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Special Issue No.3 Part II.

IMPORTANCE OF THE ORGANIZATION'S MANAGEMENT DEVELOPMENT FOR ITS CONTINUOUS GROWTH

Round Table, 15. July 2017, Tehran

Guest Editor: Zorana Nikitovic, Faculty of Business Economics and Entrepreneurship, Belgrade, Serbia

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FOREWORD

Special edition of the International Review Journal is made with the aim of pointing to the significance of continuous improvement of organizational management for the sake of its constant growth and progress in modern business conditions. The emphasis in the first part is on employment and education in modern business. Second part refers to different angles of handling organizational management in Iran, while the third part deals with the promotion of modern organizations' management through case study analyses.

In today's conditions organizations are dealing with different challenges such as global competition, intense turbulence, high level of uncertainty and risk in business, quick technological improvement and high quality in meeting the customers' needs. For these and many other reasons organizations are, in their businesses, constantly adjusting to new market conditions and directing their business operations and resources towards the enablement of a long-term survival on the market and the achievement of competitive advantage.

We are hoping that papers within this special edition are going to encourage others to think about this topic and we would like to invite other authors to speak their minds about these and other challenges in modern business.

Dr Zorana Nikitovic

Belgrade, july, 2017.

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Employment and education in modern business

AN INVESTIGATION INTO THE ROLE OF CHANGE MANAGEMENT IN THE PROCESS OF EDUCATIONAL SUPERVISION AND GUIDANCE

Hoda Sadat Mohseni[1]

Maria Ghorbanian[2]

Abstract

The purpose of the present study is to examine the role of change management in the process of educational supervision and guidance. As we know, the most important goal of educational guidance and supervision is to improve the educational situation. Therefore, change management plays a crucial role in achieving this goal. Change is one of the fundamental elements of change management, and its design, implementation and evaluation can be systematically achievable. The supervision and guidance in the educational system require a type of management style that can pursue the goal of improving the educational situation beyond the bureaucratic management in order to achieve a desirable situation in the teaching-learning process; accordingly, it seems that a kind of change in the managerial model of educational organizations can be the primary solution of some of the structural obstacles in achieving the goals of educational supervision and guidance. In this regard, the present study intends to determine the position of change management in its process by carefully examining the objectives of the educational supervision and guidance. In the effective change management model, the center of the intersection of the three elements of organization, process, and technology is where change management lies. Thus, based on this model, it can be said that change management in educational organizations is positioned at the point the three components of the process of educational supervision and guidance, educational technology and educational organization overlap.

Key words: Educational supervision and guidance, Change management, Organizational change, Technology

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Introduction

During the different periods of history, the nature of educational supervision and guidance has taken different meanings in response to a wide range of pressures on the educational system. Over the past years, supervision and the supervisory strategies implemented by the supervisors have undergone many changes (Kellermann et al., 2013). Traditional supervisors pursued those supervisory and educational objectives that were restricted to the teachers' absolute obedience of the instructions imposed by the supervisors and inspectors. Traditional supervision and guidance involved forcing the teachers to use pre-determined solutions and methods, whereas the modern sense of educational supervision and guidance considers the development of learning process instead of targeting the development of education. Modern educational supervision and guidance promotes inclusive growth and education, along with motivating and guiding them in the right direction for growth and development. All these factors focus on supervision and management, rather than being evaluated by means of improved teaching-learning strategies. Interdependence and collaboration are the basic characteristics of supervision and management in educational systems. The success of an educational system in achieving its goals depends on a management model that realizes the function of individuals in group situations through collaborative activities (Thakral, 2015). Some of the most important advantages of organizational change are: increasing the individuals' participation in an organization, establishing broad relationships among learners, educators and managers, providing constant improvement and continual progress, improving meritocracy, providing continuous teaching and encouraging learning, taking proper and dynamic planning, empowering individuals, and employing technological and innovative aspects (Faghihi et al., 2011). Organizational change refers to applying new changes and approaches in an organization in order to improve organizational processes and procedures. These changes are largely recognizable in the organizational and activity forms, and even in the organizational nature (Pardo Del Val et al., 2012). The change process in an organization requires change management and leadership in order to significantly affect the process perceived by the individuals in the organization (Kavangh, 2006). Traditional management and leadership will not survive in the third millennium, and the world will need a transformational management and leadership (Lee, 2011).

Today, universities work in a dynamic and vibrant environment. Such a situation requires implementing continual organizational changes and transformations both from the behavioral and the structural dimensions (Zomorodian, 2003). Leading the organization and its constituent elements to success or failure is the responsibility of managers of the organizations. Managers determine the organization's fate based on the styles they choose for leading the organization. Meanwhile, the role of change management in line with the supervision process and educational guidance seems to be able to lead the educational system towards success in achieving the adjustment and improvement in learning process, which is the ultimate goal of the educational system. The present research seeks to examine this issue by corresponding the dimensions of effective change management with the main elements of the educational supervision and guidance process.

Theoretical Framework

The Process of Clinical Supervision and Guidance

Supervision refers to helping the teachers to think about the information obtained from their observations in order to make better decisions about teaching and to effectively apply it in their teaching (Acheson, Gall, 2001). Therefore, the educational leaders and supervisors are expected to assess the classroom education and educational programs correctly and make necessary changes and adjustments in educational programs that can meet the changing condition of the society. Senge (1990) describes the role of educational supervisors in organizations as those who help others to rebuild their thoughts and to look deeper into issues and discover the underlying causes in situations. If the current trends continue, supervisors will be called to provide a learning atmosphere. Creating learning spaces requires schools to rebuild in a way that learning develops for all students and also the capabilities of teachers are emphasized in a way that all the new facilities are considered. One of the supervision and guidance methods in education is the clinical approach which has modeled medical and clinical approaches during the 1970s. In this period, the focus was on the recognition and treatment of educational problems, using the information from the teaching gatherings and the classroom observations. Educational supervisors used this kind of clinical approach in schools to examine the teachers' behavior and to help them individually in order to achieve more objective results.

Clinical supervision refers to the systematic study of the teacher's behavior in the classroom in a friendly atmosphere, with the teacher's own involvement and cooperation. The term 'clinical' indicates the observation of teacher's teaching in the class through the interaction between the supervisor and the teacher, the emphasis of which is on a professional and friendly relationship. In other words, this style of supervision is based on counseling which is focused on the individual teacher (Bernard & Good, 2007). This model was first proposed by Goldhammer and Cogan in the 1960s. Over the time, the use of traditional and authoritative methods of supervision and guidance have lost their status and are now largely rejected by most of the experts, as these methods have not had the desired results over the past years. Gradually, the clinical method of supervision and guidance developed by avoiding traditional supervision methods and the desire to improve the performance of teachers and education. According to Reavis (1978), the professional interest in activities designed to improve the performance of teachers in the classroom was called the Clinical Supervision Movement (Reavis, 1978). This method of supervision is mostly interactive and instead of focusing on the power of an individual (the supervisor), it is democratic and teacher-centered (Acheson et al., 2001, p. 33). The purpose of the clinical method is to detect problems in the classroom and to identify the areas that need improvement, and after the class observation, it helps to analyze teacher's teaching and to understand how teachers and students interact. The goal is to help teachers improve using the information collected through what has been observed in the classroom. The clinical approach has been developed to increase the awareness of teaching behavior and the classroom interactions that significantly affect the students' learning. But despite the nature and the purpose of educational supervision and guidance and its important role in achieving the educational goals, the results of the studies in this area indicate that this process is not properly implemented, which consequently, leads to its inefficiency in the educational system of our country. Therefore, it seems absolutely necessary that the supervision and guidance program in the educational system, the implementation strategies, the existing mechanisms and the criteria for the selection of supervisors and educational guides, and the required professional skills and competencies for effective performance of this task should be revised. Moreover, the factors and barriers affecting the effectiveness of the performance of guides in schools should be investigated (Azizi, 2007).

The Effective Change Management and its Dimensions

Developing a mission that provides a vision of the future of the organization, achieving the individuals' attachment to this mission and simultaneously making the goal and effort are considered as important features of leadership. Creating such a mission provides ground for change in an organization (Senge, 1988). Most of the managers consider change as vital for the organizational success and are constantly looking for the ways to make the organizational change work. Change management is a process planned throughout the organization that is managed by the top management of the organization and increases the effectiveness and health of the organization systematically (Khanifar, 2010). Philip Kombs notes that "if a transformation is to take place in the field of education, it must begin with the instructional management" (Asgarian, 1997). Peter Drucker (2001), also, believes that it can indubitably be claimed that the challenges in the process of change are due to the managerial problems (Drucker, 2001). Accordingly, the issue of change management is of particular importance. To create effective changes, organizations need to have robust planning and design, which is called Effective Change ManagementEffective change leads to the strengthening of the new tendencies and behaviors or new strategies, and as a result, the current behaviors are challenged. In other words, in order to replace the previous behavior with a new one, the resistance layers of individuals must be broken down and their participation must be changed for an effective change (Kreitner & Kinicki, 2001). Like all living organisms, an organization needs to be changed in order to maintain its balance and stability in accordance with its internal and external environment. Motivating people in the organization through their participation in making decisions about changes will play a significant role in effective change management (Rezaeian, Ahari, 2004). An organizational change can be defined as a change in one of the main dimensions (process) of an organization's operations. The main dimensions include structure, technology, culture, leadership, goals, and staff of the organization (Mills et al., 2009). According to Beckhard, the organization's transformation is a planned activity or effort throughout the organization which is managed by the organization's top management and increases the effectiveness and health of the organization through the systematic change plans in the organization's processes, using the behavioral sciences (Cummings, Worley, 2015).

Regarding the types of changes in the organization that are determined by the goals and motives of the organization, the change management in this research is a type of transformational change. In Armstrong's view (2009), the transformational change occurs when there is a fundamental change in the structures, processes and behaviors that have a significant impact on the functions of the organization (Bakhshi, 2011). As mentioned before, change is vital for the organizations. Specifically, in educational institutions, managers and educational leaders should provide conditions for adapting to the changing circumstances in order to achieve the goals of the organization. Thus, paying attention to the supervision and guidance process and the nature of the evaluation of the teaching-learning process, together with the transitional change management, can lead the educational organizations to their goals, which in general, is the realization of learning in learners.

Change Management in the Process of Educational Supervision and Leadership

Today, the organizations are increasingly facing with dynamic and changing environments, and therefore, they have to adapt themselves to the environmental changes in order to survive. In other words, considering the rapid pace of scientific, technological, social, cultural and many other changes in today's world, those organizations are successful and efficient which, in addition to adapting themselves to the developments of the modern society, can predict the future and are able to manage these changes in order to make the desired results for a better future. According to Toffler, it is through taking the advantage of the changes innovatively that we can avoid the future shock and get a better and more humane future (Toffler, 1994). Since the educational organizations are one of the key factors in determining the future of a country, considering the dimensions of change in these types of organization is more important than any other organizations. Educational organizations are in need of supervision and guidance more than any other organizations due to their educational sensitivity, human nature, transcendental goals, diversity, professionalism of the teacher's work, the complexity of teaching, the limited educational technology, and the difficulty of measuring and evaluating academic achievements (Wiles, 1997). According to the experts, guidance refers to helping the teachers to improve their perceptions, recognize the school environment, discover their own skills and abilities, and increase their adaptability to the environment. Also, they will achieve better efficiency and effectiveness in line with the organizational changes (Vakilian, 2001). Since the process of educational supervision and guidance is concerned with the improvement of education, promoting the quality of educational activities is the main goal and the cornerstone of this process (Niknami, 1998), and its importance, validity and necessity are constantly increasing (De Gruwe, 2007). Therefore, with the increased expectations of the society and families of the educational environments to enhance the quality of educational services, managers and teachers should be guided to make significant changes and transformations in the selection of appropriate teaching materials and methods, and also in their behavior and their relationship with students within the educational settings (Azizi, 2007). Sergiovanni and Starratt (1985) explain conceptually and operationally the styles of supervision and guidance in an accurate and scientific way, along with the theoretical basis of management emphasizing on classical theories, human relations and human resources. These scholars believe that the attitudes of managers towards teachers, the school structure, the nature of change, the management patterns, the type of leadership and decision makers, the type of authority governing the organization, the motivational factors on the style and the pattern of supervision and educational guidance depend on how these variables combine (Sobhani Nejad & Agha Hosseini, 2006). Scientifically speaking, the concept of supervision and guidance has gone a long way over the past 100 years. In the classic educational literature, supervision and guidance refer to the control, guidance and evaluation of the current affairs for the purpose of examining the operations, and an educational supervisor refers to a person who is in charge of supervising the quantity and quality of the work of others (Alagheband, 1995). But contrary to the traditional interpretations of supervision, it has, in its new sense, got clinical aspects aimed at encouraging the professional development of teachers to be fully collaborative. In this regard, supervision is implicitly intended to focus on the position of man in the organization, considering the basic aspects of the human relations (Abbaspour, 1996). In general, there has not been much research, especially in our country, on the educational supervision and guidance, its role and position, its weaknesses and strengths, and the strategies for improving such a process. The evidence and the results of the previous studies inside and outside the country do not provide a very positive perspective for the educational supervision and guidance (Azizi, 2007).

According to the above-mentioned, it seems that taking advantage of effective change management within the definition of educational supervision and guidance can play an important role in increasing the effectiveness and efficiency of this decisive process in the educational organizations.

Review of Literature

The results of Abdoli's (2002) research on the difference between the present situation and the desired state of the educational supervision and guidance confirm that first, there is a significant difference between the current methods of educational supervision and guidance in schools with the desired status and second, the average of indirect methods of educational supervision and guidance in girls' and boys' high schools is more than the direct ones. In an investigation into "The Effect of the Principals' Educational Supervision and Guidance on the Academic Achievement of the High School Students in Shiraz"**,** Sobhani-Joo (1992) concluded that there is no significant relationship between the principals' educational supervision and guidance and the academic achievement of the students. Also, the results of the multivariate regression revealed that among the six roles of educational supervision and guidance, only the role of decision-making and supervision can predict the students' academic achievement. In another research "The Study of the Degree of Adaptation of the Guide Teachers of Kurdistan Provincial Elementary School to Their Job Descriptions from the Perspective of the Educational Guides and Officials", Rauf-Naderi (2002) concluded that the educational guides of Kurdistan province had failed to conduct their professional tasks and also their tasks did not correspond with the description of the organizational tasks of the educational supervision and guidance. The results of Sha'abani-Nejad's (1995) research revealed that the managers with more managerial background and experience would carry out more educational supervision and guidance tasks, and also those primary school administrators who have completed more in-service training, would apply more educational duties and guidance. Moreover, the primary school administrators who have studied primary education would carry out more responsibilities and training guidance than those who have studied in other fields. The results of another study by Blumberg (1974) on the supervision of teachers suggest that the teachers consider supervision as a part of the existing system which does not play an important role in their professional life. In fact, supervision is considered as a common organizational practice that has lost its position (Acheson and Gall, 1997). Mitchell & Tucker (1992) claimed that the school performance is heavily dependent on the eligibility of management and the effectiveness of supervision. Also, Blair (1991) emphasized the importance of proper planning in using various supervisory and guidance functions as an important and effective process for the implementation of the school curricula. Knowles & Sudzina (1994) also argued that providing a wider level of effective supervision and facilitating the duties of supervisors would improve the status of educational supervision and guidance among the teachers. Another group of experts support Nelson and Sassi's view (2000) that educational supervision and guidance should be considered as one of the functions of the community of school-oriented learners, in which teachers together with the school principal examine the quality of teaching and learning in various subjects (Little and McLaughlin, 1991; Rowan, 1993).

Methodology

The present study is qualitative and has been carried out in a library method. First of all, reliable sources such as scientific books and articles were used to introduce the educational supervision and guidance. Also, the scientific translated and authored references were used to investigate the effective change management, its concepts and its objectives. And finally in the conclusion section, an analytical-descriptive method was used to compare these two methods.

Discussion

As mentioned earlier, change is one of the main dimensions (process) of the organization's operations within Mills et al.'s (2009) definition of the organizational change. The main dimensions include structure, technology, culture, leadership, goals and the organization staff. On the other hand, the change management in this research refers to a kind of transformation that involves fundamental changes in the structures, processes, and ultimately the behaviors that significantly affect the functions of the organization. Since this research seeks the transformational change using the change management in the educational guidance system, Golembiewski's modified model of effective change management has been used to correspond with the clinical supervision and guidance cycle (Figure 1).

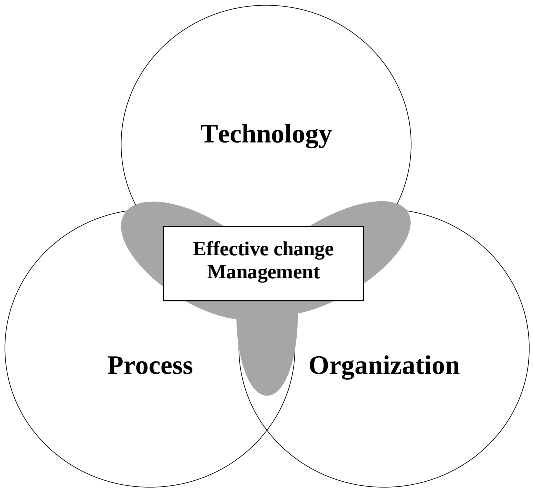

Figure 1: Dimensions of the Effective Change Management according to Golembiewski

In the educational system, if the process of clinical supervision and education corresponds with the dimension of process in the model above, then the organization corresponds with the educational organization, and the technology in the model of effective change management corresponds with the educational technology. In the dimension of organization, structure, organizational culture, and the type of management, improving the change management is effective. The appropriate organizational structure corresponding with the process of educational supervision and guidance plays a significant role in the effectiveness of its activities. An appropriate organizational culture provides the necessary framework for changing the attitudes of the teachers and managers towards the process of supervision and guidance. Also, the choice of transformational management or leadership fitting with the flexible structure and an organizational culture based on the change provides an opportunity for the implementation of the supervision and guidance process. Therefore, taking advantage of an up-to-date teaching technology adapted to the educational goals and the indigenous factors plays a vital role in completing the above-mentioned cycle in order to achieve effective change management. Thus, the result of the correlation between Golembiewski's modified model of effective change management and the supervision and guidance process is as follows (Figure 2).

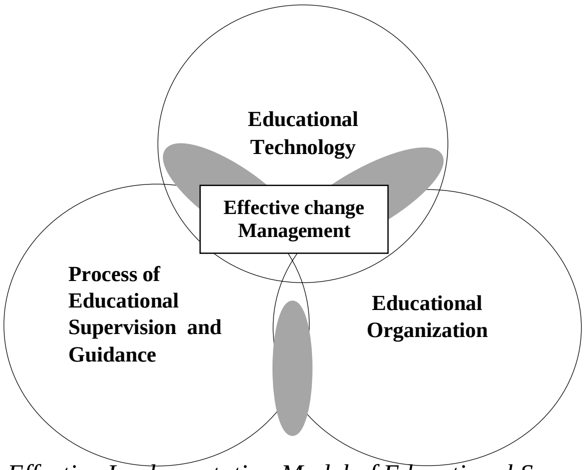

Figure 2: The Effective Implementation Model of Educational Supervision and Guidance

Conclusions

Educational supervision and guidance has undergone continuous changes since its appearance in terms of its nature, concept and purpose. This change is evident in the theories of educational supervision and guidance. But according to the findings of the previous studies, the performance of educational supervision and guidance in Iran has not changed much and in practice, the expectations in improving the teaching-learning process have not been met yet. One of the reasons behind the ineffectiveness of the educational supervision and guidance process is its lack of conformity with social, economic, cultural and technological changes that have a significant impact on the change in the organizations, in particular the educational institutions. It seems that corresponding the components of the process of educational supervision and guidance with the dimensions of effective change management plays an important role in redefining this critical process in educational organizations. The result of this redefinition will be a transformation in the structure, culture, type of management and educational technology appropriate for the process of supervision and guidance. Finally, with regard to the above, it seems that the overlapping of these open-ended elements with the clinical supervision and guidance that has shared features with the change management in its goals and its flexible nature can be an effective step for the educational organizations in achieving their goals, i.e. is to realize learning in learners.

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THE RELATIONSHIP BETWEEN PERSONALITY-JOB FIT AND ORGANIZATIONAL COMMITMENT AMONG FEMALE SECONDARY SCHOOLS' PRINCIPALS IN TEHRAN

Mansoureh Abdolmohammadi[3]

Abstract

The main aim of this study was to examine the relationship between personality-job fit and organizational commitment among female secondary schools' principals in Tehran. The research method was a descriptive correlational study. The statistical population included all the principals of secondary schools in Tehran during the academic year 2016-2017 who were selected using a multi-stage cluster sampling method (N=210). The data collection tools were Allen and Meyer's Organizational Commitment Questionnaire and NEO Personality Traits Inventory. The research data were analyzed using descriptive statistics (central tendency and dispersion indexes) and inferential statistics (Pearson correlation and stepwise multivariate regression analysis). The research findings showed that there was a significant positive relationship between organizational commitment and all types of personality-job fit among principals ($p \leq 0.001$). However, there was a significant negative relationship between organizational commitment and neurotic personality-job fit ($p \leq 0.001$).

Key words: Organizational commitment, personality-job fit

JEL:M10

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Introduction

The education system is one of the largest and most extensive systems in any society that determines the fate of society in the long run. In fact, the happiness or misery of each society depends on the education system of that society. If education is properly designed in terms of goals, structures and resources, it will ensure the growth and development of that society in the long-term and brings it closer to effectiveness (Imani et al. 2010). Meanwhile, the performance of principals plays an important role in the growth of national capitals and mental health. If the future principals and educators of each country do not feel good in their working environment, they cannot do their jobs well. If the principal is interested in his/her job, his/her creativity and talent will flourish in the concerned working field and he/she will never be tired or depressed. Conversely, if the principal is not satisfied with his/her job, he/she will also suffer from depression and his/her work will be unsuccessful and, consequently, the society will also undergoes suffer and damage (Mirdrikvandi, 2000). Therefore, a teacher's job should be given to those who are personally relevant and fit to this job.

Obviously, individual differences cause many differences in human behaviors and personality is considered the first source of these privileges. Therefore, identification of the personality traits, abilities, disabilities, attitudes and feelings as well as understanding the causes of these behaviors and the prediction of actions and reactions have long been considered by the scholars active in the domain of social sciences such as psychologists, anthropologists, educators and sociologists. Undoubtedly, adapting the abilities and talents to the needs of the society will increase efficiency, effectiveness, success and satisfaction and it improves the quality of work. Several studies have shown that common organizational problems may be really related to personality factors (Block, 1981 as quoted by Khosravi, 2003).

In many cases, lack of intelligence or lack of technical skills may not be considered the sole reason for individuals' failure in performing their job responsibilities effectively in the organization but it may be attributed to mismatches between their personality traits and the job they have undertaken thereof. For this reason, one needs to consider the studies conducted in relation to job-personality fit (Sa'atchi, 2007).

The mission of the principals of educational organizations is to exploit the experiences, talents and intellectual resources of human resources, especially their principals and teachers. This is easy to achieve in the context of a rich organizational commitment that duly meets the wishes, needs and expectations of knowledge, abilities and skills or coordinates and synchronizes them in this regard (Karamipour, 2003).

In general, the domain of education should necessarily receive due attention and it is clear that teachers play a decisive role in realizing this objective. In this regard, selecting principals who have high-quality working life and, more importantly, taking measures to maintain them in their careers is considered as one of the main issues of education. The lack of qualified principals and educators in the Department of Education will deprive students of appropriate services. Therefore, studying the factors affecting the directorial job in the realm of education, which guarantees principals' satisfaction and job motivation, maintains them in their profession and creates a strong and desirable motivation, is embedded with a tremendous significance.

Statement of Problem

The optimal utilization of capabilities of staff is the primary goal of each organization, particularly education. In other words, human resources are the most important capitals of organizations and as the quality of these capitals increases, it will be more probable to observe more successful, viable and thriving organizations. Therefore, one must try to improve the quality of human resources because it is both in the interests of the organizations and individuals. Actually, a loyal and satisfied individual who is consistent with organizational goals and values, inclined to maintain an organizational membership and willing to go beyond the assigned duties can be a major factor in the effectiveness of the organization. In fact, the presence of such manpower in the organization is characterized with increased levels of performance and reduced number of absences, delays and job abandonments on the part of employees. Besides, the former represents an ideal organizational image in public and it provides the ground for the organization's growth and development (Hosseinian, Majidi and Habibi, 2007). On the contrary, the human resources that have a low sense of satisfaction and quality of working life and personality-job unfit not only do not move toward organizational goals, but also they are neglecting the organization's issues and problems.

There are various factors in the life of each organization including manpower, machinery and capitals. Regarding this fact, it appears that human resources are considered the most important and most effective factor in this domain because human resources bring about the efficiency of machinery, capitals, materials and other factors (Ismaili, 1997). Therefore, the development and growth of organizations depends on the optimal utilization of their human resources. Besides, paying attention to these huge resources in the field of human resource management and taking into account the needs and problems of employees and the atmosphere of the workplace are effective factors in the success of any organization (Rouhi, Asayesh, Rahmani and Abbasi, 2011). Today, it seems that the creation of techniques that promote the will and desire for success in the manpower employed in the organizations is one of the major problems of organizations (O'Connor, Fernandez & Rodriguez, 2006). Industrial and organizational psychologists have identified and investigated the important psychological structures affecting effectiveness in order to increase the efficiency and effectiveness of employees and organizations. As such, job-personality fit and organizational commitment are among the most important of these structures that have a prominent role in increasing the effectiveness of individuals and organizations.

Adapting the requirements of a job with personality traits is best explained in Neo Theory under the title of “Personality–Job Fit Theory”. This theory is based on the concept of fit between the personality traits of an individual and his/her job. Neo offers five types of personality and believes that the employee's satisfaction from his/her job and his/her willingness to leave it depends on the degree to which his/her personality is matched to his/her job (Robins as translated by Alvani and Danayi Fard, 2010). Personality is one of the main factors that can be used to evaluate the job applicant in the first call. Since it is somewhat difficult to pay attention to the applicant’s situation in many environments and in different situations, it seems rational to make use of personal information in order to predict his/her future behaviors. Efficiency can be helped through comparing the individual’s personality with his/her colleagues, especially in an environment where collective effort is required (Langari, 2006). Regardless of the components that create the organizations, it seems that if these components are made available to qualified human resources, organizations can achieve their goals by spending less time, effort and costs (Abtahi, 2002).

In the definitions of personality, some believe that personality is considered an inherent or genetic phenomenon and some argue that it is an acquisitive phenomenon. Furthermore, some believe that personality is formed by the combination of these two factors. It should not be forgotten that personality is not an absolute concept and, in fact, it is always subject to change and transformation. According to John Dollard, cultural changes, social pressures, mental illness, past events and incidents, especially in childhood, are factors influencing the personality change (Panji, 2003, as quoted by Me’marzadeh and Mehrnia, 2009). Each (personality) type is the product of a particular interaction between several cultural and personal forces, such as peers, inherited and genetic factors, parents, social class, culture and physical environment (Holland, 1997, as quoted by Imanra Jovini, 2012). Given another perspective, Rice (2008) states that personality is a general concept and includes all the features that make a person unmatched and different from others (Fazeli, 2010).

The issue of personality-job fit is one of the most important and essential principles and a large part of the success of employees in different responsibilities are due to observance of this principle. In fact, a large part of the problems that occur in some organizations, such as education, sometimes occur due to employees’ personality-job unfit (Abtahi, 2002). Holland (1994) also states that individuals are more successful and more satisfied in appropriate and propitiate working environments and, thus, they represent more efficiency in this regard. Therefore, if individuals’ personality and the type of job fits together, job satisfaction will be at its highest level and, as a result, staff turnover will fall to the lowest rate (Robins as translated by Alvani and Danayi Fard, 2010).

Dissatisfaction with the quality of working life is a major problem affecting all employees, regardless of their position and status. Therefore, lack of attention to the quality of working life indirectly leads to fatigue and dissatisfaction in workplace and, consequently, it weakens the morale of employees and increases the absences at work, job abandonments and psychological stress. On the other hand, an organization that cares about the quality of working life of its employees will have the benefits of having more committed manpower which lead to more labor productivity. In fact, the quality of employees’ working life has a direct impact on their morale and the morale lasts a direct impact on the type of services provided by the organization (Mahdad, Mahdavi Rad and Gol Parvar, 2011).

In the researcher's viewpoint, organizational commitment is perhaps one of the variables that can be related to the personality-job fit. Organizational commitment is one of the most interesting and important issues in organizational behavior management. Researchers and scientific centers have worked hard to define and understand its impact on employees’ behaviors. Organizational commitment is a set of assumed values, basic beliefs, collective memory, expectations and definitions of success that exists within an organization and reflects the common ideology adopted by individuals. Actually, it expresses the sense of employees’ identity. Organizational commitment provides unwritten rules and often implicit guidelines in order to reach a compromise with others in the organization and it increases the stability of the social system (Cameron and Quinn, 2006). One aspect of the complexity of organizational commitment relies in its formation process. How do two organizations operate in different ways over the years with same environmental backgrounds and leaders? (Sharif Zadeh and Kazemi, 2008).

Organizational commitment affects all aspects of the organization. Several studies and researches have shown that commitment affects the goal setting, strategy, individual behaviors, organizational performance, motivation and job satisfaction, creativity and innovation, decision making and employees’ participation in affairs, sacrifice level, commitment, hardworking and the like. This factor determines and distinguishes effective and ineffective performances and patterns for internal relationships among individuals. Actually, this concept provides coherence and coordination for the organization and its employees (Ribiere, 2001).

The commitment in each organization is considered the main factor in shaping it and, thus, the former has a significant impact on the structure and design of the organization, its internal and external environment of the organization, technology and human resources. Commitment delineates do's and don'ts and shapes the behavioral form of organization (Dehqan et al., 2011). In fact, commitment is the key to the success of the organization. Organizational commitment gives employees an organizational identity. Besides, their ability to attract, educate and maintain talented and ethical employees highlights and distinguishes organizations from each other. In turn, employees will find a deep dependency on the organization. Many prominent thinkers in the field of organizational behavior believe that organizational commitment is a factor in changing and increasing the care of individuals on themselves and on their workplace. This component is a general psychological dimension in organizational and personal approaches that leads to mental health, job satisfaction, engagement in work and ultimately improved level of quality of working life (Gomberg, 1992).

Organizational commitment facilitates collective engagement because as the commitment level is stronger, more numbers of employees get familiar with organizational goals, accept cultural-organizational values and feel committed to them. In such a situation, employees' satisfaction is promoted and encouraged. If employees' satisfaction is coupled with strong management, it leads to improved morale and motivation which, in turn, affects organizational performance and effectiveness (Sultani, 2002).

Accordingly, principals are esteemed as effective factors in the life of the educational organization and the progress and success of this organization depends on the proper use of its forces. Therefore, in this research, the researcher is trying to find the answer to the following question: Is there any relationship between organizational commitment and personality-job fit among school principals?

Significance of study

Work takes the majority of individuals' hours during the day so its conditions are important and the desirable working conditions are considered the prerequisites for human resource empowerment. Since human resources are the most important capitals of organizations, it seems that more constant attention should be paid to human resources day by day to the extent that, in the present, the requirements to meet the basic needs of employees in each organization receive the highest priority. The latter is due to this fact that achieving the organization's goals depends on securing the rational and legitimate goals and demands of human resources (Khanfir, Moqimi, Jandaqi and Zarvandi, 2009).

Since principals are among the most important assets and components of the Department of Education, it is important to pay attention to their educational and educative roles as well as significant issues and concepts affecting their work. Furthermore, the latter can have a great impact on the quality of education and students. The lack of qualified principals and educators in the Department of Education will deprive students of appropriate services. So, it is necessary to conduct research in this area.

Organizational commitment and personality-job fit can last a significant role in promoting individual and organizational effectiveness. Given this fact that organizational commitment and personality-job fit in different professions and organizations are important for maintaining the organization and regarding this notion that no research has examined the simultaneous relationship between these two variables among principals, the present research examined the concerned issue accordingly.

On the other hand, organizational commitment is equally effective in educational organizations as it affects business organizations. Educational places have their own commitment and the importance of the organizational commitment in educational places has been so powerful in that researchers in the domain of educational management have conducted numerous studies in this field during recent years. Human beings are considered the output and returns of educational organizations. Since human relations are important in educational organizations, the concept of organizational commitment becomes more important and significant. The principals, teachers and the school staff can distinguish the school from another school with an appropriate organizational commitment. Thus, a school-specific organizational commitment can maintain its originality (Mozafari et al., 2008). Regarding this fact that the relationship between organizational commitment and many desired organizational behaviors has been shown, it appears that paying due attention to the education-specific organizational commitment and its relationship with the personality-job fit can help to increase the efficiency and effectiveness of providing the desired services.

The results of this study can lead the authorities and educational staff in particular to pay a close attention to those issues that play a role in improving and promoting the working conditions of principals. On the other hand, this study can be considered a fresh and novel inquiry and, subsequently, it may help other studies in identifying other effective issues in this area.

Research objectives

Main objective

Determining the relationship between personality-job fit and organizational commitment among female secondary schools' principals in Tehran

Subordinate objectives

1) Determining the relationship between organizational commitment and neurotic personality type among female secondary schools' principals in Tehran

2) Determining the relationship between organizational commitment and extroverted personality type among female secondary schools' principals in Tehran

3) Determining the relationship between organizational commitment and open-minded personality type among female secondary schools' principals in Tehran

4) Determining the relationship between organizational commitment and agreeable personality type among female secondary schools' principals in Tehran

5) Determining the relationship between organizational commitment and conscientious personality type among female secondary schools' principals in Tehran.

Research hypotheses

1. There is a relationship between organizational commitment and neurotic personality type among female secondary schools' principals in Tehran

2. There is a relationship between organizational commitment and extroverted personality type among female secondary schools' principals in Tehran

3. There is a relationship between organizational commitment and open-minded personality type among female secondary schools' principals in Tehran

4. There is a relationship between organizational commitment and agreeable personality type among female secondary schools' principals in Tehran

5. There is a relationship between organizational commitment and conscientious personality type among female secondary schools' principals in Tehran.

Theoretical and operational definitions of terms

Organizational commitment

Theoretical (conceptual) definition

Today, most managers agree on human resources as their most important assets. Even some of them consider customers as secondary components because no service is produced or provided without committed and capable employees. Actually, it is not possible to treat employees inappropriately and, then, expect them to behave appropriately with customers. The reason why employees are so important today is that the organizations are evaluated at a speed that can meet the needs of their customers. In fact, the following sentence no longer bears any meaning or implication: "I have to talk to my boss". Customers do not care about who the boss is because the only ones who attracts their attention are the customers who answer the phone, greet them, register their orders and hand over their goods or handle their complaints. Besides, customers expect great first-class services and they desire to receive such services as soon as possible. Therefore, dedicated and powerful employees are needed to do the following assignments. Accordingly, employing dedicated, knowledgeable and loyal employees is the most important factor in the success of the organization. Thus, organization's primary priority must be directed towards attracting and maintaining committed and qualified employees and failure to realize this objective means losing efficiency, lack of growth and loss of business. Success in a competitive world belongs to organizations that consider committed and loyal employees as their greatest capitals. Many scholars believe that human resources are the only competitive advantages and organizations must turn these potentials into real forces through exerting proper and correct actions and, then, direct them in line with the organizations. Organizations that lack human resources can never achieve their goals. In other words, human resources play a key role in maintaining market-based competition.

Definition of organizational commitment

Literally speaking, commitment refers to undertaking a job, taking responsibility, holding a position and making a covenant and contract. Technically speaking, commitment may refer to the following concepts:

1) Proceeding to commit a responsibility or belief

2) The act of referring or pointing to a topic

3) Committing or taking action in the future.

Commitment is an obligation that limits the freedom of actions (Oxford Dictionary, 1991).

Organizational commitment is “the relative degree of specifying an individual’s identity in relation to the organization as well as his/her participation and involvement in the organization." In this definition, organizational commitment includes three factors:

1) Believe in the goals and values of the organization

2) Desire to make a significant effort for the sake of the organization

3) Strong and deep wish and desire to continue membership in the organization.

Dimensions of organizational commitment

In this line, Allen and Meyer have examined the multiplicity of commitment. Therefore, the dimensions of organizational commitment have been taken from their model including affective commitment, continuance commitment and normative commitment:

Affective commitment

Allen and Meyer consider the affective commitment as the emotional attachment of an individual to an organization and identification with it. If we define the commitment in this way, the affective commitment consists of the following three dimensions:

* An affective attachment to the organization

* The person's desire to identify with the organization

* The desire to continue working in the organization.

Continuance (rational) commitment

Continuance commitment is based on Baker's investment. This theory is based on the fact that over time, an individual accumulates his/her capital in the organization and as his/her experience grows, the more capital he/she will accumulate and the loss of it will cost more to him/her. These investments include the time during which special organizational skills are acquired. As such, such investments may not be transferred thereof. Baker (1960) defines commitment as a willingness to carry out a series of continuous activities. This tendency is due to the accumulation of savings and capital and if such activities are interrupted, these savings will disappear. The term "investment" refers to the value that a person has invested in an organization (e.g. time, effort, attempt, money, etc.) which can disappear or annihilated.

Normative commitment

Normative commitment is regarded the third dimension of organizational commitment. This notion represents a kind of obligation to continue working with the organization. Thus, employees will remain in the organization as long as they believe that working with the organization is a right decision. Nowadays, affective, continuance and normative commitments are examined as distinguishable dimensions of attitudinal commitment rather than diverse types of commitments. So, it seems that the nature of the person's relationship with the organization is different in each of the three dimensions of commitment (affective, continuance and normative). Employees with a strong affective commitment tend to work with the organization and, consequently, they stay with it. Conversely, employees who have a strong continuance commitment will stay in the organization due to their own needs to the organization. Finally, those employees with a strong normative commitment stay in the organization because they feel they must stay and, in fact, they feel forced and obliged to stay in the organization.

General perspectives on organizational commitment

Today, there are two perspectives on organizational commitment, as follows:

1) The attitudinal perspective that views commitment as an emotional or attitudinal concept and argues that individuals pursue the goals of the organization attempt to identify with the organization. This perspective is typically operationalized and measured through Porter Scale.

2) The behavioral perspective that looks at an organizational commitment from a completely different perspective and considers the concept of commitment more a behavioral than an attitudinal phenomenon. According to this perspective, which is based on Baker's views, individuals are dependent on the organization primarily in order to gain benefits, such as enjoyment of job benefits and promotion, rather than in terms of their emotions and desires.

Different types of commitment

Rezaian (1995) states that principals agree on a set of commitments, including:

* Being committed to clients or customers

* Being committed to the organization

* Being committed to self

* Being committed to individuals and working group

* Being committed to work

In the following section, it will be attempted to describe each of them as follows:

Being committed to clients or customers

The first and perhaps most important organizational commitment is towards the customers. Leading principals try to provide useful services for clients or customers. Principals show their commitment to the clients or customers through the following ways:

1) Offering and providing services

2) Respecting the customers.

Being committed to the organization

The second most important directorial commitment is towards the organization. The influential principal is considered the illustrator of the status of his/her organization. Actually, principals positively show this commitment in the following three ways:

1) Celebrating the organization

2) Supporting top principals

3) Acting on the basis of the organization's core values.

Being committed to self

The third most important directorial commitment is towards the self. Leading principals make a strong and positive image of themselves in the eyes of others and they attempt to act as decisive powers in every circumstance. This notion should not be confused with self-serving or selfishness. Actually, pioneer principals attempt to blend power with humility. This kind of commitment is manifested through the following three activities: demonstrating autonomy, consolidating oneself position as the principal and accepting the constructive criticism.

Being committed to individuals and working group

The fourth most important directorial commitment is towards the teamwork and individual team members. Leading principals show self-sacrifice toward those who work for them. This practice refers to the principals’ appropriate use of leadership style to help individuals in order to achieve success in their tasks. The principals’ willingness to spend time and energy and daily work with their subordinates is considered a sign of his/her positive commitment towards employees. In particular, three vital activities constitute the components of this kind of commitment: showing positive interest and recognition, giving encouraging feedback and encouraging innovative ideas.

Being committed to work

The fifth most important directorial commitment is towards the tasks to be done. Successful principals give relevance and meaning to those activities conducted by employees. They determine the focus and direction of their subordinates and ensure that they successfully carry out their assignments. The superiority of the principals' success is demonstrated by excellent performance of the organizational unit supervised by the principals themselves. Such an engagement is realized only when the simplicity and pragmatism of that assignment is preserved and the concerned assignment receives due attention.

The importance of organizational commitment

Efficiency, effectiveness and performance improvement are among the most important goals of the organization and each organization attempts to strengthen these outputs in a variety of ways. In order to achieve the above objectives, the relevant factors and their enhancers must be identified and, after identification and review, they should be strengthened. The organizational commitment is one of these factors that has received much attention in recent years. The latter component is affected by many variables and it affects many others such as job satisfaction, absence, job abandonment, job challenge and performance. In many cases, organizations need individuals who work for the benefit of the organization and beyond their specified tasks, especially in multifunctional organizations. Actually, the failure to create such an obligation and the psychological dependence among the members of the organization will require increased costs for the establishment of precise and complex monitoring and control systems. Those principals and employees whose organizational values and goals have been internalized create the confidence that staff are working to provide the resources of the organization. Therefore, there are many reasons why an organization should increase the level of organizational commitment among its members; firstly, organizational commitment is a new concept that is generally different from dependency and job satisfaction. For example, it is probable that nurses may love what they do but they are dissatisfied with the hospital in which they work. In that case, they will look for similar jobs in other similar environments. Conversely, restaurant waiters may have a positive feeling towards their work environment but they hate waiting at the desk or generally hate their job. Secondly, previous studies have shown that organizational commitment is characterized with positive outcomes such as job satisfaction, presence, job performance and transactional organizational behavior which are requirements of an organization. However, the organizational commitment is negatively correlated with the desire to abandon a job. Thirdly, commitment can have positive and multiple implications in that committed employees have more discipline in their work, stay longer and work more in the organization. In this line, principals must maintain the commitment and loyalty of employees to the organization, increase employees' participation in decision making and provide a satisfactory level of job security for them in order to make them loyal and committed to their work.

Operational definition

In terms of organizational commitment in this research, it was indicated that the scores extracted from the Allen & Meyer's Organizational Commitment Questionnaire were between 1 and 24.

Regarding the proportion of neurotic personality and organizational commitment in this research, it was indicated that the scores extracted from NEO Personality Traits Inventory were between 25 and 84.

Regarding the proportion of extroverted personality and organizational commitment in this research, it was indicated that the scores extracted from NEO Personality Traits Inventory were between 25 and 84.

Regarding the proportion of open-minded personality and organizational commitment in this research, it was indicated that the scores extracted from NEO Personality Traits Inventory were between 25 and 84.

Regarding the proportion of agreeable personality and organizational commitment in this research, it was indicated that the scores extracted from NEO Personality Traits Inventory were between 25 and 84.

Regarding the proportion of conscientious personality and organizational commitment in this research, it was indicated that the scores extracted from NEO Personality Traits Inventory were between 25 and 84.

Personality-job fit

Theoretical (conceptual) definition

Personality-job fit

Given a correct job selection, one should consider individual differences and various factors such as personality traits, values, interests, skills, family circumstances, community conditions, etc. Personality traits are one of the most important factors in this realm.

In general, there are always successful people of different types in all jobs and it cannot be precisely stated that only certain personality types are successful in a given job.

Regarding the previous studies in this domain, it is indicated that the personality types introduced for each job are generally more inclined towards the concerned job and, thus, they have more job satisfaction.

A true understanding of each person's personality type is a complex process requiring enough expertise and time. Of course, each person has its own unique characteristics and even those who have some kind of personality types are still different in some cases.

Personality–Job Fit Theory

The Job-Employed Fit Theory is based on the assumption that job requirements, including skill diversity, task identity, job independence, job knowledge, job skills, job ability and dozens of other variables, have the potential and the ability to fit personal characteristics such as age, gender, level of education, marital status, work experience, knowledge, skills and abilities. As a result, there will be compatibility between the person and his/her job and, consequently, it may affect individual's behaviors and attitudes.

David (2007) describes the job-employed fit as follows: "compatibility between employees and the organization in the work they do. In other words, knowledge, skills and abilities possessed by employees are the knowledge, skills and abilities needed by the undertaken job in the organization" (p. 6).

The compatibility between the job requirements and personality traits is best explained in Neo Theory entitled "Personality–Job Fit Theory". This theory is based on the concept of fit between the personality traits of a person and his/her job (Robins as translated by Alvani and Danayi Fard, 2010).

Operational definition

The individuals' scores obtained from NEO Five-Factor Inventory were designated as the personality-job fit in this research.

Regarding the notion of neurotic personality in this research, it was indicated that the scores obtained from questions 6, 11, 16, 21, 26, 31, 36, 41, 46, 51 and 56 as well as NEO Five-Factor Inventory were designated as individuals' score.

Regarding the notion of extroverted personality in this research, it was indicated that the scores obtained from questions 7, 12, 17, 22, 27, 32, 37, 42, 47, 52 and 57 as well as NEO Five-Factor Inventory were designated as individuals' score.

Regarding the notion of open-minded or flexible personality in this research, it was indicated that the scores obtained from questions 8, 13, 18, 23, 28, 33, 38, 43, 48, 53 and 58 as well as NEO Five-Factor Inventory were designated as individuals' score.

Regarding the notion of agreeable personality in this research, it was indicated that the scores obtained from questions 9, 14, 19, 24, 29, 34, 39, 44, 49, 54 and 59 as well as NEO Five-Factor Inventory were designated as individuals' score.

Regarding the notion of conscientious personality in this research, it was indicated that the scores obtained from questions 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60 as well as NEO Five-Factor Inventory were designated as individuals' score.

Discussion and Conclusion

Today, human resource researchers have come to realize that qualified and skilled manpower is a valuable and enduring factor for the growth and development of organizations and countries. Regarding the past half century, a significant part of the progress of developed countries has been tweaked by the evolution of trained human resources. The desirable experiences of successful organizations about the value of manpower signify the importance of human capitals employed in these organizations. They respect the greatness and significance of their organizations as much as those who work for them. Besides, they argue that human beings are the source of all creativity, abilities and beauties. They believe that if desirable circumstance and conditions are provided for human beings in the organization, their capabilities and potentials may be flourished and manifested thereof. Such organizations attribute their success or failure to the level of loyalty and suitability of their human resources. Ultimately, they believe that if an organization does not have the merit to maintain its loyal and determined power, it will slowly sink (Jahed, 2003 as quoted by Roozban, 2012).

The problems and challenges of human life are resolved through depending on small and large organizations in society. As a super-system entity, society has many sub-systems and each of these subsystems is important in their own place. Given this, educational systems that provide future human resources are of great importance. Undoubtedly, education is one of the most important elements and teachers are the most important of them who play a significant role in the human efficiency of the individual education system as well as the effectiveness of the education system. Regarding the sensitivity and importance of the role of teachers in matters such as the education of students' potentials, the transfer of culture, religious and spiritual education, helping to identify spirituality, training, depicting way of life and, in brief, humanizing and educating the next generation, this group are always under pressure. Regarding the different context of schools (compared to other organizations) and the conflicts resulting from bureaucratic and professional structures, a total different and special behavior pattern is expected from teachers and principals. These factors along with other stressor factors, such as the lack of satisfactory welfare, insufficient salary and benefits and the lack of compatibility between teachers' job with the personality of some teachers, etc., cause depression, psychological stress, and, finally, decreased level of quality of working life among teachers. These factors are also related to the organizational culture in education.

As outlined above, the results of this research in the first hypothesis showed that there was a significant negative correlation between organizational commitment and neurotic personality-job among teachers. Besides, it was found that there was a significant positive correlation between organizational commitment and extroverted, flexible, agreeable and conscientious personality types and directorial job. Given the education system of our country, it seems that principals characterized with neurotic traits will never be able to take on the goals of this organization and they will not contribute to the progress and excellence of this organization. Conversely, it was indicated that principals embedded with such personality traits as extroversion, flexibility, agreeableness and conscientiousness act in line with organizational goals and can be considered productive forces for the education organization. Actually, they can adapt themselves to the organization and continue to work more efficiently.

Given the results of this research, it can be concluded that human resources managers in organizations should, at the beginning of the recruitment of these human capitals, consider the desired job as a dress so that they can select and find a suitable and qualified employee therein. Accordingly, the selected employees will not be frustrated thereof. In fact, considering such issues in utilizing the human resources required by organizations can maximize the overall performance of the organization. Organizations and companies should pay more attention to the quality of their recruitment of human resources more than any other issue in their competitive advantage of human resources. Actually, the former results from the optimal personality-job fit. Furthermore, they must not tailor the criteria for choosing individuals in different and diverse positions of the organization in a same way and they must act in accordance with the requirements and required characteristics.

Lack of attention to the suitability of the job with the personality of the persons causes such effects as reduced level of efficiency and effectiveness in the organization, deteriorated quality of working life, reduced level of coordination and compatibility of the persons with the concerned job, less job success, increased number of displacement and abandonments of the job and increased number of burnouts.

As a result, it seems that these results have general implications for school professionals, administrators, principals as well as the education system. In fact, the former groups play an important role in helping students to modulate the mental health problems of students and their families. Accordingly, particular attention should be paid to preparing school principals and general changes must be exerted to enhance the personality-job fit and organizational commitment so that they can go on a path to growth and continue to train their students.

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THE RELATIONSHIP BETWEEN SELF-ESTEEM OF EMPLOYEES WITH ORGANIZATIONAL DEVELOPMENT, ADMINISTRATION OFFICE OF THE IMAM KHOMEINI RELIEF COMMITTEE (RA), MAZANDARAN PROVINCE

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Abstract

Organizational development is a systematic, rational, integrated and programmed approach which is used to increase organizational effectiveness. This approach is influenced by psychological factors that one of these factors is self-esteem and its aspects. The purpose of this study was investigating the relationship between organizational development and self-esteem and its aspects of the staff of the Imam Khomeini Relief Committee (RA), Mazandaran Province. The study method of study in term of purpose is applied and in term of data collection is a survey research and it is correlational study. The statistical population is all the staff of the Imam Khomeini Relief Committee (RA) of Mazandaran province, 95 persons which is selected by random sampling and Krejcie and Morgan Table, the sample size is estimated as 76 people. (K-S) test, Pearson correlation and regression and SPSS software were used to analyze the data. Also, the validity was assessed by using Cronbach's alpha. The results indicate that there is a significant positive relationship between overall self-esteem and self-esteem with organizational development. On the other hand, the results indicate that there is a significant relationship between family self-esteem and self-esteem, with social organizational development. There was also no significant difference between male and female employee's self-esteem and organizational development. According to these findings, it can be concluded that self-esteem is an important and moderating parameter of organizational development. As a result, appropriate training to increase self-esteem among employees can be considered a priority intervention to achieve optimal organizational development.

Key words: Family self-esteem, social self-esteem, occupational self- esteem, organizational development

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Introduction

Today is an era of acceleration change and uncertainty toward future and the lack of available and sufficient data for executives' decision-making. In fact, the stability and development of organizations in twenty-first century are lies in line with the rapid development, growth and expansion because environmental rapid changes, improvement and organizational development in different positions are inevitable. (Ebrahimzadeh, R, 2005). Organizational development is a process that an organization develops its own internal capacity to achieve and maintain its maximum effect for its role in the organization's mission. This process led to the growth and flourishing of organizations through training staffs who are the valuable capital working in an organization.(Afsharnejad, Taher,2005). Thus certainly the most important factor in the growth and development of any organization is human resources and the success and progress of any organization depends on its skilled manpower. Imam Khomeini Relief Committee (RA) is one of those organizations whose human resources are the most hard-working and committed people and if the working conditions and motivations are favorable and, they use their talent and skills to work efficiently for the organization and performed better for serving needy people.

Self-esteem is one of the variables that usually affect the motivation, effort and a person's vision that reflects an assessment of self, the level of belief to ability, importance, success and value. It is a personal judgment about the value of its own. Self-esteem is an important self-awareness and a strong factor in encouraging people to work, determining the capacity and willingness of self-control and self-guidance and intention toward beneficial behaviors which consists of different aspects, but one of the aspects is occupational self-esteem which is related with the organization. In other words, occupational self-esteem indicates the level of self-awareness to perform specific tasks in the future.

People often achieve different levels of self-esteem to do tasks or functions that are important for their lives (for instance, main responsibilities of their job). Employees, who have a high occupational self-esteem, work better than people who have low self-esteem and are more satisfied with their jobs. Those with high self-esteem evaluate their abilities highly and are certain that when they decide to do something, they can do it efficiently; in contrast, people with low self-esteem see their abilities as limited. Therefore they predict less success for themselves and restrict their activities. As a result, a person's occupational self-esteem level at work plays an important role in their organizations. Increased occupational self-esteem has positive relationships with measuring motivation, organizational citizenship behavior, job satisfaction, organizational commitment, and job performance.

Given the importance of proper help to orphans and needy families, and also participating in charitable activities represent the attention to employees of RA, thus this study is trying to investigate the relationship between self-esteem and their organizational development. Therefore the research question is; is there a significant relationship between the variables of self-esteem and organizational development of Imam Khomeini Relief Committee?

Research objectives

Main objective:

Studying the relationship between staff self-esteem and organizational development of the Imam Khomeini Relief Committee (RA), Mazandaran Province

Secondary objectives:

Determining the relationship between occupational self-esteem of staff and organizational development of the Imam Khomeini Relief Committee (RA), Mazandaran Province

Determining the relationship between family self-esteem and organizational development department of the Imam Khomeini Relief Committee (RA) of Mazandaran

Determining the relationship between social self-esteem of staff and organizational development of the Imam Khomeini Relief Committee (RA) of Mazandaran

Conceptual Model of research

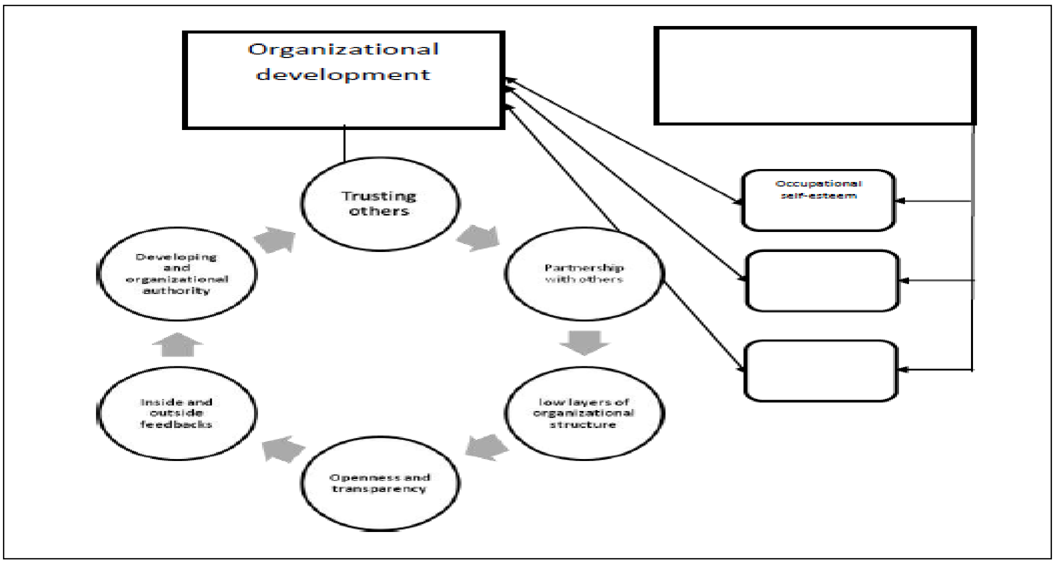


Figure 1: Conceptual Model

Reference: Hossainnejad et al (2013)

Self-esteem definition

People have several different conceptions of themselves during life. Self-esteem is an important self-awareness and a strong factor for encouraging people to determine their capacity and self-control and guidance and willingness toward beneficial behavior (Tousi, 2001).

Self-esteem is an attitude of acceptance or non-acceptance of himself which ultimately shows itself in the form of interest (apathy) of a person toward himself. The factors which can severely affect self-esteem are the encounter of valid people, work systems, personal lifestyle and sense of adequacy and functionality from personal experience (Tousi, 2001).

Occupational self-esteem shows the level of consciousness of a person to perform certain tasks in the future. The tasks that people often do (for example, driving) or tasks that are important to their lives (for example, the main responsibilities of their job) obtain different levels of self-esteem. This difference is important; people who perform a task and constantly receive negative feedback never have the impression that they are efficient (Aronson, 1998).

We have recently discovered another level of self-esteem which has special significance for people in the workplace. This is an organizational self-esteem. Organizational self-esteem is an image that people have of their value as a member of the organization. People with high organizational self-esteem know themselves important, meaningful and worthwhile (Aronson, 1998).

Workplace self-esteem

Agitation, confusion, rapid competition and uncertainty are important characteristics of the work environment in the twenty-first century. As a result of this situation, many organizations applied a participant's work with unprecedented change. This participatory attitude includes empowering the employees, participatory decision-making and democracy in the workplace. The obvious plans of this approach for attracting employees' participation include career development, job enrichment, quality control circles, quality of work life programs, joint committees of staff and management, total quality management programs, employee participation schemes and self-running groups. Each of the above programs, in its own way, has had a positive effect on the organization. This positive impact has beneficial consequences on individual and organizational levels (Fakouiyan, 1999).

Participatory work systems can succeed if employees free their potential energy to work and substantially apply their self-control and self-guidance. Unfortunately, many organizations that are changed from the traditional model to participatory model realize that their employees immediately cannot work independently and responsibly. This leads to raising two important questions; who are these self-guidance and self-control employees? "How directors can cause these behaviors?" The answer of first question lies in the concept of self-esteem. Basically, the way of employees' attitudes in the workplace can strongly affect their motivation and behavior at work. The responsibility of supervisors is to understand this attitude and use that to improve the self-esteem of employees in workplace. The second answer is that supervisors can use and promote staff self-esteem through identifying a series of organizational conditions (e.g., structure and resources) and managing behaviors (such as empowering, education and encouragement) (Fakohian, 1999).

Organizational Self-esteem

Self-esteem is an image that people have of their value as a member of the organization. People with high organizational self-esteem know themselves important, meaningful and valuable. Organizational self-esteem points out that self-esteem which is specific to organizational environments and perceptions of staff from their organization, and is made up of past experiences, including successes and failures in business (Hugh and Lee, 2000, quoted by Pearson & Gardner, 2004). Self-esteem reflects the organization's perception of their competence within the organization. Organizational self-esteem is the degree to which members of the organization can also meet their needs by participating in roles that are within the corporate environment, so people with high organizational self-esteem have personal sense of urgency in the case of an organization member and they feel that their needs have been met in the roles they have played in their organizations (Pearson et al., 1993).

Organizational self-esteem grows in situations where the organization provides messages, opportunities, or structural issues to create relationships with competent and staff values, increasing organizational self-esteem has positive relationships with assessing motivation, organizational citizenship behavior, job and professional satisfaction, organizational commitment, and job performance (Ari & luke,1997, Karonso, Lankford & Roy,1997, Gardner & piers, 1997, Hall et al 1989, Tong & Gilbert,1994, quoted by Phillips, 2000). High organizational self-esteem creates need to progress, challenges and intrinsic motivation and high educational level. Also high organizational self-esteem is associated with work attitudes such as organizational commitment and overall job satisfaction and retention at work (Vi & Albert, 1998, quoted by Mayer, Viet field and Godkin, 1999).

In short, employees with organizational self-esteem are exactly those staff that a participant organization, if it wants to compete in today turbulence and unreliable global market, needs them. These staffs are more active, probably resolve more complex problems in terms of uncertainty, are more responsible and have more self-control self-directing (Pearson & Gardner, 2004).

Self-esteem Formation and Development

Self-esteem is the result of thoughts and feelings, emotions and our experiences in life and this feeling is based on our knowledge or understanding of ourselves and mostly of our social experiences, we see ourselves in the way that we think others see us (Croman, 1976).

Around a hundred years ago a sociologist named "Crowley" wrote "Our attitude is like a mirror which reflects the assessment of the perception of others towards us" thus "self-image" that conveys the concept of self-esteem seems to be created and made by influence of external environment (Sheehan, 1998).

In the first years of life, we are heavily influenced by image of others from us; this affects our attitude towards ourselves. It is good to know if we grow up in a different way probably we would have a different self-esteem, although we are necessarily the same person (Sheehan, 1998).

In order to evaluate the development of self-esteem can investigate the person from himself (self-perceived) and "self-ideal" of the self- vision similar to the concept which means the person has a vision of skills, character and qualities which are inside a person or not. Self-ideal is an image of the person that the person wants, not as inaccessible, but in accessible and certain features, when the self-image and self-ideal are well coordinated, the self-esteem will be positive. For example, a child who values the academic success and also is a good student will feel good about himself because he has positive assessments of his true characteristics. On the contrary, a child whose self-ideal is popular person but in reality has few friends, his self-esteem will be weak. The difference between the ideal image of him and self-esteem creates problems in this field (Sheehan, 1998).

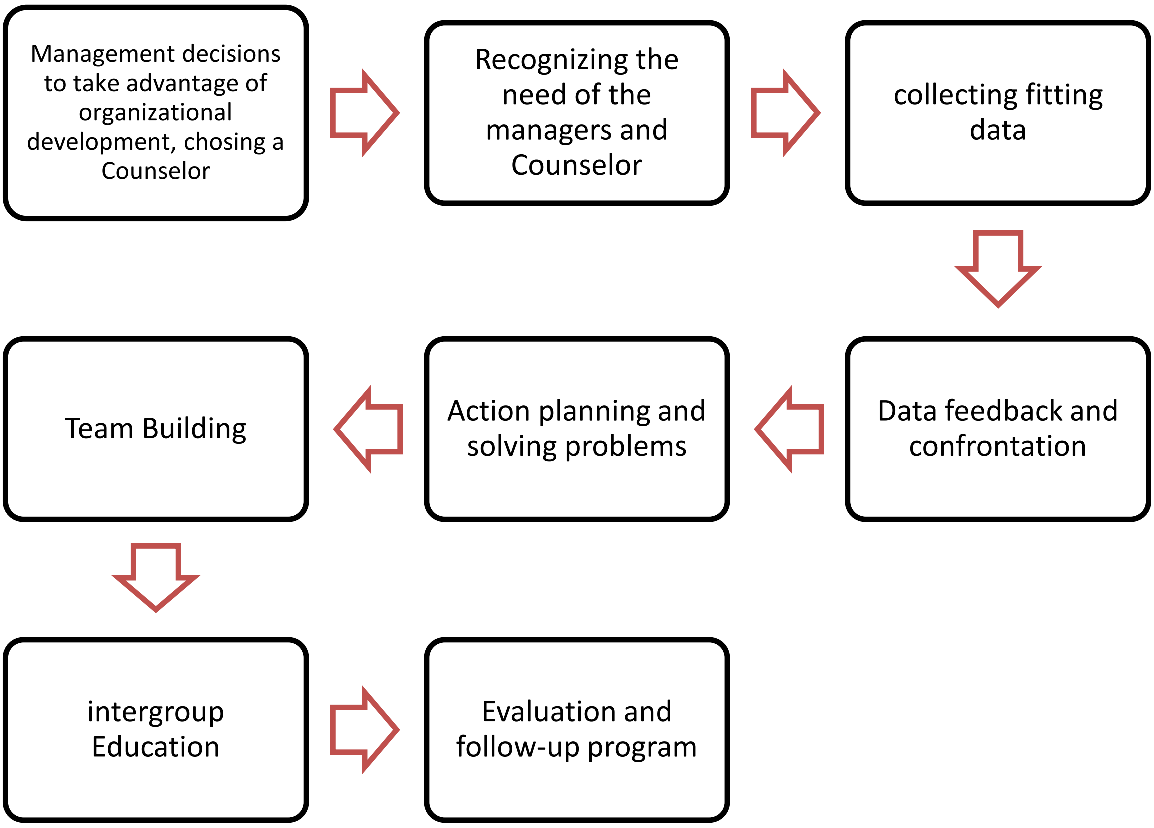
The basic tendency toward having good feeling about themselves and the world around is something that all of us are born with, however, over time; the natural tendency is threatened in different ways. In this regard, researchers have studied many variables that some of them will be discussed:

A. Developing method: the relationships quality in childhood is essential because the seeds of self-esteem are planted at this time. It is thought that the mother plays a central role in this respect. If the mother-child relationship is healthy, the child will have a positive feeling about the ability to make personal and intimate relationships in adulthood. The opposite is also true. Failing to establish an emotional relationship with mother can lead to persistent anxiety caused by neglect or rejection (Sheehan, 1998).

Organizational development process

Organizational development can always be followed one or more than one year to take an organization. Various methods are at hand for organizational development, but include a full schedule and conventional steps. The steps are briefly listed in the following diagrams.

Steps of organizational development process



1. Primary detection: Organizational development advisor meets with senior management to determine the nature of the difficulties, elect the organizational development practices that are most likely to succeed, and achieve the full support of senior management. At this point counselor can pay to collect the data through dialogue with various parties in the organization.

Internal records

Hosseinnejad et al (2014) an article as the relationship between self-esteem and job satisfaction and organizational development the results of comparison of organizational development between male and female teachers indicate that there is a significant differences between men and women at the level of 5%. Thus in this comparison, women have reported higher organizational development than men.

Ahmadi et al (2012) in a study about the relationship of organizational development, self-esteem and its impacts on PNU employees concluded that results showed that there is no significant relationship between family self-esteem and social self-esteem with organizational development.

Yavari (2013) in a study about the relationship between self-esteem and organizational development in education concluded that self-esteem is a self-evaluation which reflects the belief to ability, importance, achievement and self-values.

Hosseini (2011) in a study about the influence of growth factors in job satisfaction of physical education teachers concluded that 51% of job satisfaction among teachers of physical education could be explained by components of organizational development. In a way that the component of trusting others has the highest impact and organizational powers have the least effect on job satisfaction. The lower layer component of the organizational structure does not show any significant effect on job satisfaction.

Mohammadpur (2011) in a study about the role of organizational development among staff concluded that organizational development is in fact recognizing human values in great efforts of the organization. Organizational development means to cause the growth and flourishing of education organizations through people who operate the organization as valuable capital.

Foreign backgrounds

Tom Keynes and Melinda (2009) investigated the effect of five characteristic model on organizational self-esteem of staffs. The results showed that five personality types of Costa and MC Correa calculate the variance of self-organization and can be a good self-esteem predictor.

Fera Costaro and McNari (2007) investigated the relationship between self-organization and their motivation factors, the results showed that organizational self-esteem will affect people motivation and development.

Lee and Facy (2007) investigated the relationship between perceived organizational support and effective organizational commitment and the mediating role of self-esteem. The results emphasized the mediating role of occupational self-esteem and practical relationship between perceived organizational support and organizational commitment.

Martin (2011) in a research about investigating the relationship of self-esteem of managers on the development of Red Crescent Society staff concluded that managers play an important role in job satisfaction of employees and in fact are an important part of any workplace. Managers in the private sector due to the authority for making changes in their units, have far greater share in the creation of job satisfaction and increasing self-esteem in their employees and subordinates. Fair and timely payment of salaries, enabling promotion and creating an intimate atmosphere in the workplace are the most important facilities.

Ting (2013) in a study of investigating the relationship of manager self-esteem on the development of bank employees came to the conclusion that employees can have the highest level of motivation and ability, but if they do not have enough resources to do their work, the motivation and ability will be wasted and as a result, they cannot succeed, such experiences often leads to low levels of organizational self-esteem.

Statistical population and Sampling

Scientific laws should have ownership so that they can be used in all cases where the subject is applied. Therefore, if the research that all cases that have fitting subject is achieved, there is no need for sampling (Houman, 2003: 113). The statistical population consists of a collection of individuals or units that have at least one common trait. The statistical population in the present study is all the Imam Khomeini Relief Committee staffs of Mazandaran Province which is 95 according to statistics their number. 76 individuals were selected randomly for the sample according to Morgan table.

Table 1:Research Questions: The questions are designed to measure these hypotheses. This section contains a standard questionnaire.

Row	Component	Questions
1	Occupational Self-esteem	Questions 1-9
2	Family Self-esteem	Questions 10-19
3	Social self-esteem	Questions 20-25
4	Organizational development	Questions 1-15

Data analysis

Data analysis of is a multi-step process in which data collected by instruments in the sample are briefed, coded, categorized and reviewed and finally are processed, to provide analysis of the relationship between the data provided in order to test the hypothesis. Statistical methods used in this study are as follows;

- Descriptive statistics: In this study, descriptive statistics were used to display demographic information. Therefore, data is explained by using frequency table and graph.
- Inferential statistics: in inferential statistics part Kolmogorov-Smirnov test (K-S) was used for the normality of variables and Pearson correlation and regression analysis were used to test the hypotheses and examine the components.

To analyze date, after collecting questionnaire, data is coded and entered into a SPSS software and finally were analyzed by using the contained instructions and according to the requirements of the variables and their relationship to each other were analyzed by aforesaid tests the data obtained were analyzed and interpreted (Russell, 1380).

Testing main hypothesis:

Null hypothesis: organizational development and self-esteem are not correlated.

First hypothesis: Organizational development and self-esteem are correlated.

According to Table 2. null hypothesis is rejected and first hypothesis is accepted and it can be said that organizational development and self-esteem are in one direction and the correlation coefficient is 0.534 which means that one percent increase of self-esteem, 0.534 will be added to organizational development and by decreasing self-esteem one percent reduction in the amount of organizational development will be reduced.

Table 2: Organizational development

		Organizational development
Self-esteem	Pearson correlation coefficient	0.534
	criteria decision	0.000
	Number	76

First hypothesis:

Null hypothesis: there is no correlation between employees' self-esteem and organizational development of RA staffs.

First hypothesis: there is a correlation between employees' self-esteem and organizational development of RA staffs.

Table 3: Occupational self- esteem of employee

Occupational self- esteem of employee	Pearson correlation coefficient	0.492
	decision criteria	0.000
	Number	76

According to Table 3., null hypothesis is rejected and first hypothesis is accepted and It can be said that self-esteem among employees and organizational development department of the Imam Khomeini Relief Committee (RA) Mazandaran province the correlation in one direction and the correlation coefficient is 0.492 This means that a one percent increase occupational self-esteem, 0.492 will be added on organizational development and occupational self-esteem percent decline will reduce the amount of organizational development.

Second hypothesis test:

Null hypothesis: there is no correlation between family self-esteem and organizational development of RA staffs.

First hypothesis: there is a correlation between family self-esteem and organizational development of RA staffs.

Table 4: Family self-esteem of employee

Family self-esteem of employee	Pearson correlation coefficient	0.638
	decision criteria	0.000
	Number	76

According to Table 4. the null hypothesis is rejected and first hypothesis is accepted a and it can be stated that family self-esteem staff and organizational development department of the Imam Khomeini Relief Committee (RA) Mazandaran province correlation in one direction and the correlation coefficient is 0.638 This means that a one percent increase of self-esteem, family employees will be added 0.638 on organizational development and the loss of a family of self-esteem percent of employees will be reduced the same amount of organizational development.

Third hypothesis test:

Null hypothesis: there is no correlation between social self-esteem and organizational development of RA staffs.

First hypothesis: there is a correlation between social self-esteem and organizational development of RA staffs.

Table 5: Social self-employee

Social self-employee	Pearson correlation coefficient	0.316
	Decision criteria	0.000
	Number	76

According to Table 4-8 null hypothesis is rejected and first hypothesis is accepted and it can be argued that social self-esteem among employees and organizational development department of the Imam Khomeini Relief Committee (RA) is in one direction and the correlation coefficient is 0.316 correlations. It means that a one percent increase of social self-esteem of employees, 0.316 will be added on organizational development and one percent reduction in self-esteem and social workers will decrease the amount of organizational development.

Variables analysis and test using regression:

The main question

Q: Is there a relationship between self-esteem and organizational development of RA staffs?

Null hypothesis: there is no relationship between self-esteem and organizational development of RA staffs

First hypothesis: there is a relationship between self-esteem and organizational development of RA staffs

Table 6: Regression testing between self-esteem and organizational development

The regression model between the organizational development with the following independent variables	β coefficient (impact)	T statistics	Decision Making Criteria
Self-esteem	0.534	5.290	0.000

Results: The analysis has been made clear that the decision criteria are less than 5%. As a result, H_1 is confirmed. This means that there is a relationship between self-esteem variable and the, organizational development dependent variable department of RA. According to the regression coefficient β indicates the effect of the independent variable on the dependent variable.

First research question

Q: Is there a relationship between occupational self-esteem and organizational development of RA?

Null hypothesis: there is no relationship between occupational self-esteem and organizational development of RA

First hypothesis: there is a relationship between occupational self-esteem and organizational development of RA

Table 7: Regression testing output between occupational self-esteem and organizational development

The regression model between the organizational development with following independent variables	β coefficient (impact)	T statistics	Criteria Decision Making
occupational Self-esteem	0.492	6.797	0.000

Results: The analysis has been made clear that the decision criteria are less than 5%. As a result, H_1 is confirmed. This means that there is a relationship between occupational self-esteem variables and the dependent variable of organizational development of RA. According to the regression coefficient β indicates the effect of the independent variable on the dependent variable.

Second research question

Question: is there a relationship between family self-esteem and organizational development of RA?

Null hypothesis: there is no relationship between family self-esteem and organizational development of RA

First hypothesis: there is a relationship between family self-esteem and organizational development of RA

Table 8: Regression testing output between family self-esteem and organizational development

The regression model between the organizational development of RA and following independent variables	β coefficient (impact)	T statistics	Decision Making Criteria
Family Self-esteem	0.638	3.196	0.000

Results: The analysis has been made clear that the decision criteria are less than 5%. As a result, H_1 is confirmed. This means that there is a relationship between family self-esteem variables and the organizational development dependent variable of RA. According to the regression coefficient β indicates the effect of the independent variable on the dependent variable.

Third research question

Question: Is there a relationship between social self-esteem and organizational development of RA?

Null hypothesis: there is no relationship between social self-esteem and organizational development of RA

First hypothesis: there is a relationship between social self-esteem and organizational development of RA

Table 9: Regression testing output between social self-esteem and organizational development

The regression model between the organizational development of RA and following independent variables	β coefficient (impact)	T statistics	Decision Making Criteria
Social Self-esteem	0.316	3.005	0.000

Results: The analysis has been made clear that the decision criteria are less than 5%. As a result, H_1 is confirmed. This means that there is a relationship between social self-esteem variable and the dependent variable of organizational development of RA. According to the regression coefficient β indicates the effect of the independent variable on the dependent variable.

According to the results of the data description:

1-The gender of most of the participants in this test are male (76.5%) and women (23.5%) It shows men are more than women in the office and their impact on the results is more.

2- The study major: The management major in the department is more highlighted which include 75% of staffs, and the number of people who have Management major is 25% which shows the role and impact of other management major is high.

3-Participant degree: the number of educated people with university degrees in the department. People who have a bachelor's degree make up 52.9% of the population, people who have an associate's degree make up 27.9% and people who have a Master degree make up 10.3% and finally, 8.8% of them had diploma and obviously the role and influence of educated people in organizational development is more.

Comparing with previous studies

In research conducted by Tom Keynes and Melinda (2009) to study the effect of the five type's model of character on organizational self-esteem they concluded that organizational self-esteem in the performance of employees is a mediator and the payment level has a positive impact on people self-esteem. In this research we came to the conclusion that there is a relationship between self-esteem of staff and organizational development of RA staffs.

Lee and Gheisi (2007) investigated the relationship between perceived organizational support and organizational commitment and the mediating role of self-esteem. The results emphasized the mediating role of occupational self-esteem and practical relationship between perceived organizational support and organizational commitment. In this research, we came to the conclusion that there is a relationship between occupational self-esteem of staff and organizational development of RA staffs.

Ferra Costa Ro and MC Nari (2007) investigated the relationship between organizational self-esteem and motivation factors, the results showed that self-esteem and motivation organizational development will affect people. In this research we came to the conclusion that there is a relationship between occupational self-esteem of staff and organizational development of RA staffs.

Variables	Current research	Confirming previous researches
Self-esteem, job and organizational development	There is a positive relationship between occupational self-esteem of staff and organizational development of RA staffs.	Taghizadeh (2012) Melinda (2009)
Family self-esteem and development of staff	There is a positive relationship between family self-esteem and organizational development staff department of RA staff	Ferra Costa Ro (2007) Husseinnajed (2014)
Social self-esteem of employees and the development	There is a positive relationship between social self-esteem and organizational development staff department of RA staff	Gardner (2008), Tom Kinz

Suggestions

- In the first hypothesis we conclude that occupational self-esteem has impact on organizational development. It was really important for these people and jobs effects on performance and organizational development.
- In the second test of the relationship between self-esteem and family self-esteem and family influence on the development of performance show dramatically because of family formation behaviors and personal characteristics and behavior of individuals and its impact on organizational development is an integral organization, particularly the RA staffs and more important and discuss the role and its impact on the environment seriously.
- The third hypothesis testing role and impact of social self-esteem is showing the interaction with the environment and people's lives at work and by looking the results shows the dramatic impact on organizational development and to the organization and other organizations that are planning to do so. It is recommended to social self-esteem and people in the organization and in order to achieve your goals and it's important not to overlook this as an important factor in the development of their own organizations.

Suggestions for future studies

Investigating the relationship between self-esteem and organizational efficiency

Investigating the conditions of self-esteem and job satisfaction

Investigating the relationship between self-esteem and organizational commitment

Investigating the relationship between conditions of self-esteem and employee turnover

Limitations and research problems

Usually, each team for starting and continuing their research career will encounter numerous obstacles and limitations. In this research, researchers are faced with difficulties including limitations and issues which lowered the speed of study:

Researchers' Limitations

1) Limited scientific resources for research

2) Limited financial resources to do the research.

3) The unwillingness of respondents to disclose the information and detailed reports that researcher interviewed in person and has to solve them.

Limitations out of the hands of researcher

1) Lack of cooperation of some colleagues

2) Qualitative variables

3) The time limit

4) Deficiency or lack of available and usable resources

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INVESTIGATING THE EFFECT OF INTELLECTUAL CAPITAL ON SUSTAINABLE DEVELOPMENT OF SPORTS ECOTOURISM

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Mostafa Tayyebi Sani[7]

Abstract

This study aims at investigating the effect of intellectual capital on sustainable development of sports ecotourism using a survey method. Given the objective of the study, the statistical population consisted of all tourism industry and sports ecotourism specialists employed by the organizations affiliated with tourism industry and also a number of expert university professors. From this population, 287 persons were identified based on select-all-the-numbers, and all of them were selected as the sample for the study. Shakerian Intellectual Capital Questionnaire (2013) and a researcher-developed questionnaire for sustainable development of sports ecotourism were the instruments used to gather data. The data were analyzed using route analysis method in SPSS and AMOS. The results of the study indicated that all the components of intellectual capital (human capital, structural capital, and communication capital) had an effect on sustainable development of sports ecotourism. Among the components of intellectual capital, the human capital component had the greatest effect on sustainable development of sports ecotourism with an impact of 0.45. The results of the study imply that special attention should be paid to intellectual capital, specially its human capital component, to develop and improve sports ecotourism.

Key words: sports ecotourism, intellectual capital, human capital

JEL: O10

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Introduction

Basically, in any country economic development requires investment in different sectors and activities of the country, and expansion in employment, production, and economic prosperity cannot be expected without investment in infrastructure and superstructure projects (Shakeri,Fereidoun, 2006). Tourism is the third largest economic sector in the world (Lozano-Oyola et asl,., 2012). It has considerably grown in importance in the past 50 years as an area of national and international commerce (Samad,Farjam, 2011). As the world's vastest service industry, tourism has a special status in economic, cultural, social, and political areas, in a way that it has turned into the world's largest and most diverse industry with 200 million employees (5 percent of all the world's employment) and an annual financial turnover of around 5.4 trillion dollars. In more than 150 countries of the world, tourism is one of the five most importance sources of earning foreign currencies, and it is the most important source of earning foreign currencies in 60 countries (Movahed,Kohzadi, 2010).

It can be said that tourism is a kind of development in which balance, interaction, and maintaining values and the quality of morality, and economic principles are all taken into consideration, and it is tried to replace an exclusively economic development by a balanced and comprehensive development (Mojhseni,2010). Based on this, many countries have been able to improve their situation to a considerable extent and deal with economic problems such as low per capita income, massive unemployment, and lack of currency revenues (Mousayie,2004). Therefore, tourism is an enormous power for change which is considered a resource for prosperity in many countries. The thousands of tourists who visit a country not only bring money with them but also affect the lives of the local people (Galdini,2007). Generally, tourism is now turning into one of the world's fastest growing industries, and it is an instrument for creating national income and one of the most important bases of economy and is considered an important concept, form, and base in sustainable development (Shokati et al., 2016).

Nowadays, tourism is one the most important sources of income and, at the same time, an effective factor in cultural exchanges between countries and has a great status as the world's most diverse service industry. Therefore, many countries of the world are in a close and intense competition with each other to increase their benefits and revenues from this international activity. Having a history that is several thousand years old and having abundant and rich sources of attracting tourists, our country has the potential to actively take part in this international competition and take the share it deserves from this enormous resource. It is obvious that gaining success in this area and achieving the material and immaterial benefits associated with it requires an understanding of the tourism phenomenon, knowing its different dimensions and consequences and also familiarity with correct management of the institutions and organizations involved in the tourism industry, a kind of management compatible with the most recent scientific achievements (Abdolshah et al., 2014).

Tourism development is manifested in different forms. Sports ecotourism is a form of tourism that has not developed properly in Iran, despite having the potential. Some of these travels include sports tourism. In industrialized countries, tourism as a whole makes up 4 to 6 percent of the gross domestic production (GDP), and the contribution of sports tourism as a whole is 1 to 2 percent of the gross domestic production. Although it is difficult to measure the effects of sports and tourism in all the world, the annual growth rate of the sports tourism industry is estimated to be around 10 percent (Hudsons, 2003). The economic advantages and benefits obtained from tourism, its natural and geographic manifestations, and its entertaining features are so attractive, and sports tourism has in fact emerged as a combination of the tourism and sports industries. In other words, doings sports are an important activity of tourists while traveling, and tourism and traveling involve a variety of sports (Honarvar, 2004).

In a study of sports tourism in Africa, Quio (2003) stated that some north African countries including Morocco, Tunisia, Egypt, and other countries of the continent like Kenya, and South Africa have considerably increased their tourism time span, tourism season, and revenues obtained from tourism by taking advantage of the existing opportunities for exploiting tourism based on natural sports attractions (Cave ,Leader, 2003).

Given human spiritual-psychological needs and the need for entertainment in the nature and the sports that can be done in natural surroundings, important actions can be taken toward achieving economic and employment objectives, and a suitable environment can be created for tourists if we have elaborate and sophisticated plans for exploiting the potential existing in different parts of the country, taking into account the different conditions of each area. Having plans for these tourist attractions and guiding sports tourists toward them would be very useful and effective and would prevent time, capital, budget, and human and material resources and facilities from being wasted and would put our country in an advantageous position in the competition we have with other countries, because, based on the investigations that have been confirmed, Iran is among the top 10 countries in terms of tourist attractions (Jenning,1998).

Although this area have not been adequately studied, some studies have attempted to investigate this industry. Roumar et al (2014) pointed out that paying attention to the needs of tourists and having plans for satisfying these needs is essential in gaining satisfaction and loyalty of tourists in ecotourism in Japan (Romão et al., 2014) Some studies have argued that Iran possesses suitable natural resources to develop sports ecotourism. Studies like Falahati et al (2013) and Esfahani et al (2009) have adequately showed that the existing natural resources in Iran are capable of developing the country's ecotourism (Fallahi, Hassani, Karoubi, Mehdi,2014; Esfahani,Goudarzi, Assadi,2009).

In a world facing severe lack of resources, it is highly important to be able to take full advantage of ecotourism potentials to deal with these problems (Kim, Walker,2012). Sustainable development of sports ecotourism in different areas of a country not only protects the environment but also helps tourist gain valuable experiences (Koc,2016). Nowadays, awareness of the benefits of sports ecotourism has increased, and the competition among different geographical locations to attract sports tourists have become more intense. Given this, authorities have tried to improve and develop the value of sports ecotourism places, so that their value is increased (Konstantaki, Wickens, 2010).

One of the factors that can help develop sports ecotourism is intellectual capital. Intellectual capital has always been an ambiguous concept, and various definitions have been offered to understand and interpret this concept. Many tend to use such words as assets, resources or performance drivers instead of the word capital and have replaced the word intellectual with words like invisible, knowledge-based or immaterial. Some professions (financial accounting and legal professions) have offered completely different definitions: non-monetary fix assets that do not have concrete and physical existence (Marr,2008). Edwinson and Malon define intellectual capital as "the information and knowledge used in working to create value" (Vasile, 2008).

Intellectual capital has the three components of human capital, structural capital, and communication capital. These components seem to have an importance impact on the development of sports ecotourism which is one of the most recent forms of tourism. Given Iran's geographical location and its abundant natural tourist attractions in some areas of the country, developing sports ecotourism can suitably result in sustainable development in these areas. Various parts of Iran have a great potential to develop sports ecotourism. Taking advantage of this potential in an appropriate way can lead to the sustainable development of sports ecotourism in the country. Intellectual capital seems to be able to have some effects on sustainable development of sports ecotourism. However, no study has ever attempted to specifically investigate and explain the relationship between intellectual capital and sustainable development of sports ecotourism. Therefore, it seems essential to study the effect of intellectual capital and its components on sustainable development of sports ecotourism. The present study is an attempt to investigate the effect of intellectual capital and its components, including human capital, communication capital, and structural capital, on sustainable development of sports ecotourism. To this end and given the existing literature on the issue, the following conceptual model is developed to be tested in the study.

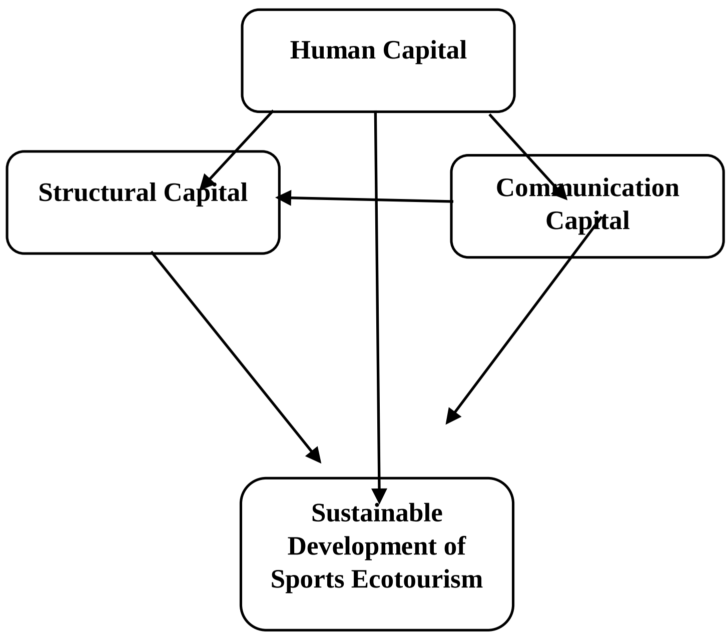

Figure 1: The Conceptual Model of the Study

Methodology

In terms of data gathering methods, this study uses a survey methodology. Given the objective of the study, the statistical population included all the experts in tourism and sports ecotourism industries who were employed by organizations affiliated with the tourism industry including The Organization for Cultural heritage, Handicrafts, and Tourism, The Ministry of Islamic Culture and Guidance, and The Ministry of Sports and The Young, and also a number of expert university professors in the area of sports tourism. After initial checking of the population, 287 persons were identified who were knowledgeable in this area. All these persons were selected as the sample for the study based on select-all-the-numbers, of whom 235 person expressed their willingness to cooperate and participate in the study. The questionnaire were sent to the participants in different forms, including in person, by mail, and by e-mail. Table 1 below shows the numbers for populations and samples divided by organizational status of the samples.

Table 1: The Numbers of Statistical Populations and Samples

Groups	Statistical Population	Statistical Sample	The Number of Questionnaires Collected	Sampling Procedure
The Organization for Cultural heritage, Handicrafts	55	55	36	Select-all
The Ministry of Islamic Culture and Guidance,	88	88	70	Select-all
The Ministry of Sports and The Young	97	97	89	Select-all
University Professors	47	47	40	Select-all
Total	287	287	235	

Shakerian (2013)'s questionnaire was used to investigate intellectual capital in this study. This questionnaire includes 66 five point Likert scale questions. These questions measure the three components of intellectual capital, namely human capital, structural capital, and communication capital. In this questionnaire, human capital included the factors: professional qualifications, social qualifications, motivating the employee, and leadership characteristics. Structural capital comprises the factors: cooperation and internal exchange of knowledge, management tools, information technology and declarative and express knowledge, product innovation, innovation and process improvement, and organizational culture. The factors comprising communication capital are communication with customers, communication with suppliers, public relations, communication with investors, and communication with colleague and associates.

A researcher developed questionnaire was used to measure sustainable development of sports ecotourism. This questionnaire included 13 questions investigating sports ecotourism development. Expert university professors' ideas and opinions were used to check the face validity of the questionnaire. Also, factor analysis was used to check the construct validity of the study. The results of the factor analysis indicated that the questionnaires used in this study are adequately valid. Cronbach's alpha confirmed the reliability of the two questionnaires. The results of the reliability tests showed that the reliability coefficient was 0.79 for the sustainable ecotourism development questionnaire and 0.86 for the intellectual development questionnaire. Descriptive and inferential (route analysis test) statistics were used to analyze the data obtained from the questionnaires using SPSS version 22 and AMOS version 20.

Results

As Table 2 shows, around 71 percent of the participants were men and around 29 percent were women. The age group 35-45 years had the highest frequency, comprising around 43 percent of the participants. The descriptive statistics also show that around 56 percent of the participants were Ph.D. students or held a Ph.D. degree.

Table 2: Descriptive Statistics of the Study

Variables	Groups	Frequency	Percentage
Gender	Men	168	71.4
	Women	67	28.6
Age	under 25 years	45	19.3
	35-45 years	101	42.9
	above 45 years	89	37.8
Education	Bachelor's degree and lower	24	10.2
	Master's dergree	79	33.6
	Ph.D student and Ph.D.	132	56.2

Since the primary foundation of route analysis models is the correlation matrix, in Table 3, the correlation matrix, mean, and the standard deviation among the variables of the study are presented. The results of this table show that there is statistically significant correlation between these variables.

Table 3: The Correlation Matrix for the Variables of the Study

	Variables	Mean	Standard Deviation	1	2	3	4
1	Sustainable development of sports ecotourism	3.60	0.31	1			
2	Human capital	3.78	0.57	0.612**	1		
3	Structural capital	3.3	0.40	0.521**	0.401**	1	
4	Communication capital	3.61	0.30	0.578**	0.425**	0.432**	1

** < 0.01

Checking the multicollinearity of the independent variables is one of the assumptions of modeling. To see whether there exists a multicollinearity, two indicators have to be studied: variance inflation factor (VIF) and tolerance factor. As can be seen from Table 4, the inflation factor for all the independent variables is lower than 10, and their tolerance factor is higher than zero and close to 1, indicating a low multicollinearity among the independent variables.

Table 4: Multicollinearity Indicators in the Variables Predicting Sustainable Development of Sports Ecotourism

Variables	Variance Inflation Factor	Tolerance Parameter
Human Capital	1.13	0.89
Communication Capital	1.15	0.91
Structural Capital	1.17	0.90

In order to investigate the effect of intellectual capital and its components, the route analysis method was used in most structural equations. Figure 2 shows the results of this test. In this model, the variables of the study are presented in an abbreviated form. To better understand these variables, Table 5 presents the abbreviations for each variable and component.

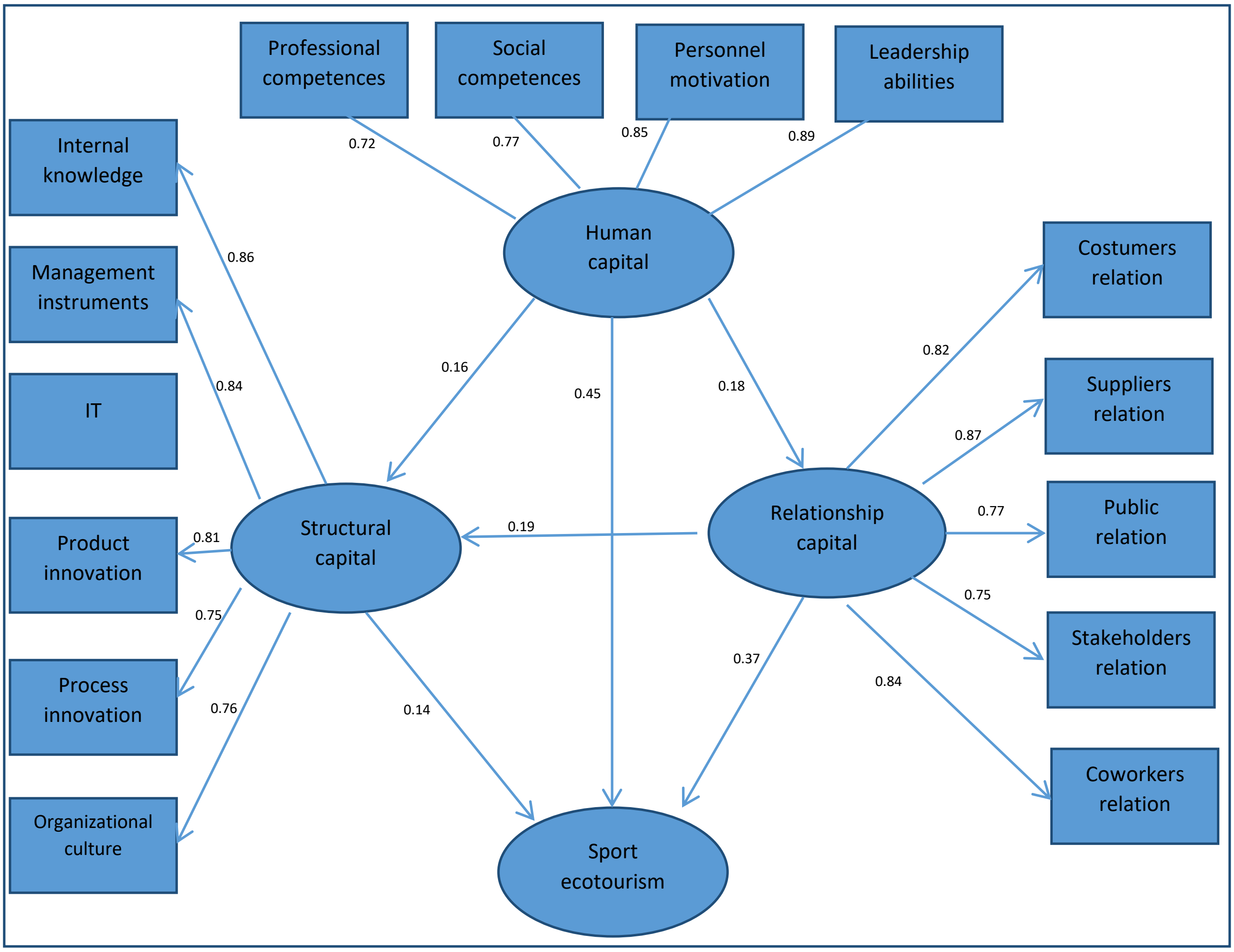

Figure 2: The Statistical Model of the Study

As the results of the statistical model indicate, it was found out that all the components of intellectual capital have an effect on sustainable development of sports ecotourism. Among the components of intellectual capital, the human capital component has the strongest effect on sustainable development of sports ecotourism with an effect of 0.45. The results of the model also showed that the different components of the intellectual capital have an adequately significant effect on each other. Table 5 shows the indicators for measuring goodness of fit in the study. As the results of this table show, all these indicators are fit and, as a result, the model used in this study is a fit one.

Table 5: Indicators of Goodness of Fit in the Study

Indicator	Value	Status
Chi Square	345.587	fit
RMSEA	0.032	fit
CFI	0.978	fit
GFI	0.962	fit
AGFI	0.954	fit
NFI	0.977	fit

Discussion and Conclusion

The results of the present study showed that intellectual capital has a statistically significant effect on sustainable development of sports ecotourism. Intellectual capital plays an importance role in performance and development in various environments. This role has been investigated in different industries. For instance, Karoubi and Heidari (2014) found out that intellectual capital plays an important role in the development of the hotel industry (Karoubi,Heidari,2014). However, this issue has not been adequately investigated in the tourism industry, particularly in sports ecotourism. In some studies, one of the components of intellectual capital has been studies very superficially.

Karimi (2013) is one of the few studies which conducted in this area. In his study intended to investigate the relationship between intellectual capital and organizational performance in the Organization for Cultural heritage, Handicrafts, and Tourism, he found out that intellectual capital can improve the performance of the Organization for Cultural heritage, Handicrafts, and Tourism, and this can result in the development of the activities of the organization, including tourism activities (Karimi, 2014). Rose and Barrons (2010) found out that intellectual capital results in the development of different activities, including tourism (Rose, Barrons,2005). Given this, it can be claimed that the results of the present study are in line with the results found in Karimi (2013) and Rose and Barrons (2010). Sustainable development of sports ecotourism requires several resources including human, structural, and communication resources in an area. Intellectual capital can provide these resources for the sustainable development of sports ecotourism.

Rahiminia and Hassanzadeh (2011) indicated that an important component of tourism development is human resources (Rahimnia,Hassanzadeh, 2011; Hodayie,Kalantari,2012). Tayyebi (2012) also emphasized that human resources are one of the most important components of tourism development (Tayyebi,2012). The existence of human resources can improve the performance of any organization. The existence of knowledgeable and highly skilled people in the area of sports ecotourism can result in the creation of joyful programs for tourists. Therefore, it should be tried to improve the capacities related to human resources in sustainable development of sports ecotourism by enhancing the skills of the available human resources and employing experts in the area of sports ecotourism.

Another important component in the development of is the existence of structural capital. One of the important components of structural capital is using and developing information and communication technologies. Saghayie and Mafi (2009) stated that infrastructural and structural factors can develop tourism industry (Saghayie, Mafi,2009). Therefore, paying attention to structural capital plays an important role in the development of sports tourism and, consequently, in the development of sports ecotourism. Hence, it should be tried to develop structural capital to develop sports ecotourism by devising operational solutions.

In this study, communication capital was identified as an influential component in the sustainable development of sports ecotourism. This capital can play a special role in attracting tourists to develop sports ecotourism by establishing intra- and inter-organizational relations. This capital familiarizes tourists with the projects carried out in this area and results in properly attracting people in this area. Malkomi (2003) and Mahdizadeh et al (2014) indicated that offering a communication model resulted in the effective attraction of people (Malkomi,2003; Mehdizadeh,Talebpour,Fathi,2014). Therefore, it is suggested that communication capital receive more attention in the sustainable development of sports ecotourism.

Given the development potentials of sports ecotourism in Iran, it can play an important role in the development of the tourism industry and in the attraction of tourists. Thanks to its special geographical and climate conditions, Iran has the capacity to host a huge number of athletes (mountain climbers, cyclists, desert walkers, boat riders, the fans of the joyful sport of skiing and also rally competitions, particularly in the desert). Although the development of sports ecotourism brings considerable benefits to tourist destinations, if it is accompanied with planning and scientific studies, it can leave negative and permanent consequences in the ecological resources of these areas. Given the materials mentioned above, ecotourism has received attention as a solution for providing environmental, social, economic, and cultural benefits both at national and local levels. Ecotourism is now in the center of attention of policy makers in the area of planning an executive affair, and many countries of the world have taken considerable advantage of the potentials of this section of industry using tact, foresight, and scientific management. To develop sports ecotourism, the required resources need to be provided. The results of this study clearly showed that, since intellectual capital provides different resources including human resources, developing intellectual capital can result in more effectively developing sports ecotourism.

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CHARACTERISTICS OF 21ST CENTURY TEACHERS

Mansoureh Abdolmohammadi[8]

Abstract

Civilization provides great potentials for the development and empowerment of human beings. However, it is not yet known whether human beings receive the necessary education in order to easily gain access to available knowledge, share resources and participate in attaining human perfection or not! Does the existing educational system lead human beings in such a way that useful knowledge, reasoning ability, skills and values get duly realized?

In the 21st century, we are in dire need of new ideas, diverse teaching methods, novel educational approaches and different attitudes towards science and culture in order to achieve sustainable development. Actually, an ideal education can create and guarantee a safe and healthy world and it leads to great advances in the scientific, industrial and social arenas. Besides, this kind of education contributes to global and international cooperation in order to achieve global sustainable development. In this line, it seems that teaching a critical thinking paradigm can lead to sustainable development.

It should be noted that enumeration of characteristics of teachers in the 21st century does not mean that teachers have been devoid of these qualities and characteristic. Since the 21st century is known as century of information, initiative, skill and speed, it seems essential to establish the characteristics of teachers in this century on the basis of these sublime principles more than before and, thus, pay more attention to them thereof.

Key words: teachers, education

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Introduction

In the educational environment of the 21st century, it is clear that such concepts as speed, accuracy, skill, information and modern technologies play a vital role. In this environment, classroom is regarded as a public self-service and school is considered as a knowledge republic that follows specific standards and, then, special executive care and attention should be exerted in their application and realization. Therefore, the existence of characteristics and requirements of the teaching-learning process in the classroom, which is in accordance with learners' needs and characteristics, must be standardized (i.e. determining what to do and how to do) and it must be implemented appropriately. In this educational environment, it is believed that learners' needs and schedule should be considered in order to develop the standards, especially in a classroom and educational setting. In fact, learning environment needs to be adorned with new teaching techniques because it is believed that creative and dynamic adaptations significantly affect the quality of education. Consequently, creative adaptations can link diverse curricula and objectify objective-subjective concepts. In this line, it appears that if some appropriate lessons and contents are delivered in a conducive and high-standard space, they will last a significant impact on the learning process.

Statement of problem

On the eve of the 21st century and regarding the expectations of public opinions, it seems that the field of education is faced with significant shortcomings in that the present system of education yields insignificant outcomes and outputs. On the other hand, the outbreaks of rapid changes in different areas, the changing needs of the society and the advent of new jobs and occupations have necessitated the need to revise the process of education. As such, training qualified teachers may win public trust. Therefore, it appears necessary to address the training programs, especially training creative and qualified teachers. Roger Kaufman argues that the success of an educational institution or organization depends on congruity between the intent and objectives of the institution/organization and the intent and objectives of the society. Parvizian asserts that educational planning is mainly based on quantitative (rather than qualitative) indicators. Accordingly, unforeseen plans should be directed towards improving the quality of education headed by teachers as powerful enforcers of educational orders. In addition, decision-making processes should be based on a clear and purposeful pattern. Nevertheless, our education system has already been congruous with many societies. However, it should undergo changes in order to achieve the noble objectives of the organization and the necessary standards in this domain. Actually, this revision must be implemented at different levels of the educational system, especially at teaching methods at different levels. So, the following questions have been raised in this study: How is the educational system in the 21st century? What are the characteristics of teachers in the 21st century?

The significance of research topic

The advent of political developments in different countries around the world in the past century has instigated severe socio-political and cultural crises. These issues have questioned the effectiveness of the current educational systems and they have necessitated the revision and modification of these pedagogical systems. As such, it seems essential to adopt strategic planning and observe educational standards (more than ever) to deal with aforementioned issues and improve the quality of the educational system. Given the third world countries, it seems that the aforementioned dilemmas have been intensified by an increase in demand for education, rising costs of education, reduced level of quality of education and weak management of the education system. Thus, experts and practitioners in the education system are faced with some challenging and burdensome dilemmas. Regarding the available evidence (Asgari, 1994; Bazargan, 1995), it is clear that there are such problems in Iran. Accordingly, revision of quantity and quality of education sector of the country is inevitable. However, any change or modification in the educational programs should be based on known and standardized theories. Otherwise, the changes will function as an unprofitable and unsustainable repetition embedded with unpleasant educational experiences. Similarly, the present study is motivated accordingly and attempts to depict an ideal education in the 21st century so that the quality and quantity of education can be improved in the future.

The content of educational environment in the 21st century

Now, we have reached the end of the 21st century and we are going to start the third millennium. Actually, the 21st century was the most eventful century of humanity. In fact, the World War I and World War II, as two unique events that led to destruction and murder of numerous human beings, as well as Russian and Chinese revolutions, which claimed to radically change the living conditions of human beings, occurred in this century. Besides, the 20th century witnessed the collapse of the Soviet Union and Eastern Europe, the decline of the Chinese Cultural Revolution, the abolition of the monarchy in several countries (such as Egypt and Iran), the independence of colonized countries, enormous progress of science and technology, the advent of nuclear fission, walking on the moon, the invention of computers and the Internet, emersion of environmental pollution and globalization, the advent of IT, E-government and other similar phenomena. All these developments will be more complex and robust in the 21st century.

Given the fast pace of change and global developments, it is strange that human beings live similar to their archaic old human beings. Similarly, classrooms cannot be held in terms of traditional past schools and they will not be able to resist in the face of changes. As such, a new and fresh planning should be proposed, new training and teaching methods should be developed and novel teacher training programs should be launched in this domain. Thus, standards in educational settings, classrooms and learning methods are considered infrastructures of fundamental developments and changes. In the 21st century, it seems that the explosion of learners' population, the speed of global communications, increased level of expectations and the need for education, invention of destructive weapons, failed experiences of the previous model and the significant gap among these domains delineate a dire warning sign in that there is a system beyond the already current one. Perhaps the concept of standardization is moving towards creating a necessary balance because some researchers believe that standardization is a kind of coordination to get to perfection and happiness in living systems. The 21st century is different from other centuries in that guarding borders and safety valves will be characterized with the least efficiency. Besides, local problems turn into global problems. Consequently, the foundations of the education system in the 21st century must become stronger and more persistent so that we can cope with these changes. In fact, standardization cannot be claimed a grotesque on the eve of the 21st century due to this fact that the education system can be scientifized and aligned with everyday changes. Therefore, education must resort to standardization in order to be prepared for a more transparent and better future (Khanifeh, Website of Ministry of Education).

Fundamental issues of education in the 21st century

No one can certainly comment on the main characteristics and features of the 21st century. However, what is certain is that, unlike thousand years ago, the world will not go smoothly and slowly. Actually, it is hoped that human beings rely on their own intelligence and thinking power, which have been enumerated as praised features in the Holy Quran and human beings have been designated as the noblest of all creatures, in order to find appropriate solutions to the challenges of the century. It seems that education system is faced with four major issues in the 21st century. It should be noted that if the following four main issues do not receive due attention, there will be some alarming consequences in this regard:

1) Students' increasing population and careful and pre-prospective planning

2) The quality of education and academic, global and local standards

3) Increased level of productivity in all aspects

4) Comparative studies and evolution on the basis of time, necessity and culture.

Features of teachers in the 21st century

Since the 21st century is known as the century of information, initiative, skill and speed, it seems essential to establish the characteristics of teachers in this century on the basis of these sublime principles:

A) Information

Enhancing and updating the level of information is considered as one of the characteristics of teachers. Regarding the domain of information, it is clear that the notion of information and communication technology occupies a special place.

1) Introduction to educational technology

Teachers should train students to be lifelong learners in order to attain success in the 21st century. This goal cannot be changed unless the learning process is directed towards something beyond mere transfer of knowledge. So, teachers should have command in the use and instruction of computers and the Internet and, then, they should encourage students to do so. It tells us what has been true yesterday may be false or even misleading. Therefore, teachers can make use of this technique in order to convert into scholarly teachers and, then, train some explorer students to properly function in present and future domains.

2. Familiarity with international standards on quality of work

3. Increasing general information

Teachers in the 21st century must enhance their information in all fields and they should not limit themselves to their own teaching domain because many sciences are interdependent. Besides, these teachers have to know the everyday terminology and they must be familiar with political, economic and social matters. Finally, teachers need to be aware of psychology in that teachers must act as knowledgeable and experienced psychologists.

4. Modern teaching

The use of active and modern teaching methods grants a special feature to teachers' teaching methods. These methods may be categorized as follow: cooperative approach, active teaching method, brainstorming, role playing, demonstration, group discussion, problem solving, inductive method and heuristic methods. Actually, good teachers properly know these methods and attempt to make use of correct teaching methods in different classes. In fact, their teaching methodology is based on standards and standards-based teaching is a work process improvement in education.

5. Participation in in-service courses

Teachers always should learn novel knowledge, sciences and information. Besides, they should not teach monotonously during their working course and, thus, they must express a unique notion through multiple angles and directions. As such, teachers must constantly participate in in-service training courses.

6. Familiarity with principles of educational psychology

Since teachers are obliged to establish mutual communications during their working course, they must identify their target audiences. Teachers must be familiar with living conditions and, to some extent, family status of their audiences. In this case, they can convey their instructional messages more clearly.

7. Depicting lesson plan

Teachers must calculate their teaching time in order to budget the book along with a clear annual lesson plan. Also, they ought to have a daily lesson plan and collect adequate and comprehensive information about the steps of writing a lesson plan. They must be familiar with the diagnostic, complementary and final assessments, and apply them is their teaching phases. Accordingly, they ought to identify the major, minor and behavioral goals, understand the educational areas (e.g. knowledge, understanding, application, combination of judgment) and apply these components in planning of their ongoing questions and assessments which are considered in their annual lesson plans.

B) Initiative

The second feature of the 21st century is the centrality of the notion of initiative in which the teachers should have the following characteristics:

1) Creativity

The 21st century teachers are creative in their communications and they take new ways and foster creative students too. If students become rich in terms of information, their potential motivation for creativity motive is activated and this will not happen unless the teachers and leaders are adorned with creativity.

2) Creating a world of questions in class

Innovative teachers are the ones who always have questions to raise in the classroom and stimulate students' motivation of curiosity. Actually, these teachers always try to bring students into action and movement (in a dead and tedious class, students are constantly watching the clock). Besides, they attempt to motivate students to willingly learn new techniques.

3) Creating a world of imagination in the class

Innovative teachers respect students' imagination. They do not mock a new composition or an unusual painting and attempt to look at it from an innovative and creative aspect because the imagination leads to creativity and innovation.

4) Courage to defeat

Innovative teachers are not afraid of any failure in introducing and applying the educational matters. Instead, they stand strong and solid and test their own creative plans. At the end, they take the answers and results and disseminate them everywhere.

5) Risk-taking capability

Innovative teachers accept any risk in their own way, whether financial or non-financial, because they hope and believe in their goals and objectives.

6) The power to change presuppositions

Innovative teachers propose new presuppositions and look at a subject through different angles and approaches. Actually, old presuppositions do not attract them and they always attempt to understand the nature of phenomena and, then, try to change these presuppositions. In fact, they experiment, test and, finally, come up with a new method and design.

7) Identify students' prerequisites

One area of activity for teachers is where to start and what are the prerequisites of their learners. Verily, innovative teachers do not start from traditional and common grounds but they delve into the best starting point. This starting point can sometimes be discovered through asking a new question or bringing a novel maquette or tool.

8) Treatment of learning disabilities

Innovative teachers try to detect and treat their disadvantaged students. Teachers who work with a handful of creative and capable students may not be able to make a special initiative in their work. Instead, the innovative teachers are the ones who help disadvantaged students through using new educational methods.

9) Determining individual differences

Innovative teachers are aware of the student's individual differences and they know how to give them appropriate responsibilities. Besides, they verily know on what grounds their creativity is revealed and in which discipline their potential talents will be realized.

C) Skill and speed

The second feature of the 21st century is the centrality of the notions of skill and speed in which the teachers should have the following characteristics:

1) Individual skills

This component includes the power of designing the mental model, the application of rational principles in teaching and the power of analyzing issues related to decision-making power.

2) Communication skills

Teachers' communication skills include emotional control, speaking skill, the use of poetry and proverbs in teaching and correct reporting.

3) Teaching skill

Skillful and thoughtful teaching has the greatest impact on the effectiveness of teachers' work. Actually, there is a special relationship between the internship period and the teachers' performance. As such, teachers in the 21st century should be familiar with the new teaching techniques and make use of these techniques in their teaching practice.

4) Use of educational aids (educational technology)

The application of teaching aids in teaching is one of the most important tools that promote the teachers' skill and speed of teaching (especially in elementary level).

5) Abstract thinking skill

Teachers with high abstract thinking skill can look at a problem(s) from different points of view (from their own point of view, students, advisers, administrators, parents, etc.). So, they can provide different solutions and think about the pros and cons of each program and select the best program. If the predicted outcomes are not materialized, they are eager to change the program. In addition, they can conjecture additional problems while planning. As such, they can regularly provide preventive measures before the problems occur. In fact, abstract thinking skill makes teachers more successful in teaching.

6) Analyzing problems

These teachers have a tremendous level of abstract thinking. They are considered intelligent in the verbal domain and they are full of excellent thoughts. Furthermore, these teachers clearly discuss various issues and they know what is necessary and what is not necessary.

It is worth noting that although such notions as global developments speed of information and initiatives are considered key concepts on the part of teachers in the 21st century, it seems that the characteristics of the teachers in our religious culture are always sublime. Although this parameter occupies a very distinguished status along with aforementioned features, it should be noted that the purpose of educating learners is not limited to learning scientific contents. In fact, religious education and moral development are very important. Here, the moral features of teachers in the 21st century will be enumerated.

D) Moral features

1) Observing social customs and etiquette

Much social prosperity is entrusted with the adherence to social customs and etiquette. As such, teachers who must function as ethical model for their students should not resort to the pretext of scientific developments, transformation and globalization and, thus, they should not abandon the social customs, break the respected borders or neglect the privacy and chastity of society.

2) Vitality and happiness

Having entered into the classroom, teachers must put aside the problems of their life, caused by changes in the society such as inflation, illness, depression and so on. Actually, they must enter the classroom with a joyful spirit. If depression, impatience and lethargy overcome teachers, these feelings can also be passed on to students. As Nietzsche says: “nothing may be achieved if we are not cheerful” (Roshd, 2004).

3) Appearance

Although the notion of speed plays a vital role in the 21st century and the range of time and opportunity is minimized, teachers should have the opportunity and time to adorn themselves and enter the classroom with an exquisite appearance. The Holy Prophet Muhammad (PBUH) always stood in front of the mirror and arranged his appearance before leaving the house. When someone asked about his concern about this issue, he beneficially replied: “I do not want to make people backbiting me on behalf of my appearance”. Accordingly, teachers should learn from the Holy Prophet Muhammad (PBUH) because he has been the model of morality.

4) Tolerability

In the age of changes and development, if teachers are faced with particular behaviors from their students, they should magnanimously deal with it. They should be magnanimous and have the ability to cope with the excitement of advancement in their students because generosity solves many problems:

[Moses] said: "My Lord, expand for me my breast [with assurance] and ease for me my task” (Taha Surah, V. 25).

Actually, tolerability paves the way for teachers to recognize and realize the inner talents of the learners.

5) Sincerity

Sincerity is the most prominent feature of teachers in the age of flourishing of science. School, lesson, class, behavior and speech should be presented honestly and sincerely. If teachers are looking for new training and global techniques, they should not do these things for their own sake and show-off. There must be sincerity in work and lack of selfishness. Besides, teachers’ goals should be directed towards advancing society and its excellence. If teachers do not represent sincerity in their work, it is likely that they succeed in the field of science but it will not have spiritual value.

6) Respecting the personality of others

Successful teachers in the 21st century are those teachers who are personable and respect the personality and characteristic of others, whether students or colleagues. In addition, they should not beat others with their stinking words. Teachers should guide others in their pursuit of success and do not humiliate others or blame them in public: *“Woe to every scorner and mocker”* (Al-Humazah, V. 1). This is due to this fact that the latter causes a grudge in the nature of individuals and flames the revenge fire within their soul.

7) Job commitment

If teachers progress in line with the society and achieve all the angles of new sciences and technologies but they are not adorned with commitment to their work, they will not bring anything other than their losses to their society. Job commitment leads to right use of scientific information and this shows the teachers how to make use of them correctly. Otherwise, science will serve genocide and the destruction of societies. Currently, this situation prevails in the West.

8) Virtue

Virtue is one of the early features of the 21st century. If teachers are not adorned with virtue and piety, the next generations who are under their education will be exempt from this trait. Teachers who are not adorned with virtue will be affected by destructive cultures. Besides, they will welcome the phenomenon of cultural invasion and they get a false scientific pride.

9) Sense of duty

Teachers in the 21st century are duteous. They do not escape from the burden of their own responsibility and they are not delayed in their work. Besides, these teachers do not waste time in the classroom and they are not lazy in their work. Even sometimes, they do more works than their designated job. Actually, teachers sacrifice and they do not just look at their work in terms of financial and material gain. In fact, they do not expect to be praised, rewarded or bestowed special encouragement.

10) Peace and kindness

The 21st century teachers are kind and attract children and adolescents accordingly. Furthermore, they are not aggressive and angry and they provide a forum for any questions and inquiries. They allow students to converse easily with them and narrate their problems.

11) Reasonable attitude and insight

The 21st century teachers have a positive and reasonable attitude towards pedagogical issues. They look at new issues and innovations with a positive outlook so that students' competitive spirit can be strengthened. Verily, teachers do not constantly remind students of their shortcomings. In other words, these teachers are strong and powerful in analyzing innovations and make use of them appropriately (Afrouz, 2003).

12) Prioritizing the interests of society over their own interests

Conclusion

The fundamental and sustainable development in any society depends on the transformation of the education system of that society. As such, improving the quality of the teacher's work, their knowledge and characteristics is considered the main axis of the development and transformation of the education system. Teachers are the founders of scientific thought as well as missionaries of social values and responsibilities to our children. In this line, teachers play a unique role in educating human resources and no job can be considered its rival in terms of effectiveness and fatefulness. The proponents and advocates of transformation and development in society should be real supporters of teachers. Policy makers in the field of education must designate special salaries and benefits for school teachers or let them attain high academic degrees, specialty and commitment to reduce their everyday living concerns. This is due to this fact that teachers are considered divine gifts and many great scholars and figures in our culture and other cultures (including Piaget, Erikson, Baghtcheban, Nayerzadeh, Rajai and Bahonar) have been proud to spend their most blessed years in schools. On the other hand, teachers need to know in which global conditions they are living and functioning and, thus, they should not restrict their thinking and action to their limited geographical boundaries. In fact, teachers must make use of their powerful initiatives, creativity and skills. Verily, they should not limit their activities to few books or pamphlets with which they have been familiar at teacher training centers or during their work. Consequently, today's sophisticated world requires constant learning and paying due attention to time, activity, sensitivity and creativity. According to Albert Einstein, human beings should not be regarded as inanimate instruments and young people should be nurtured in accordance with elegance and harmony (Roshd, 2004). In the end, we ask Almighty God to succeed our teachers in the teaching process and adorn them with desirable traits and bestow them patience, generosity and free-thinking. As such, teachers will be successful in educating and nurturing a healthy, competent and creative generation. Consequently, the future of Iran depends on the efficiency of the present graduates.

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THE STUDY OF TEACHERS' NEEDS FULFILLMENT BASED ON MASLOW'S HIERARCHY OF NEEDS AND ITS RELATIONSHIP WITH HUMAN RESOURCE PRODUCTIVITY IN MAHABAD DEPARTMENT OF EDUCATION

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Abstract

The purpose of this study is to assess the needs of the teachers of Mahabad Department of Education and its relationship with productivity. The research is based on Abraham Maslow’s classification of the human needs including physiological, safety, social, self-esteem and self-actualization needs conducted on the statistical population. The basic requirements for promoting productivity are motivating the organizational staff such as the staff in the Department of Education, and fulfilling their needs; it is in this way that the attitudes, values and motivations are affected in productivity. In this research, Maslow’s levels of needs are considered as the independent variables and the productivity of the employees as the dependent variables. The study has systematically sampled and surveyed 305 teachers out of 1465 (elementary, secondary and high schools) in Mahabad city. In terms of purpose, the present research is an applied one; it is also a descriptive-survey and correlation research in terms of nature, methodology and data collection. The data was obtained through sending a questionnaire to the teachers and receiving it back. It was revealed that the needs of the teachers in Mahabad Department of Education were in a low level of needs, and there was a significant relationship between the levels of teachers' needs and their productivity. There was also a significant difference between the various levels of teachers’ needs at different levels of education and the different levels of married and single teachers’ needs. But was no significant difference was found between male and female teachers.

Key words: Maslow's hierarchy of requirements, human resource productivity, teachers’ needs

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Introduction

Effective organizations are the organizations that place a major emphasis on human resources as a source of production. Therefore, the attention should be paid not only to the wages and salaries, but also to the emotional issues and spiritual needs. Also, in the organizational culture and the managerial atmosphere, the focus should be on the environment to be free for the staff in all organizational categories in order to express their opinions.

In the distribution of specialized professions, eligibility is a promotion criterion and a system of fair punishment and encouragement is applied on the activities of the teachers. Human behavior, which is the main factor in the organizations like the Department of Education, is carefully monitored. Paying attention to the human resource training in order to optimize the specialties and promote their level of knowledge and abilities, establishing of a stable system at the organization's overall level and monitoring the functions of the organization's product to meet the needs of the community and the development of technology in the administrative processes, paying attention to the factors affecting the organization and also the factors that reduce the productivity of the human resources in the organization should be of the senior management interests to prevent the organizational deviation from its main goals. Accordingly, in order for the organization to improve continuously, the senior management should necessarily focus on the participatory management, the appropriate use of technology, the mechanization of the organization for the complex application of methods and the presentation of clear plans.

In the Department of Education, teachers are the main source of product promotion, the output of which is training the human resources for the jobs and universities, and in general guiding the community; thus, the behavior of the teachers should be taken into consideration.

Today, it is universally accepted that the actual needs of the members of an organization should be properly identified and the organization should be able to fulfill them as much as possible. With the needs unfulfilled, human as an important element of the organization cannot be expected to promote productivity and follow the organizational ethics. Although leading to more expenses, fulfilling the teachers’ needs creates job satisfaction and increases the interest in work within the organization. This would finally result in more productivity in the organization, which is far more valuable than the financial expenditure.

Statement of the Problem

In human resource management, human resources are considered as one of the most complex management methods by the scholars, because human resources are one of the most important elements of each organization and would significantly affect all the other organizational resources. As the main element in the organizational environment, human has a distinct fixed position that has to be present in the basic and advanced systems, and there is no alternative to him. In developing countries like ours, the organizations should try to identify and address the problems and the needs of their staff.

Since any activities, whether personal or institutional, requires a motivation and any motivations requires stimulus, it is necessary to identify the needs of the human resources to guide and coordinate activities towards organizational objectives (Hamidizadeh, 1998). Accordingly, the purpose of this study is to identify the needs of the teachers in Mahabad Department of Education and to determine the importance and priority of these needs.

Significance of the study

Within the capitalist world, the governments, administrations, and nations face major problems and challenges through the globalization process. The challenges of globalization would heavily affect the countries with traditional regimes, despite their management practices. Indeed, this effect will be much more complicated for the human resources, because human resources are the most complex factors in the productive and organizational processes. As a result, the reform of the organizational behavior is not possible without paying attention to the human resource requirements, since the goal of human resource reforming is to develop executive capacity and to promote the level of profitability. Therefore, the research that identifies the needs of the teachers is well understood. In this research, the priority of teachers' needs based on Maslow's hierarchy of needs at Mahabad Department of Education is identified, and the relationship between these needs and the human resources productivity of the mentioned office is investigated. Such researches should be continually conducted at the level of the teachers in order to identify the needs and the factors affecting their sustainability. The results obtained should be evaluated and applied to minimize the problems.

Literature Review

Internal Studies

1). “The Study of the Factors Affecting the Motivation in the Employees of Sistan-Baluchestan Regional Water Company” has been conducted by Gholam Hossein Bozorgmehr under the supervision of Badr-al-Din Yazdani and the advisement of Ahmad Aqbat-e-Bakhir as the MA dissertation in Zahedan University. It investigated the factors affecting the employees' motivation in Sistan-Baluchestan Regional Water Company in 2012. The results of the survey showed that human needs are strongly related to the internal and external motivations and that the company's top managers should provide the necessary facilities to meet these needs. If such basic needs and at least some of the secondary needs of the employees are met, they can be expected to perform better and this will finally lead to more efficiency.

2). In his dissertation entitled "The Study of the Relationship between Salary of the Calendar Work Experience and Education with the Productivity of Small Industries in Kermanshah Province" from the Islamic Azad University of South Tehran in 1996, Mohammad Ganjavar concluded that the low-order needs include stronger motivation among those people who have low levels of education, but the opposite is true about the highly-educated people.

3). In his thesis entitled "Assessing the Level of Human Resources Productivity, Causes of Low productivity and Providing Solutions to Increase it" from Amir Kabir University of Technology in Industrial Management in 1994, Seyyed Mohammad Lavasani suggested that one of the causes of low productivity is the staff’s low motivation, and concluded that there is a positive correlation between productivity and motivation.

4). Hojat Abbasi’s study on "Identifying and Investigating the Effective Factors and Parameters in Increasing the Efficiency and Productivity of the Process of Production of Arak Machinery Manufacturing Company" in 1994 from Tarbiat Modarres University, concluded that one of the effective factors in increasing the efficiency is motivation: by motivating the employees, their efficiency can increase by 15%.

5). “Investigating the Causes and the Factors Affecting Job Satisfaction and Motivation of Employees of Neka Power Plant Company” was conducted by Mohammad Taqi Azadeh Soraki under the supervision of Professor Mehrdad Madhoosh and the advisement of Dr. Ali Shahiri in order to investigate the causes and the factors affecting job satisfaction and employees’ motivation in Neka Power Plant Company. It was revealed that job satisfaction affects the employees' motivation and increases productivity.

6). Ta’ali’s (2005) findings also indicate that there is a significant relationship between the satisfaction of different levels of employees' needs and their productivity in Tehran Tax Affairs Office.

7). The results of Tavakoli (2004) and Fath Abadi’s (2007) research showed that there is a significant relationship between increasing the motivation and fulfilling the employees' high-level needs and their productivity. The results of the research by Monshizadeh Nayini (2010), Rostami (2008), Salimi Khozani (2008) and Salehi (2004) also indicate that there is no significant difference between male and female employees’s level of needs considering Maslow’s needs hierarchy.

External Studies

1). Robert Zawacki and Laura Zawacki (1998) pointed to the ways of creating productivity and motivation in a study entitled "How to create motivation and productivity through managerial feedback?", and emphasized that considering the hierarchy of staff needs based on the Maslow’s Theory, most of the American companies have stopped fulfilling the needs of their employees in the fourth-level, i.e. self-esteem, and the corporate executives can achieve more productivity through respecting their human resources.

2). John Asouli has conducted researches on the motivational orientation and has come to the conclusion that self-motivation is not important in high productivity and efficiency. Rather, the orientation and guidance of motivation can serve the main purposes of the organization and prevent it from being misapplied.

3). Miller J. the university professor and sports commentator who has served as a consultant in sports teams, has come to the conclusion that those players who are more motivated, have a better performance and when the individual’s motivation is at the high level, high results are obtained; therefore, fulfilling their needs is directly related to their productivity.

4). Dan Hotsson recognized and assessed a series of employees’ needs and motivations at a factory in 1999, and concluded that factory workers had problems in terms of social relationships; that is, they were on the third level of Maslow's needs, and their tasks made them have very little interaction with each other. However, identifying this problem led to the setting up of committees at the company and establishing social relationships and interactions among employees to achieve their goals.

5). The results of Harpaiz's research in 1990 revealed that the first and the second levels of Maslow's needs increase the performance of male employees, while Maslow's third and fourth level of needs increase the performance of female employees.

6). Belfield and Mercedes (2002) showed that there is a significant relationship between the levels of teachers' need and their level of education. As teachers increase their level of education, their needs grow and they need more self-actualization.

Research Objectives

The main purpose of this research is to recognize and evaluate the hierarchy of teachers' needs and the relationship of their needs with their productivity in Mahabad Department of Education. In this regard, the following goals are pursued:

1. Determining the Priorities of Teachers' needs in Mahabad Department of Education Based on Maslow's needs hierarchy.
2. Determining the relationship between teachers' needs and their productivity.
3. Determining the level of teachers' needs based on the organizational groups.
4. Determining the relationship between education and the teachers' needs

Regarding the above-mentioned purposes, the applied objectives of this research are to identify the needs of the teachers in Mahabad Department of Education and to focus on the motivators in order to guide their productivity.

Hypotheses

1. The teachers' needs of Mahabad Department of Education are low-order needs.

2. There is a significant relationship between the fulfillment of different levels of teachers' needs and their productivity in Mahabad Department of Education.

 2.1. There is a significant relationship between fulfilling of the teachers' low-order needs and their productivity in Mahabad Department of Education.

 2.2. There is a significant relationship between fulfilling of teachers' high-order needs and their productivity in Mahabad Department of Education.

3. There is a significant difference between the teachers' needs at different levels.
4. There is a significant difference between the needs of male and female teachers.
5. There is a significant difference between the needs of married and single teachers.

Theoretical Framework and the Analytical Model of the Research

In this research, two theoretical frameworks are presented:

Maslow's Hierarchy of Needs

The theoretical framework of the present study applies Abraham Maslow's theory of the recognition and evaluation of the hierarchy of organizational needs, which identifies the hierarchy of needs as one of the components of an organization that consists of the following elements.

Maslow considers five levels of human needs, including physiological needs, safety needs, social needs, self-esteem needs and self-actualization needs (Planck and Allen, 2002), and categorized them as high and low orders. The physiological and safety needs are at the lower order, and the social needs, self-esteem and self-actualization at the higher order. High-order needs are fulfilled within the individual, while low-order needs are principally fulfilled through the external factors such as wages, union contracts, and so on (Robbins, 1997). According to Maslow, the need that has the most motivating force is the physiological need that includes basic human needs and forms the first order; after that, the higher orders are respectively important, (Rezaeian, 1992).

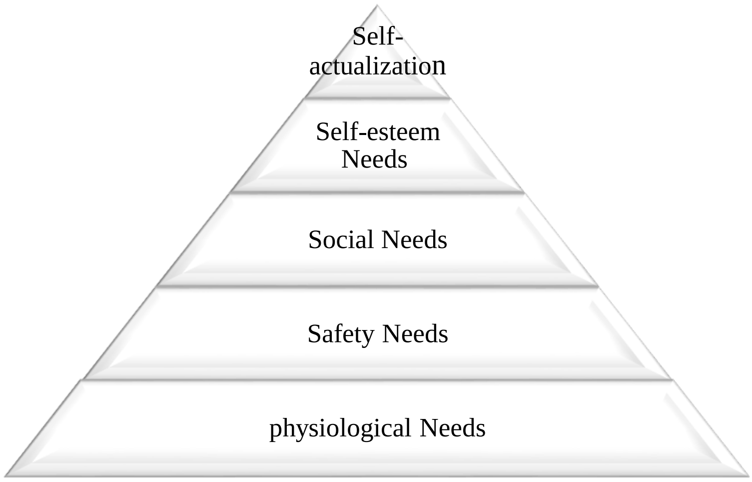

Figure1: Maslow's Hierarchy of Needs

Human Resources Productivity

Productivity refers to maximizing the use of the resources, human resources and the institutional arrangements to reduce costs and satisfy the employees, managers and customers. Human resource productivity is the ratio of the output (the labor or the defined service) to the input (the amount of labor for a specific service being used) (Robbins, 1998). The term was originally introduced in 1776 by Adam Smith, the father of economics, as a factor creating new values for a phenomenon. In 1878, however, another economist Jvans referred to it as the reasonable counting of the labor that maximizes wealth.

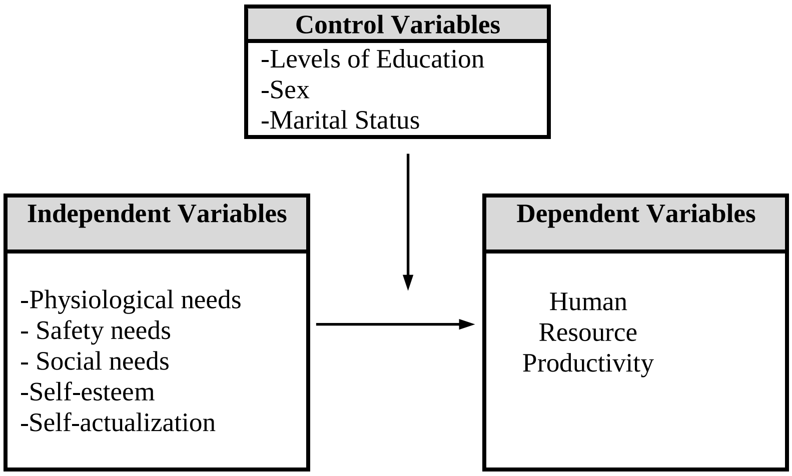

Figure 2: Analytical Model of the Research

Methodology

The present research attempts to develop the applied knowledge in the field of studying the needs of the teachers working in Mahabad Department of Education and its relationship with the teachers' productivity. The research is, therefore, an applied one. It is a descriptive-survey and a correlation study, too. In this type of research, the relationship between variables is analyzed based on the purpose of the research. The purpose of an applied research is the development of the applied knowledge in a particular context. In other words, an applied research is directed toward practical application of the knowledge.

Statistical Population and Sample

In this research, the statistical population consists of all the official teachers in Mahabad Department of Education who are working in different units of the organization in terms of the goals of the organization. The total number of teachers in Mahabad Department of Education is 1,465. The stratified random sampling (Table 1) was used to select the statistical sample out of the population. The number of the teachers in each section of the sample was gender-specific.

Table 1: Statistical Sample by Sex at Each Level

Female	Male	No. of Samples from Each Grade	No. of Teachers	Grade	Order
80	102	182	780	**elementary**	**1**
24	38	62	300	**secondary**	**2**
27	34	61	295	**High school**	**3**
131	174	305	1465	**Total amount**	

The Validity and Reliability of the Research Data Collection Tool

Since the most important tool for the data collection and measurement of variables in this research is the questionnaire, the validity of the questionnaire is of great importance. In the design of the questionnaire, care has been taken to ensure that the questions are easy to understand. The content validity of the questionnaire was also ensured by the experts, university professors and the organizational experts. After receiving the comments, the necessary adjustments were made and thus the questionnaire was assured to measure the intended characteristics. Finally, a questionnaire consisting of 34 questions was designed for measuring the variables. As a result, the validity of the questionnaire was verified at least in terms of high content. The method used to test the reliability in this research is the Cronbach's alpha coefficient. The results of this test are presented in table (2):

Table 2: The Reliability Coefficients of the Scale of the Questionnaires

Cronbach's alpha	Dimensions	Maslow's needs
794%	Physiological needs	
784%	Safety needs	
825%	Social needs	
817%	Self-esteem	
809%	Self-actualization	
847%	All the components	
791%	Efficiency	

Data Analysis

In the present study, a questionnaire with closed questions was used to collect the data applying the Likert scale. The descriptive and inferential statistics were also used to analyze the data. In the descriptive statistics, absolute frequency, relative frequency, central tendency (mean) and dispersion indices (standard deviation) were applied. In the inferential statistics, the Kolmogorov-Smirnov Test was used to examine the normalization or non-distribution of the variables. In order to test the research hypotheses in the framework of inferential statistics, the analysis of variance, the Student's T-test for independent groups, Correlation Test and Friedman Test were applied.

Results

To investigate the research variables and to test the research hypotheses, Table 3 lists the independent variables and their related statistics.

Table 3: Descriptive statistics of research variables

Elongation	Skewed	Maximum	Minimum	Scope of Change	Standard Deviation	Mean	Number	Variable
-1.00	-0.18	5.00	2.75	2.25	0.458	4.17	305	**Physiological Needs**
-0.79	-0.11	4.63	2.13	2.50	0.512	3.71	305	**Safety Needs**
-0.68	-0.01	4.75	1.85	2.90	0.589	3.89	305	**Social Needs**
1.40	1.07	4.88	2.16	2.72	0.404	3.73	305	**Self-esteem needs**
-0.63	-0.04	4.71	1.00	3.71	0.784	4.12	305	**Self-actualization needs**
0.85	0.29	4.91	1.24	3.67	0.541	3.69	305	**Productivity**

The normality of the data was analyzed using the Kolmogorov-Smirin Test. If the significance level is greater than 0.05, we obtain the normality of the data, otherwise we will doubt the normality of the data (Table. 4).

Table 4: Testing the Normalization of the Variables

The assumption of normalization is confirmed	0.812	Kolmogorov-Smirin Z-score	Physiological Needs
	0.524	The Significance Level	
The assumption of normalization is confirmed	1.225	Kolmogorov-Smirin Z-score	Safety Needs
	0.098	The Significance Level	
The assumption of normalization is confirmed	1.025	Kolmogorov-Smirin Z-score	Social Needs
	0.245	The Significance Level	
The assumption of normalization is confirmed	2.242	Kolmogorov-Smirin Z-score	Self-esteem Needs
	0.004	The Significance Level	
The assumption of normalization is confirmed	1.005	Kolmogorov-Smirin Z-score	Self-actualization Needs
	0.212	The Significance Level	
The assumption of normalization is confirmed	0.948	Kolmogorov-Smirin Z-score	Efficiency
	0.234	The Significance Level	

The data obtained from the 5-item questionnaire are usually arranged in scale and for the analysis of this type of data, the non-parametric inference is used due to the uncertainty of their distribution. Nonparametric statistics provide better results for the small samples, but parametric tests are more accurate. According to the results presented in Table (4), the P value obtained from the tests is more than the significance level of 0.05; thus, the assumption of the normalization of the data is confirmed except for the variable of self-esteem needs. Given the fact that the sample size (data) is larger than 30, and also from the central limit theorem in the statistics, parametric methods can be used to examine the hypotheses. In this research, the independent T-test was used to analyze the significance of the research hypotheses, and also the Pearson Correlation Test was applied to investigate the relationship between the variables. The analysis of the variance and LSD follow-up test were also used to compare the levels of teachers' needs.

Research Hypotheses

Testing the First Hypothesis:

The teachers' needs of Mahabad Department of Education are low-order needs.

To examine the first hypothesis, the teachers' needs of Mahabad Department of Education were divided into two categories based on Maslow's hierarchy of needs. Physiological and safety needs were categorized as the low-order needs and social, self-esteem and self-actualization needs were categorized as the high-order needs.

To use the Independent Student's T-test, the Levene's Test was first used to test the consistency of the variances of the two groups of high- and low-order needs:

Table 5: Levene's Test for the First Hypothesis

Test Result	The Significance Level	F-score	
Equivalence of the Variances	0.265	1.250	The Levels of Teachers' Needs

Table 6: The Student's T-test of Independent Groups for the First Hypothesis

Confidence Interval 95% Maximum	Minimum	Average Difference	Significance Level	Degree of Freedom	T-score	Variables
1.2711	0.5412	0.760	0.028	303	2.312	Levels of Teachers' Needs

According to the value of t = 312.2, the table value of which is at a critical level of 0.05 with a degree of freedom of 303 (1.96) and a significant level (P-value) which is lower than 0.05; therefore, there is a significant difference between the level of the teachers' needs at Mahabad Department of Education. With regard to the positive upper and lower limit, the difference between the two groups is positive, and this means that the average low-order needs of the teachers is higher than their average high-order needs. Considering the above-mentioned inference, we can conclude that the needs of the teachers at Mahabad Department of Education are low-order needs (physiological and safety needs).

Testing the Second Hypothesis:

There is a significant relationship between the fulfillment of different levels of teachers' needs and their productivity in Mahabad Department of Education.

To test this hypothesis, the following sub-hypotheses are tested:

A). There is a significant relationship between fulfilling of the teachers' low-order needs and their productivity in Mahabad Department of Education.

B). There is a significant relationship between fulfilling of teachers' high-order needs and their productivity in Mahabad Department of Education.

Table 7: Correlation Test

Pearson Coefficient	Number	Variables
0.744**	305	Low-order Needs- Efficiency
0.593**	305	High-order Needs- Efficiency

*** The correlation at the level of 0.01 is also significant.*

According to table (7), there is a positive and relatively strong correlation between fulfilling the teachers' low-order needs and their productivity in Mahabad Department of Education (r = 744). There is also a moderate and positive relationship between fulfilling the teachers' high-order needs and their productivity in Mahabad Department of Education (r = 1.593). To examine the second hypothesis, the Pearson Correlation Test was applied between different levels of teachers' needs and their productivity, and the correlation coefficient 0.612 was obtained at the error level of 0.01.

Testing the Third Hypothesis:

There is a significant difference between the teachers' needs at different levels.

To test the above hypothesis and to test the differences in the levels of the teachers' needs based on the different educational levels (elementary and high school), i.e. the study of the effect of the independent classified variable (academic grade) on the dependent variable (levels of respondents' needs) and given that the independent variable (educational level) has limited levels (three levels), the One-way ANOVA Test has been applied.

Table 8: One-way ANOVA Test for the Levels of Respondents' Needs by Different Levels of Education

Significance Level	F-score	Degree of Freedom	Averages	Total Sum	Source of Change	
0.000	4.367	2	324.283	648.567	Intragroup	Levels of Needs
		302	74.259	22426.218	Intergroup	
		304		18428.756	Total	

According to Table (8), the level of significance is less than 0.05, and therefore, there is a significant difference between the levels of teachers' needs in three educational levels in Mahabad Department of Education. The LSD post hoc Test was used to classify the difference between the three educational levels. These differences are presented in Chart 3:

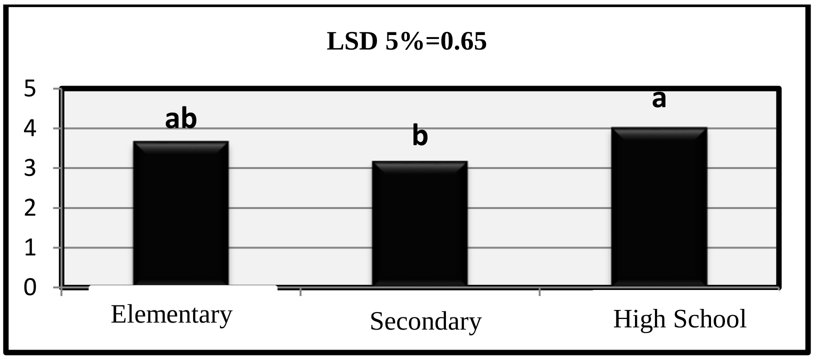

Chart 3: LSD post hoc Test

It is inferred from Chart (3) that the difference in the levels of teachers' needs among different levels of education is due to the differences in the levels of teachers' needs in both secondary and high school, and in this regard, there is no significant difference between the elementary and the secondary and high schools.

Testing the Fourth Hypothesis:

There is a significant difference between the needs of male and female teachers.

To test the fourth hypothesis, T-test was used for two independent groups of men and women:

Table 9: Levene's Test for the Fourth Hypothesis

Result	Significance Level	F-score	
Homogeneity of variances	0.146	1.974	The Level of Male and Female Teachers' Needs

Table 10: T-Student Analysis of the Independent Groups for the Fourth Hypothesis

Confidence interval 95%	Average Difference	Significance Level	Degree of Freedom	t-score	Variables

Maximum	Minimum					
0.4963	-0.5412	0.039	0.285	303	1.013	The Needs Level of Male and Female Teachers

According to the value of t = 1.013 obtained from the table value at a critical level of 0.05 with a degree of freedom of 303 (1.96) and a significant level (P-value) which is greater than 0.05, there is no significant difference between the level of male and female teachers' needs in Mahabad Department of Education.

Testing the Fifth Hypothesis:

There is a significant difference between the needs of married and single teachers.

T-test was used for the two independent groups of the married and single teachers in order to test the fifth hypothesis.

Table 11: Levene's Test for the Fifth Hypothesis

Result	Significance Level	F-score	
Heterogeneity of Variances	0.004	5.319	The Level of Single and Married Teachers's Needs

Table 12: T-Student Analysis of the Independent Groups for the Fifth Hypothesis

Confidence interval 95% Maximum	Minimum	Average Difference	Significance Level	Degree of Freedom	t-score	Variables
2.3794	1.2691	0.749	0.000	284.26	4.371	The Needs Level of Male and Female Teachers

Regarding the value of t = 371.4, the table value of it is at a critical level of 0.05 with a degree of freedom of 28.26 (1.96) and a significant level (P-value) of 0.05, there is a significant difference between the level of married and single teachers' needs in Mahabad Department of Education.

Friedman Test was used to evaluate the effect of (ranking) of each variables of the level of teachers' needs in Mahabad Department of Education on their productivity.

Table 13: Friedman Test

Ratings Means	Variables	Test Scores	
3.28	Physiological Needs	305	Number
3.02	Safety Needs	45.502	Chi-square
1.81	Social Needs	4	Degree of Freedom
2.45	Self-esteem Needs	0.000	Significance Level
1.94	Self-actualization Needs		

The results of Friedman Test reveal that the level of significance is less than 0.05; therefore, the variables do not have the same effects and the teachers' physiological needs in Mahabad Department of Education are descriptively the most influential variables. The next factors are respectively as follows:

- Safety Needs
- Self-esteem Needs
- Self-actualization Needs
- Social Needs

Discussion and Conclusion

According to the data obtained from the questionnaires, 174 of the respondents (57.0% of the sample) were male and 131 (43.0% of the sample) were female; also, 274 of the respondents (89.8% of the sample) were married and 31 (10.2% of the sample) were single. A total number of 44 respondents (14.5% of the sample) worked at the headquarters of Mahabad Department of Education and 261 (85.5% of the sample) were serving in the queue of the relevant office. Out of 305 sample members, 20 of the respondents (6.5% of the sample) had a diploma, 79 (26.0% of the sample) had an Associate’s Degree, 191 (62.6% of the sample) had a Bachelor’s Degree, and 15 of the respondents (4.9% of the sample) had Master’s Degrees or higher. Regarding the teachers' service record, 37 of the respondents (12.1% of the sample) were people with a service record of less than 5 years, 48 (15.7% of the sample) with a service record of 5 to 10 years, 94 (30.8% of the sample) of 11 to 15 years, 63 (20.64% of the sample) of 16 to 20 years, 47 (15.4% of the sample Statistically) of 21 to 25 years old and 16 people with a service record of over 25 years. Regarding the salary received by the teachers, 84 of respondents (27.5% of the sample) received salaries between 1 to 1.5 million tomans, 149 of the respondents (48.8% of the sample) received salaries between 1.5 and 2 million tomans, 52 (17.1% of the sample) received salaries between 2.5 to 2.5 million tomans and 20 of the respondents (6.6% of the sample) received salaries between 2.5 and 3 million tomans.

Based on the results of testing the first hypothesis, it can be concluded that the needs of the teachers in Mahabad Department of Education are low-order needs (physiological and safety needs). This is consistent with Gholam Hossein Bozorgmehr’s study (2012), as the employees’ needs of Sistan-Baluchestan Regional Water Company were also low-order in Maslow's needs pyramid. Faramarz RafiPour (1995) investigated the villagers’ needs, and the results of his study were also in line with the conclusions of this study. Ta’ali’s (2005) study is also in this line with the present findings.

According to Table (7), there is a positive and relatively strong correlation between fulfilling the teachers' low-order needs and their productivity in Mahabad Department of Education. There is also a moderate and positive relationship between fulfilling the teachers' high-order needs and their productivity in Mahabad Department of Education. These results are consistent with Johnny Miller's findings that highly-motivated players achieve good results, and that fulfilling their needs is directly related to their productivity. In his 1994 dissertation, Hojjat Abbasi also explains that fulfilling the employees’ needs as much as possible leads to the productivity and increased customer satisfaction.

The results of testing the third hypothesis showed that there is a significant difference between the three levels of teachers’ needs in Mahabad Department of Education. The differences in the levels of teachers' needs are due to the differences in the levels of the teachers' needs at both secondary and high school, and the elementary school has no significant difference in the level with the secondary and high schools.

The examination of the fourth hypothesis suggested that there is no significant difference between the level of the needs of male and female teachers in Mahabad Department of Education. The results of the studies by Munshizadeh Nayini (2010), Rostami (2008), Salimi Khozani (2008) and Salehi (2004) also indicate that there is no significant difference between male and female employees in Maslow's needs hierarchy, which are all in line with the findings of the present study. But Harper's (1990) research reveals that the first and the second levels of Maslow's needs increase the performance of male employees, while the third and the fourth levels increase the performance of female employees.

And finally, testing of the fifth hypothesis shows that there is a significant difference between the levels of the needs of married and single teachers.

Suggestions Based on the Findings of the Research

1. We can expect the teachers to be more productive by fulfilling their needs; for instance, through the division of the labor rightly, the enrichment of the job, the displacement and rotation of the job, the teachers’ empowerment, considering the psychological aspects of their work, providing intellectual creativity and the strengthening of the teachers’ spirit, paying attention to the work discipline and the work environment, and following the principle of equality. Also, new needs can be created through providing the ground and encouraging the employees.
2. A direct relationship was found between the levels of the employees' needs and their level of productivity. Since the organizations consider productivity as their most important goal, we suggest them to increase the level of their employees' needs.
3. It has been found that there is no significant difference between the needs of male and female teachers; therefore, each gender is at a certain level of needs and paying equal attention to their needs is important for the management.

4. There is a significant difference between the levels of married and single teachers' needs and thus, married and single teachers are not at the same level of needs. It is, therefore, suggested that the obstacles to marrying teachers should be omitted.

5. The teachers' needs are at a low level, and therefore, the reasons behind it should be sought and the solutions should be presented to raise the level of the teachers' needs.

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STUDYING THE IMPACT OF SOCIAL CAPITAL ON ORGANIZATIONAL COMMITMENT

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Abstract

The purpose of this research is to explore the effect of social capital on organizational commitment. To this end, one main hypothesis and three secondary hypotheses were proposed. This study is descriptive-applicable and Nahapiet and Ghoshal studies (1998) were employed to measure social capital and Allen and Meyer's questionnaire (1990) was used to measure organizational commitment. The statistical population included 250 employees of the Markazi province's petrochemical industry that was determined by Random sampling method. Data analysis was done by structural equation modeling with help of Smart-PLS software. The results disclosed that social capital has a positive and significant effect on organizational commitment.

Key words: Social Capital , Organizational Commitment, Affective Commitment, Continuous Commitment, Normative Commitment

JEL:O15

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Introduction

Experience of the advanced industrial world shows that the major factor of global competition accelerating the increase of productivity and economic capacity in organizations and society is human resources. However, one of the most important things that various organizations emphasize on it is the employees' commitment to the organization and responsibilities of their job. Consequences of the presence of the employees with low commitment may be expensive for the organizations and therefore it is necessary for the management to pay attention to it.

Failure to evaluate the organizational commitment, leads to high costs caused by staff turnover and attract new staff, creating a complex control mechanisms and supervision. If the organizations take note of the benefits that are along with organizational commitment, raising the level of commitment among employees will have a special meaning.

One of the new social concepts that can strengthen organizational commitment is the employees' social capital. Since the social capital is a process that leads to the formation of social networks and coordination facilitate and cooperation to achieve the goals, therefore, it is the best context for organizational commitment (Abbasi Asfajir et al. 2016). There is the positive relationship between social capital and the organization's ability to create an organizational commitment; the organization can achieve the staff interest through paying the attention to its employees and support them (Leana and Van Buren, 1999).

According to the above, this research is studying the effect of social capital on organizational commitment.

Theoretical Foundations and Literature Review

In the new management theories, the importance of social capital has much increased rather than the other types of capital, because the concept of social capital includes features such as social trust, social participation and norms as well as the self-productivity feature. This means that with proper use of it, the grounds for production and strengthen are provided. The researchers believe that social capital in addition to reducing administrative costs, lead to much time and money to be devoted to basic activities and a proper flow of learning and knowledge to be provided among them (Monazami, 2014).

The concept of social capital for the first time in 1920 was used by someone named Henny Fan. After half a century of delay, again in 1960, Jane Jacob raised the issue of social capital. Since then, many studies have been done on social capital.

Social capital includes trust, mutual understanding, shared values and behaviors that bind the members of human networks and communities and makes possible their cooperation (Cohen & Prusak, 2001). Social capital is the collection norms in the social systems that promote cooperation of the members and leads to a decrease of the transactions and communications costs. According to this definition, the concepts such as civil society and social institutions are closely associated with the concept of social capital (Fukuyama, 1999). To Putnam, social capital refers to the concepts such as trust, norms and networks that lead to improve the communication and optimal participation by members of a community and eventually lead to their mutual benefit (Putnam, 1995).

Social capital consists of the relational, cognitive and structural dimensions. Each dimension of social capital serves as a separate construct and, while the characteristics used to describe the three dimensions of social capital are highly inter-related, each has a set of unique qualities. (Turner, 2011).

Relational Dimension

The relational dimension concerns "the kind of personal relationships people have developed with each other through a history of interactions" (Nahapiet and Ghoshal 1998 p. 244). The relational dimension encompasses the character and qualities of the connection between individuals. This is often characterized through trust and cooperation and the identification that a particular individual has within a network of relationships.

Structural Dimension

The structural dimension concerns the "properties of the social system and of the network of relations as a whole". (Nahapiet and Ghoshal 1998 p. 244). The structural dimension encompasses network components and facets such as the presence or absence of ties between parties, the configuration of a network (such as the hierarchy within an organization), and concepts such as denseness of relationships, structural holes in networks, the presence or absence of network ties between different people, formal and/or informal (such as appropriable networks) network configuration, and the density and connectivity of a network.

Cognitive Dimension

The cognitive dimension refers to "those resources providing shared representations, interpretations, and systems of meaning among parties". (Nahapiet and Ghoshal 1998 p. 244). The cognitive dimension captures the concepts of shared norms, systems of meanings and values, and, as such, we can expect the cognitive dimension to directly impact the development of social capital and the development of relationships.

The achievements that empowering organizations can gain by using and strengthening of social capital include: providing and increasing the customer satisfaction, align with market needs, increasing job satisfaction among employees, increase the sense of belonging, participation and responsibility in employees; changing the attitudes from obligation to authority, more commitment among the staff and improve the quality of the work; better communicate of staff with managers and supervisors; reducing operating costs and increasing the profitability; increasing the efficiency of decision-making processes, continual improvement in organization and increasing the productivity, creating new initiatives and make more use of intellectual resources (Niazi et al, 2009).

Social capital due to the characteristics and features such as awareness, confidence and cooperation, and social participation can facilitate the formation the relationships based on respect and ultimately enable citizens to have a significant and powerful role. The interactions within an organization leads to informal groups which will have a considerable impact on the organization. If the managers and other factors in the organization be able to create the cooperation and trust among employees in a right atmosphere, they can increase productivity and enhance organizational commitment (Aziziz, 2008).

Having committed employees who all their efforts are directed towards achieving organizational goals and customer satisfaction, seems necessary for each organization. At the same time, the organizational commitment creates an emotional interest so that employees get strongly committed, Involved in the organization and will enjoy the membership in the organization. However, the empirical evidence suggests that many factors including discussions of social capital Impact on shaping the organizational commitment (Ebrahimi, 2016).

The construct, "organizational commitment" has been a subject of interest for those studying the organizational psychology. Organizational commitment involves the loyalty of employees' to the organization, their readiness to put exertion on organization's behalf, the level of coincidence of personal goals with the organization, and an aspiration to continue employment with the organization. (Khaliq et al, 2016).

Porter, Steers, Mowday and Boulian (1974) defined organizational commitment as the strength of an individual's identification with and involvement in a particular organization but then further stated that commitment is characterized by three factors (a) a belief in and acceptance of goals and values, (b) a willingness to exert effort, and (c) a strong desire to maintain membership. (Wright and Kehoe, 2007).

Meyer and Allen (1990) believed proposed three components of organizational commitment

A) Affective commitment: it involves the emotional bond of employees with the organization. So individuals recognize themselves with their own organization.

B) Continuous commitment: according to this commitment, individuals pay the costs of leaving the organization. In fact, they ask themselves once they leave the organization, what costs they will bear. In fact, those who are continuously committed to the organization are the individuals whose reason behind of their stay in the organization is the need to stay.

C) Normative commitment: the employee feels that he/she should stay in the organization and this is the right action. This dimension shows a sense of duty to continue cooperation with the organization. People who have a high level of the commitment, they feel that they must stay in the organization (Allen & Meyer, 1990).

Many studies has been conducted In terms of impact on organizational commitment. Table 1 offers a number of studies on the subject of research.

Table 1: Literature Review

Findings of the research	Subject of the research	researcher	Row
The results showed that there is a significant positive relationship between social capital and organizational commitment and the three dimensions of social capital and commitment.	The relationship between social capital and organizational commitment with an emphasis on the Watson and Papamarks: Research in the Department of Ports and Maritime province of Gilan	Nemat Zadeh (2016)	1
The results showed that there is a significant relationship.between social capital and organizational commitment in Bank Mellat in Tehran.	The relationship between social capital and organizational commitment	Keshvardost et al (2015)	2
the results showed that Social capital and job satisfaction on Organizational commitment have significantly positive effect.	the effect of social capital on organizational commitment in Ahwaz University of Medical Sciences with the mediating role of job satisfaction	Mambony et al. (2014)	3
The results showed that, there is a significant relationship among all the processes of social capital and Organizational Commitment	The effect of social capital on organizational commitment	Monazami (2014)	4
Correlation test Showed that, There is a significant correlation between organizational commitment and social capital between employees.	The Study of the relationship between social capital and organizational commitments among Tabriz Islamic Azad University employees	Elmi et al (2011)	5
The results show that there is a positive significant relationship between social capital and organizational commitment. So that with increasing social capital and job satisfaction, organizational commitment of teachers increases. There is a negative relationship between work experience and organizational commitment (reverse) in other words, with the increase of work experience; organizational commitment of teachers is reduced.	The Study of the Relationship between Social Capital and Organizational Commitment among Teachers in Bandar Abbas	Dehghanian and Rastegar (2016)	6
The results of the study revealed that there are effects of the social capital dimensions on organizational Commitment types.	The Impact of Social Capital on Organizational Commitment in Jordanian Companies	Aboyasin et al (2015)	7
The results showed that the level of social capital and organizational commitment of employees was higher than expected and there was a direct relationship between social capital and organizational commitment.	The Relationship between Social Capital and Organizational Commitment of Employees in Zanjan Education Organization: (A Case Study)	Sayadi and Hayati (2014)	8
The results showed that, there is a significant positive relationship between dimensions of social capital and organizational commitment .	The relationship between social capital and organizational commitment	Macke et al (2012)	9
The results of the study showed that trust, communication, and employee focuse have significant direct and moderate indirects on organizational commitment.	Social Capital and Organizational Commitment	Watson et al (2002)	10

Conceptual model

According to literature review the items related to social capital and organizational commitment provided a suitable framework for modeling (Figure 1).

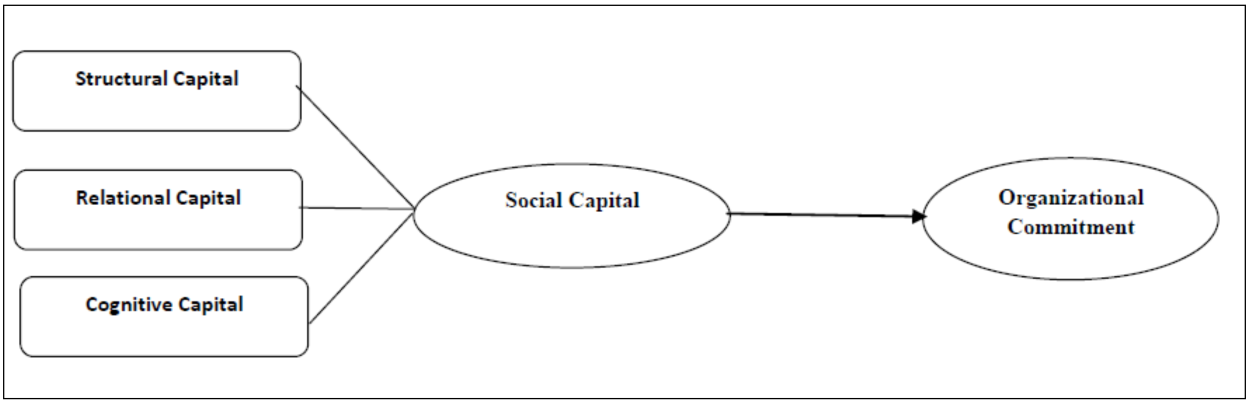

Figure 1: Conceptual model.

Research Hypotheses

Main hypothesis : Social Capital has a positive and significant effect on Organizational Commitment

First Subsidiary hypothesis : Structural Capital has a positive and significant effect on Organizational Commitment

Second Subsidiary hypothesis :Relational Capital has a positive and significant effect on Organizational Commitment

Third Subsidiary hypothesis: Cognitive Capital has a positive and significant effect on Organizational Commitment

Research Methodology

This study is applicable from objective aspect and correlational-descriptive from methodological aspect. The statistical population included 250 employees of the central province's petrochemical industry that was determained by Random sampling method . A standardized questionnaire was utilized to test the research model. Nahapiet and Ghoshal studies (1998) were employed to measure social capital and Allen and Meyer 's questionnaire (1990) was used to measure organizational commitment.

Thus, research questions have the required validity. The collected data was analyzed using statistical techniques including t-value test, confirmatory factor analysis, and structural equation modeling via SPSS and Smart PLS software in order to explain model elements and the relations among them. Construct validity was examined through confirmatory factor analysis. Cronbach's alpha coefficient of all variables was.812 that is more than 0.7. As a result, research questions have the required reliability (Table 1). Data collected were analyzed by using of statistical techniques Include: Test t-value, confirmatory factor analysis and structural equation with SPSS software and Smart PLS model to explain the components of model and their relationships.

Data analysis

In structural equation modeling, it is necessary to study construct validity and determine whether the selected questions have the required accuracy to measure the constructs or not. To this end, confirmatory factor analysis (CFA) was employed. Figure 4 shows the adjusted model and factor loading of other questions after omitting those questions with low factor loading. In Smart-PLS, Average Variance Extracted (AVE) indexes and composite reliability (CR) were used to evaluate the measurement model. Average Variance Extracted (AVE) is applied to study convergent validity of the research. Values more than 0.5 are suitable for this AVE. In structural equation modeling, composite reliability coefficient more than 0.7 for each construct shows its suitable reliability. Values of these coefficients are presented in Table 1 which show high reliability of the model.

Table 1: Values of Cronbach's alpha , CR and AVE

Variables	AVE	CR	Cronbach's alpha
Social Capital	.653	.892	.821
Structural Capital	.598	.921	.751
Relational Capital	.618	.765	.819
Cognitive Capital	.725	.847	.780
Organizational Commitment	.536	.748	.836

Testing the structural model

The structural model is tested to confirm or reject the hypotheses. This is presented in Figure 2. Numbers on paths show path coefficients.

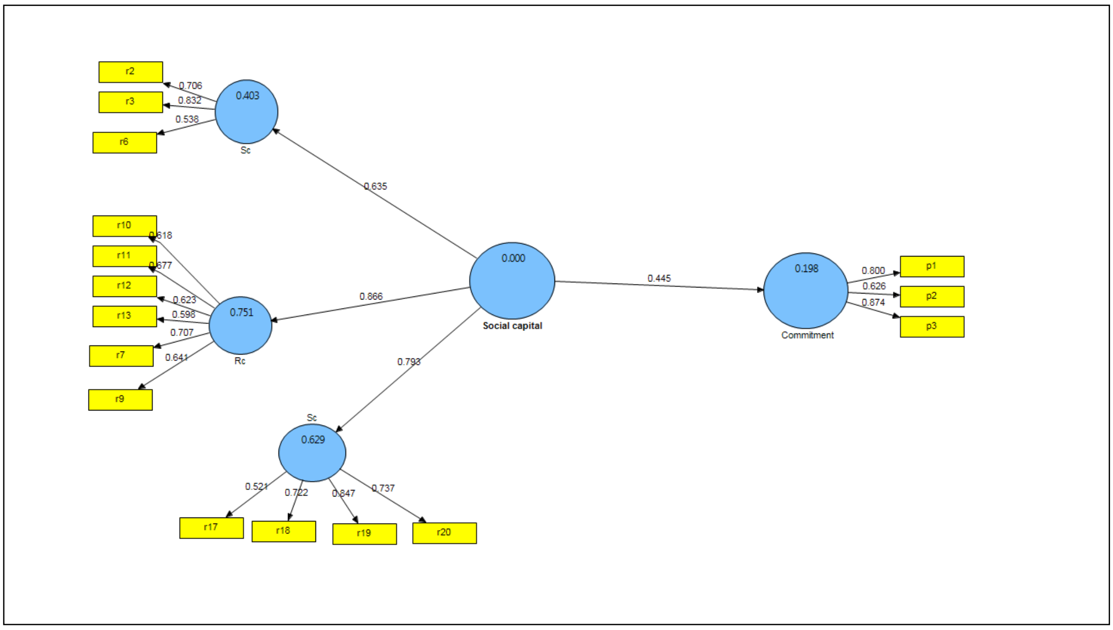

Figure 2: Numbers on paths coefficients

To examine significance of path coefficients, t-values for each path should be calculated. These values are displayed in Figure 3.

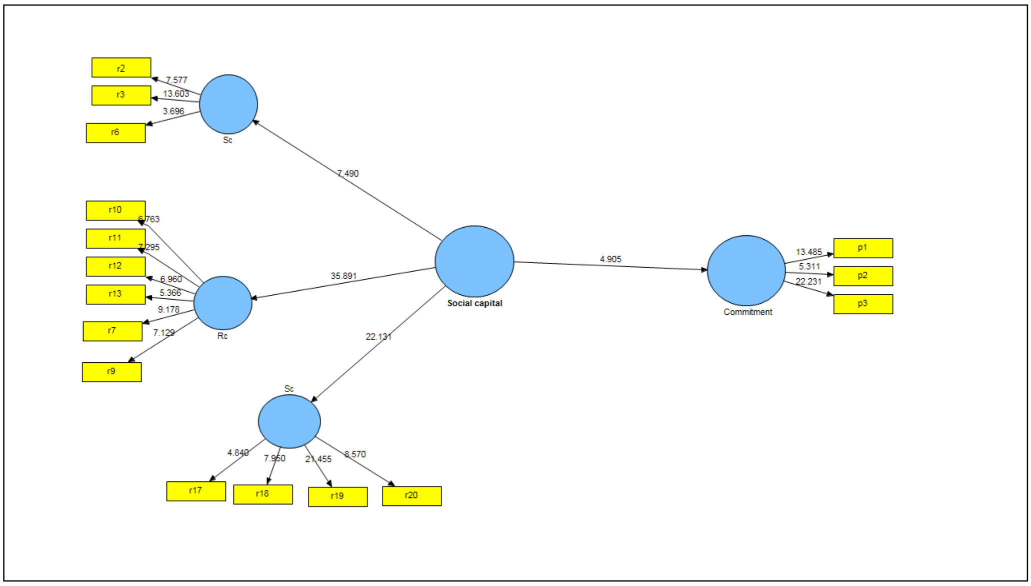

Figure 3: T-value

In this figure, the numbers show T-values. Values larger than 1.96 and those equal to it mean that there is a significant relationship between the two variables. Hence, summary of testing the research hypotheses is presented in Table 2.

Table 2: Results of testing the hypotheses

Relation			hypothesis	path coefficients	T-values	Results
Social Capital	→	Organizational Commitment	Main	.455	4.905	confirm
Structural Capital	→	Organizational Commitment	Subsidiary 1	.341	3.702	confirm
Relational Capital	→	Organizational Commitment	Subsidiary 2	.343	2.756	confirm
Cognitive Capital	→	Organizational Commitment	Subsidiary 3	.004	.033	Reject

Discussion and conclusion

The purpose of this study is survey the effect of social capital on organizational commitment , for this purpose a main hypotheses and three subsidiary ones were defined . The main hypothesis evaluate the effect of positive social capital on organizational commitment of human resource. Since the amount of T-value of this hypothesis is greater than 1.96 , this hypothesis was confirmed. This represents a significant and positive impact on social capital on organizational commitment According to the results of verification this hypothesis ,it can be stated that focus on social capital in the organization increases the level of organizational commitment and thus the effectiveness and efficiency of the organization will be increased, this finding is consistent with results of Azizi (2008) , Aboyasin et al (2015), Sayadi and Hayati (2014), Macke et al (2012) and Watson et al (2002) based on a positive significant relationship between social capital and organizational commitment.

The results of the analysis of the first and second sub- hypotheses showed that dimensions of social capital have positive significant relationship impact on organizational commitment. The third sub- hypotheses examines the influence of cognitive capital on organizational commitment , since the the amount of T-value of this hypothesis was less than 1.96, the hypothesis was not confirmed or rejected. Reject of this hypothesis can be related with atmosphere and personality characteristics of respondents , and ignoring other intervention factors relevant.

In the end, we can state that human resources, in terms of having the power of thought, creativity and innovation, are the greatest asset of any organization and any development and improvement in technical and organizational systems is done by manpower. Because of the obvious importance of human resources in the organization and its significance as a generator of wealth and capital that its presence in the capital , Managers and leaders must be careful and focus their special attention to the social capital and its great impact on organizational survival.

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II
Different angles of handling management and organisational behavior in Iran

EXPLORING THE RELATIONSHIP BETWEEN AVOIDANT, COMPROMISE, ACCOMMODATIVE, AND COMPETITIVE MANAGEMENT STYLES AND EMPLOEE MORALE IN FARS REGIONAL WATER ORGANIZATION USING ANALYTICAL HIERARCHY PROCESS (AHP)

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Abstract

The aim of the present study was to explore the relationship between avoidant, compromise, accommodative and competitive management styles and the staff morale in Fars Regional Water Organization using analytical hierarchy process (AHP). This study is considered as an apply research in terms of its objectives, a descriptive-correlational research in terms of the method, and a cross-sectional research in terms of the time period it was conducted. To test the research hypotheses and rate the research variables, SPSS and Expert Choice were used. The results of Pearson correlation test indicated that there is a significant relationship between avoidant, compromise, accommodative, and competitive management styles and the staff morale. In addition, the results of rating conflict management styles suggested that compromise and collaborative, accommodative, avoidant, and competitive styles are ranked as the first to fourth important styles in terms of their impact on the staff morale.

Key words: conflict management styles, avoidant, compromise, accommodative, and competitive management styles, staff morale

JEL: M10

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Introduction

Human resources play an important role in ensuring the quality of the society and efficiency in government and business organizations and underlie economic, social, and cultural development. That's why human resources have always been focused upon by officials and managers of organizations in the world. It is alleged that the most effective way to gain a competitive advantage in the current situation is to make employees more efficient (Mirsepassi, 2011).

Morale in the field of management is considered as one of the outstanding aspects of a healthy organization. Many organizations undermine or reinforce their staff's morale. Failure to adopt appropriate measures in order to meet the primary and secondary needs of employees in the organization, makes them work with a low spirit and the minimum power and they always tries to be opportunistic and break free from their duties, which would in turn reduces the quantity and the quality of their performance and those of the organization (Shahrabadi, 2012).

Conflict is a natural and normal part of our everyday life and it is a fact that human beings have been familiar with throughout history, but unfortunately because of mismanagement it has turned into strife and hostility, so today, people have a bad memory of it and consider it a negative phenomenon. Conflict occurs when two or more people are against each other and disagree due to differences in their needs, wants, goals, and values. In other words, conflict is a process in which a person realizes that another person has negatively affected the goals he is pursuing. Conflict management means a planning process to avoid conflict when it is more likely to occur and make plans to resolve the conflict when it actually occurs (Seyed Ameri, 2009).

Kenneth Thomas introduces the five main styles for conflict management: competitive, accommodative, compromise, collaborative, and avoidant styles (Cann, 2008). Each of these styles is based on two aspects of attending oneself and attending others (Dubrin, 2004).

One of the most important issues facing managers in most organizations and institutions is employees' morale and mood. Due to problems in the family and society, including economic problems, employees become vulnerable and lose their control even when encountering a minor problem and are likely to create troubles for themselves and the organization. In these cases, managers are required to intervene and improve the situation with proper management and resolving the conflicts in the organization so that they can help the organization in achieving its goals by solving employees' psychological problems. According to the theoretical issues presented, the exploration of how avoidant, compromise, accommodative and competitive management styles are associated with the staff morale in Fars Regional Water Organization is of high significance. This being so, the main questions addressed in this study are presented as follows:

- Is there any significant relationship between avoidant, compromise, accommodative and competitive management styles and the staff morale in Fars Regional Water Organization?
- How each conflict management style is rated in terms of its impact on the staff morale?

Literature review

Afsari (2014) studied the impact of organizational climate on teachers' morale in public high schools for boys. The results showed that organizational climate has a negative impact on teachers' morale and all its three components including feeling of attachment, imitation, and rationality. Therefore, all research hypotheses were confirmed. Rostamipour (2011) explored the relationship between job burnout and elementary school teachers' morale in Khoram Abad and found that generally there is a negative significant correlation between job burnout and the teachers' morale. In another study, Soleimani (2005) investigated the relationship of school staff's job satisfaction and morale with the application of conflict management styles. It was found that the staff's job satisfaction and morale have an effect on their tendency to use conflict management styles.

Kaushal and Kwantes (2006) examined the relationship between culture, power, character, and styles of conflict resolution. Their findings suggested that there is a relationship between individualism and collectivism. It was also found that self-control and emotional intelligence have a significant correlation with conflict resolution styles. Bush and Shirley (2007) examined the relationship between self-scrutiny and the strategy of conflict resolution and showed that there is a significant relationship between levels of self-scrutiny conflict resolution strategies among managers. Valentine (2010) examined the ratings of conflict management among female nurses and concluded that female nurses tend to use avoidance and negotiation styles more frequently than coercion style and that the negotiation style is the main style used for conflict management.

Research Methodology

This study is considered as an apply research in terms of its objectives, a descriptive-correlational research in terms of the method. The statistical population included all 385 employees working in Fars Regional Water Organization in 2016. The sample size was determined through Kerjcie and Morgan table and as such a total number of 185 employees were selected as the respondents using random sampling. The data were collected through field and library methods. The instrument used to collect the data was a questionnaire that was distributed among the respondents and returned back after being completed. Before the final administration of the questionnaire, it was reviewed by a number of professors and they confirmed that its validity was within the acceptable limits. The reliability of the questionnaire was estimated through Cronbach's alpha coefficient and the corresponding values for all variables in this questionnaire were higher than 0.70, which indicative of the high internal consistency of the questionnaire items. After testing the normality of the variables, the Pearson correlation test was run to analyze the data and test the research hypotheses. In addition, analytical hierarchy process (AHP) was used to rate research variables. The process of the data analysis was performed using Excel, SPSS, and Expert Choice.

Empirical results

Normality of variables

As it can be seen in Table 1, the significance level of Kolmogorov-Smirnov test for all variables is greater than 0.05. This shows that all variables in this study are normally distributed and thus the Pearson correlation test can be employed to test the research hypotheses.

Table 1: Result of Kolmogorov-Smirnov test

Styles		**Avoidant**	**Competitive**	**Accommodative**	**Compromise & collaborative**	**Staff morale**
Number		185	185	185	185	185
Normal parameters	3.4507	3.4507	3.1622	3.3528	3.3694	3.3953
	0.6786	0.6786	0.8328	0.6428	0.7046	0.5944
Value	0.97	0.97	0.133	1.27	1.19	0.87
Sig.	0.181	0.181	0.107	0.265	0.265	0.283

Testing research hypotheses

Hypothesis 1: There is a significant relationship between avoidant management style and the staff morale in Fars Regional Water Organization.

Hypothesis 2: There is a significant relationship between compromise and collaborative management style and the staff morale in Fars Regional Water Organization.

Hypothesis 3: There is a significant relationship between accommodative management style and the staff morale in Fars Regional Water Organization.

Hypothesis 4: There is a significant relationship between competitive management style and the staff morale in Fars Regional Water Organization.

As was mentioned earlier, the Pearson correlation test was used to test the research hypotheses. If the significance level in the test is smaller than 0.05, it is concluded that there is a significant correlation between the two variables under analysis.

Table 2: Hypothesis testing results

Independent variables	**Dependent variable**	**Correlation coefficient**	**Sig.**
Avoidant style	Staff morale	0.709	0.000
Compromise and collaborative style	Staff morale	0.748	0.000
Accommodative style	Staff morale	.766	0.000
Competitive style	Staff morale	0.814	0.000

As it is shown in the above table, there is a significant relationship between all conflict management styles including avoidant, compromise, accommodative and competitive styles and the staff morale ($P < 0.05$). This shows that all research hypotheses are retained.

Results of Analytic Hierarchy Process (AHP)

In the next step, pairwise comparisons were made among the research variables based on the respondents provided by the respondents in this study and then the corresponding mean scores were calculated. Afterwards, a hierarchical tree was plotted through Expert Choice software and the analytic hierarchy process was performed by using the pairwise comparisons. Table 3 and Figure 1 show pairwise comparisons among the research variables:

Table 3: Pairwise comparisons for each component of management style

Management styles	Competition	Solidarity	Compromise & collaborative	Avoidance
Competitive	1	2.1	4.2	2.7
Accommodative		1	2.9	3.1
Compromise & collaborative			1	4.1
Avoidant				1

Figure 1: Rating of components of management style

As it can be seen in Figure 1 and Table 4, compromise and collaborative, accommodative, avoidant, and competitive management styles are ranked as the first to fourth important styles in terms of their impact on the staff morale.

Table 4: Rating of components of conflict management style

Rank order	Styles	Weight
1	Compromise & collaborative	0.520
2	Accommodative	0.249
3	Avoidant	0.140
4	Competitive	0.091

Conclusions and suggestions

Employees try to improve their own and their colleagues’ morale by avoiding certain behaviors including:

- I avoid talking openly about a disagreement I have with my colleagues.
- I do my best so that the disputes seem trivial.
- I try to ignore the disputes even if it does harm to the organization.
- When I realize that my colleague is going to talk about our disagreements I try to avoid discussing them.

Morale is an individual and group disposition that helps people to express their opinions in a rational manner to the extent possible when encountering disputes and disagreements. People with a high morale also tend to listen to the other party before asserting their opinions and consider the realization of the other party’s demands instead of competing and fighting with their rivals in order to overcome them in situations involving conflict. Having satisfaction and a strong morale helps people to maintain a spirit of collaboration in their interaction with others. Such people try to resolve their conflicts and disputes by using a problem solving approach and through cooperation with the opposing parties, because if there is cooperation among the group members they will have freedom needed for self-actualization.

In the conflict management style, the manager pays close attention to the members of the organization, trusts employees, and tries to find out solutions that serve the conflicting parties’ interests. In addition, the conflicting parties focus on solving problems and clarifying disputes rather than compromising with different viewpoints. The management and employees who follow this style consider all possible choices and explore critically similarities and differences in in different perspectives in order to find the possible sources of conflict. Because when employees realize that the manager respects and trusts them and reminds them of their weaknesses in an affectionate way, they will do their best to perform their duties well and enhance their quantitative and qualitative efficiency, and this contributes to improving employees' working spirit. Given the features of (competitive) conflict management style, managers rely more upon their power and position and have stricter control on their employees to ensure that they observe regulations and rules. In this type of management, the assigned tasks by the manager should be performed by employees with great care. Therefore, it requires the increased employees' participation in organizational operations and when the participation increases it enhances the employees' morale.

The results of the study also indicated that compromise and collaborative, accommodative, avoidant, and competitive management styles are ranked as the first to the fourth important factors affecting the staff morale with an inconsistency rate of 0.09. Therefore, managers can use compromise and collaborative management style to improve their employees' morale. In this style, flexibility, communication, and negotiation are of special importance. In other words, they are required to increase employees' participation in working processes.

Since conflict among employees is inevitable in organizations, the manager in the organization under study are recommended to use conflict as an opportunity for change, because disagreements and conflicts are useful for the organization if they are addressed insightfully. Managers are able to act as effective leaders in their relevant units if they are familiar with individual and personality differences of their employees. Managers can increase the employees' morale and improve their productivity and the organizational performance by encouraging the employees to cooperate with each other in performing the tasks, appreciating more active employees in the group, increasing their awareness of the result of individual and group works, encouraging them to share correct information in order to find the best solution, and helping employees to express their opinions and suggestions.

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THE EFFECT OF OPERATIONAL AUDIT ON IMPROVEMENT OF DECISION-MAKING BY DIRECTORS IN THE LISTED ENTERPRISES IN TEHRAN SECURITY AND EXCHANGE ORGANIZATION TSEO

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Abstract

The present research is intended to examine effect of operational audit on improvement of decision-making by directors in the listed enterprises in Tehran Security and Exchange Organization TSEO. This study is composed of three hypotheses for exploring effect of operational audit on improvement of decision-making by directors. The data were gathered by employing methods of data collection (via questionnaire) and with respect to sample size, questionnaires were distributed among directors of enterprises and audit managers where it included 3 general questions and 26 specialized questions. The reliability of questionnaire was determined by Cronbach alpha coefficient and its validity was ascertained by achieving similar results from repetition of testing hypotheses. The studied hypotheses are as follows: 1- Use of operational audit results may impact on decisions made by directors in organizational economy; 2- Use of operational audit results can influence in decisions made by directors regarding organizational efficiency; and 3- Use of operational audit results may impact on decisions made by director in organizational effectiveness. The results of binomial test, test for comparing mean rate of population, Friedman ANOVA test and fore measurement of correlation between factors to test hypotheses indicated that employing operational audit results have influenced in decision-making of directors on economy, efficiency, and effectiveness of organizational operation and in other words all three tested hypotheses were approved.

Key words: Operational audit, Decision-making of directors, Efficiency, Effectiveness, Economy

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Introduction

Quantitative and qualitative development of organizations, companies, and executive bodies in governmental, public, and private sectors has led to more complication in social and economic and commercial relations, fast growth in sciences, ever-increasing advancement and acceleration of technology, and enhancement of human science level causing improvement in management role in the existing organizations in today world. Adaption of proper and appropriate administrative techniques in optimal use of organizational resources, particularly in public sectors is a conscientious responsibility, rational mission, religious requirement and national task and it has led to preservation and protection from the existing national resources at macro level and acquisition of higher benefits. The restriction of the available resources and facilities, speed and quality in presentation of products and services, intensification of competition, necessity for purposeful realization of activities, and also requisite for accountability have caused to put accurate focus on and to pay high attention to efficient and effective performance and through observance of economy as a model for management activities in the organizations where under such circumstances the management may assume oneself as required to use organizational resources in such a way that to realize long term and short term organizational objectives at lowest cost and without adaptation.

Rather than to cause laying foundations for strong administrative systems and controls to access to proper data for decision-making in today world, this paradigm has led to creation of a new type of audit under title of operational or management audit. Although this type of audit may not be called as new, goals and techniques and methods used in this type of audit today is surely new since the goal of this type of audit is generally to guide operation toward optimization through assessment of performance and identifying the efficient opportunities and presentation of influential suggestions to improve operation. The management performance is objectively evaluated with respect to the group of facilities and constraints of activities and rate of efficiency, effectiveness, and economy of the same operation as well as structural conditions of administrative controls are measured including administrative, organizational, and controlling structures etc. by which to consult with the authorities for better and more appropriate administration of activities. Thus unlike that audit which is assumed as one of validation services, in terms of its focus on identifying improvement solutions and presentation of suggestion for optimization of operation, performance audit is posited further as one of managerial counseling services in today world so it may lead to constant positive and forwarding developments in organization and improve management motives efficiently for further dynamism in approaching to individual and organizational goals than ever. With respect to the given issues, operational audit process is assumed as an appropriate counseling service and very effective tool toward enhancement and improvement of performance in terms of numerous interests and advantages so that it should be principally welcomed by directors in economic units and organizations. While it seems the reality is not exactly the same and it may not be welcomed by managers in Iran so this lack of inclination by management in implementation of this process may slightly create confrontation by directors and also barriers against directors for execution of process (Schneider, 1973).

Literature and research background

Operational audit

With focus on effectiveness, efficiency and economy, operational auditor is deeply linked to concepts of management. No one can explain about management schools with different classifications without referring to various management schools, particularly theories of organization. Here, the classification is adapted according to classic and neoclassic schools, organizational behavior, and modern structuralism.

a) **Classic school**: The experts in the field of management trace the start point of classic theory of organization in eighteenth century simultaneously with emerging of complex economic organizations in UK. The nature of organizations is assumed as the same in this theory and it can be administered according to the identical principles. The assumptions of this theory were governed by 1930s.

b) **Neoclassic school**: Neoclassic followers criticized the classic adherents because their school was based on theoretical and empirical foundations and they utilized achievements of behavioral sciences. So, Simon says the organization is not isolated from the environment and environmental conditions should be managed. The main point that is related to operational audit is that classic followers assume some principles such as unity of command or constraint of supervision field as requisite for increasing efficiency.

c) **School of organizational behavior**: This theory was seriously proposed since 1975. Efficiency and effectiveness, creativity, flexibility and generally improvement of organization may be possible in light of growth and training of personnel. The assumptions of this theory are as follows: 1) Existing identity of organization is subject to meeting of human requirements; 2) Organization and personnel need to each other; 3) Personnel and organizations should be fitted to each other.

d) **Modern structuralism school**: Based on this theory, organizational efficiency is the basis for its rationalism and the goal is to increase wealth. The main assumptions of this school are as follows: 1) Logical movement and providing goals for organizations are subject to coordination and employing organizational controls; 2) Appropriate structure is necessary for advancement of objectives; 3) Tendency to expertise in activities and work division may increase quality and quantity of production; 4) Many organizational problems results from structural defect and they can be solved by change in structure.

American association for Internal Audit defines operational audit as follows: It denotes a regular and systematic process that assess effectiveness, efficiency, and economy of operation in an organization within framework of managerial controls and report of final assessment results along with presentation of adjusting suggestions and recommendations to the competent personnel and it will finally lead to optimal use of organizational resources and improvement of its productivity.

The operational audit is to regular control of evidences and documents of a governmental organization, a project, an activity, or a task for evaluation of its performance independently. This type of audit presents some information for promotion of public accountability task and for facilitation in decision making by the units as responsible for supervision and implementation of corrective measures (US Government Accountability Office, 2007).

The operational audit denotes comprehensive control over an operational unit or total organization in order to assess its systems, controls, and performance compared to determined goals by the management (Whiting & Puny, 1998).

The operational audit is a regular and systematic process for assessment of effectiveness, efficiency, economy in organizational operation and reporting of assessment results along with practical suggestions to competent personnel for improvement of operation (Rider, 1996).

Operational audit is a new controlling technique that presents assessment technique to auditors for effectiveness of operational methods and internal controls (Schneider, 1973).

The operational audit is purposeful and systematic control of evidences and documents of an organization, a project or an activity that is done for presentation of independent assessment of performance compared to specific criteria (Arjomandi, 2003). A slightly manipulated definition is quoted from Bradford Cadmus (1964): ‘Operational audit denotes systemic and regular process for assessing efficiency, effectiveness, and economy of operation in organization with focus on management planning and control and reporting the given results from controls accompanied to the suggestions need for improving operation.’(Laurence, 1973) Three elements of efficiency, effectiveness, and economy play highly important role in operational audit and they have been defined in above approval as follows: a- Effectiveness is the level achieving of objectives. b- Efficiency denotes ratio of the results came from operation (output) to the consumed sources (input). According to this definition, the efficient operation is one that provides maximum yield (output) by spending minimum sources (input) via employing optimal methods. c- Economy denotes effort made for minimizing educational cost and use of organizational sources by keeping appropriate quality.

Economy, efficiency and effectiveness

Standards of American Audit Bureau have defined concept of audit for economy, efficiency and effectiveness. A brief explanation has been given for each of these terms well-known as (3es) and their positions are mentioned in operational audit.

A- Economy (or operational cost): Does the inspected organization perform its tasks versus sources with respect to principle of saving at most possible economic status? The operational audit may control following cases in assessment of economy of operation and way of allocation and consumption of sources: 1- Adaption of appropriate method for procurement; 2- Inflation (surplus) of workforce in organization with respect to size of executive operation; 3- Storing of additional materials rather than needed; 4- Utilization from expensive equipment; and 5- Avoidance from wastage of resources

B- Efficiency (operation techniques): Does the organization perform the tasks with the minimum effort? Some cases for operational deficiency against which they should be alert are as follows: 1- Inappropriate adaption of manual and mechanized methods; 2- Useless bureaucracy; 3- Deficient operational systems and techniques; and 4- Complex hierarchy and or communicative patterns in organization; 5- Rehashing; 6- Useless operational phases

C- Effectiveness (or results of operation): Does organization achieve the favorable results and interests with respect to objectives or any other measurable criterion? Revision of operational results includes the followings: 1- Assessment of organizational planning system comprising of detailed organizational goals and plans; 2- Evaluation of adequacy of management system to measure effectiveness; 3- Determination of range for achieving results; and 4- Identifying inhibitors (barriers) against achieving satisfactory results and outcomes (Rider, 1996)

Despite of this fact that assessment of operational results includes permanent managerial tasks, measurement goals and criteria are not always defined clearly. Regardless such transparency, auditor may not significantly evaluate. If management has not succeeded in this process before operational audit, auditor should take the following measures along with management: 1- Determination of objectives, specifying of measurement criteria and determination of needed techniques to collect the required data for measurement of rate of achieving operational results; 2- The relationship among economy, efficiency and its impact on the given results can be assumed as similar to flip-flop motion. Namely, the balance should be established to acquire the needed amounts for each of them. The favorable balance will be established when the operational costs is kept without reducing efficiency and effectiveness at the possible minimum level and this is realization of operational economy. At the same time, operational techniques should be employed with the minimum cost and without sacrificing the results and this means realization of efficiency. Thus, it can be found that why economy and efficiency are usually examined together and as a part of operational audit method. Economy, efficiency and effectiveness are given in Figure 1. The relationship among operational economy and efficiency has been displayed in this diagram as well (Rider, 1996).

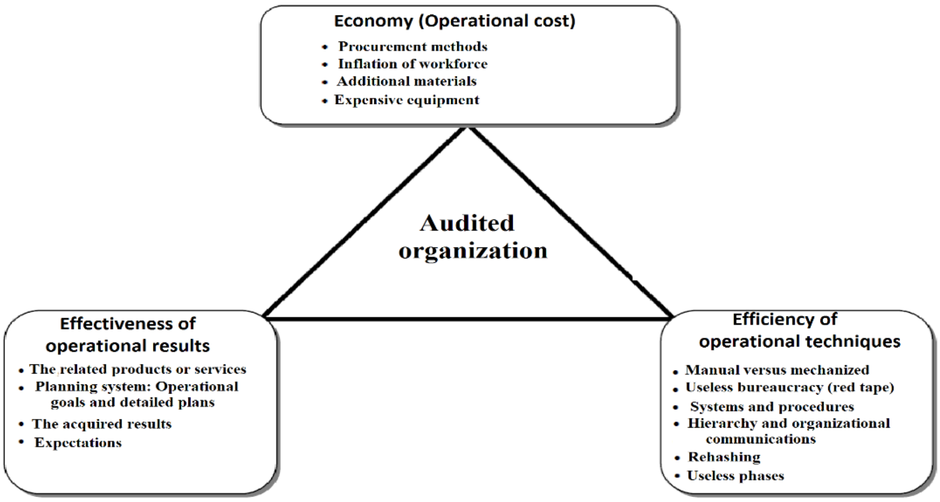

Figure 1: Operational audit triangle

Source: Rider Harry R; Comprehensive manual of operational audit, 2002

The reasons for execution of operational audit

The financial statements are no longer responsive for management information requirements. Thus, management in both private and public sectors tends to acquire more information for judgement about quality of operation and operational advancements. For this reason, it necessitates for operational audit techniques to assess effectiveness and efficiency of operation. Many auditors (internal and independent) are asked to assess operation in an organization. Demand for these specialized services is going to increase with more focus on efficiency, effectiveness, and economy of operation with the given results. Possessing professional skills such as ability to analyze, finding of facts and reporting, and for execution of operational audit has placed in superior position than other. Operational audit includes regular exploration of organizational activities in relation to its operational goals. According to report of 'Committee of Operational Audit and Management' of American Association of Accountants (1982), the general goals of operational audit are as follows (Cadmus, 1964):

a- Assessment of performance: Any operational audit system includes evaluation of performance of the given organization. The assessment of performance denotes comparing way of guiding and execution of organizational activities with following cases: **1**- Operational goals are determined by management and or employers e.g. organizational policies, standards, purposes, and goals; and 2- Other appropriate criteria for measurements and assessment;

b- Identifying of existing opportunities to improve operation: Operational improvement can be classified with respect to economy, efficiency, or effectiveness. The professionals may identify the specific opportunities for improving operation through analysis on conducted interviews with persons (inside or outside organization), observation of operation and review of past and current reports, analysis of transactions, comparison of industrial standards, and expert judgment based experience or by other suitable devices.

c- Presentation of suggestion to improve operation or continuance of controls: Nature and range of operational audit suggestions comprise of noticeable variation. In many cases, operational Audit may not present certain suggestions but on some occasions it is necessary and also may be possible to conduct more analyses and beyond current range of audit operation.

Operational objectives of operational audit

The directors are inclined in execution of operational audit for various reasons. Some of these reasons are given here. Remember that it is possible the management tends only to a certain goal (i.e. operational efficiency), a composition of operational goals (i.e. observance of techniques and internal controls), or their specific schedule (acquiring of results based on cost-profit principle).

a- **Financial and accounting** include observance of financial policy- execution of accounting procedures- implemented procedures by personnel with consistent tasks- the presence of adequate audit tests- Possibility for observation of procedures

b- **Adequacy of internal controls consists of** 1- accounting controls e.g. protection from assets- credibility of financial records and documents- System for assigning powers and approvals- division of tasks- enforcement of objective controls over assets and 2- administrative controls including operational efficiency- observance of administrative policies- adequacy of information and management reporting- potentials and training of personnel- quality control

c- **Observance of procedures include rules and regulations**: governmental or local- commitment to administrative policies- Practicing assignment of powers and approvals- business evidences about acquisition of operational predetermined goals and objectives- commitment to short- term and long-term plans- Achieving of operational management goals- attraction and efficient training of manpower- assessment of organizational policies

d- **Organizational efficiency** includes perfect knowledge about powers and tasks- logical and compatible communications in reporting- description of current tasks and operation- separation of tasks of personnel at different levels compared to similar organization- levels of personnel comparing to similar organization

e- **Operational results include organizational planning**: objectives, operational goals and detailed projects- progress and accurate implementation of plans by considering alternatives, constraints, cost- profit, and sources allocation- assessment of operational results (appropriateness of measurement criteria, evaluation of victories and failures, adjustment of destinations, goals and solutions in strategies) (Operational Audit Committee, 2001)

Destinations of operational audit

The auditor should be aware of destinations for which the controlling operation is done in operational audit. Before start of operational audit, the auditor should consult with management about his/ her impression of the related goals. Mutual agreement should exist over destinations of operational audit from the beginning of process. For example, audit goals may be one of these cases: 1- Analysis and assessment of quality of accounting system and the relevant internal controls, 2- analysis of the related systems and controls to internal control system, operational activities and observance of regulations, 3- Analysis on potential for achieving objectives, operational goals, and existing results in the approved project, 4- Comparison of the given achievements and outcomes with the specified goals in management plans during a certain time period and determination of the reasons caused obstruction against achieving goals, 5- Analysis and description of reasons for inadvertent rise of activities about which there is little information, 6- assessment of observance of public rules and regulations in order to achieve the minimum level of confidence about observance of these rules, and 7- identifying and reporting defects and advanced areas in order to provide professional assistance and follow-up if necessary (Rider, 1996)

Advantages of operational audit

Proportional to its range, operational audit may be followed by remarkable advantages e.g. 1- identifying the problematic areas, the related reasons and solutions for their improvement, 2- providing opportunities for omission of deficiency and wastes i.e. reducing cost, 3- recognizing opportunities to increase income level, 4- identifying operational objectives and goals, undefined organizational policies and procedures, 5- specifying criteria to measure level of acquisition of organizational objectives and operational goals, 6- Some suggestions for improvement of improving organizational policies, procedures, and structure, 7- Analysis on performance of personnel and organizational units, 8- control of observance of legal requirements and organizational objectives, operational goals, and organizational policies and methods, 9- analysis on presence of any type of unallowed and fraudulent activities or behaviors against rules and regulations, 10- assessment of managerial controlling information systems, 11- identifying possible problematic points in the future operation, 12- preparation of communication way among top management and operational management, and 13- providing independent and objective assessments of operation (Rider, 1996)

Types of operational audit

The operational audit can be classified according to the audited subjects in three major groups as follows: current and daily (tasked) operation, organizational, and special missions.

a- Current and daily (tasked) operation: one can daresay that in most of cases, operational audit includes focus on tasked activities. The current operational and daily (tasked) audit is focused on specific group of operational tasks and or activities and or specific task in the organization generally and or one of its units. This type of audit activity rarely exceeds from operational borderlines but it is the relations among a unit with other internal units to which it interactively exchanges.

b- **Organizational audit**: This type of audit targets organizational unit (branch, district or subordinate) instead of activities and processes. As a result, operational audit over efficiency, effectiveness and economy is a managerial process. For instance, how much can organizational plan be effective, efficient, and economic for determination of tasks and techniques to achieve coordination?

c- Special missions audit: The management application includes different goal and limit in this type of audit; for example, audit of a company before buying it, assessment of offer for omission of a district, analysis of activities and communications upon possible existing conflict among interests or analysis of activities and control for acquiring evidences regarding commitment of illegal activities.

Business phases and operational audit process

Basically, operational audit includes data collection, assessment, and presentation of suggestion if necessary. Operational audit principally comprises of measurement and evaluation of activities toward their improvement. The management is responsible for planning, leadership, and control of activity. Thus, analysis and assessment of planning method, guiding, and control of activities by management is assumed as main and key point in operational audit. Moreover, operational audit covers analysis of results and knowledge about problems. These cases also provide type of internal attitude toward effectiveness of management and facilities for advancement. The operational audit phases includes respectively: 1- planning, 2- audit plans, 3- execution of operation, 4- completion of findings and formulation of suggestions, and 5- reporting.

Any operational auditor may execute both types of controlling operations: primary control and detailed control. Both types of audit possess all above-said phases. The existing difference between two types of control lies in level of emphasis, selected specific techniques, and goals at any certain step. The operational audit phases can be described as follows:

Planning: At this phase, auditor acquires general information. This information is concerned with types of activities, nature and relative importance of these activities, and other general information and it can help the auditor in planning for primary units of audit.

Audit plans: Operational audit plans are prepared for primary controls on some activities which are selected at planning phase. The audit plans, which have been basically and appropriately planned, are necessary for efficient and effective execution of operational audit. These plans should be designed for any situation specified to the given position so that the predetermined activity to be performed at any business phase and the relevant reason to be clearly mentioned.

Execution of operation: Audit analyzes organizational operation to determine effectiveness of management and the relevant controls. These tasks and controls are tested by specific focusing on the fields and areas with high possibility for deficiency or difficult control. This phase aims at determining specific status that needs to correction with its importance and in that what efforts should be made regarding the given subject.

Completion of findings and formulation of suggestions: Based on the important areas which have been identified at the step of execution of operation, specific findings may be acquires based on these characteristics including: 1- status: what did you find? 2- criterion: what to do? 3- effect: what is its effect on operation? 4- reason: what happened? And 5- suggestion: what should be done to adjust conditions? (Zare, 2011)

Reporting: The auditor prepares the report based on audit results. The report is prepared in order to announce the results to the beneficiaries or ones who are responsible in this regard. In fact, most of audit findings and perhaps the formal report of auditor are presented to the management to make the corrective or complementary efforts. The final report is really an abstract of operational audit results (Rider, 1996).

Criteria in operational audit

The operational auditors have to adapt criteria proportional to their assigned tasks. This issue may cause some problems in the existing with the unit under control. Therefore the auditors should discuss their criteria with management of the given unit and come to the common result. Execution of audit operation by means of criteria which have not been verified by the responsible unit for controlling may lead to emerging dispute between two sides and even issuance of unreliable audit reports. This condition may be exacerbated when the auditors are not inclined to agree with viewpoints of the inspected subject. If this problem is not resolved by clarification of issue at different phases, then auditor should stop the assigned operation or if this is not possible due to various reasons including legal requirements, s/he should continue audit process and reflect the disputed cases by his/ her report to the controlling unit.

Types of criteria

The criteria are usually intraorganizational and or they are codified by operational auditor and through cooperation by management. Some examples of such criteria are as follows:

a- Intraorganizational criteria: Organizational policies- rules and regulations- contracts- financing requirements- organizational projects, operational destinations and goals- budgets, organizational tables and detailed projects and **b- Codified criteria by operational auditor**: they include performance of similar organizations- the relevant statistics to industry and performance- previous and present performance of employer- engineering standards- special analyses or investigations- audit judgement- appropriate business methods- favorable commercial norm; for example, if operational goals of an organization comprise of preparation of perceivable, proper and timely financial information.

How to determine criteria?

An appropriate criterion should be 1- *perceivable*- the given criterion should be clear and perceivable for all and express how to assess the operation; 2- *relevance*- the formulated criterion should be timely and relevant to the given subject, 3- *reliability*- the basic information for preparation of criteria should be free of error, objective, and perfect, and 4- *Comparability*- the codified criteria should be similar and comparable with the related criteria to other economic units.

The determining principles of operational audit criteria are not difficult and far-fetched rules. The paramount principles include 1) auditors should try to identify various plan elements inside the project or the assigned tasks. Any project or task is normally done through various phases such as financing for budget, planning, execution, and utilization. The auditors should try to find answer this question at any phase of project or the assigned task that what a qualified director should do for execution and control of project at any phase. The answer to this question can be extracted from the sources including basic planning documents e.g. agreements, other audit institutes, other similar systems that have been audited, determined standards by professional communities, public methods and policies, rules, and regulations and procedures, previous performance, the executive standards codified by management and interview with professionals and experts etc. this answer may lead us toward finding audit criteria (Operational audit plan, 2010), 2) auditors should inquire methods and policies taken by the controlling unit. This may help to creating appropriate criteria, 3) when there is no any stabilized method auditors should search for such methods in similar economic units and try to adjust the method of those economic units with their own conditions, 4) auditors should analyze the information related to background of economic unit and determine criteria using their statistical techniques, and 5) Occasionally, auditors derive their audit criteria from expectations of users for services in economic unit. This is done by means of method of interviewing with the users or completion of questionnaire by them (Manual of operational audit, 2004).

Operational audit measures

The best point is where a list of main organizational tasks is prepared and those areas are specified in which operational audit results in the maximum benefit and we prioritize any task based on its criticality and utility in terms of audit. an example of this control list is as follows: 1- board of directors, 2- management, 3- organizational- administrative- reporting and control, 4- planning system e.g. organizational- administrative- detailed planning- personnel's affairs- employment procedures- measurement and assessment procedures- levels of personnel- salaries and wage payment techniques, 5- accounting e.g. assets- liabilities-budgeting procedures- salaries and wage- accounts payable- accounts receivable- transmission of invoice and collection of claims- financial reporting- industrial accounting procedures- borrowing and issuance of bonds- system of recording in general books and ledger, 6- Electronic -data processing e.g. design and analysis of system- planning and use of software- equipment- personnel- operational procedures- production control- control of goods inventory- marketing- sale-engineering- equipment- fixed assets- insurance.

As usual, auditors are exposed to time limit in operational audit. Thus they try to spend this time in through operational zones with the maximum susceptibility to optimization of operation. Of those criteria that are employed for identifying critical points in a company, one can refer to 1- limits which possess more importance compared to other sectors such as revenues, costs, percent of assets, sale rate, production units and personnel, 2- those zones in which control is weaker e.g. lack of an efficient control system in production, management reporting system, and organizational planning and control; 3- those areas where there is possibility for abused or negligence in the process; for instance, the production and goods should be controlled in such a way that some of transaction not to be reported and they should be left hidden and also uncontrollable reporting of time and cost and ineffective techniques for assessment of personnel, 4- The areas with difficulty in control including possible presence of warehousing methods, transportation or inefficient time schedule, 5- Those areas in which the performance is not done effectively or economically , 6- the deficient areas were introduced to the management and or required for improvement including Human Resources Management (HRM), production methods, data- processing operation and management reporting and the limits which have been identified by analysis of ratios, known changes or trends such as areas in comparison with several time periods as exception to the rule (Rider, 1996).

Execution of operational audit process

Operational audit may be implemented by an independent audit institute, an internal audit group, an internal independent unit, and personnel of units and or their composition. The execution phases are identical more or less. The summary of these phases is mentioned as follows:

1- **Identifying and definition of problem**: Identification and definition of a problem is usually the first step. Identifying major problematic fields that are examined in operational audit is one of managerial tasks but auditor may contribute in recognition of problem according to the managerial request or conduct exploration for identifying major operational fields.

2- Collection of appropriate data: collection of appropriate supporting data is the second step that is done usually by operational auditor. Data collection aims at providing information about background of problematic fields (which have been identified at first phase) so that to confirm presence of this problem.

3- **Assessment of situation**: Evaluation of status quo in organization is done in order to determine some cases including organizational structure and accessible sources are the next step. These cases are those ones based on which the auditor announces his/ her suggestions for execution of operational audit to the management.

4- **Presentation of suggestion**: in order to clarify the important issues, the management should submit written proposal or contract draft to him. These cases include: 1- Subject background to justify need for operational audit, 2- goals for execution of operational audit, 3- range of operational audit execution (operational audit should include each of operational fields), 4- Auditor's attitude for execution of operational audit, 5- tasks, expectations, and also time obligations taken by operational audit personnel and personnel of employer, 6- reporting requisites to management (holding sessions for work progress and final report), 7- advantages which are provided for the organization as operational audit result, and 8- time and cost should be estimated, although presentation of offer to management is considered as common method for the independent auditors, it has been recommended before startup operation to send such offer by auditors as well. The main objective of such a letter is to create clear and trusted communication among audit group and management in order to achieve common perception of operational audit goals and range (Rider, 1996).

Research literature

Prof et al (2016) examined effectiveness of internal accounting in Nigeria. By sending questionnaire for 182 directors based on the designated Likert spectrum, despite of the fact that directors emphasized in effectiveness of internal audit, they indicated proper punishments have been stipulated for lawbreakers. However internal audit is violated in this country. They emphasized the information of auditors should be updated instead of searching for modern audit techniques. Similarly they expressed that an overall and transparent system should be designed to employ operational auditors.

Henry et al (2015) implied as operational audit can be efficient in which both organizational and operational independence should be preserved for auditors so this second dimension has been addressed by professional standards. Operational independence depends on employer's tendency to cooperation and also selected strategies taken by auditor to treat with employer. Finally they showed the complex interactions in formal designed arrangements have created ambiguity across border of independence of operational auditors.

Brazel et al (2010) propose an important question in their study that if auditors show any reaction versus abnormal conflict between financial and non-financial measurements or not. The non- financial measurements are operational calibrations which are not listed in financial statements but in any case they exist in other reports. Professional standards, audit texts, and former studies indicate the non-financial measurements might be used by independent auditors to examine results of financial statements of their customers and prevent from fraudulence and faking instead. However the recent studies show that the auditors often ignore non-financial items often at time of controlling financial data and even when these items are prepared. At next step, they found that as auditors have indicated paying their attention to non-financial items they have assessed relationship between these items and fraudulence risk at high level. Their findings indicated that auditors should take instructions in this regard and consider non- financial regulations included in group of risk for fraudulence at high level. The findings of this group showed that auditors overlooked non- financial items regarding fraudulence unlike its potential importance.

In an essay titled self-assessment of audit plan, Sakai (2009) describes executive practice for assessing thought management, planning, and performance of management in fact for which managerial and financial audit and performance of output of plans taken by public companies and agencies are necessary. Similarly, this essay invites reader to use a model both in assessment of audit report and about result of management performance. Also in his study, Abili (2009) identified the factors relating to type of leadership and attitude of management group from the relevant organizational factors to productivity in middle-rank managers.

Brown et al (2009) posit trust as one of requirements and with respect to their attitude and given partial transparency and high-cost audit, trust is deemed as one the needed and essential parts of financial items. In their investigations, they found that the observed features of operational risk are not revealed so to manage cash flow.

Loi and Fat (2007) explored strategic organizing conditions to reduce risk and for effective management as a hybrid strategy and model for operational audit. This essay has provided strategic models about audit fields. Likewise, they imply correlation between audit trends and organizing conditions are intrinsically useful both for auditors and enterprises.

Barbara (2007) studied formation and organizing of expert audit in assessment of governmental performance. It has been evaluated in this paper how general audit in Alberta at Canada converted their comments and claims in expert form relating to management knowledge in governmental performance and in fact utilized various tools to keep their suggestions and some methods were explored by which government showed reaction to them.

Research hypotheses

With respect to theoretical bases and conducted researches, the research hypotheses are presented as follows.

First hypothesis: Use of operational audit may impact on decisions made by directors in organizational economy.

Second hypothesis: Use of operational audit may impact on decisions made by directors in organizational efficiency.

Third hypothesis:: Use of operational audit may impact on decisions made by directors in organizational effectiveness.

Variables and measurement parameters

In this study, operational audit is independent variable, and the dependent variables include efficiency, effectiveness and economy and meditating variables comprise of decision-making of directors where the used parameters for measurement of each of them in questionnaire are as follows:

1-**Efficiency:** reducing inappropriate use of manual and mechanized techniques, reduced rate of useless bureaucracy (red tape), decreased number of inefficient operational systems and techniques, reduced hierarchy and or complicated communication models in organization, reduced rehashing, reduced rate of useless business phases, decrease in inappropriate use of cash fund, decrease in use of irrational and useless organizational model, decreased quantity of incomplete works, reducing useless and inefficient hiring of personnel, decreased useless and inefficient consumption of physical resources, 2-**Effectiveness:** Improvement of manufactured products and services, enhancement of planning system including operation destinations and goals and detailed projects, improvement regarding achievement of results, fulfillment of customers' expectations, change in advancement and accurate implementation of plans, (alternatives, constraints, costs and allocation of sources), rising recognition of inhibiting factors versus achieving satisfactory results, and creating management system to measure effectiveness and 3- **Economy:** Taking appropriate method for procurement, reduced storage of additional materials (surplus), decreased use of expensive equipment, avoidance from wastage of sources, reduced inflation of workforce in organization with respect to size of executive operation, reducing numbers of high-qualified personnel in suitable positions, decreased number of unsuitable material with less frequent turnover, reduced wastes and small and gradual theft of materials and goods

Methodology

Whereas present research is of descriptive type therefore questionnaire has been utilized for collection of given data in testing hypotheses similar to many related descriptive studies. The questions of this inventory are of close-ended types and Likert scale is used as measurement scale for the questions for each of which the participants should select one of the given choices listed in Table 1. The general part of questionnaire in this study comprises of questions about education, work background, and occupational task and the second unit of questionnaire also consists of 26 questions comprising of 3 dimensions i.e. economy (8items), efficiency (11 items), and effectiveness (7items). In order to determine validity of questionnaires, the research has put it at disposal of some academic teachers and experts and thereby the validity of questionnaire was measured. Cronbach alpha coefficient (method) was employed for determination of reliability of measurement tools. For this purpose, 33 questionnaire forms had been distributed randomly among the samples out of which 30 cases were returned and based on which we randomly chose them in two groups with 14 and 16 members. The results came from sending samples questionnaires were confirmed by Cronbach alpha test using SPSS software thereby the reliability was approved at level 85.6%. Therefore, the related questionnaire has been prepared in final form. The elected directors were appointed in those enterprises where operational audit was process completed on 21st March 2015 (end of fiscal year) and they belonged to various branches of industry.

Table 1: Measurement scale for questions

Strongly agree	Agree	No comment	Disagree	Strongly disagree
9	7	5	3	1

Statistical population and sample

The statistical population of this study includes two groups:

A: *Directors of the listed enterprises in Tehran Security and Exchange Organization (TSEO) the operational audit has been implemented in their companies:* By referring to TSEO website the information file of listed enterprises in TSEO was received and questionnaire was sent to their directors for whom the status was determined separately based on industry and with respect to open or close symbol of the given companies. Whereas the accurate number of directors and members of boards in the given companies were not known thus this number was considered averagely as 10 persons for any enterprise (3 persons for members of board of directors, 1 for managing director, and 6 persons for other corporate directors including financial, administrative, production, commercial, sale, and marketing affairs directors etc.), Moreover, operational audit has been implemented in about 50 enterprises or it is in progress. Given this point, total size of population of directors is considered 500 members.

B: *Audit directors*: Since capability for decision making and or effect on operational audit report are deemed as characteristic given for audit directors in the aforesaid study therefore under these conditions, the given population includes the audit directors who are entitled to issue report according to professional requirements. Accordingly with respect to the latest statics in Iranian Association of Certified Accountants and statistics audit directors who are employed in Supreme Audit Court, sample size of the given population was determined and classified and presented 724 members as it described in Table 2.

Table 2: Community of audit directors

Description	Members
Audit directors as partners in audit institutes and member in Iranian Association of Certified Accountants	656
Audit directors in Supreme Audit Court	65
Total	721

Whereas data are measured by distance scale in this study thus for determination of correlation rate between independent variables and function Pearson's torque correlation coefficient has been utilized. In order to describe attributes of sample in this section, initially collected data are summarized and classified using parameters of descriptive statistics and their demographic traits are described by means of the related tables and diagrams within professional task, education and work background. Then we approve or reject the hypotheses by means of parameters of inferential statistics and thereby the given results from observation of selected samples are generalized to the population. Afterwards, exclusive data, which have been derived from questionnaire items, are examined. Binomial tests are employed for testing the given hypotheses. In first part of questionnaire, some questions have been proposed regarding individual characteristics of respondents including professional task, education, and work background. Descriptive data and demographic traits in respondents are as follows.

Table 3: Sum of sent and received questionnaires

Group	Statistical population	Number of sample	Received samples	Percent	No- reply
Corporate directors	500	120	112	41%	8
Audit directors	721	173	167	59%	6
Total	1221	293	279	100%	14

Based on Table 3, the respondents have been divided into two main groups in terms of occupational rank: first group includes directors of the listed enterprises in TSEO Organization (members of board of directors, managing director, and other directors) and second group comprises of audit directors. Frequency of respondents in above groups indicates in terms of occupational rank that they are 14.7% (members of board of directors), 20.1% (directors), and also the rest 59.9% (audit directors). In terms of type education degree, respondents are divided into four classes i.e. PhD, MA, BA, and high school diploma. The following table displays way of distribution of respondents in both groups. Similarly, in terms of work background, respondents are classified into five categories: up to 5 years, 5-10years, 10-15 years, 15-20 years, and more than 20 years where 3.6% of respondents have 1-5years work background, 21.1% (5-10years), 25.4% (10-15years), 31.9% (15-20years), and the rest 17.9% (more than 20years).

Inferential statistics

The statistical data of ranks (very high, high, average, low, and very low) are respectively marked by numbers (1, 3, 5, 7, 9) after collection of questionnaires and they are tested and examined along with general information via SPSS software and by means of binomial testing of the given answers. Concerning the current hypothesis, answers include 5 choices (Likert spectrum) i.e. (very low, low, average, high, very high). To equalize these answers with binomial test, we convert 5 given choices into two groups namely Group 1 (very low, low) and Group 2 (average, high, very high). Thus, we will have two groups and any answer is placed necessarily either in Group 1 or in Group 2 and or it does not belong to each of both groups. Accordingly, being effective means placement in Group 1. One can convert statistically the hypothesis as followings: 0.6 is derived by dividing 3 (average, high, very high) by 5 (Likert spectrum). The results came from this text are summarized in Table 4.

The results of testing of Hypotheses I, II, and III are shown in Table 4 using binomial test at confidence level 95%. With respect to the given results relating to testing of first hypothesis, 96% of respondents have considered the results of operational audit in decision-making of directors as efficient on economy at high level. Whereas significance level is smaller than $\alpha = 5\%$ thus H_0 is rejected and H_1 is confirmed at confidence level 95%. In other words, 'Use of operational audit results may impact on decisions made by the directors in organizational economy.' With respect to the given results from testing of second hypothesis, 90% of respondents have assumed operational audit results as efficient on decision-making by directors in rising efficiency. Whereas significance level is smaller than $\alpha = 5\%$ thus H_0 is disproved and H_1 is approved at confidence level 95%. In other words, 'Use of operational audit results may impact on decisions made by the directors in organizational efficiency.' With respect to the results came from testing of third hypothesis, 90% of respondents have assumed operational audit results as highly efficient on decisions made by directors in rise of effectiveness. Since significance level is smaller than $\alpha = 5\%$ therefore H_0 is rejected and H_1 is verified at confidence level 95%. In other words, 'Use of operational audit results may impact on decisions made by the directors in organizational effectiveness.'

Table 4: The results relating to testing of hypotheses

Hypothesis	Description	Frequency	Calculate ratio	Tested ratio	Significance level
First hypothesis	Group one (disagree H1)	12	0.04	0.6	0.00
	Group two (agree H1)	267	0.94	-	
	Sum	279	100		
Second hypothesis	Group one (disagree H1)	27	0.10	0.6	0.00
	Group two (agree H1)	252	0.90	-	
	Sum	279	100		
Third hypothesis	Group one (disagree H1)	24	0.10	0.6	0.00
	Group two (agree H1)	255	0.90	-	
	Sum	279	100		

B: Freidman test: This test is utilized for equality of preference of variables and the existing variables can be ranked by the above test in this study.

Ranking of variables

Testing of Null Hypothesis and Opposite Hypothesis is as follows: **Null Hypothesis (*H_0*)**: Preference of variables is equal. And **Hypothesis one (*H_1*)**: The minimum preference of two variables is not equal.

Table 5: Results of Friedman test

N	Chi- Square	Df	Asymp. Sig.
279	21.671	2	0.000

The tested statistics include frequency content, rate of Chi-square, and degree of freedom in Table 5 and the foremost factor is significance level. The resulting significance level is also 0.000; in other words, it indicates existing high significant difference (99.9%) and precision of ranks. With respect to the calculate rate of Chi-2 and the given error in Table (0.00) that is smaller than error level (5%), hypothesis (H0) is not approved. It results in that the minimum preference of two variables is not equal and given the conducted calculations, independent variables have been ranked where they have been shown in Table 6. The given results indicate that there is some difference between variables and variable of effectiveness is placed at first rank. Namely, use of operational audit results in decisions of directors has the highest impact on rising organizational effectiveness compared to increase in efficiency and economy. It is noteworthy that given Sig. level is about 0.5 between three factors thus it can be mentioned that there is positive correlation among three factors.

Table 6: Ranking of independent variables

Variables respectively based on impact	Rate of impact
Effectiveness	2.23
Efficiency	1.89
Economy	1.89

D: Testing for comparing means among two populations:

In order determine if there is any significant difference among attitude of executive directors (CEOs) and audit directors in respective of impact by use of operational audit results on decisions of directors in organizational economy, test for comparing means among two populations was utilized. With respect to significance level (0.000) i.e. smaller than 5%, hypothesis of inequality of means and H_1 is verified. In other words, 'There is some difference among attitudes of executive directors and audit directors in terms of use of operational audit results in decisions of directors on organizational economy.' Similarly, since the lower and upper limits are negative thus difference of means in two populations is lesser than zero and mean of first population is smaller than in second population. Namely, Group 2 (audit directors) considers the impact of operational audit higher in decisions of directors on organizational economy. To find if there is any significant difference among attitude of executive directors and audit directors in terms of impact of use of operational audit results in decisions of directors on organizational efficiency, test for comparing means in two populations is employed. The claim for inequality of means and H_1 is verified. In other words, 'there is some difference among attitude of executive directors and audit directors in terms of use of operational audit results in decisions of directors on organizational efficiency.' Whereas the lower and upper limits are negative thus difference of mean is lesser than zero in two populations and mean value in first population is smaller than in second population. Namely, Group 2 (audit directors) assumes impact of operational audit as higher in decisions of director on organizational efficiency. In order to determine if there is any significant difference among attitude of executive directors and audit directors with respect to impact of use of operational audit results in decisions of directors on rising organizational effectiveness, test for comparing means in two populations has been utilized. With respect to significance level (0.000) that is smaller than 5%, hypothesis of inequality of means is accepted. In other words, 'there is some difference in terms of attitude among executive directors and audit directors with respect to use of operational audit results in decisions of directors on organizational effectiveness.' Similarly, the mean value in first population is smaller than in second population. Namely, Group 2 (audit directors) assumes impact of operational audit as higher in decisions of directors on organizational effectiveness.

Discussion and conclusion

The first hypothesis of research denoted that **use of operational audit results may impact in decisions made by directors on organizational economy**. In parallel with exploration of the given hypothesis, eight questions were proposed where the given results denote it at confidence level 95%. Therefore, use of operational audit results may impact in decisions made by directors on organizational economy. Moreover, audit directors versus executive directors argue that use of operational audit results has further impact in future decisions of directors on organizational economy. Thus, we can conclude that if management uses operational audit results in future decisions, the organization can do the assigned tasks versus sources by considering principle of saving at the most possible economic form and it can avoid from wasting of resources, storage of additional materials than needed, use of expensive equipment, inflation of manpower, and taking appropriate techniques for procurement etc.

The second research hypothesis denoted that **use of operational audit results may impact in decisions of directors on organizational efficiency**. In parallel with review of the given hypothesis, eleven questions were proposed where the given results imply this point at confidence level 95%. Thus use of operational audit results can impact in decisions of directors on organizational efficiency. In addition, audit directors believe that use of operational audit results has higher impact in future decisions of directors on organizational efficiency. With respect to the aforesaid cases, if management employs operational audit results in future decisions, the organization can do the given tasks with minimum effort and it may avoid from inappropriate use of manual and mechanized techniques, useless bureaucracy (red tape), inefficient operational systems and methods, hierarchy or complicated communicative patterns in organization, rehashing, the useless business phases etc.

Third research hypothesis implied that **use of operational audit results may impact in decisions of directors on organizational effectiveness**. In the course of review on hypothesis 3, seven questions have been presented where the given results denote it at confidence level 95%. Thus, use of operational audit results has impact in decisions of directors on organizational effectiveness. Moreover, audit directors versus executive directors believe that use of operational audit results may have higher impact in future decisions made by directors on organizational effectiveness. Thus, if management employs operational audit results in future decisions, with respect to the objectives or any other measurable criterion, organization can achieve the favorable results or interests and it can cause improving manufactured products and services, satisfying expectations of customers, enhancement in planning system, rising recognition of inhibitors against achieving satisfactory results, creating management system for measurement of effectiveness, rise in achievement range toward outcomes.

The results came from testing of second and third hypotheses are consistent with findings of the study conducted by Delano Howard (1991) in Kentucky State. By implementation of case study in the selected public units in the given state, he mentioned that the operational audit techniques relied on preparation of appropriate evidences and information that could put appropriate tool for decision- making and preparation of report about rate of effectiveness at disposal of directors and how the management could exert suitable changes for relative improvement of efficiency and effectiveness of performance (Zoghi, 2010). Likewise, similar study was conducted in Iran by Bab-Al-Havaeji (2001) regarding management performance audit and its impact on productivity and final cost of product in order to examine management performance in 15-Khordad Foundation Food Industries Companies within framework of basic audit elements, management performance, and productivity and presentation of suitable solutions for improvement of their status. The general conclusion shows that productivity principles have not been addressed in management performance in the sampled enterprises and with respect to results of polling and statistical tests, it is possible to observe these principles and upgrade productivity by implementation of management performance audit and this study also included findings similar to the conducted research.

The results indicate that operational audit in future management decisions has highest impact on rise of effectiveness and the tested population believes that execution of operational audit in the company causes the management to make decisions so that activities of the company to take step toward achieving further outcomes and profits. And it can be implied that following to rise of one of factors, other factors also move in that direction and they are increased.

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ANALYSIS THE PRIORITIES OF URBAN MANAGEMENT IN THE MASHHAD METROPOLIS, IRAN

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Abstract

In recent years, urban management in Mashhad Metropolis has face with different challenges. In the meantime, diagnose and prioritize these problems has a fundamentally important. In order to, the aim of this research is analysis the priorities of urban management in the Mashhad metropolis using strategic approaches. To obtain this goal, it was used for descriptive- analytical studies, documentary and questionnaire in the frame of Delphi model and software analyzes. In order to, after holding the initial discussion sessions with 30 academic elites and executive's managers of Mashhad city as research statistical society, there were identified 16 variables in the frame of 6 general classifications. In continuous, the primary variables were defined in the Mic Mac strategic study software's in the context of amidst cross impact methods. Then, it was asked from the statistical society to assess the variables in term of the direct, indirect and potential influence- dependence rates from the range 0 (null) to 3 (strong influence). The results showed that the obtained fill rate is equal to 96.85% with two data iteration which it represents the high level of variables influencing on each other. Also, by considering the results, we can understand that the WL5 variable with 34 total number of rows scores had the most direct impact on other variables and WL3 with 21610 total number of column score had the highest rate of indirect impact on other variables.

Key words: Strategic Approaches, Mic Mac analyses, Women's Safety, Urban Planning, Saqqez City

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Introduction

Iran is known as one the oldest civilizations in the world and a home to some of the oldest cities such as Shoush from the Elam era (2700 B.C.), Hegmataneh from the Median Empire (670 B.C.), Pasargad and Takht-e-Jamshid from the Achaemenid (550 B.C.) and Neishabour from the Sassanid (224 to 650 A.D.) dynasty. All these old Iranian cities were well developed as the origins of urban planning and urban settlement during the ancient time (Mashhadizade, 2002). These ancient cities show strong evidences of urban planning from the ancient era in Iran. The Islamic conquest of Iran (633-656 A.D.) however ended the Sassanid Empire. During the Islamic era in Iran, urban planning was much affected and influenced by the Urban Planning in Contemporary Iran (Rasoolimanesh & et al, 2013). Accordingly, expand of urbanism and its eventual specific hazards have made the useful solutions and approaches more highlighted. In addition to such factors as urban environment, urban transportation, urban safety, and urban planning, one of the most important features influenced on the urban factors is urban management. As known, each social activity regardless of the organized management takes apart. The cities as systems require management as well, to determine the goals and plans and to organize the different urban elements activities. This paper through a comparative looking tries to identify the urban management methods in Iran and the modern European countries, so that it would improve the urban management in Iran (Hesari, 2015; Majlesi, 2014). At present, these issues along with urban recession are the central concerns of urban planners (Alden, 1996:553) and have created certain challenges for the system of urban management which are unprecedented. (UN Habitat, 2009: xxi). Of course, it should be noticed that urban settlement is an opportunity to achieve the national objectives of sustainable development, to utilize the micro and macro-economic advantages, social welfare and to improve the environment protection, but fulfillment of above privileges will depend on the policies being applied in city and the quality of urban management and planning (World Bank, 2000: 36) which at present many of cities in developing countries are deprive of access to the above goals as overshadowed by different social, economic and political issues (Pourahmad & et al, 2015). The concept of urban management is larger than the combined concepts and it can be mentioned in the way that the urban management is mostly used for the local authorities or the municipalities. The local authorities called as Municipalities, are mainly stated after the industrial revolution, and are initially formed in Europe and then in the U.S. and the other countries. Based on the urban management plan and determined by United National, five axes have been stated for the countries in the 21 century. Urban environment management Elimination of urban poverty urban landing management urban infrastructure management financial management in the Municipalities (Kamrava, 1999). There is no general principle for urban management concept and the main meaning of this term is very confusing. Stern believes that, urban management doesn't have a specific definition and content (Stern, 1993). According to the tastes, perception of people and also political-social demands of different eras had different meanings. We can still see these differences in meaning and concept in the recent era. The World Bank defines urban management as a quasi-commercial activity for governments. In other words, urban management means, managing urban affairs and high performance in order to use the World Bank loans. Urban management is sometimes considered as a tool for implementing the urban policies, which means urban managing science. Van Dijk defines urban management as an effort for coordinating and integrating the public and private actions for overcoming problems that urban residents encounter, and creating more competitive, fairer and more stable cities. Van clink and Bramesta also defined modern urban management as the process of implementing, coordinating and assessing the integrated strategies with city's authorities' help, by considering the private section objectives and citizen's benefit, in a political framework that in higher levels of government, is being edited for approaching the sustainable economic development potential (Van Dijk, 2006; Momeni & et al, 2011). In urban management, participation has two meanings, the first meaning of participation concept, can be considered cooperation between private sectors and municipality. In this kind of cooperation, the private sector which acts according to the market rules, in order to get economical profits and by receiving service cost that presents, cooperates with municipality and, hence, in performing duties, helps the municipality. Municipality monitors the activity of this section and giving part of duties to the private section does not mean that the municipality is not responsible toward the quality of the presenting services. The second concept of the participation emerges in the cooperation of community sector with municipality. This sector has other names such as social sector or private non-for-profit sector (mozayyeni, 1997; Alamdari & Habib, 2012). In order to, the aim of this research is analysis the priorities of urban management in the Mashhad metropolis in Iran to obtain this goal, it was used for descriptive- analytical studies, documentary and questionnaire in the frame of Delphi model and software analyzes.

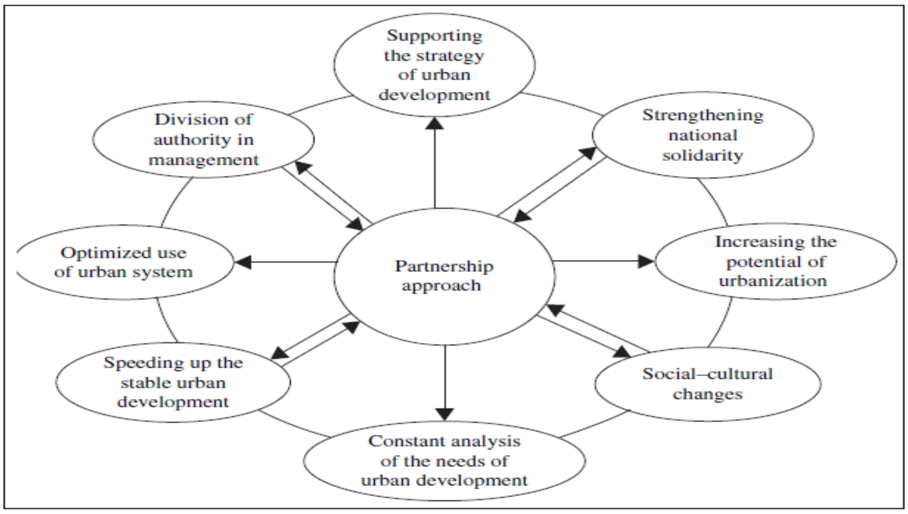

Figure 1: Partnership and change in urban management

Source: Pilehvar, 2007

Study Area

The city is located at 36.20º North latitude and 59.35º East longitude, in the valley of the Kashafrud River near Turkmenistan, between the two mountain ranges of Binalood and Hezar Masjed Mountains (Wikipedia, 2015). Also, Mashhad is the capital of Khorasan Razavi Province in Iran. It is one of the most important cities due to its religious, historical and economic values that attract a large number of people from all of the world as pilgrim each year. In 1986, its population was 668,000 whereas its current population is about 2.8 million. Since 1987, built-up areas in the city have expanded significantly (Rafiee, 2009); the city has witnessed a rapid growth in construction which it has caused destruction of green spaces areas. This trend in the urban park is in sharp contrast with the rules governing improvement and establishment of new urban parks within the current boundary and the projected future of the city. In addition, the provinces of Iran are all under extensive land use evaluation and planning, the results of which will be available in near future. The land use is mostly environmentally oriented giving high value to public urban parks and aims to upgrade the per capita green areas in the newly built regions. However, there are other players in the filed including major private stakeholders who have influence in deciding the physical and biological properties of built-up area development plans (Iranian Statistical Center, 2014). The Natural Step Framework is a methodology for successful organizational planning. It is based on systems thinking, recognizing that what happens in one part of a system affects every other part. The vast majority of Mashhadian peoples are ethnic Persian, who form over 95% of the city's population. Other ethnic groups include Kurdish and Turkmen people. The people of Mashhad who look like Asians are of Turkmen or Hazara descent. Among the non-Iranians, there are some population of Afghanistan, Iraq and Pakistan. The Afghan immigrants have several neighborhoods around the city. One of the districts inhabited by Afghan immigrants is Golshahr. There are also over 20 million pilgrims who visit the city every year (Mashhad Municipality, 2015).

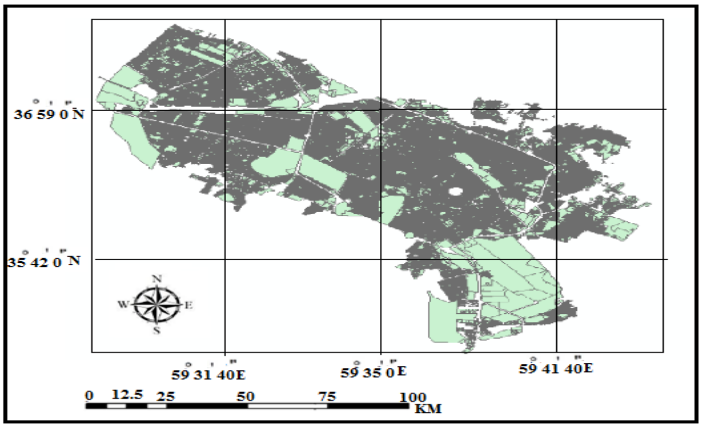

Figure 2: *A view of Study Area.*

Source: Heydari et al., 2017.

Material and Methods

To obtain the research subject, it was used for descriptive- analytical studies, documentary and questionnaire in the frame of Delphi model and software analyzes. In order to, after holding the initial discussion sessions with 30 academic elites and executive's managers of Mashhad city as research statistical society, there were identified 16 variables in the frame of 6 general classifications. In continuous, the primary variables were defined in the Mic Mac strategic software's in the context of cross impact matrix and the amidst cross impact methods. Then, it was asked from the statistical society to assess the variables in term of the direct, indirect and potential influence- dependence rates by giving scores 0 to P values (0=Null, 1=Weak, 2=Average, 3=Strong, P=Potential effect).

Findings and Results

Identify the primary indicators and cross impact matrix

Classification the effective urban management indicators of Mashhad city was performed in the framework of a matrix with n×n size. For this purpose, 6 main categories of variables (table 1) along with the 16 subcommittees' variables were identified as the primary variables after the holding meetings with the academic and executive's elites. Then, by entering the variables into the mic mac software, it was attempting to define each of the variables according to their subsidiaries and identity. In the next step, it was asked from the experts to give score to the variables based on the influence and effectiveness rate of variables on each other. Therefore, as it was stated in the methodology section, given the concessions to the variables from 0 to 3 and P (0=Null, 1=Weak, 2=Average, 3=Strong, P=Potential effect). Then, we have obtained to a cross impact matrix as figure (3).

	1 : WL1	2 : WL2	3 : WL3	4 : WL4	5 : WL5	6 : CC1	7 : CC2	8 : CC3	9 : SR1	10 : SR2	11 : WS1	12 : WS2	13 : WS3	14 : UF1	15 : SJ1	16 : SJ2
1 : WL1	0	3	3	2	2	2	2	2	2	2	2	1	2	2	2	2
2 : WL2	3	0	3	3	2	2	3	3	2	1	1	2	2	2	2	2
3 : WL3	2	2	0	2	2	2	2	2	2	2	1	1	1	2	2	2
4 : WL4	3	2	2	0	2	2	3	2	2	2	2	2	1	1	1	2
5 : WL5	2	2	3	2	0	2	2	3	2	3	2	2	2	3	2	2
6 : CC1	2	2	3	2	2	0	2	2	3	2	2	2	2	2	1	2
7 : CC2	2	1	2	1	2	1	0	2	2	2	1	0	1	1	1	1
8 : CC3	1	1	2	1	2	1	1	0	2	1	2	1	2	1	1	1
9 : SR1	2	2	2	2	2	2	2	3	0	2	2	2	2	2	2	3
10 : SR2	2	2	3	2	2	2	3	2	2	0	2	2	1	1	1	1
11 : WS1	1	2	1	1	1	1	1	1	1	1	0	1	1	1	1	2
12 : WS2	2	1	2	1	2	1	1	1	2	1	1	0	1	1	2	1
13 : WS3	1	1	1	2	1	1	1	3	2	2	2	1	0	1	2	1
14 : UF1	1	2	1	2	1	2	1	1	2	1	1	2	1	0	2	1
15 : SJ1	2	1	2	1	2	1	3	2	2	1	2	2	1	1	0	1
16 : SJ2	2	2	2	3	2	2	1	2	1	2	2	2	1	1	1	0

***Figure 3:** CIM on Kurdish Women's Participation in the Safety of Urban Spaces.*

Source: Findings, 2017

With relied to the findings, we can say that the obtained fill rate is equal to 96.85% with two data iteration which it represents the high level of variables influencing on each other. This situation shows the efficiency of the research tool and the verification of collected data by distributing the questionnaires in a very desirable level.

Table 1: Primary matrix features

INDICATOR	VALUE
Matrix size	16
Number of iterations	2
Number of zeros	17
Number of ones	85
Number of twos	132
Number of threes	22
Number of P	0
Total	239
Fill rate	96.8538%

Source: Findings, 2017

Direct influence- dependency analysis

In continuous, we have obtained to CIM and based on the table (1), since the 239 calculated values in the framework of the cross-impact matrix by the elites, 132 cases with the highest statistical volume had the moderate impact on other variables (2: moderate impact). Also, 85 numbers have the weakest impact; 22, 17 and 0 cases, ordinary had the strong, null and potential impact on the other variables. In continuous, in the context of table (2), there are provided the categorized variables in the belongings to variables number and abbreviation of each variable.

Table 2: Direct values of women's safety variables in the study area

N°	Variables	Brief Abbreviation	Total Number of Rows	Total Number of Column
1	Participatory and efficient management.	WL1	31	28
2	Strategy oriented management.	WL2	33	26
3	Attention to good urban governance.	WL3	27	32
4	Effectiveness and efficiency.	WL4	29	27
5	Attention to local councils.	WL5	34	27
6	Providing good urban services.	CC1	31	24
7	Improvement social trust.	CC2	20	28
8	Attention to citizen's needs.	CC3	20	31
9	Attention to local identity.	SR1	32	29
10	Attention to justice urban management.	SR2	28	25
11	Transparency in management.	WS1	17	25
12	Lawfulness in the urban management.	WS2	20	23
13	Reduce the city costs.	WS3	22	21
14	Improvement the quality of life.	UF1	21	22
15	Citizenship rights.	SJ1	24	23
16	Women's and quarter management.	SJ2	26	24
Total	---	WL1	415	415

Source: Findings, 2017

According to tables (1) and (2) and by considering the analysis results of research, we can understand that there are different practical important kinds of variables in urban management in the study area system. By considering the fig (3) and Tables (1) to (2), we can understand that the WS1 (transparency in management) had the lowest influencing coefficient from other variables. Also, WS3 (reduce the city costs) with the 21 column rate had the lowest direct dependency on the other variables. According to calculated column rates the attention to good urban governance (WL3), Attention to citizen's needs (CC3), Attention to local identity (SR1) with 32, 31 and 29 had the most direct dependency to other research variables. Therefore, with relied on the findings, Attention to local councils (WL5) with 34 scores and attention to local identity (SR1) with 32 scores had the most direct impact on other variables. In the figure (6), the distribution of research variables in the diagram page were done according to variables status in the analyses and planar identity of some other variables.

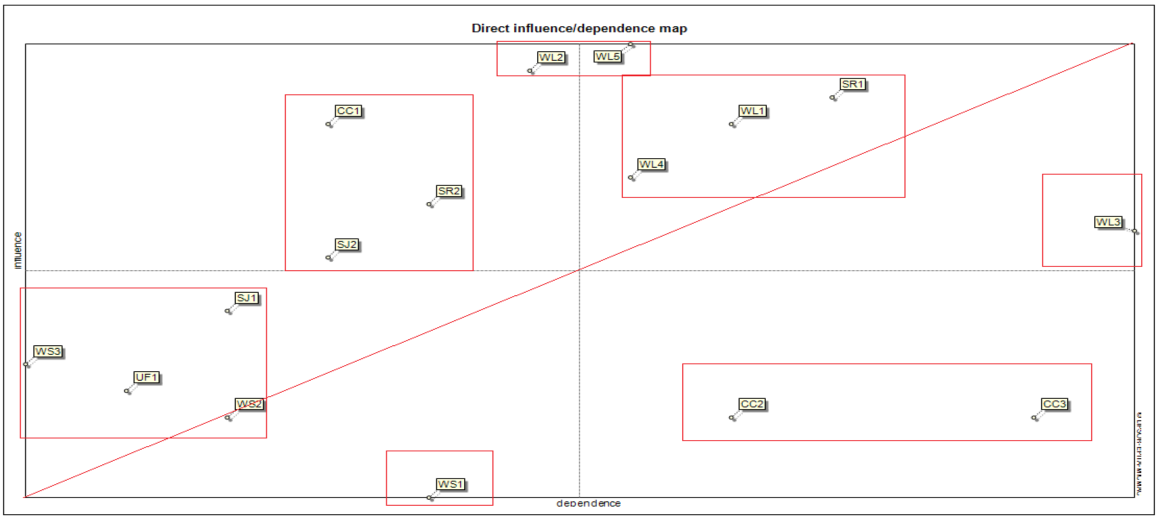

Figure 4: Distribution of variables according to direct influence- dependency & their planar identity.

Source: Findings, 2017

By attention to the findings of figure (4), we can obtain to figure (5) as below.

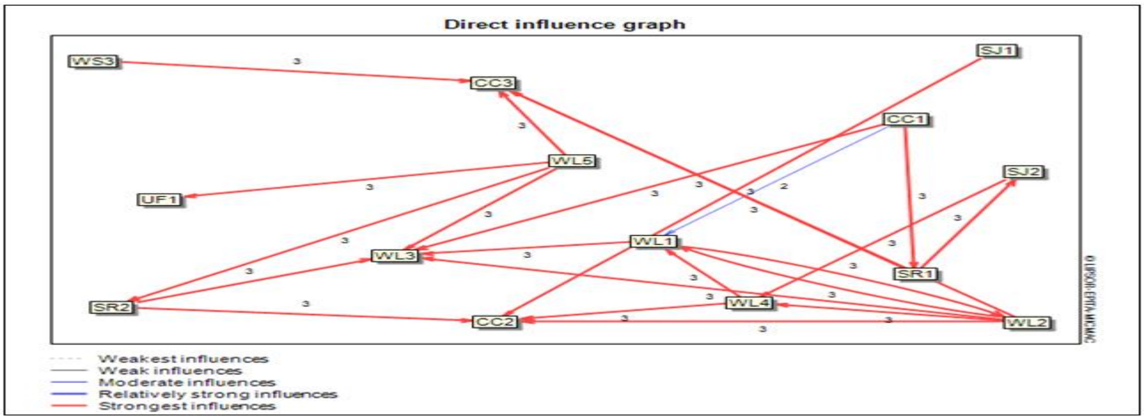

Figure 5: Distribution of variables according to direct influence- dependency.

Source: Findings, 2017.

Indirect influence- dependency analysis

In continuous, to assess the indirect influence-dependency rate, we will be stable after a multiplication of degree 3, 4 or 5. Therefore, the instability situation of the urban management situation was confirmed at a high level through the obtained data from the analysis of the indirect variables influences on each other's.

Table 3: Indirect values of women's safety variables in the study area

N°	Variables	Brief Abbreviation	Total Number of Rows	Total Number of Column
1	Participatory and efficient management.	WL1	21060	18981
2	Strategy oriented management.	WL2	22134	17744
3	Attention to good urban governance.	WL3	18659	21610
4	Effectiveness and efficiency.	WL4	19761	18212
5	Attention to local councils.	WL5	22475	18446
6	Providing good urban services.	CC1	20967	16465
7	Improvement social trust.	CC2	14188	19007
8	Attention to citizen's needs.	CC3	13708	20922
9	Attention to local identity.	SR1	21247	19506
10	Attention to justice urban management.	SR2	19038	17143
11	Transparency in management.	WS1	11905	16944
12	Lawfulness in the urban management.	WS2	14092	15451
13	Reduce the city costs.	WS3	14684	14564
14	Improvement the quality of life.	UF1	14637	15272
15	Citizenship rights.	SJ1	16032	15655
16	Women's and quarter management.	SJ2	17939	16604
Total	---	WL1	415	415

Source: Findings, 2017

Such a way that, the variable distribution is more in the around of diagonal lines in the northeast sector and the southeast part of the diagram. Thus, the most variables of this section have a planar identity. Such variables at the same time are very influential and impressionable. So, it is caused by the exacerbating or damping effects of variables due to their instability nature. We can understand that, the variables of attention to local councils (WL5), strategy oriented management (WL2), attention to local identity (SR1), participatory and efficient management (WL1) and providing good urban services (CC1) with the 22245, 22134, 21247, 21060 and 21247 row points have the highest indirect impact on the other variables respectively. Meanwhile, the indexes of attention to good urban governance (WL3), attention to citizen's needs (CC3), attention to local identity (SR1) and improvement social trust (CC2) with the 21610, 20922, 19506 and 19007 column points have the highest indirect dependency rather other variables.

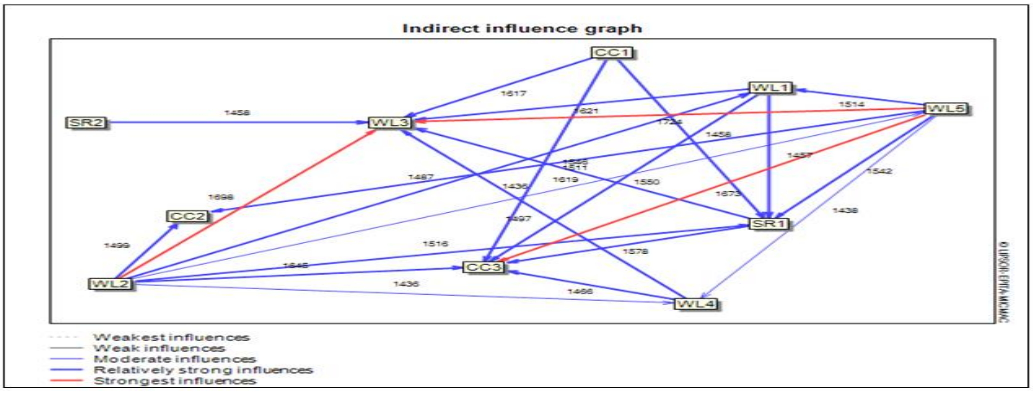

Figure 6: Distribution of variables according to direct influence- dependency.

Source: Findings, 2017

Indirect and direct potential influence- dependency analysis

According to the research findings, we can say that the variables of attention to local councils (WL5), strategy oriented management (WL2) and attention to local identity (SR1) with the 34, 33 and 32 sorted values had the highest level of direct potential influences on the other variables. Also, these rates for the indirect influences are consists of 22475, 22134 and 21060 ordinary to the attention to local councils (WL5), strategy oriented management (WL2) and participatory and efficient management (WL1) factors.

Table 4: Indirect and direct potential influence- dependency in the study area

N°	Variables	Brief Abbreviation	Total Number of Rows	Total Number of Column
1	Participatory and efficient management.	WL1	31	28
2	Strategy oriented management.	WL2	33	26
3	Attention to good urban governance.	WL3	27	32
4	Effectiveness and efficiency.	WL4	29	27
5	Attention to local councils.	WL5	34	27
6	Providing good urban services.	CC1	31	24
7	Improvement social trust.	CC2	20	28
8	Attention to citizen's needs.	CC3	20	31
9	Attention to local identity.	SR1	32	29
10	Attention to justice urban management.	SR2	28	25
11	Transparency in management.	WS1	17	25
12	Lawfulness in the urban management.	WS2	20	23
13	Reduce the city costs.	WS3	22	21
14	Improvement the quality of life.	UF1	21	22
15	Citizenship rights.	SJ1	24	23
16	Women's and quarter management.	SJ2	26	24
Total	---	WL1	415	415
Indirect potential influence- dependency				
1	Participatory and efficient management.	WL1	21060	18981
2	Strategy oriented management.	WL2	22134	17744
3	Attention to good urban governance.	WL3	18659	21610
4	Effectiveness and efficiency.	WL4	19761	18212
5	Attention to local councils.	WL5	22475	18446
6	Providing good urban services.	CC1	20967	16465
7	Improvement social trust.	CC2	14188	19007
8	Attention to citizen's needs.	CC3	13708	20922
9	Attention to local identity.	SR1	21247	19506
10	Attention to justice urban management.	SR2	19038	17143
11	Transparency in management.	WS1	11905	16944
12	Lawfulness in the urban management.	WS2	14092	15451
13	Reduce the city costs.	WS3	14684	14564
14	Improvement the quality of life.	UF1	14637	15272
15	Citizenship rights.	SJ1	16032	15655
16	Women's and quarter management.	SJ2	17939	16604
Total	---	---	415	415

Source: Findings, 2017

Then, we can present the key driving forces of women's safety in the public urban spaces of Saqqez city as the table (5).

Table 5: The Key affecting variables of women's safety in the public urban spaces of Saqqez city

Key direct influencing factors	Brief Abbreviation	Key indirect influencing factors	Brief Abbreviation
Attention to good urban governance	WL3	Strategy oriented management.	WL2
Attention to citizen's needs.	CC3	Attention to local councils.	WL5
Attention to local identity.	SR1	Attention to local identity.	SR1
Attention to local councils.	WL5	Participatory and efficient management.	WL1

Source: Findings, 2017

According to the overall approach of the research, it can be stated that after the identifying of variables and assess the relationship between them by the executive and academic elites, 16 final variables were evaluated in the framework of the natural step approach key assumptions. Finally, 4 variables were selected as the key influencing and affecting forces as the table (5).

Conclusion

In recent years, urban management in Mashhad Metropolis has face with different challenges. In the meantime, diagnose and prioritize these problems has a fundamentally important. The concept of urban management is larger than the combined concepts and it can be mentioned in the way that the urban management is mostly used for the local authorities or the municipalities. The local authorities called as Municipalities, are mainly stated after the industrial revolution, and are initially formed in Europe and then in the U.S. and the other countries. Based on the urban management plan and determined by United National, five axes have been stated for the countries in the 21 century. Urban environment management Elimination of urban poverty urban landing management urban infrastructure management financial management in the Municipalities. In urban management, participation has two meanings, the first meaning of participation concept, can be considered cooperation between private sectors and municipality. In this kind of cooperation, the private sector which acts according to the market rules, in order to get economical profits and by receiving service cost that presents, cooperates with municipality and, hence, in performing duties, helps the municipality. Municipality monitors the activity of this section and giving part of duties to the private section does not mean that the municipality is not responsible toward the quality of the presenting services. The second concept of the participation emerges in the cooperation of community sector with municipality. This sector has other names such as social sector or private non-for-profit sector. by considering the analysis results of research, we can understand that there are different practical important kinds of variables in urban management in the study area system. By considering the fig (3) and Tables (1) to (2), we can understand that the WS1 (transparency in management) had the lowest influencing coefficient from other variables. Also, WS3 (reduce the city costs) with the 21 column rate had the lowest direct dependency on the other variables. According to calculated column rates the attention to good urban governance (WL3), Attention to citizen's needs (CC3), Attention to local identity (SR1) with 32, 31 and 29 had the most direct dependency to other research variables. Meanwhile, the indexes of attention to good urban governance (WL3), attention to citizen's needs (CC3), attention to local identity (SR1) and improvement social trust (CC2) with the 21610, 20922, 19506 and 19007 column points have the highest indirect dependency rather other variables.

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INVESTIGATING THE EFFECTS OF STRATEGIC INTELLIGENCE ON COMPETENCY MANAGEMENT AT THE ORGANIZATIONAL LEVEL IN SOME GOVERNMENTAL INSTITUTIONS IN TEHRAN

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Abstract

Competency management or organizational competency is a kind of overall management which can determine the performance of an organization. Hence, an organizational competency model is investigated and the effects of managers' strategic intelligence on this model are evaluated. Competency management is of that non-understood terms in our country (Iran). In this study, we analyzed the topic by taking an opinion poll from 100 statistical populations of managers in 4 government centers and, considering the difficult access to chief managers of the organizations, we collected data from middle and executive managers who were chief managers' representatives. This research was a field research and inferential statistics and SPSS software was used to analyze data. To measure the reliability of the questionnaires Cronbach' Coefficient Alpha was applied which were measured as 0.81, 0.79, and 0.72, respectively. The results showed that, the state of strategic intelligence and organizational competency management were at the intermediate and low level. Pearson Correlation Coefficient revealed that there was a positive and meaningful relationship between strategic intelligence and competency management in government centers. The results of multiple regression analysis indicated that among components of strategic intelligence, the human resources intelligence and competitive intelligence were the most effective factors in competency management forecast.

Key words: Strategic intelligence, competency management, organizational process, competitive intelligence, information management

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Introduction

Competency management is of wide-spread concepts which cannot be explained completely in a sentence or a word. In fact, the existence of set of skills under specific conditions can lead to competency management at the organizational level. It can be affected by many factors, but only the relationship between managers' strategic intelligence in management process is investigated in this research. And to achieve better results and limit statistics we took advantage of several government centers. To show the importance of this idea we refer to the investigation of only one parameter in competency management and that can be merely managers' strategic intelligence and information. The results show that there are many barriers to utilize strategic intelligence in government centers. This study aims to provide solution to build competency and minimize the barriers to implement competency management in such these places. In this paper, we first expound the literature and background and express the issue, then by explaining the framework, hypothesis and questions we investigate the questionnaires and their statistical analysis, after all, the results will be presented.

The literature

Literature review

The definition and application of the term vocational competencies is quietly different in different organizations based on their desired goals and objectives (Lee, 2006). Basic competencies are defined as basic knowledge, attitude, skill, and behaviors which result in better implementation of programs (Maddyet et al., 2002). Uilich, Brockbank, Yonng & Lack, Boroski & Dycr, Armesterange, Mirabile, Katano, and Bonder described the competency as knowledge, skill, ability and other required behavioral characteristics related to job performance, whereas, other researchers such as Spencer, Fleishman, Wetrogen, Uulman, Marsholl & Mies believed that competencies are the combination of motivation, self-concept characters, attitude of values, knowledge content or ethology skills which can make distinction between top and moderate managers; and some other experts like Strobler & Green also considered competencies text descriptions of work habits and minimum standards of measureable performances. Molagan, Slivinski, Mitrani, Dalziel & Fitls knew the competency as an individual infrastructure queue which has causative relation with effective or superior performance in a career (Latifi, 2004). Competency approach in human resources management is not a new approach. Ancient Romans used a form of competency in an effort to provide the characteristics of a "good Roman soldier". Introducing competency-based approaches in organization environment is started since 1970 and has rapid application and development. David MacClelland a psychologist from Harvard University is known for his description of "competency" in human resources literature. Then, he argued that the traditional tests of intelligence, as well as other conditions such as qualification for the prediction of job performance are doomed to failure. His arguments against the intelligence tests and traditional approaches of analyzing job for choosing personnel were a plan for competency test. As a case study, he examined the Foreign Service Officers selection. In his study, MacCelland found that competencies such as interpersonal sensitivities, positive cultural considerations and management skills distinguished senior officials from normal officers (management articles database, 2007). The importance of competency is developed in organizations after Laweler, 1994 significant article; and the evaluation of organization, from job analysis- based organizations to ones based on competency, was investigated, so that today a large number of organizations apply competency-based HRM practices. Despite its using and application in different ways, competencies seem to need to be interpreted and explained in terms of concept (Wikipedia, 2016). In another research titled "Evaluation of Meritocracy in Choosing Public and Private Managers" which conducted by Ali Atafar and Azarbayjani (2001), the meritocracy is studied. One of the serious issues in developing countries is manager election and its criteria. This study which is the result of a survey aims to determine the rate of manager election based on general criteria (meritocracy) and proprietary criteria (inaptitude) and also the impacts of using these criteria on organizations performances. The results of this study show that the election based on proprietary criteria results in reduced work, absenteeism, job dissatisfaction, loss of creativity and talent, decrement in performances and the effectiveness of organizations and generally, waste of society's resources, and managers elected by this kind of criteria, though adopt this criterion for choosing other staff. The proprietary criteria are also widely used in selecting the managers of both public and private sectors. Dehghanian (2007) in an article titled "merit management" tries to study the competency. The competency-based management is a long-term integrated approach to manage human capital which compiles in accordance with joint sets of competencies linked with macro strategies of country. For this purpose, the establishment of competence as one of the policies and strategies of country in the twenty-year vision document and the forth program is emphasized. In this study the current approaches for investigating the concept of competency and the experiences of other countries in establishing a competency-based management system are evaluated, moreover, the position of this issue in the socio-economic and cultural development forth program of Islamic Republic of Iran is investigated, and finally, the infrastructures required for studying a comprehensive competency-based management system are analyzed. In another research by Nasehifar & et al. (2009) titled "a model for assessing the capabilities and competencies of the directors of the Ministry of Commerce" the competency of managers is studied. The main question in mentioned study is that whether these planning processes can provide an environment for converting an ordinary manager to a leading manager? The results of this study indicate that identifying qualified people is a kind of complicated and problematic task. In many fields, managers' work is affected by irresponsible factors. Managers usually have more job opportunities, power, and wealth. Hence, in many cases rules may be replaced by relationships. Therefore, periodically evaluating managers' capabilities and competencies in accordance with appropriate models can clarify the efficiency and effectiveness of this significant organizational resource. In the new millennium, human resources and information technology would guide organizations' activities. Applying information technology can reduce the processing information costs as well as reducing human errors. Considering the results of this study we can realize that by using information technology more accurate and quicker assessment can be achieved. Recent and past studies and researches always faced one problem, that is, they consider competency and its management an issue directly depends on the employees, this means there is a wrong perception that employing and training qualified and competence employees is a step toward competency management. The presence of such these employees is crucial in reaching competency management; nevertheless, this paper aims to study that if those managers who should manage this competency are qualified enough?

Expressing the issue

The three main dimensions of intelligence are as follows: tactical, operational, and strategic. The tactical intelligence is the basic level and provides critically analyzed information. The managers of mid-level use operational information to guide and direct actions (Lehane, 2011). The strategic intelligence is considered a specific form which widely addressed any issue with essential detail to describe threats, opportunities, and risks in the way which can be helpful in determining programs and policies (McDowell, 2005). Spencer, 1993, categorized the competency into two groups: 1) the required competencies which specified the essential skills for minimum performance in a work or carrying out a task. 2) Superior competencies by which the obtained results and performances are above the average. Indeed, competencies present a model which indicates the person with superior performance in his job (reporting by the institute of industrial management assessment, 2003, 53). The dimensions of competency include communications, team work, self-management, leadership, critical thought, and professional thought (Schermerhorn, 2002). Communications include the ability to share ideas and information. Team work includes the ability to work effectively in a team. Self-management includes the ability to assess, change and promote your behavior. Leadership includes the ability to influence and support others to do their important duties. Critical thought includes the ability to collect and analyze data on creative solutions. Professional thought includes the ability to maintain, excite and advance confidence and promote professional development (schermerhorn, 2002). Knowledge is a commodity and intelligence is an output. Knowledge is power, thus integrating the added value of knowledge can reinforce an organization only by processes of decision making (McDowell, D, 1999). An applicable planning should be specified by a suitable analysis and strategic intelligence is a proper tool for this purpose (McDowell, D, 1999). Companies with high strategic intelligence have clear strategy and are always contended. They are always trying to improve, and looking for more effective and efficient alternatives. Creativity and compatibility allow the organizations, across which the strategic intelligence is distributed, to have flexibility, adaptive behavior, and unremitting changes (Blanding, 2012). "Strategic intelligence" is adaptable to changing conditions today which is in conflict with a fixed and unchanged situation. Every sign and signals today make us be adaptable to changing conditions. Looking more closely at companies and their bankruptcy reasons, it can be implied that most of them had discovered the problem but were unable to recognize strategy to solve it. Most of them failed to change their structure in new condition because they suffered heavy financial and human costs to build their own structure and consequently any changes in it seems difficult to them. And finally, those who affected by developed and appropriate strategy are no-one but employees in an organization or company. Hence, "strategic intelligence" is the ability through which and with regard to personal and social behavior we can learn safety procedures for adapting to new circumstances (Haghighat Monfared et al, 2014: 3). Strategic intelligence prepares leaders to understand the field they are active in better. It helps them to work for common interests (Mac Cabi, 2011). These competencies in strategic intelligence include: vision, partnership, innovation, intuition, and motivating workers. According to Mac Cabi's opinion, using prediction and thought is a system for an ideal designing. Partnership is an ability to create strategic union. Developing the strategic intelligence of unions is considered to be an ability to discover new procedures and constant promotion and make change. Intuition in those effective leaders with emotional intelligence and ability to predict along with using scenarios and thought is a way to synthesize which results in motivation workers' capabilities. Communicating with people in an appropriate participation is a good way for leaders to create motivation. Communicating is not only the way to obtain information it can also lead to communicate with people's feelings. When leaders have such these characteristics, they can be considered leaders with strategic intelligence (Tham and kim, 2002). Intelligence process converts data into intelligence, this process forms management axis by analyzing, interpreting, combining and applying data in decision making. It does not mean that whatever happens outside the organization can be predicted, but this process leads to some outcome through within and outside the organization and managing them, like actively creating future. Strategic intelligence is a new vision to organizations to discover core competencies and competitive advantages in today's troubled environment (Poorkianian et al., 2013: 1).

Theoretical foundations (framework)

There are various views about management components. Many theorists had conducted various researches on effective factors in competency and present their views. Raybould and Vikins (2005) stated that the components of competency management include: verbal communication, written communication, problem-solving, conceptual skills and analysis, data management, team work and leadership, interpersonal skills, adaptive learning, and self-management. All these components are of management skills and each of which will be defined in this part. **Verbal communication:** while this component primarily refers to speaking, typically relies on both verbal and nonverbal elements to convey meaning. Verbal communication includes discussion, speeches, presentations (shows), interpersonal communications and many other types. Body language and the voice quality play a significant role in face to face communications and possibly have a greater impact on the audience than the intended content of the spoken words. A proficient host must consider the audience and communication with them. For instance, one may say a joke and entertain the audiences by his body language and tone whereas they may be bored with the same joke said by someone else (Wikipedia, 2017). **Written communication:** many ideas and forms about the relationship between the steps of using technology are presented during the time. Therefore, advances including communication psychology, media psychology, emerging the field of communication study are processes with specific meaning. This process requires a vast roster of interpersonal processing skills, listening, observation, speaking, question, analyzing movements, and evaluating the possibility of participant and collaboration. Extra massage (when the person received many massages at the same time) and complexity of the massage are the barriers to successful communication (Wikipedia, 2017). **Problem-solving:** problems in an organization are defined as cases with which the organization's capability to achieve the goals will be reduced, in other words, the problem would affect the organization and prevent the organization from its goals. Hence, a precise and explicit definition of the problem is one of the important steps in solving it on the other hand managers may face troubles and difficulties in defining the problem. A part of these difficulties arises from the fact that sometimes the events which managers may pay attention to cause adverse effects and may have negative effect on the organization (Mirzaei, 2012). **Concept and analysis skills** is the ability to visualize, express, understand or solve simple or complicated problems trough adopting rational decisions based on available data. These skills include the utilization of logical thinking to break down complicated problem into its smaller components. Richard Hiver, in 1999 explained that: "like carpentry and driving, analytical thinking is also a skill. It can be taught, learned, and promoted by more practices. However, like many other skills such as cycling it cannot be learned only by participating in classes and listening to how it is done. Analysts acquire skill by practicing" (Wikipedia, 2017). **Data management:** it includes managing and collecting data from one or several resources and presenting this data to one or several audiences. Management means organizing and controlling the structure, combining and processing and providing data. Data management is described as the ability of the whole organization to create, maintain, retrieve and making the correct information accessible at the right place and organization for competence individuals with the lowest cost, at the best media in order to be used in decision making (Wikipedia, 2017). **Teamwork and leadership:** today many people are concerning about teamwork, but actually it is not possible to make a real group only by gathering people and want them to work together. In fact, each member of the group should exactly know why they are gathering together, what they want, and how should they achieve them. The success of a team depends on to what extent the leader clarifies the mission, vision, values, and goals and explain them in detail to those who somehow connected with. These missions, visions, values, and goals should be aligned with individuals' missions, visions, values, and goals in the way that achieving their visions and goals results in realizing the visions and goals of their business (Grozny Mir, 2010). **Interpersonal skills:** having well interpersonal relationship is a sign of mental health. Warm and intimate relationship with other people is the source of trusts and comforts of each of us. Social protection is indeed social bonds among people which lead to making peace, importance, security and respect inside them. It is required learning some skills to benefit this network; the skills which can be helpful in promoting our relationships. In such this situation people believe that they are not alone and that they belong to a group of people who can help them if necessary (Moradi, 2007). **Learning and compatibility:** a relatively permanent change which is resulted from a kind of experience and behavior is named learning. Learning helps us to become compatible with our environment. Learning is formed via training, education, and trial and error. In contrast, there are some people who cannot easily adapt themselves with the circumstance and have constant procedures in terms of behavior. Fundamental roles are given to adaptive people when the organization arranges policies because they are able to represent different actions in face with different audiences (Robins, 1943). **Self-management** is controlling and guiding emotional reactions and feelings in different situations and in face with different people by which the person is able to act more positively and effectively. Self-management means accepting weaknesses and managing continues trends, in fact, self-management is a power superior to resistance to problematic behaviors; self-management depends on your self-awareness and leading positively your behavior (Ghadir, 1999). Strategic intelligence components: **1. Competitive intelligence:** this component is an environmental analysis system which complete the organization's knowledge about external environment, affects the organization's programs, performances, and decision, collecting data about products, environmental factors, and clients and after analysis provides them to decision makers. **2. Market related intelligence:** this component is related to future trends and the needs and preferences of costumers and new markets, and suppliers and distributors and competitor. **3. Environmental macro intelligence:** this is the process of collecting, processing, and interpreting information about external factors which is effective in the usefulness of programs and decisions (technologically, socially, economically, and environmentally). **4. Business intelligence:** this includes useful tools and techniques in adopting appropriate sales, production, and financial decisions. **5. Intelligence related to organizational resources:** it includes human resources, financial resources, and physical resources. **6. Informational intelligence:** it includes the processing of collecting, organizing, analyzing, and distributing information among different parts of organization and ethically managing information (Haghighat Monfared et al., 2014: 7-8). Effective components in strategic intelligence can be achieved among mentioned factors: competitive intelligence (environmental analysis), market intelligence (providence with competitors and costumers), organizational process intelligence (identifying effective external factors), technologic intelligence (tools and techniques), human resources intelligence (human, financial, physical), data management intelligence (collecting, analyzing, and distributing data). In fact, the strategic intelligence can be formed by components above and the totality of this is used as independent variables in this study. The definitions of each component are as follows: **competitive intelligence:** it includes monitoring competitive environment in which organizations operate and compete with the aim of adopting strategic decisions. In recent years, competitive intelligence become one of the important concepts of management and inter-wined with leading companies. Increasing competitive intelligence allows organizations to analyze their surrounding environments faster and more accurately and store the results in a beneficial way and make it available for decision makers when necessary. It accelerates information and knowledge exchange and significantly improves the effectiveness of thinking and collective decision making process (Najafi Haghi, 2017). **Business intelligence:** it includes theories, procedures, processes, architectures, and technologies by which crude data would be changed to meaningful and useful data. It uses a large amount of data to identify and develop new opportunities. Using new opportunities and applying an effective strategy can lead to an advantage competitive advantage (Wikipedia, 2017). **Organizational process intelligence:** Glyn (1995) described this component as information processing functions by which compatibility with demand environment is provided, which depend on its innovation and implementation and divided it into 3 categories: individual intelligence gathering, interrelation, and integrating individual and organizational intelligence as a larger system. McMaster, 1996, defined the organizational intelligence an organization's capability in collecting data, having innovation, producing knowledge and operating based on this knowledge. Albrecht, 2002, said that organizational intelligence is talent and capacity of an organization in its mental strength moves and the focus of this mental strength to fulfill the mission of the organization. He also considers this component the ability to make all intellectual capability of the organization move and make this intellectual capability focuses on its mission (Albrecht, 2002). Ulrich & Brockbank (2005), described organizational intelligence as the amount of competencies and abilities of the organization which may be used systematically. Simic (2005): organizational intelligence is the intellectual ability of the organization for solving problems in the organization. Ardalan & et al. (2012): organizational intelligence is total information, experiences, knowledge, and understanding issues of the organization. **technological intelligence:** it includes activities that create an insight into the processes and technological existence facts (threats and opportunities) of the external environment by collecting, analyzing, and distributing appropriate and related information, and herby supports decision making processes about technological issues and also management throughout the organization (Kerr & et al., 2006). There are many definitions for technological intelligence, but regardless different attitudes in defining this concept, there is consensus on key issue; constant process of collecting and analyzing data and acquired knowledge from this process provide the necessary knowledge to take decision in the field of technology and make it possible to achieve competitive advantage (Khosrowpoor, 2013). **Human resources intelligence:** managing human resources includes the process of working with people, in the way that this people and their organizations achieve a complete ability even when it requires change, acquiring new skills, undertaking new responsibilities, and new forms of relationships. In fact, human resources management is the utilization of manpower in order to achieve organization's goals and includes activities such as recruitment, training, wage and salary, and organizational relationships. In other words, in the organization human resources are functions that significantly promote the performance of employees in serving to employers' strategic goals. Human resources management tries to explore how to manage people in organizations focusing policies and systems (Wikipedia, 2017). What this study considered is intelligence in human resources management and a clever use of human, financial and physical resources by manager. **Information management intelligence:** information management system is an integrated system consists of user and machine in order to providing data to support operate, management, and decision making in the organization. This system utilizes computer software and hardware, guides and instructions, and models for analysis, planning, control and decision making and a database (Davice and Olson, 1985, 6). Information management system collects environmental data and records exchanging and operating data and then filters, organizes and selects them and represents them to managers as information and provides a tool for managers to product their requirements data (Mordic and Manson, 1986, 6). It is an integrated, computer and user-machine system which provides information required to support operating and decision making (Omidvar, 2005). The values of strategic intelligence can be effective in learning changes in business environment by promoting the capabilities observed in managers and personnel competencies. The ability to communicate between views can increase providing data access for all members. As a result, increasing "intelligence quotient" is occurred in all organization's managers and personnel (Tom and Kim, 2002). Intelligent operating system and competency strength for advancing innovation are essential for today global competition and business environment (Harun, 2012). This study aims to: 1. Investigating managers' strategic intelligence component as independent variable and competency management component as dependent variable and analyzing the relationship between them. 2. Determining the level of usage of strategic intelligence by managers in some government agencies. For this purpose, by combining Rybold and Vikenz components of strategic intelligence and competency management we design the conceptual model of this study and analyze the relationship between them.

Conceptual model

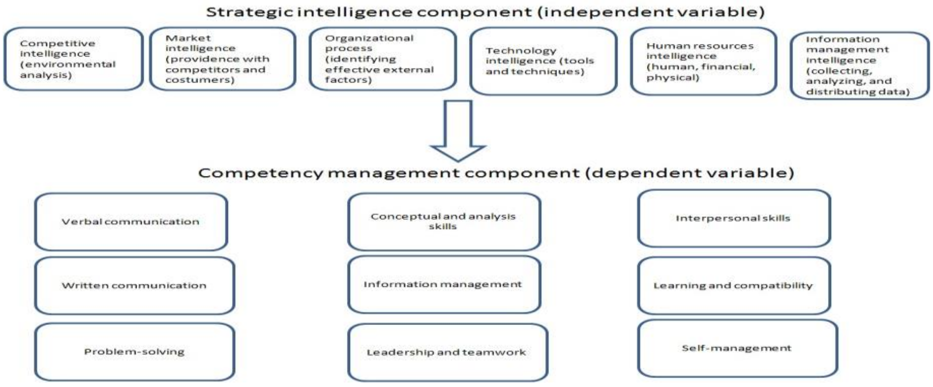

Figure 1: Integrated model of strategic intelligence and competency management

Hypotheses-questions

Main hypotheses: strategic intelligence plays an important role in developing competency management in government centers and institutes. 9 subsidiary hypotheses are derived from the main hypotheses which are as follows:

5.1. Strategic intelligence has an important role in verbal communication competency.

5.2. Strategic intelligence has an important role in written communication competency.

5.3. Strategic intelligence has an important role in problem-solving competency.

5.4. Strategic intelligence has an important role in conceptual and analysis skills competency.

5.5. Strategic intelligence has an important role in data management competency.

5.6. Strategic intelligence has an important role in leadership and teamwork competency.

5.7. Strategic intelligence has an important role in interpersonal skills competency.

5.8. Strategic intelligence has an important role in learning and adaptability competency.

5.9. Strategic intelligence has an important role in self-management competency.

Methodology

Research questions: 1. How is the relationship between strategic intelligence and competency management? 2. In what extent do managers at organizational level use strategic intelligence in competency management? 3. What are the barriers to competency management in government centers and the solutions to meet them? Qualitative content analysis strategy is used to answer research questions. Three approaches for analyzing qualitative content are introduced. These three approaches are introduced based on their degree of apriority. The first approach is a contractual approach. Coding is done directly from crude data in this approach. It is similar to the fundamental theory. The second approach is a directorial approach. Primary coding in this approach begins from the results of previous research or a theory. Then, during data analysis, researcher drowns himself in data and let issues emerge from data. Developing a conceptual framework or a theory is the main purpose of this approach. The third approach is summarization content analysis. It begins with numerating words or main content then analysis is extended. At the first glance this approach seems to be quantitative but its goal is to explore the usage of these words in an apriority mode (Rahimnia et al., 2012). Directorial and contractual approaches were used in this study. Primary information is given to 100 executive and operating managers from technical, human resources, planning, administrative, and financial fields in form of questionnaire. Due to the difficult access to chief managers' data are collected from mid-managers. The questionnaire included 35 content questions about the relationship between strategic intelligence and the level of its usage by executive and operating managers in competency management, and there were 5 personal questions. Secondary information is obtained from field and librarian studies, internet, research, thesis and related articles. In this study we use the combination of Karl Albrecht organizational strategic intelligence standard questionnaire (2002) and 360-degree model standard questionnaire (Managers dominance in others). Karl Albrecht organizational intelligence evaluation questionnaire contents 38 questions with the aim of evaluating 7 components. 16 questions were chosen from this questionnaire. 360-degree model questionnaire contents 63 questions. This questionnaire evaluates the dominance of manager or boss in others (colleagues, subordinates, bosses, organizational peers, and client). 19 questions were chosen from this questionnaire. Both questionnaires were graded in accordance with five-item Likret scale. In order to analyze the findings of this study we use descriptive statistics such as mean, standard deviation, and table and also inferential statistics like univariate t-test, Pearson correlation and multiple regression analysis. To determine the validity of the questionnaire we use validity method and the experts of Persian and Latin and internet resources management views referring to Iranian and foreign theorists or quoted in articles and contents. Chronbach's Coefficient Alpha is used to determine the reliability of the questionnaire.

Findings and Analysis

In this research, a number of 100 questionnaires were distributed among four organizational institutions of Tehran. All the distributed questioners were collected from the respondents. Table 1 shows the number of these institutions' managers in terms of their managerial ranking. It is worth-noting that the statistical population of research was selected using a random-sampling method and the availability sampling method was used for selecting managers.

Table 1: Number of Governmental Institutions in Terms of their Managerial Ranking (2016-2017)

Center Code	Managerial Ranking			Total
	General Manager	Manager	Staff	
Center 1	**1**	**12**	**4**	**17**
Center 2	**2**	**13**	**8**	**23**
Center 3	**1**	**18**	**6**	**25**
Center 4	**5**	**19**	**11**	**35**
Total	**9**	**62**	**29**	**100**

Source: Preliminary Study

According to the statistics given table 1, among 100 statistical population of research, 17, 23, 25, and 35 participants were from governmental centers 1, 2, 3, and 4, respectively. This table illustrates the number and percentage of managerial ranking of these people. Further, as we can see, the total number of high-ranking managers was restricted to only 9 managers due to inaccessibility to these managers. 62 persons were intermediate and executive managers and 29 persons were staffs.

Table 2 displays the education level of managers who responded to the questionnaire for each governmental center. For example, 47.1 %, 41.2 % and 11.8 % of managers had B.A., M.A. and Ph. D. degrees in governmental center 1, respectively. This table also illustrates the managerial scope of statistical population managers for each center. According to these statistics, 24%, 66% and 10% of these managers were from technical, office and financial and planning departments, respectively. Further, table 2 represents the statistics for managers' gender in accordance with their governmental center. According to these statistics, 9% and 91% of respondents were among female and male managers, respectively.

Table 2: Level of Education, Gender and Managerial Scope of Managers for Each Governmental Center

Center code		Education			Total	Management Scope			Total	Gender		Total
		B.A.	M.A.	Ph.D.		Technical	Office and Financial	Planning		Male	Female	
Center 1	Count	8	7	2	17	5	10	2	17	16	1	17
	% within center code	47.1%	41.2%	11.8%	100%	29.4%	58.8%	11.8%	100%	94.1%	5.9%	100%
	% within education	12.7%	24.1%	25.0%	17.0%	20.8%	15.2%	20.0%	17.0%	17.6%	11.1%	17.0%
	% of total	8.0%	7.0%	2.0%	17.0%	5.0%	10.0%	2.0%	17.0%	16.0%	1.0%	17.0%
Center 2	Count	14	8	1	23	5	16	2	23	21	2	23
	% within center code	60.9%	34.8%	4.3%	100.0%	21.7%	69.6%	8.7%	100.0%	91.3%	8.7%	100.0%
	% within education	22.2%	27.6%	12.5%	23.0%	20.8%	24.2%	20.0%	23.0%	23.1%	22.2%	23.0%
	% of total	14.0%	8.0%	1.0%	23.0%	5.0%	16.0%	2.0%	23.0%	21.0%	2.0%	23.0%
Center 3	Count	18	5	2	25	3	20	2	25	22	3	25
	% within center code	72.0%	20.0%	8.0%	100.0%	12.0%	80.0%	8.0%	100.0%	88.0%	12.0%	100.0%
	% within education	28.0%	17.2%	25.0%	25.0%	12.5%	30.3%	20.0%	25.0%	24.2%	33.3%	25.0%
	% of total	18.0%	5.0%	2.0%	25.0%	3.0%	20.0%	2.0%	25.0%	22.0%	3.0%	25.0%
Center 4	Count	23	9	3	35	11	20	4	35	32	3	35
	% within center code	65.7%	25.7%	8.6%	100.0%	31.4%	57.1%	11.4%	100.0%	91.4%	8.6%	100.0%
	% within education	36.5%	31.0%	37.5%	35.0%	45.8%	30.3%	40.0%	35.0%	35.2%	33.3%	35.0%
	% of total	23.0%	9.0%	3.0%	35.0%	11.0%	20.0%	4.0%	35.0%	32.0%	3.0%	35.0%
	Count	63	29	8	100	24	24	66	10	91.4%	91	9
	% within center code	63.0%	29.0%	8.0%	100.0%	24.0%	24.0%	66.0%	10.0%	35.2%	91.0%	9.0%
	% within education	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	32.0%	100.0%	100.0%
	% of total	63.0%	29.0%	8.0%	100.0%	24.0%	24.0%	66.0%	10.0%	91	91.0%	9.0%

Source: Preliminary Study

The questionnaire involved at least two questions from strategic intelligence and competency management components. The total number of questions was 40 where 5 questions were related to personal information of the individuals.

Now, we analyze the reliability of the above-mentioned components estimating Cronbach's Alpha in SPSS statistics. Tables (3), (4) and (5) indicate the information related to strategic intelligence components analysis.

Table 3: Statistical results to ensure reliability of questionnaire) values of Cronbach's Alpha in strategic intelligence

Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of items (N)
0.810	**0.816**	**5**

Table 4: Summary of strategic intelligence analysis

	N	%
Valid	**98**	**98.0**
Cases excluded	**2**	**2.0**
Total	**100**	**100.0**

Source: Analysis of questionnaire using SPSS

Table 5:Mean and Standard Deviation of Strategic Intelligence Components

	Mean	Std. Deviation	N
Market 1	**2.03**	**1.000**	**98**
Process 1	**2.26**	**1.065**	**98**
Process 2	**2.00**	**1.005**	**98**
Technology 2	**2.19**	**1.249**	**98**
Information	**2.98**	**0.963**	**98**

Source: Analysis of questionnaire using SPSS

In the analysis of the 5 components of strategic intelligence in SPSS and a 98% validity of questionnaire's items, a reliability of 0.81 using Cronbach's Alpha was obtained which is considered as a highly satisfactory reliability. In addition, the Mean and Standard Deviation (SD) of all the components of strategic intelligence including market intelligence, organizational process, technology intelligence and information management intelligence were analyzed separately. As it can be seen, the information management intelligence has the highest mean and the lowest standard deviation indicating that this component is closer to standard level among the managers of organizational centers. In contrast, market intelligence has the least mean and technology intelligence has the highest standard deviation indicating that these two components are more distant from the standard level. The other components are in a similar situation with a slight difference. Now, we analyze the components of competency management in the tables (6), (7) and (8):

Table 6: Cronbach's Alpha values in competency management (reliability of statistical results)

Cronbach's Alpha	Cronbach's Alpha based on standardized items	Number of items (N)
0.794	0,798	7

Source: Questionnaire analysis using SPSS

Table 7: A summary of Competency management analysis

	N	%
Valid	98	98.0
Cases excluded	2	2.0
Total	100	100.0

Source: Questionnaire analysis using SPSS

Table 8: The Mean and Standard Deviation (SD) of strategic intelligence components

	Mean	Standard Deviation (SD)	N
Linguistic communications	3.17	0.862	98
Written communications	2.82	1.049p	98
Problem solving	4.07	0.777	98
Problem solving 1	**2.79**	**1.151**	**98**
Individual	**2.92**	**0.870**	**98**
Learning	**2.99**	**1.000**	**98**
Learning 1	**3.48**	**1.409**	**98**

Source: Questionnaire analysis using SPSS

Analyzing the seven components of competency management in SPSS with 98% validity of questionnaire items, we obtained a reliability of 7.94% using Cronbach's Alpha which is a highly acceptable reliability. Also, the mean and standard deviation of linguistic communications, written communications, problem solving, interpersonal skills, learning and compatibility were analyzed discretely. It was observed that problem-solving skill and linguistic communications had the highest mean and the lowest standard deviations indicating that these components had been closer to the standard level among the managers of organizational centers. In contrast, the written communications had the least mean and learning and compatibility had the highest standard deviation indicating that these two components are more distant from the standard level. The other components were similar to each other with a slight difference.

Table 9: Reliability of statistical results) Cronbach's Alpha values with all the components of dependent and independent variables

Cronbach's Alpha	**Cronbach's Alpha based on standardized items**	**Number of items (N)**
0.729	**0711**	**30**

Source: Questionnaire analysis using SPSS

As Table 10 illustrates, with a combination of 30 items of questionnaire including components of strategic intelligence independent variable and competency management dependent variable, we achieve a reliability of 7.29% using Cronbach's Alpha which is a highly satisfactory reliability.

Table 10: Factor analysis for strategic intelligence

Axis	N	Range	Minimum	Maximum	Mean	Standard Deviation	Variance
Question1(Competitive intelligence)	100	3	1	4	2.61	0.920	0.864
Question2(Competitive intelligence)	100	4	1	5	2.80	1.044	1.091
Question3(Market intelligence)	100	2	1	3	2.11	0.764	0.584
Question4(Market intelligence)	99	3	1	4	2.03	0.994	0.989
Question5 (Organizational process)	100	4	1	5	1.95	0.880	0.775
Question6(Organizational process)	100	3	1	4	2.23	1.072	1.149
Question7(Organizational process)	99	4	1	5	1.99	1.005	1.010
Question8(Organizational process)	100	4	1	5	2.21	0.868	0.753
Question9(Technology intelligence)	100	3	1	4	1.76	0.793	0.629
Question10(Technology intelligence)	99	3	1	4	1.97	0.931	0.866
Question11(Technology intelligence)	100	4	1	5	2.17	1.248	1.557
Question12(Human resources intelligence)	100	4	1	5	2.72	0.866	0.749
Question13(Human resources intelligence)	100	4	1	5	2.73	1.136	1.290
Question14 (Information management intelligence)	99	3	1	4	1.82	0.705	0.497
Question15 (Information management intelligence)	99	3	1	4	1.84	0.738	0.545
Question16(Information management intelligence)	97	3	1	4	1.72	0.800	0.640
Valid N (Likewise)	93						

Source: Questionnaire analysis using SPSS

Table 10 represents all the questions of questionnaire concerning the strategic intelligence components in terms of statistic variance, mean and standard deviation. According to this table, information management intelligence with the least standard deviation has a high level of significance and competitive intelligence, technology intelligence, human resources intelligence and organizational process have an mean of significance. The variations of responses range between mean and high levels.

Table 11: Factor analysis of competency management

Axis	N	Range	Minimum	Maximum	Mean	Standard Deviation	Variance
Question17(Linguistic communications)	100	3	2	5	2.97	0.958	0.918
Question18(Linguistic communications)	100	4	1	5	2.94	1.455	2.118
Question19(Written communications)	99	4	1	5	2.40	1.212	1.468
Question20(Written communications)	100	3	1	4	2.72	1.026	1.052
Question21(Problem-solving)	100	3	2	5	3.15	0.869	0.755
Question22(Problem-solving)	99	4	1	5	3.19	1.014	1.218
Question23(Conceptual and analytical skills)	99	3	1	4	2.81	1.047	1.095
Question24(Conceptual and analytical skills)	100	3	2	5	4.06	0.776	0.602

Question25(Team work and leadership)	100	4	1	5	2.81	1.152	1.327
Question26 Team work and leadership)	98	2	2	4	3.35	0.705	0.497
Question27(Interpersonal skills)	100	3	2	5	3.16	1.061	1.126
Question28(Interpersonal skills)	100	3	1	4	2.68	1.127	1.270
Question29(Learning and compatibility)	99	3	1	4	2.87	1.037	1.074
Question30(Learning and compatibility)	99	3	1	4	2.93	0.872	0.760
Question31 (Self-management)	100	3	1	4	1.74	0.760	0.578
Question32(Self-management)	100	3	1	4	3.01	1.000	1.000
Question33(Information management)	100	4	1	5	3.49	1.403	1.970
Question34(Information management)	100	3	1	4	1.89	1.014	1.028
Question35(Information management)	99	3	1	4	1.98	0.915	0.863
Valid N (Likewise)	93						

Source: Questionnaire analysis using SPSS

Table 11 illustrates the variance, mean and standard deviation of all the questions of competency management components. As the table indicates, information management and linguistic communications with the smallest standard deviation have a high level of significance and written communications, conceptual and analytical skills, interpersonal skills and problem-solving skill have an mean of significance. The variations of responses range between mean and high levels.

In the following, the research hypotheses will be analyzed:

Hypothesis 1: The strategic intelligence plays a significant role in the linguistic communications of competency management.

Table 12:Results of testing hypothesis 1

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				6		Competitive intelligence	-0.162	-1.122	0.265
						Market intelligence	-0.692	-1.606	0.000
Linguistic communications	$\mathbf{0.666^{a}}$	0.444	12.223	92	$\mathbf{0.000^{b}}$	Organizational process	0.142	1.397	0.166
						Technology intelligence	-0.600	-4.217	0.000
						Human resources intelligence	0.73	0.499	0.619
						Information management intelligence	0.230	2.417	0.48
					$\alpha \leq 0.05$	Strategic intelligence	0.106	5.357	0.000

Source: Questionnaire analysis using SPSS

As it can be seen in Table 12, the t statistic calculated for linguistic communications was ($p \leq 0.05$, $t=5.357$, $df=92$). Thus, the first hypothesis was confirmed at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and linguistic communications of competency management. The absolute value of t is significant for technology intelligence and information management intelligence above the mean and it is less than the constant 2.33 for other components. Therefore, these two components have had a significant statistical influence to explain the dependent variable (linguistic communications) variations.

Hypothesis 2: The strategic intelligence plays a significant role in written communications of competency management.

Table 13: Results of testing hypothesis 2

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.445	2.478	0.15
						Market intelligence	0.923	5.723	0.000
Written communications	$\mathbf{0.555^a}$	0.308	5.330	84	$\mathbf{0.000^b}$	Organizational process	-0.66	-0.482	0.631
						Technology intelligence	0.295	1.664	0.100
						Human resources intelligence	-0.432	-2.443	0.000
						Information management intelligence	0.66	2.423	0.674
					α≤0.05	Strategic intelligence	0.18	3.654	0.000

Source: Questionnaire analysis using SPSS

According to Table 13, the t statistic obtained for linguistic communications was (p≤0.05, t=3.654, df=84). Thus, the hypothesis 2 was confirmed at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and written communications of competency management. The absolute value of the t value is significant for competitive intelligence, market intelligence and human resources intelligence above the mean and it is less than the constant 2.33 for other components. Therefore, these three components have had a substantial statistical influence to justify the dependent variable (written communications) variations.

Hypothesis 3: The strategic intelligence plays a significant role in problem-solving competency.

Table 14:Results of testing hypothesis 3

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.191	2.596	0.11
						Market intelligence	0.934	4.166	0.000
Problem-solving	$\mathbf{0.867^a}$	752	36.730	85	$\mathbf{0.000^b}$	Organizational process	0.324	5.767	0.000
						Technology intelligence	0.029	0.404	0.687
						Human resources intelligence	-0.446	-5.640	0.000
						Information management intelligence	0.009	0.143	0.887
					α≤0.05	Strategic intelligence	0.043	3.831	0.000

Source: Questionnaire analysis using SPSS

As it is shown in Table 14, the t statistic calculated for problem solving variable was (p≤0.05, t=3.831, df=85). Thus, the hypothesis 3 was verified at a significance level of 95% indicating that strategic intelligence plays a significant function in problem-solving component of competency management. The absolute value of the t is significant for organizational process intelligence, competitive intelligence, market intelligence and human resources intelligence above the mean and it is less than the constant 2.33 for other components. Consequently, the two components of organizational process and human resources intelligence have had a considerable statistical influence to justify the dependent variable (Problem-solving) variations.

Hypothesis 4: The strategic intelligence plays a substantial role in conceptual and analytical skills of competency management.

Table 15: Results of testing hypothesis 4

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	-0.174	-1.512	0.134
						Market intelligence	-0.408	-0.041	0.000
Conceptual and analytic skills	$\mathbf{0.599^a}$	0.358	6.625	83	$\mathbf{0.000^b}$	Organizational process	0.63	4.720	0.474
						Technology intelligence	-0.430	-0.841	0.000
						Human resources intelligence	0.411	3.373	0. 01
						Information management intelligence	0.205	2.094	0.39
					α≤0.05	Strategic intelligence	-0.068	-3.976	0.000

Source: Questionnaire analysis using SPSS

As it can be observed in Table 15, the t statistic calculated for conceptual and analytic skills was ($p \leq 0.05$, $t=3.976$, $df=83$). Thus, the hypothesis 4 was accepted at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and conceptual and analytical skills. The absolute value of the t is significant for organizational process and human resources intelligence above the mean and it is less than the constant 2.33 for other components. Thus, these two components have had a significant statistical effect to justify the dependent variable (Conceptual and analytical skills) variations.

Hypothesis 5: The strategic intelligence plays a considerable function in information management competency.

Table 16: Results of testing hypothesis 5

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.006	0.051	0.959
						Market intelligence	-0.097	-0.855	0.395
Information management	$\mathbf{0.738^a}$	0.544	14.504	85	$\mathbf{0.000^b}$	Organizational process	-0.622	- 06.411	0.000
						Technology intelligence	-0.115	-0.916	0.362
						Human resources intelligence	-0.378	-2.766	0. 007
						Information management intelligence	-0.150	1.359	0.178
					α≤0.05	Strategic intelligence	0.160	8.219	0.000

Source: Questionnaire analysis using SPSS

According to the information given in Table 16, the t statistic calculated for information management variable was ($p \leq 0.05$, $t=8.219$, $df=85$). Hence, the hypothesis 5 was approved at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and information management competency. The absolute value of the t has been significant for organizational process and human resources intelligence above the mean and it is less than the constant 2.33 for other components. Thus, these two components have had a significant statistical influence to explain the dependent variable (information management) variations.

Hypothesis 6: The strategic intelligence plays a significant function in team-work and leadership competency.

Table 17: Results of testing hypothesis 6

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.719	5.073	0.000
						Market intelligence	-0.353	-2.775	0.007
Team-work and leadership	$\mathbf{0.757^a}$	0.574	16.331	85	$\mathbf{0.000^b}$	Organizational process	-0.476	-4.401	0.000
						Technology intelligence	-1.038	-7.395	0.000
						Human resources intelligence	-0.649	-4.257	0. 000
						Information management intelligence	-0.036	-0.297	0.768
					α≤0.05	Strategic intelligence	0.117	5.366	0.000

Source: Questionnaire analysis using SPSS

As we can see in Table 17, the t statistic calculated for team-work and leadership variable was ($p \leq 0.05$, t=5.366, df=85). Therefore, the hypothesis 6 was confirmed at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and team-work and leadership competency. The absolute value of the t has been significant for organizational process, technology intelligence, competitive intelligence and human resources intelligence above the mean and it is less than the constant 2.33 for other components. As a result, these four components have had a significant statistical influence to justify the dependent variable (Team-work and leadership) variations.

Hypothesis 7: The strategic intelligence plays a significant role in interpersonal skills competency.

Table 18:Results of testing hypothesis 7

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.254	2.838	0.006
						Market intelligence	0.033	0.408	0.684
Interpersonal skills	$\mathbf{0.798^a}$	0.637	21.292	85	$\mathbf{0.013^b}$	Organizational process	0.083	1.209	0.000
						Technology intelligence	1.038	7.395	0.230
						Human resources intelligence	0.429	4.389	0. 000
						Information management intelligence	0.408	4.241	0.000
					α≤0.05	Strategic intelligence	-0.035	-2.547	0.013

Source: Questionnaire analysis using SPSS

According to Table 18, the t statistic calculated for interpersonal skills was ($p \leq 0.05$, t=2.547, df=85). Therefore, the hypothesis 7 was accepted at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and interpersonal skills competency. The absolute value of the t has been significant for human resources intelligence, technology intelligence, competitive intelligence and information management intelligence above the mean and it is less than the constant 2.33 for other components. Hence, these four components have had a substantial statistical influence to justify the dependent variable (Interpersonal skills) variations.

Hypothesis 8: The strategic intelligence plays a significant role in learning and compatibility competency.

Table 19:Results of testing hypothesis 8

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.584	3.500	0.001
						Market intelligence	0.612	4.100	0.000
Learning and compatibility	$\mathbf{0.485}^a$	0.235	3.739	85	$\mathbf{0.001}^b$	Organizational process	0.028	0.221	0.825
						Technology intelligence	0.379	2.300	0.024
						Human resources intelligence	-0.734	-4.096	0. 000
						Information management intelligence	-0.146	-1.010	0.316
					α≤0.05	Strategic intelligence	0.033	1.299	0.001

Source: Questionnaire analysis using SPSS

As it can be observed in Table 19, the t statistic obtained for learning and compatibility was ($p \leq 0.05$, t=1.299, df=85). Thus, the hypothesis 8 was confirmed at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and learning and compatibility competency. The absolute value of the t has been significant for human resources intelligence, market intelligence and competitive intelligence above the mean and it is less than the constant 2.33 for other components. Hence, the above three components have had a significant statistical influence to explain the dependent variable (learning and compatibility) variations.

Hypothesis 9: The strategic intelligence plays a significant role in self-management competency.

Table 20:Results of testing hypothesis 9

Dependent variable	R	R^2	F	DF	Sig	Independent variable	β	T	Sig
				7		Competitive intelligence	0.172	1.194	0.236
						Market intelligence	-0.242	-1.876	0.064
Self-management	$\mathbf{0.650}^a$	0.422	8.872	85	$\mathbf{0.000}^b$	Organizational process	-0.235	-2.148	0.035
						Technology intelligence	-0.169	-1.191	0.237
						Human resources intelligence	0.063	0.407	0. 685
						Information management intelligence	-0.029	-0.230	0.819
					α≤0.05	Strategic intelligence	0.115	5.243	0.000

Source: Questionnaire analysis using SPSS

As it can be seen in Table 20, the t statistic calculated for self-management was ($p \leq 0.05$, t=5.243, df=85). So, the hypothesis 9 was affirmed at a significance level of 95% indicating that there is a significant relationship between strategic intelligence and learning and self-management competency. The absolute value of the t has been less than the constant 2.33 for all the components. Hence, none of these components have a significant statistical influence to explain the dependent variable (self-management) variations.

Table 21: Pearson Correlation Coefficient for dependent and independent variables

Competency management	Strategic intelligence	
0.642**	1	Pearson Correlation
0.000		Sig. (2-tailed)
88	93	N
1	0.642**	Pearson Correlation
	0.000	Sig. (2-tailed)
93	88	N

Source: Questionnaire analysis using SPSS

Table 21 indicates the correlation between strategic intelligence and competency management using Pearson Coefficient Test with a significance level OF zero (Sig. =000) in terms of the positive linear relationship between these two variables.

Table 22: Results of valid and invalid responses for independent and dependent variables

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Strategic intelligence	88	88.0%	12	12.0%	100	100.0%

Table 22 indicates the number of valid and invalid responses for independent and dependent variables. Among the available responses, 12 questions had no responses which were excluded from the statistics.

Discussion and Conclusion

The strategic intelligence comprises the other types of intelligence to create added value information and knowledge for making an organizational strategic decision. Good planning must be preceded by good analysis and strategic intelligence is a particularly appropriate tool for this purpose (McDowell, 1999). The results of statistical analysis of 4 governmental centers of Tehran in using a strategic intelligence that can direct managers towards a competency management are as follows:

Hypothesis 1. The findings of hypothesis 1 indicated that the strategic intelligence was above the mean. The t value for technology intelligence and management intelligence was significant at a mean. These findings are in agreement with the *Simon Wootton* and Terry *Horne (1993:9) perspective: "strategic intelligence involves the deployment of five basic, five combinations, and three higher-order thinking skills, the five basic skills are memory, imagination, numeracy, empathy, and conversational thinking". In this regard, the recognition and identification of staff personality and job quality by the managers, human resources intelligence and organizational process is necessary which can increase the verbal and linguistic communications competencies.*

Hypothesis 2. *The results of hypothesis 2 demonstrated that the strategic intelligence is above the means.* The t value for competitive intelligence, market intelligence and human resources intelligence at the mean was significant. These findings are harmonious to the Tham and Kim (2002) perspective stating that "Giving them the ability to communicate their insights which in turn will increase the information available to all organizational members, thereby increasing the "Intelligence quotient" of all organization managers and members. The ability not only to communicate information but also to communicate a sense of meaning that inspires people to follow. When managers have these qualities, they are considered leaders with strategic intelligence". To achieve this purpose, choosing competent managers, training and improving their knowledge, increasing managers' authorities, reforming the organizational process and structures which improve the written communications competencies are recommended.

Hypothesis 3. The findings of hypothesis 3 revealed that the strategic intelligence *is above the mean.* The t value for competitive intelligence, market intelligence, human resources intelligence and organizational process was significant at a mean. These findings are in line with Kagnyn et al. (2008) attitude maintaining that "strategic intelligence, on the one hand, is a way for increasing human intelligence in social, political and economic systems. On the other hand, it is a method for solving the problems of today's communities" (qtd. in Salehinejad, 2011). Doing so, it is necessary to increase governmental capabilities, create a sense of intimacy between managers and employees, support and leverage employees, upgrade managers' information and knowledge, focus on the available challenges which contribute the problem-solving competences.

Hypothesis 4. The results of hypothesis 4 indicated that the strategic intelligence *is higher than the mean. Also,* the t value for human resources intelligence and organizational process components was significant. These findings are in agreement with Maccoby and Scudder (2011) perspective which calls for the following abilities for managers: "anticipating the currents of change that will result in threats and opportunities for their organization, creating their organization's future and designing a compelling vision of where they want to lead people and what it implies for the organization, partnering with those who complement their abilities and who share their leadership philosophy, engaging, motivating, and empowering people to collaborate with them to implement the vision". For this purpose, it is crucial to improve the managers' knowledge and information, stating the organizational objectives, strategies and policies clearly, coordination between organizational structure and process and communication between manager and employees which help to increase the conceptual and analytical skills.

Hypothesis 5. The findings of hypothesis 5 demonstrated that the strategic intelligence *is above the mean.* The t value for human resources intelligence and organizational process was significant. These findings are in line with the perspective stating "Strategic intelligence is identified as having the correct information available for the correct people as to allow them to make informed business decisions about the future of their organizations. Without this information, it is believed that it would be difficult for employees to make the correct decisions to achieve and maintain market leadership (Marchand & Hykes 2007). To achieve this objective, it is useful to increase using information and communication technology, improve the information exchange rate, upgrade employees' information through staffs' training courses, recruiting managers and staffs with high intelligence quotient, increase technology budget, create competitive environments in organizational centers from the government to improve the information technology competences.

Hypothesis 6. The findings of hypothesis 6 revealed that the strategic intelligence *is higher than the mean. Moreover,* the t value for technology intelligence, competitive intelligence, human resources intelligence and organizational process was significant. These findings are in line with Harvey's (1998) viewpoint that "the employees involvement is based on the fact that the employees participate in the decision-making process that influences their lives, have more freedom of action in their office and organization (qtd. in Salehi Nejad, 1392). To do so, it is necessary to boost participatory decision-making, collaboration and team-working, create an appropriate environment for creativity and innovation which help the leadership and team-working competencies.

Hypothesis 7. The findings of hypothesis 7 indicated that the strategic intelligence *is above the mean. Besides,* the t value for technology intelligence, competitive intelligence, human resources intelligence and information management intelligence was significant. These findings concord with Maccoby's (2007) different definition for strategic intelligence. According to him, "successful leaders share five qualities including foresight, visioning with systems thinking, partnering and motivating and empowering". Doing so, direct emotional communications among managers and employees, giving attention to various performances and providing proper and impartial incentives and rewards, organizational development, organizational responsibility and commitment can enhance the interpersonal skills competencies.

Hypothesis 8. The findings of hypothesis 8 revealed that the strategic intelligence *is above the mean. Likewise,* the t value for competitive intelligence, market intelligence and human resources intelligence was significant. These findings are in coordination with Well's (2016) perspective" I called that capacity strategic intelligence as through which we can effectively adapt to the new conditions in terms of social and individual behaviors". To do this purpose, enhancing learning to improve performance standards, individual and group leaning processes, increasing computer use, creating a supportive learning environment, reiterating learning, production and knowledge, supporting and recommending the spirit of compatibility can effectively influence the learning and compatibility competencies.

Hypothesis 9. The findings of hypothesis 9 indicated that the strategic intelligence *is above the mean. Also,* the t value for none of the strategic intelligence components was significant. These findings are in concord with Azgoli's (2003) viewpoint reiterating that "most researchers for doing research on management, emphasize on those individuals who are at the top of a group or organization and their hierarchical relationships with their employees. So, a process is acted on from top to down in which the subordinates are directed by an individual at the top. This has been the most conventional management and leadership paradigm in the past two decades". However, this opposes Fletcher and Kaufer's (2003) viewpoint saying that "but in new models, management and leadership is an activity which can be introduced among members, groups and organizations in which all the individuals have the ability to make decision on their own tasks and responsibilities" (qtd. in Mollahosseini and Barkhordar, 2007). Doing so, social influence on employees, reducing directive procedures, supporting and reinforcing the subordinates, delegating tasks to employees, and building trust with employees can affect the self-management competencies.

Final Word

The present research makes a statistical analysis of 4 governmental centers of Tehran which can be generalized to similar governmental organizations and centers. According to statistics, the use of strategic intelligence in competency-based management has been at an average level. However, the strategic intelligence has been used for quite a few exceptional components at a high level. On the other hand, since the respondents to the research questionnaire have been among organizational managers, it is likely that their choices have moved away reality. To achieve this objective, a set of suggestions and recommendations can be made such as analysis and changing organizational policies, recruiting efficient managers through a comprehensive planning, identification of qualified and experienced employees, annual evaluation of managers performance, reducing informal relations and office bureaucracy, removing governmental budgeting and capabilities scarcity, technology management, increasing managers authorities, providing incentives for efficient institutions from the government to create a competitive environment, and encouraging efficient working groups. Finally, the governmental institutions can possess a higher competency using governmental support and strategic intelligence of competent mangers which needs a serious planning and solemnity.

Dedication

I would like to express my gratitude to all those who helped me in preparing this research. Further, I profoundly appreciate my husband, engineer Farhad Hadadi for his assistance in computer affairs as well as his patience and accompanying me during this research. I am very grateful to my children, Dorsa and Parsa, who had to tolerate my absence at home. Finally, I would like to thank the contribution of all those who responded sincerely to the research questionnaire.

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Appendix

Questionnaire

Gender: Male□ Female□	**Managerial rank:**	**Managerial scope:**	**Education:**

1. I interact with my other colleagues, employers and clients in a constructive way.
2. There is a formal and meticulous process for environmental analysis of the organization (processes, opportunities and threats analysis).
3. I try to deal with the internal and external factors affecting the organization through learning and identifying those factors.
4. Customer (client)'s value is a principle for each organization.
5. I can explain the reasons for making my decisions to the other staffs if necessary.
6. I accept the responsibility for my mistakes.
7. The organizational structure concords with the working process.
8. There is the minimum amount of bureaucracy in the organization.
9. I can make technical changes effectively in terms of their priority.
10. Managers take advantage of the most current strategies for running the organization.
11. The organizational atmosphere is ready to welcome the technological changes.
12. I assign some of the decisions to lower-order levels of organization.
13. The quality of occupational career is of importance.
14. The information regarding the performance of the organization is easily accessible.
15. The organization tries to identify the future leaders.
16. The organization enjoys a well-ordered planning or software to identify, enhance, and develop the managers and staffs.
17. When my viewpoints differ from the others, I am interested in knowing their viewpoints completely.
18. I interact with other staffs efficiently.
19. I can express the occupational problems and realities in a written and organized form.
20. Managers transfer the organizational objectives to the staffs.
21. I align the staffs' reactions against problems and difficulties using appropriate strategies.
22. Managers resolve the performance problems and difficulties of the organization.
23. Managers appreciate the organizational competencies of their staffs.
24. The staffs maintain that the rewards, benefits and promotions are given fairly in terms of their performance.
25. I encourage the staffs to accomplish team success.
26. The group work plays a facilitative role in the organizational process.
27. The staffs' promotion depends on their merits.
28. I create an atmosphere in which others can express their ideas with no fear of being criticized or punished.
29. The staffs training and professional growth is of high significance.
30. The staffs possess a high sense of cooperation.
31. The staffs appreciate the organizational expectations and demands.
32. The staffs maintain sustainable relationships with each other.
33. The organizational strategies are reviewed annually.
34. The information systems of the organization are potent and strong.
35. The information concerning the organizational performance is easily available

Very low □ 2. Low□ 3. Moderate□ 4. High□ 5. Very high□

Note 1. All the questions are answered in a form of Likert scale from 1= Very low to 5= Very high similar to question 35 above.

Note 2. Numbers 1, 2 and 3 are used to represent the governmental institutions codes.

Note 3. The managerial rankings include 1= general manager 2=manager 3=staff

Note 4. The managerial scopes are 1= technical 2= office and financial 3=planning

THE ASSESSMENT OF THE ORGANIZATIONAL BEHAVIOR OF REFAH BANK PERSONNEL IN TERMS OF CUSTOMER SATISFACTION

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Sakineh Ashrafi[26]

Mehdi Sanei[27]

Abstract

As one of the most important service organizations, banks are in charge of navigating and supporting many economic activities in the society. One of the key problems in the study of the quality and quantity of organizational performance in achieving the goals is paying attention to how people behave in the operational environment. On the other hand, the employees' behavior also affects customer satisfaction; therefore, the aim of this study was to investigate the role of organizational behavior in achieving customer satisfaction. The statistical population of the study consisted of all the customers of Refah Bank in Shahrud County. In this way, 150 participants were selected as sample members based on Cochran's formula (infinite population). These subjects were evaluated through the survey and causal method. The measurement instrument in this study included two researcher-made questionnaires of organizational behavior consisting of occupational commitment, interpersonal communicative skills, professional motivation, customer-oriented skills, organizational citizenship behavior, and emotional intelligence and a researcher-made questionnaire of customer satisfaction. The results were analyzed in SPSS. Based on the results of factor analysis for organizational behavior and customer satisfaction, the validity of the questionnaires were over 67% and 68%, respectively. Moreover, the reliability of questionnaires was calculated by Cronbach's alpha for organizational behavior and customer satisfaction as 0.938 and 0.934, respectively. The results of these tests showed that organizational behavior generally plays an important role in customer satisfaction and the relationship between organizational behavior and customer satisfaction is positive and significant.

Key words: Organizational Behavior, Customer Satisfaction

JEL: L20

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Introduction

The ever-increasing challenges and complexities of the competitive conditions of organizations that are associated with increased expectations have created new needs for the customers. The increased expectation of customers involves the fact that the organizations have to pay specific attention to the quality and variety of goods and services in approaching the customers. Under the circumstances, those organizations can be successful that can adapt to the environmental needs and try to meet such needs and demands. This cannot be achieved unless the organizations come to grasp the necessity of this approach towards the customers (Bahrami, 2008).

Today, experts consider human resources to be the most valuable capital which is available to the organizations and they believe that the key to success and growth or failure and degradation of organizations is centered on the quality of human resources management (Tabarsa, 2010).

Forming any society is not possible without people. They organize themselves for goals that might be very elementary and naturally abide by some general behavioral rules and some come together to establish an organization (Salehi Kordabadi et al., 2011). In modern organizations, managers look for different ways of using an efficient, useful and upgraded work force. They also admit that, as the main factor in the development of human resources, the human resources can dedicate their energy and abilities to the organization when they feel satisfied with the management, the organization, and their professional future. Each organization has its own structure that contains all the concrete features and characteristics that form the behavior of its members. Now, if the organization is supposed to continue its activities in a dynamic environment, its human resources must enjoy sustainable development (Seyyed Javadein, 2010). Organizational behavior is an interdisciplinary field of study that addresses individual, group and organizational behavior emerging in the early 1960s. Organizational behavior is a systematic study aiming to improve the ability to describe, predict, and direct the behavior control and change (Gholipour, 2007). Some experts have visualized a key and pivotal role for humans in promoting efficiency as humans can promote the quantity and quality of their work by increasing the incentives. Furthermore, they propose serious designs and use their creativity to remove problems. Indeed, this is a factor that can make changes in itself and its surroundings (Kalantari, 2012). Today, with the rapidly changing organizations, the managers look for ways of increasing the organizational commitment of the staff to achieve a competitive advantage in this manner because the staff can ensure the survival of the organization through their behavioral changes (Boodlaei et al., 1990). The behavior of the staff can affect customer satisfaction and this satisfaction is one of the main elements and requirements of management systems in enterprises and businesses. The efforts and the amount of time used to promote management tools by researchers, experts and managers of commercial organizations point to the fact that customer satisfaction is currently one of the most important factors in determining the success of an organization in business and profitability. Hence, the establishment and operation of measurement systems and customer satisfaction surveys are viewed as the most significant indicator in improving the performance and the most basic needs of modern organizations. In any case, this fact cannot be ignored that customers are the main motive for commercial and service organizations such as banks which seek major improvements in their path towards more progress. In other words, no business can survive without its customers. Therefore, it is vital to any organization to access a framework for understanding, analyzing, and evaluating customer satisfaction.

As one of the most important service organizations, banks also provide guidance and support for many economic activities of the society. Parallel to this fact, we may consider the staff members and their behavior as this might leave a visible mark on customer satisfaction and even the productivity of colleagues can be seen clearly in this respect. Therefore, in the present study, we investigate and evaluate the behaviors of the personnel at Refah Bank in terms of customer satisfaction.

Research hypotheses

The main hypothesis

The organizational behavior of the staff at Refah Bank affects customer satisfaction.

Subsidiary hypotheses

1 – The occupational motivation of the personnel at Refah Bank has a role in customer satisfaction.

2 – The emotional intelligence of the personnel at Refah Bank has a role in customer satisfaction.

3 – The customer-oriented skills of the personnel at Refah Bank have a role in customer satisfaction.

4 – The communicative skills of the personnel at Refah Bank have a role in customer satisfaction.

5 – The organizational citizenship behavior of the personnel at Refah Bank has a role in customer satisfaction.

6 – The occupational commitment of the personnel at Refah Bank has a role in customer satisfaction.

The conceptual model of the research

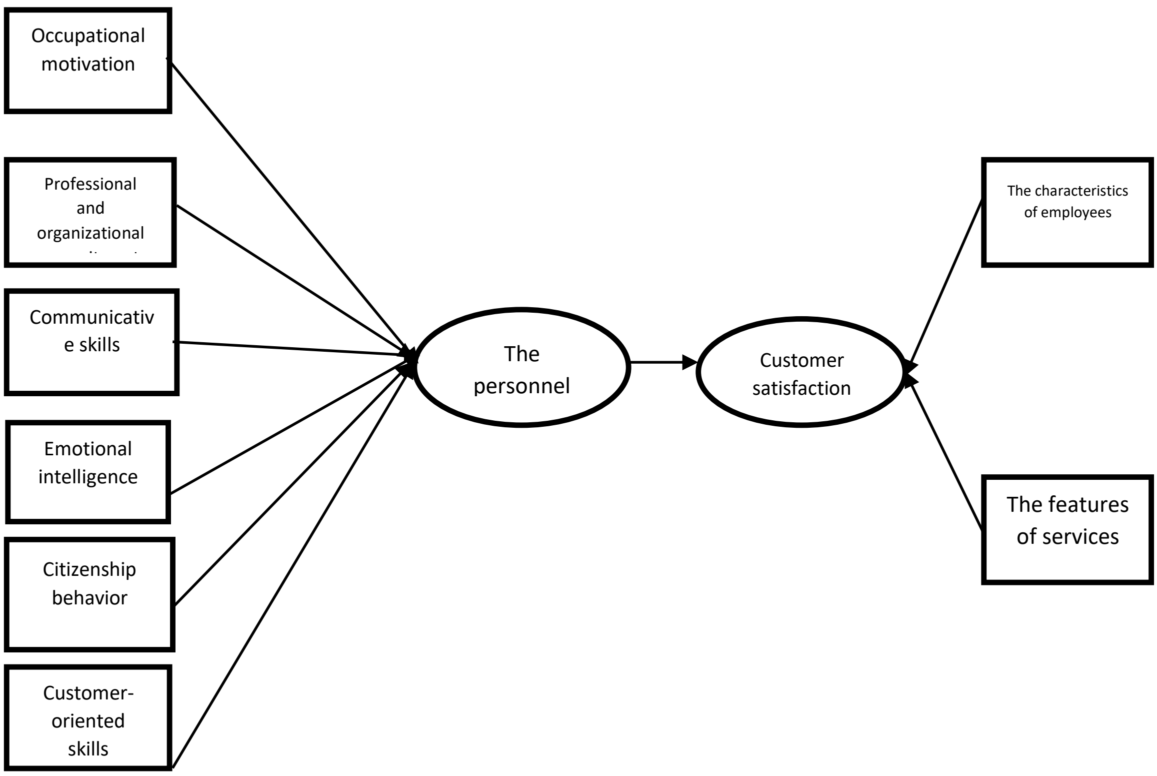

Figure 1: The conceptual model of the research

Research Method

The studied statistical population consists of the customers of Refah Bank. Therefore, the population is of the infinite type. Moreover, the sampling was done through randomization.

Cochran's formula was used to determine the sample size. Based on this formula, the sample size was estimated to be 150 and the questionnaires were distributed and completed among these respondents.

The validity of the questionnaire

The KMO measure and Bartlett's test of sphericity were used to check the validity of the research in the analysis. The KMO measure indicates the sampling adequacy and ranges between 0 and 1. The closer the value is to 1, the more appropriate the data can be for factor analysis. Otherwise, the results of factor analysis are not appropriate (lower than 0.6). The index is obtained from the following equation in which r_{ij} shows the correlation coefficient between the variables of i and j and a_{ij} is the partial correlation coefficient between them:

$$KMO = \frac{\sum\sum {r_{ij}}^2}{\sum\sum {r_{ij}}^2 + \sum\sum {a_{ij}}^2}$$

Bartlett's test also examines whether the correlation matrix is known and therefore it is not appropriate for identifying the operating model structure. If the significance of Bartlett's test is less than 5%, factor analysis is appropriate in identifying the operating model structure as the assumption of the known correlation matrix is rejected.

Additionally, the validity of questionnaires was examined by factor analysis. The results of this test for the personnel's organizational behavior have been reported below:

In Table 1, the Bartlett's test results that approximate the chi-square statistic have been shown. The significance value of Bartlett's test is less than 5% (0.000), suggesting that the factor analysis is appropriate in identifying the operating model structure and the known assumption of the correlation matrix is rejected. Moreover, since the amount of KMO index equals 0.873 (which is close to one), the sample size (i.e. the number of respondents) is sufficient for factor analysis.

Table 1: Bartlett's test results for the organizational behavior questionnaire

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.873
Bartlett's Test of Sphericity	Approx. Chi-Square	2363.141
	df	435
	Sig.	.000

Table 2 shows the variance percentages and the eigenvalues of different factors. Here, factor 1 to 7 have eigenvalues larger than 1 and thus remain in the analysis. If we consider the column of relative cumulative variance, these 7 factors can explain 67.034% of the variance regarding the variables. Therefore, the validity of the questionnaire obtained by factor analysis is more than 67 percent. Additionally, in the remaining rotation of the factors, the proportion of the total variation which is explained by these 7 factors is fixed. Nevertheless, unlike the method without rotation in which the first factor determines a greater percentage of changes (36.715%), in the method of factor rotation, each of them explain approximately the same level of the changes.

Table 2: The percentage of variance and the eigenvalues of different factors for the questionnaire of personnel organizational behavior

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.014	36.715	36.715	11.014	36.715	36.715	4.557	15.189	15.189
2	1.991	6.637	43.352	1.991	6.637	43.352	3.159	10.530	25.719
3	1.651	5.502	48.854	1.651	5.502	48.854	3.130	10.435	36.153
4	1.527	5.089	53.943	1.527	5.089	53.943	2.545	8.483	44.636
5	1.437	4.789	58.731	1.437	4.789	58.731	2.456	8.185	52.822
6	1.303	4.344	63.075	1.303	4.344	63.075	2.382	7.939	60.760
7	1.188	3.959	67.034	1.188	3.959	67.034	1.882	6.274	67.034
8	.945	3.149	70.183						
9	.874	2.914	73.097						
10	.847	2.822	75.919						
11	.813	2.709	78.628						
12	.663	2.211	80.839						
13	.578	1.926	82.765						
14	.552	1.839	84.604						
15	.531	1.771	86.375						
16	.464	1.545	87.921						
17	.453	1.509	89.429						
18	.400	1.333	90.762						
19	.379	1.262	92.024						
20	.325	1.085	93.109						
21	.303	1.012	94.120						
22	.272	.905	95.025						
23	.247	.822	95.847						
24	.222	.739	96.586						
25	.199	.664	97.250						
26	.193	.645	97.894						
27	.184	.612	98.506						
28	.166	.554	99.061						
29	.147	.492	99.553						
30	.134	.447	100.000						

The results of this test are presented below for the questionnaire of customer satisfaction:

In table 3, the results of Bartlett's test that approximates Chi-2 statistic have been shown. The significance level of Bartlett's test is less than 5% (0.000), suggesting that factor analysis is appropriate in identifying the structural factor model and the known assumption of the correlation matrix is rejected. Moreover, since the amount of KMO index equals 0.875 (close to one), the sample size (i.e. the number of respondents) is sufficient for factor analysis.

Table 3: Bartlett's test results for the customer satisfaction questionnaire

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.875
Bartlett's Test of Sphericity	Approx. Chi-Square	2432.251
	df	351
	Sig.	.000

Table 4 shows the variance percentages and the eigenvalues of different factors. Here, factors 1 to 6 have eigenvalues greater than 1 and thus they remain in the analysis. If we look at the column of relative cumulative variance, these 6 factors can explain 68.936% of the variance of variables. Therefore, the validity of the questionnaire obtained by factor analysis is more than 68 percent. Additionally, in the remaining rotation of the factors, the proportion of the total variation that is explained by these seven factors is fixed. Nevertheless, unlike the method without rotation in which the first factor determines a greater percentage of changes (37.962%), in the method of factor rotation, each of them explain approximately the same level of the changes.

Table 4: The percentage of variance and the eigenvalues of different factors for the questionnaire of customer satisfaction

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.250	37.962	37.962	10.250	37.962	37.962	4.027	14.916	14.916
2	2.661	9.854	47.816	2.661	9.854	47.816	3.837	14.212	29.128
3	1.652	6.120	53.937	1.652	6.120	53.937	3.666	13.578	42.705
4	1.541	5.706	59.642	1.541	5.706	59.642	3.236	11.984	54.689
5	1.398	5.176	64.819	1.398	5.176	64.819	2.625	9.721	64.410
6	1.112	4.117	68.936	1.112	4.117	68.936	1.222	4.526	68.936
7	.949	3.513	72.449						
8	.761	2.820	75.269						
9	.756	2.798	78.068						
10	.679	2.514	80.581						
11	.596	2.208	82.789						
12	.567	2.098	84.887						
13	.484	1.794	86.682						
14	.443	1.640	88.322						
15	.410	1.519	89.841						
16	.397	1.471	91.312						
17	.361	1.339	92.650						
18	.300	1.110	93.761						
19	.295	1.092	94.853						
20	.237	.879	95.732						
21	.207	.767	96.499						
22	.198	.733	97.232						
23	.181	.671	97.903						
24	.172	.638	98.541						
25	.144	.535	99.076						
26	.137	.507	99.583						
27	.113	.417	100.000						

The reliability of the questionnaire

In this paper, Cronbach's alpha was used to examine the reliability of the questionnaire. The alpha coefficient was calculated using the below formula:

$$\alpha = \frac{n}{n-1}\left(1 - \frac{\delta_i^2}{\delta_t^2}\right)$$

N: The number of questionnaires

δ_i^2 : The variance of the responses to each item

δ_t^2 : The variance of responses for each sample

The obtained α coefficient is a number between zero and one and as this number is closer to 1, it indicates the greater reliability of the questionnaire. If this coefficient is small (less than 0.5), we should remove the questions that have made α smaller to correct the questionnaire. To make sure that the distributed questionnaires are reliable, Cronbach's alpha coefficient was calculated in SPSS for the respective questionnaires and this figure was calculated as 0.938 for the questionnaire of personnel organizational behavior and 0.934 for the questionnaire of customer satisfaction. Therefore, it was concluded that the questionnaires have the necessary reliability.

Findings

The investigation of the characteristics of sample members

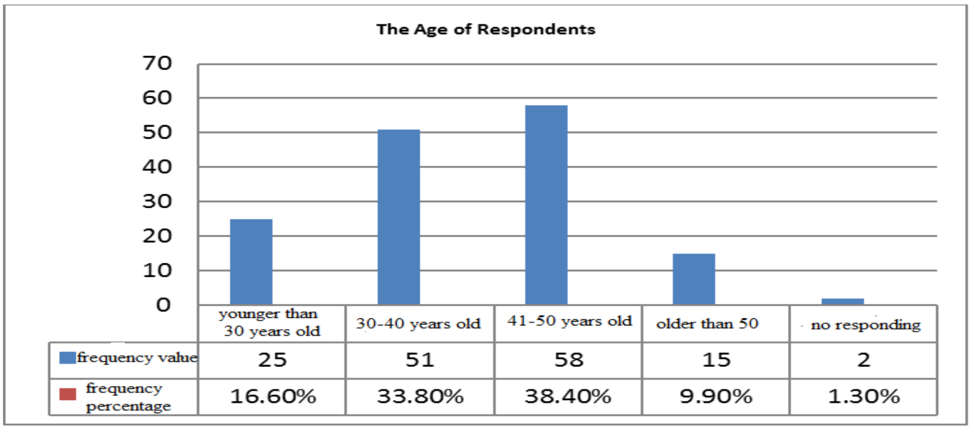

Diagram 1: The age of respondents

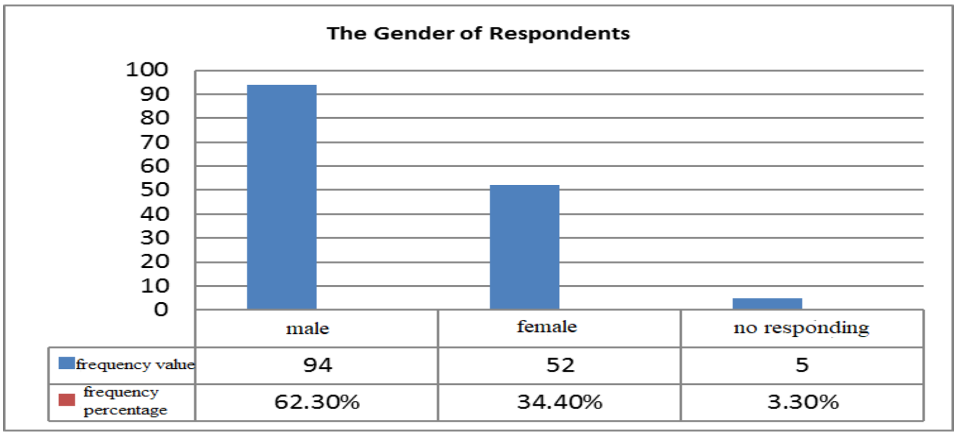

Diagram 2: The gender of respondents

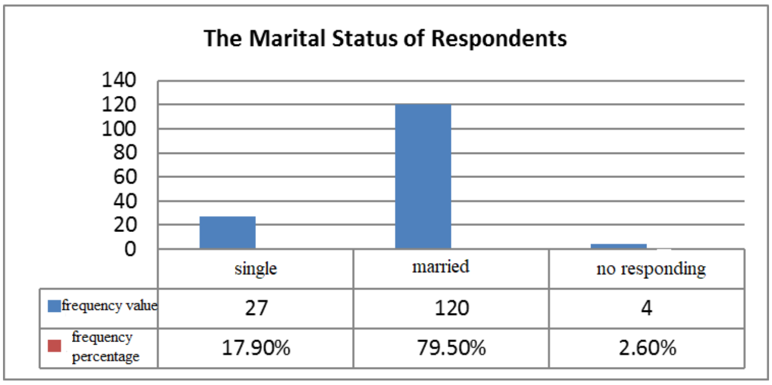

Diagram 3: The marital status of respondents

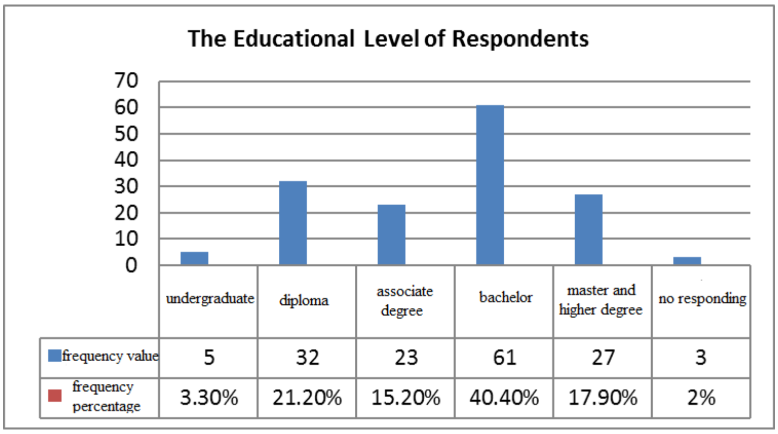

Diagram 4: The educational level of respondents

Inferential statistics

The results of Kolmogorov–Smirnov test

As observed, the level of significance is above 5% for the components of the personnel organizational behavior and customer satisfaction. Therefore, the distribution is normal and parametric tests are used to examine the hypotheses.

Table 5: The results of Kolmogorov–Smirnov test

One-Sample Kolmogorov-Smirnov Test			
		Organizational behavior	Customer satisfaction
N		151	151
Normal Parameters	Mean	3.12	3.66
	Std. Deviation	0.614	0.540
Most Extreme Differences	Absolute	0.098	0.074
	Positive	0.091	0.035
	Negative	-0.098	-0.074
Kolmogorov-Smirnov Z		1.207	.904
Asymp. Sig. (2-tailed)		.108	.387

The main hypothesis: The organizational behavior of the personnel at Refah Bank affects customer satisfaction.

Table 6 shows the results of the simple regression test. The results of this table include 4 sections which are described below:

1) The inserted/removed variables: Here, the personnel organizational behavior is considered as the independent variable and the dependent variable is customer satisfaction. The method used in this study to determine the regression is the “Enter” method. The “Enter” method is an approach to variable selection in which all the inserted variables at one stage are used to determine the regression.

2) The summary of model (R coefficient values and Durbin-Watson): The results of this section include the multiple correlation coefficient (0.640), coefficient of determination (0.409), adjusted coefficient of determination (0.405), standard error of estimate (0.41643) and Durbin-Watson statistic (1.839). Since Durbin-Watson statistic is within the range of 1.5 to 2.5, the assumption of the absence of correlation of errors is not rejected and the regression can be used.

3) Regression variance analysis: the results of regression variance analysis are used to determine the certainty of a linear relationship between the variables. The statistical hypotheses of the significance test for the whole regression model are given below:

$$\begin{cases} H_0\text{: There is no linear relationship between the two variables} \\ H_1\text{: There is a linear relationship between the two variables} \end{cases}$$

Here, the significance (0.000) is less than 5 percent and the assumption about the linearity of the model will be accepted.

4) The regression coefficients: This part of the table includes unstandardized coefficients (B), standardized coefficients (Beta), t statistic, and the significance used to test the assumption of the equality of each coefficient in column B with number zero. As *Sig* is the test of equality for the fixed value and zero (0.000) and is less than 5%, the assumption that this regression coefficient equals zero is rejected and it must remain in the regression equation. On the other hand, *Sig* is the equality test of regression coefficient with zero (0.000) and is less than 5%, therefore the assumption that this coefficient equals zero is rejected and it has to remain in the equation. Here, the regression equation is described as such. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (organizational behavior of the personnel). Therefore, the main hypothesis is accepted and organizational behavior of the staff at Refah Bank affects customer satisfaction.

Table 6: The results of the simple regression test for the main hypothesis

Variables Entered/Removed						
Model		Variables Entered		Variables Removed		Method
1		Personnel organizational behavior		0		Enter
Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		0.640	0.409	0.405	0.41643	1.839
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.879	1	17.879	103.099	0.000
	Residual	25.838	149	0.173		
	Total	43.717	150			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	1.906	0.176		10.823	0.000
	Personnel organizational behavior	0.562	0.055	0.640	10.154	0.000

Subsidiary hypothesis 1: The professional commitment of the staff at Refah Bank has a role in customer satisfaction.

Table 7 provides the results of the simple regression test.

Here, the regression equation is y = 2.418 + 0.397x. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the professional commitment of the personnel). Therefore, the first subsidiary hypothesis is accepted and the professional commitment of the personnel at Refah bank affects customer satisfaction.

Table 7: The results of simple regression test for the first subsidiary hypothesis

Variables Entered/Removed						
Model		Variables Entered		Variables Removed		Method
1		Personnel professional commitment		0		Enter
Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		0.484	0.234	0.229	0.47412	1.800
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.223	1	10.223	45.476	0.000
	Residual	33.494	149	0.225		
	Total	717	150			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.418	0.188		12.839	0.000
	Personnel professional commitment	0.397	0.059	0.484	6.744	0.000

Subsidiary hypothesis 2: The interpersonal communicative skills of the staff at Refah Bank have a role in customers' satisfaction.

Table 8 provides the results of the simple regression test.

Here, the regression equation is y = 2.591 + 0.343x. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the interpersonal communicative skills of the personnel). Therefore, the second subsidiary hypothesis is accepted and the interpersonal communicative skills of the personnel at Refah bank affect customers' satisfaction.

Table 8: The results of simple regression test for the second subsidiary hypothesis

Variables Entered/Removed						
Model		Variables Entered		Variables Removed		Method
1		The individual communicative skills of the personnel		0		Enter
Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		0.473	0.224	0.219	0.47720	1.837
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.787	1	9.787	42.978	0.000
	Residual	33.930	149	0.228		
	Total	43.717	150			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.591	0.168		15.454	0.000
	The individual communicative skills of the personnel	0.343	0.052	0.473	6.556	0.000

Subsidiary hypothesis 3: The occupational motivation of the staff at Refah Bank has a role in customers' satisfaction.

Table 9 provides the results of the simple regression test.

Here, the regression equation is y = 2.600 + 0.354x. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the occupational motivation of the personnel). Therefore, the third subsidiary hypothesis is accepted and the occupational motivation of the personnel at Refah bank affects customers' satisfaction.

Table 9: The results of simple regression test for the third subsidiary hypothesis

Variables Entered/Removed						
Model		Variables Entered		Variables Removed		Method
1		The professional motivation of the personnel		0		Enter
Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		0.526	0.277	0.272	0.45188	1.945
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.509	1	11.509	56.359	0.000
	Residual	30.017	147	0.204		
	Total	41.526	148			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.600	0.147		17.642	0.000
	The professional motivation of the personnel	0.354	0.046	0.526	7.507	0.000

Subsidiary hypothesis 4: The customer-oriented skills of the staff at Refah Bank have a role in customers' satisfaction.

Table 10 provides the results of the simple regression test.

Here, the regression equation is y = 2.476 + 0.382x. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the customer-oriented skills of the personnel). Therefore, the fourth subsidiary hypothesis is accepted and the customer-oriented skills of the personnel at Refah bank affect customers' satisfaction.

Table 10: The results of simple regression test for the fourth subsidiary hypothesis

Variables Entered/Removed						
Model		Variables Entered		Variables Removed		Method
1		Personnel customer-oriented skills		0		Enter
Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1		0.568	0.323	0.318	0.43736	1.805
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.408	1	408	70.095	0.000
	Residual	28.118	147	0.191		
	Total	41.526	148			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.476	0.147		16.842	0.000
	Personnel customer-oriented skills	0.382	0.046	0.568	8.372	0.000

Subsidiary hypothesis 5: The organizational citizenship behavior of the staff at Refah Bank has a role in customers' satisfaction.

Table 11 provides the results of the simple regression test.

Here, the regression equation is $y = 2.511 + 0.377x$. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the organizational citizenship behavior of the personnel). Therefore, the fifth subsidiary hypothesis is accepted and the organizational citizenship behavior of the personnel at Refah bank affects customers' satisfaction.

Table 11: The results of simple regression test for the fifth subsidiary hypothesis

Variables Entered/Removed			
Model	Variables Entered	Variables Removed	Method
1	The organizational citizenship behavior of the personnel	0	Enter

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.495	0.245	0.240	0.46189	1.766

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.164	1	10.164	47.644	0.000
	Residual	31.361	147	0.213		
	Total	41.526	148			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.511	0.172		14.859	0.000
	The organizational citizenship behavior of the personnel	0.377	0.055	0.495	6.902	0.000

Subsidiary hypothesis 6: The emotional intelligence of the staff at Refah Bank has a role in customers' satisfaction.

Table 12 provides the results of the simple regression test.

Here, the regression equation is $y = 2.323 + 0.419x$. This equation shows that there is a positive linear relationship with a positive y-intercept between the dependent variable (customer satisfaction) and the independent variable (the emotional intelligence of the personnel). Therefore, the sixth subsidiary hypothesis is accepted and the emotional intelligence of the personnel at Refah bank affects customers' satisfaction.

Table 12: The results of simple regression test for the sixth subsidiary hypothesis

Variables Entered/Removed			
Model	Variables Entered	Variables Removed	Method
1	The emotional intelligence of the staff	0	Enter

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.544	0.296	0.291	0.44607	1.940

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.275	1	12.275	61.691	0.000
	Residual	29.250	147	0.199		
	Total	41.526	148			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	B		
1	(Constant)	2.323	0.175		13.251	0.000
	The emotional intelligence of the staff	0.419	0.053	0.544	7.854	0.000

The review of the current status of research components

The one-sample t-test is used to examine the status of research components. The results of this test are given in Table 13. The test results showed that the components of occupational commitment, interpersonal communicative skills, emotional intelligence, and the organizational behavior of the personnel and customer satisfaction are favorable, but the status of occupational motivation, customer-oriented skills, and the organizational citizenship behavior is not desirable.

The confidence interval for the component of occupational commitment: $0.02 \leq \mu - 3 \leq 0.23 \rightarrow 3.02 \leq \mu \leq 3.23$

The confidence interval for the component of interpersonal communicative skills: $0.00 \leq \mu - 3 \leq 0.24 \rightarrow 3.00 \leq \mu \leq 3.24$

The confidence interval for the component of occupational motivation: $-0.03 \leq \mu - 3 \leq 0.24 \rightarrow 2.97 \leq \mu \leq 3.24$

The confidence interval for the component of customer-oriented skills: $-0.01 \leq \mu - 3 \leq 0.25 \rightarrow 2.99 \leq \mu \leq 3.25$

The confidence interval for the component of organizational citizenship behavior: $-0.04 \leq \mu - 3 \leq 0.18 \rightarrow 2.96 \leq \mu \leq 3.18$

Confidence interval for the components of emotional intelligence: $0.11 \leq \mu - 3 \leq 0.33 \rightarrow 3.11 \leq \mu \leq 3.33$

Confidence interval for the component of the personnel's organizational behavior: $0.02 \leq \mu - 3 \leq 0.22 \rightarrow 3.02 \leq \mu \leq 3.22$

The confidence interval for component of customer satisfaction: $0.57 \leq \mu - 3 \leq 0.75 \rightarrow 3.57 \leq \mu \leq 3.75$

Table 13:One-sample t-test results

Component	M	SD	T Statistic	df	Sig	95% confidence interval of sample mean difference	
						Lower level	Upper level
Occupational commitment	3.13	0.657	2.403	150	0.018	0.02	0.23
Interpersonal communicative skills	3.12	0.746	2.001	150	0.047	0.00	0.24
Occupational motivation	3.10	0.808	1.579	148	0.116	-0.03	0.24
Customer-oriented skills	3.12	0.787	1.909	148	0.058	-0.01	0.25
Organizational citizenship behavior	3.07	0.695	1.268	148	0.207	-0.04	0.18
Emotional intelligence	3.22	0.688	3.866	148	0.000	0.11	0.33
Personnel organizational behavior	3.12	0.614	2.449	150	0.015	0.02	0.22
Customers' satisfaction	3.66	0.540	15.034	150	0.000	0.57	0.75

Two-sample t-test results

The role of gender in the respondents' views

To measure the differences of views between women and men about the main features of the organizational behavior of the personnel and customer satisfaction, we use a two-sample t-test.

The results of the test are shown in Table 14. As can be seen, the views of men and women are the same in all components of occupational commitment, interpersonal communicative skills, occupational motivation, customer-oriented skills, organizational citizenship behavior, emotional intelligence, the organizational behavior of the personnel and customer satisfaction.

Table 14: The results of the role of gender in respondents' views

Component	Gender	M	SD	Levene test for the equality of variances		T-test for the equality of means		
				F Statistic	Sig	statistics t	df	Sig (interquartile)
Occupational commitment	Male	3.07	0.585	1.690	0.196	1.580	144	0.116
	Female	3.24	0.723					
Interpersonal communicative skills	Male	3.12	0.649	8.231	0.005	-0.101	81.712	0.920
	Female	3.14	0.887					
Occupational motivation	Male	3.12	0.755	0.791	0.375	0.069	142	0.945
	Female	3.11	0.858					

Customer-oriented skills	Male	3.15	0.730	1.413	0.236	0.255	142	0.799
	Female	3.12	0.834					
Organizational citizenship behavior	Male	3.05	0.659	0.009	0.925	-1.072	142	0.285
	Female	3.17	0.682					
Emotional intelligence	Male	3.19	0.653	0.646	0.423	-0.739	142	0.461
	Female	3.28	0.712					
Organizational behavior	Male	3.10	0.555	3.907	0.050	-0.756	144	0.451
	Female	3.18	0.660					
Customer satisfaction	Male	3.65	0.539	0.272	0.603	-0.544	144	0.587
	Female	3.70	0.513					

The role of marital status in the respondents' views

The results of the test are shown in Table 15. As can be seen, the views of single and married respondents are the same in all components of occupational commitment, interpersonal communicative skills, occupational motivation, customer-oriented skills, organizational citizenship behavior, emotional intelligence, the organizational behavior of the personnel and customer satisfaction.

Table 15: The results of the test for the role of marital status in respondents' views

Component	**Marital status**	**M**	**SD**	**Levene test for the equality of variances**		**T-test for the equality of means**		
				F statistic	**Sig**	**T statistic**	**df**	**Sig (interquartile)**
Occupational commitment	Single	3.09	0.727	0.241	0.624	-0.480	145	0.632
	Married	3.16	0.638					
Interpersonal communicative skills	Single	3.13	0.769	0.002	0.968	-0.085	145	0.932
	Married	3.14	0.740					
Occupational motivation	Single	3.27	0.808	0.019	0.890	1.053	143	0.294
	Married	3.09	0.794					
Customer-oriented skills	Single	3.31	0.875	0.872	0.352	1.209	143	0.229
	Married	3.11	0.747					
Organizational citizenship behavior	Single	3.30	0.720	0.671	0.414	1.743	143	0.084
	Married	3.05	0.661					
Emotional intelligence	Single	3.29	0.757	0.164	0.686	0.515	143	0.608
	Married	3.22	0.661					
Organizational behavior	Single	3.23	0.646	0.204	0.652	0.856	145	0.393
	Married	3.12	0.593					
Customer satisfaction	Single	3.71	0.428	1.479	0.226	0.422	145	0.673
	Married	3.67	0.557					

The results of multiple comparisons of the population means (ANOVA)

The test of the role of age in the respondents' views

The test results are shown in Table 16. As can be seen, the views of different age groups are the same in all components of occupational commitment, interpersonal communicative skills, occupational motivation, customer-oriented skills, organizational citizenship behavior, emotional intelligence, the organizational behavior of the personnel and customer satisfaction.

Table 16: The results of the test on the role of age in respondents' views

Customer satisfaction	Organizational behavior	Emotional intelligence	Organizational citizenship behavior	Customer -oriented skills	Occupational motivation	Interpersonal communicative skills	Occupational commitment	component Statistic
0.616	0.450	0.450	0.161	0.659	0.669	1.399	1.070	F statistic
0.606	0.717	0.718	0.922	0.578	0.572	0.245	0.364	Sig value

The test of the role of educational level in the respondents' views

The test results are shown in Table 17. As can be seen, the views of different educational groups are the same in all components of occupational commitment, interpersonal communicative skills, occupational motivation, customer-oriented skills, organizational citizenship behavior, emotional intelligence, and the organizational behavior of the personnel but they are not the same for the component of customer satisfaction. The results of Tukey test regarding the customer satisfaction showed that there is a significant difference between the respondents with a bachelor's degree and those with a high school diploma while there are no significant differences in the mean of other educational groups.

Table 17: The results of the test on the role of education in respondents' views

Customer satisfaction	Organizational behavior	Emotional intelligence	Organizational citizenship behavior	Customer-oriented skills	Occupational motivation	Interpersonal communicative skills	Occupational commitment	component / Statistic
3.946	1.192	0.757	0.806	1.272	1.612	0.194	1.332	F statistic
0.005	0.317	0.555	0.524	0.284	0.175	0.941	0.261	Sig value

We use post hoc tests to determine which means are different with respect to the component of customer satisfaction. One of these tests is the Tukey test and these components will be discussed in what follows.

Customer satisfaction

In table 18, the Tukey test results are provided. In the column dealing with mean differences, the significant differences are marked with *. As can be seen, according to Tukey test, there exists a significant difference between the group holding a high school diploma and those holding a bachelor's degree (that is, the significance level is below 5%), but there is no significant difference between the mean of other educational groups (that is, the significance level is above 5%). To examine the smaller or larger paired mean values of the groups, we may use the upper and lower levels.

Table 18: The results of Tukey test for the component of customer satisfaction

Multiple Comparisons					
Customer satisfaction Tukey HSD					
(I) Education	(J) Education	Mean Difference (I-J)	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Certificates lower than High School Diploma	High School Completion Degree	0.164	0.963	-0.52	0.85
	Associate's Degree	0.537	0.216	-0.16	1.24
	BA	0.500	0.228	-0.16	1.16
	Master's Degree & higher	0.242	0.869	-0.45	0.93
High School Completion Degree	Certificates lower than High School Diploma	-0.164	0.963	-0.85	0.52
	Associate's Degree	0.373	0.065	-0.01	0.76
	BA	0.336*	0.026	0.03	0.65
	Master's Degree & higher	0.078	0.978	-0.29	0.45
Associate's Degree	Certificates lower than High School Diploma	-0.537	0.216	-1.24	0.16
	High School Completion Degree	-0.373	0.065	-0.76	0.01
	BA	-0.037	0.998	-0.38	0.31
	Master's Degree & higher	-0.295	0.258	-0.70	0.11
BA	Certificates lower than High School Diploma	-0.500	0.228	-1.16	0.16
	High School Completion Degree	-0.336*	0.026	-0.65	-0.03
	Associate's Degree	0.037	0.998	-0.31	0.38
	Master's Degree & higher	-0.258	0.195	-0.58	0.07
Master's Degree & higher	Certificates lower than High School Diploma	-0.242	0.869	-0.93	0.45
	High School Completion Degree	-0.078	0.978	-0.45	0.29
	Associate's Degree	0.295	0.258	-0.11	0.70
	BA	0.258	0.195	-0.07	0.58

In table 19, the component of customer satisfaction has been divided into similar subgroups based on the mean values. As observed, the mean values of the educational groups of AA, BA, MA and higher university degrees are set in one group and the mean value of the AA, BA, MA and higher degrees and high school diplomas and certificates lower than the diploma are homogenous and are thus placed in one group.

Table 19: The homogeneity of the component of customer satisfaction

Customer Satisfaction			
Tukey HSD			
Education Level	Number of Data	Subset for alpha = 0.05	
		1	2
AA	23	3.51	
BA	61	3.54	3.54
MA	27	3.80	3.80
High School Diploma	32	3.88	3.88
Certificates below high school diploma	5		4.04
Sig.		0.268	0.060

Conclusion

The results of the study showed that organizational behavior generally plays a key role in customer satisfaction. Organizational behavior includes factors such as occupational commitment, interpersonal communicative skills, occupational motivation, customer-oriented skills, organizational citizenship behavior, and emotional intelligence. In this study, each of these components was examined with regard to customer satisfaction and their significant relationships were confirmed with respect to customer satisfaction. As regards the relationship between organizational citizenship behavior and customer satisfaction, the results of this study are consistent with previous results from Schneider et al. (2005), Hassani Kakhaki and Gholipour (2007), Hamidi et al. (2011) and Nejat et al. (2009). In their studies, they have confirmed the relationship between organizational citizenship behavior and customer satisfaction. Similar to the results of the present study, Okapra (2008) has confirmed the relationship between occupational commitment and customer satisfaction. In relation to emotional intelligence and customer satisfaction, Nourleila et al. (2009) confirmed the relationship between these two variables in an article. Yazdani et al. (2011) have confirmed the relationship between customer-orientation and customer satisfaction that is consistent with the findings of the present study. In addition, the effects of demographic variables were investigated concerning the results of hypotheses in the second stage. The results showed that the views of female vs. male and single vs. married respondents and the views of different educational and age groups are the same. However, the educational background of respondents affected customer satisfaction. In this way, there was a difference between the views of respondents with BAs and high school diplomas.

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EXAMINING NEW PRODUCT DEVELOPMENT STRATEGIES: A SYSTEM DYNAMICS APPROACH

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Sogand Yekenejadian[29]

Abstract

New product development (NPD) is among the most important factors of survival in today competitive business environment. Many of NPD projects have failed. One of the most important reasons is pursuing wrong launch strategies. Either, allocation of too much resource in case of market low response or allocation of few amounts of resource in case of market high response can bring the company with a complete disaster. In this study, based on system dynamics (SD) methodology, influencing variables and components of new product launch strategies were identified and finalized applying Delphi method. Focus groups used Fuzzy Cognitive Map (FCM) as a tool to judge about causal relationships. Validity of the model was approved using three known methods. Then, model run and system was simulated under several scenarios and policies in each. The results showed that flexible launch strategies comparing to static ones, under condition of market uncertainty, have better performance.

Key words: New Product Development, New Product Launch Strategies, System Dynamics, Fuzzy Cognitive Map

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Introduction

The importance of new product launch strategies and their implementation have been more emphasized in recent years. Numerous studies have already been conducted on successful launch strategies including the ones by Ali et al. (1995), Beard et al. (1996), Traynor (1989), Yoon et al. (1985).

Fred Langerak et al. (2004) investigated the role of several factors in new product success and performance one of which was "new product launch process". This article presents a conceptual framework of the characteristics considered in the study and the relationships between them. Then, some hypotheses are suggested for the factors. One of the hypotheses will test the launch issue with the theme that higher efficiency in 1. market testing, 2. launch budgeting, 3. launch strategies and tactics will improve new product performance. Finally, it is concluded that efficiency in market tests, launch budgeting, and launch strategies is one of the most important requirements for the success of new product (Fred Langerak et al., 2004).

Hultink et al. identified strategic and tactical variables associated with new product launch for the first time. Then, some other studies were conducted on launch tactics among which is the study done by Beard et al. (1996). They described and classified tactics of new product launch with modern technology in firms (Hultink et al., 1996).

Other studies have considered surrounding environment and uncertainty in new product launch process. For instance, Jiayo Chen et al. (2005) published an article entitled "The impacts of speed-to-market on new product success: moderating effects of uncertainty". The results of their study showed that speed-to-market has generally a positive impact on new product success, but market uncertainty moderates direct effects. Moreover, time-based strategies are more useful and important when environment and market changes are unknown and fast (Jiyao Chen et al., 2005).

Clearly, organization flexibility becomes important under uncertainty conditions during new product launch process. Yuan Li et al. (2009) investigated this matter in an article entitled as "Can strategic flexibility help firms profit from product innovation?" In this study, they examined the accuracy of four assumptions concerning the relations between product innovation, performance and flexibility of resources through an experimental test on 670 Chinese firms. Results showed positive effect of innovation on firms' performance and the moderating role of resources flexibility in this relation (Li et al., 2009).

Many studies have been carried out on the benefits of the integration of matrix performance in the product development process so far. One of the newest studies is the one conducted by Michael Song et al. (2009) as "The integration of marketing and production during the new product development processes: effects on the success of product with high or low innovation". They examined 643 American firms. The study just examined the direct effects of marketing and production integration on product development process and it is obvious that there might be further indirect effects that had not been addressed. The results showed that the integration of marketing and production is very important for products with both high and low innovation. In relation to highly innovative products, it was seen that the integration of marketing and production, could largely overcome the environment uncertainty (Song et al., 2009).

Anna Shaojie et al. (2011) stated that supply chain activities play an important role in new product launch by converting market demand into actual sales, and yet much attention has not been paid to the relationship and collaboration between marketing and supply chain. They conducted a research in which they presented a dynamic model of new product launch and examined the scale of launch under different conditions of the market and elements of launch tactics including advertising, distribution, pricing, production and inventory management. The proposed model in this study indicates how and why dynamic methods are better than static ones and help the managers understand the interactions between different launch elements much better. The following figure displays the basic model of the study (Shaojie et al., 2011).

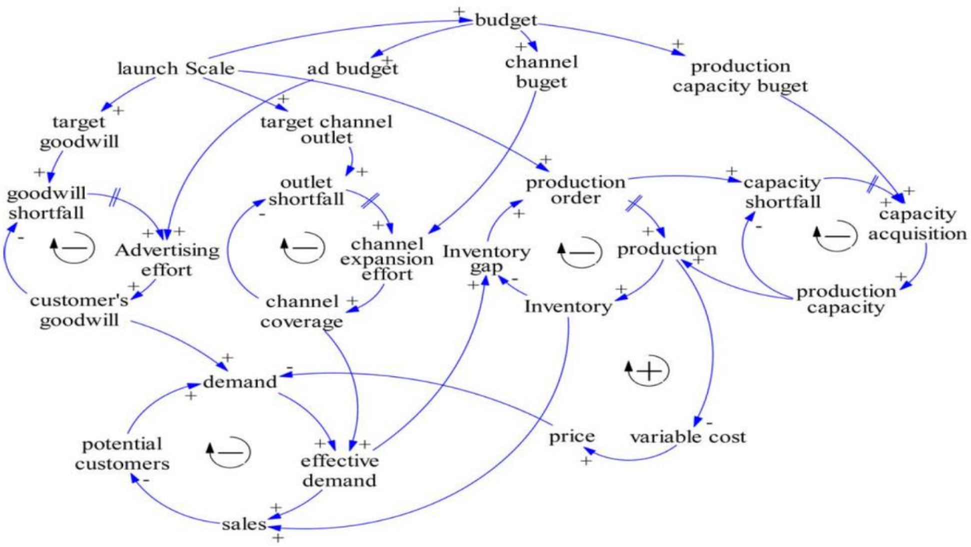

Figure 1: Dynamic model of new product launch

Reference: Shaojie et al., 2011

This study is the first attempt to develop new product launch strategies with system dynamics modeling. Although, it raises new dimensions in the issue of launch, the elements of the model and their relationships are merely identified based on literature review. However, some relationships and components might not be seen in this way. Moreover, the model lacks some important elements in new product launch process concerning to financial issues, that might have some kind of effects on the results.

Wojciech Stez et al. (2016) did a study in which they analyzed new product pricing policy in the field of information technology. Using a system dynamics method, they also offered a model that, unlike the others, would consider only those parameters that could be estimated accurately. The model consists of several main components: 1. acceptance of the product by potential customers 2. Management of sales number reports 3. calculation of product price. The results of the study provide valuable information on identifying the variables affecting new products pricing and causal relationships between them (Stez et al., 2016).

An overview of the research literature shows that new product launch is a critical stage in product development process and an efficient product launch has a great impact on new product success and even a good product with poor launch might fail. Furthermore, new product launch is a high-risk process occurring in the uncertainty environment that not only includes marketing aspects such as price management, channel management, advertising management, promotion process, demand management, and launch scale management, but also covers aspects such as production and inventory management. In such an atmosphere of uncertainty, the way one firm developments its new product launch strategies are very important. It helps firms to properly organize their resources to launch new products. Although, there are studies done on the development of product launch strategies but majority of them overlooked the uncertainty and instability inherent in the launch process. However, the process of product launch to market occurs in an uncertain, dynamic and interactive environment. Therefore, in such an environment, firms require strategies for launching their new products that are more flexible and are able to compensate for errors resulting from initial predictions, as much as possible (Shaojie et al., 2011).

Very few studies have been done in the field of NPD using dynamic methodology. So there is still a need to develop dynamic NPD models suitable for nowadays ever changing environment. In this study we are going to develop such a dynamic model for analyzing launch strategies in an uncertain, interactive and instable environment.

Research Methodology

For doing the study, as shown in figure 2, in the first phase for conceptualizing of the problem, literature was reviewed. As a result, NPD dimensions and components were identified. Then, in order to validate and finalize the identified elements, Delphi method was used. Delphi panel members were consisted of 12 subject matter experts in the R&D and marketing departments of company ABC, a leading company acting in the furniture industry. Tabela 1 shows the final identified elements.

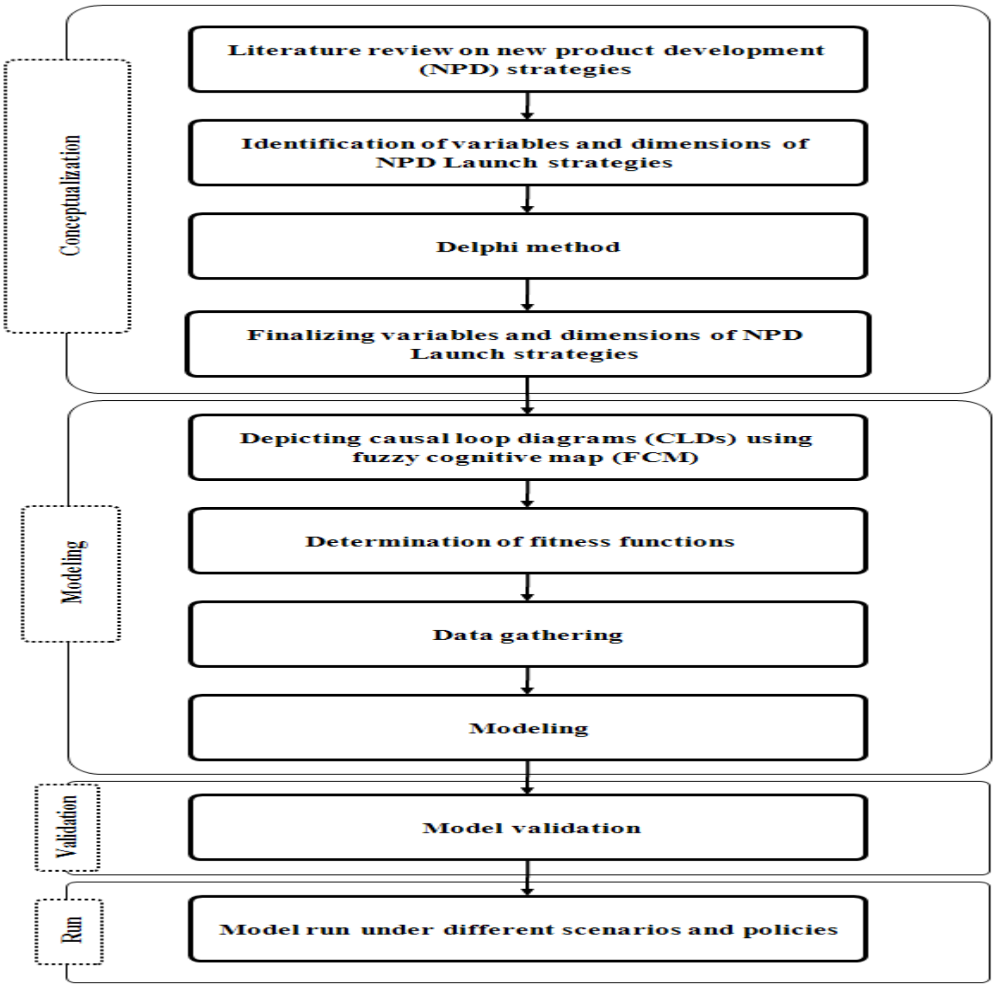

Figure 2: Research Stages

Table 1: Dimensions and components of new product launch

Dimension	Component	Reference
Demand management	Demand size	Bass, 1969
	sales	Hultink & Robben, 1999 Dube et al., 2010
	Product price	Repenning, 2001 Kotler et al. ,2009
Advertisement management	Customer goodwill	Bass, 1969, 1994, 2004
Distribution channel management	Number of outlets	Lilien and Kotler, 1983
	Channel budget	Lilien and Kotler, 1983
Production and inventory management	Production capacity	Chambers et al. 2009 Song and Swing, 2009
	Production order	Dube et al., 2010
Launch scale management	Launch scale	Shaojie et al., 2011
	Launch budget	Shaojie et al., 2011
Pricing management	Production costs	Hultink and S. J. Robben Liu, 2010 Stecz & Pytlak, 2016
	Advertising cost	Bass, 1969

Then, in the phase of modeling, it was needed to explain dynamic hypotheses. And based on them, draw the causal loop diagrams (CLDs) where interviews, archival data and soft techniques such as Focus Groups are considered as common techniques for conceptualizing the model (Forrester, 1961; Sterman, 2000). Qualitative methods such as interviews and Focus groups are suitable for analyzing soft variables in the model. In this study, in order to make results of Qualitative methods more precise and more reliable, by pursuing a mixed methodology, we have used fuzzy cognitive maps (FCM) as a supplementary tool. As a philosophical underpinning for mixed methods studies, Tashakkori and Teddlie (1998) and Patton (1990) convey the importance for focusing attention on the research problem in social science research and then applying pluralistic approaches to derive knowledge about the problem. A fuzzy cognitive map (FCM) is a cognitive map where relationships among the elements derive from a given mental map, with their relative importance representing the magnitude of the causality of such elements. Application of FCMs requires the interpretation of subjective information, for example, stakeholders' perceptions or expert knowledge, into semi-quantitative description of variables and their interrelations (Ozesmi, U. and Ozesmi, S. 2003; Kok 2009; Vliet et al. 2010). A focus group of 25 experts consisted of company ABC experts in the marketing and R&D department accompanied with its core customers went through FCM procedure to identify causal relationships among NPD elements captured in the first phase. Figure 3 shows the resulted cognitive map.

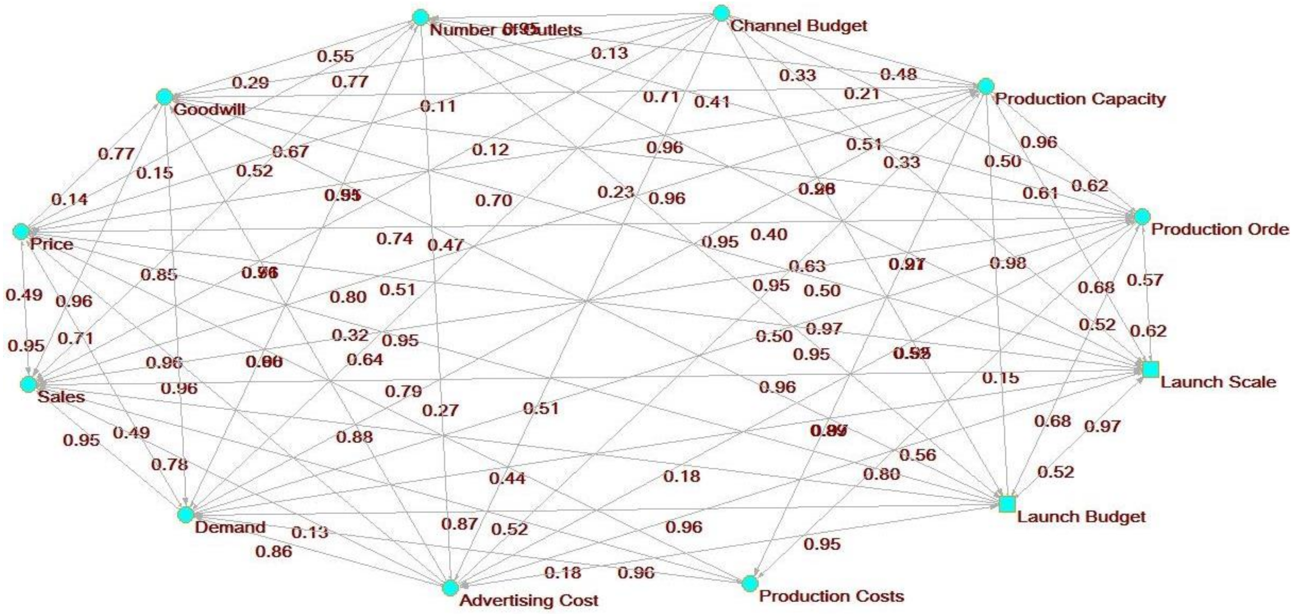

Figure 3: Cognitive map resulted from FCM

Then, reinforcing and balancing causal loops were depicted with regard to causal map at hand. Fitness functions added to the relationships. Parameters and initial values of fitness functions gathered through referring to recorded historical data. After some iteration adjustments were made to the model. The model was validated by using several methods of structural adequacy, behavior reproduction and extreme conditions. Then validated model was run under some scenarios. Difference policies, namely launch strategies, in each scenario was analyzed in the simulated system and compared to other policies. In the following paragraph the detailed process of modeling the problem is illustrated.

Modeling

Level 0 Model was drawn by taking into account the relationships between main variables including production, pricing, management of distribution channel and advertising. Then, Level 1 Model was formed by adding the identified components of each variable and the relationships between them. The final model (Model Level 2) was developed by adding fitting functions, initial values and parameters to the Level 1 Model.

As figure 4 shows, Level 0 Model displays the relationships between the main variable of the research (launch scale) and other four variables. These variables affect the main variable and each other.

Loop R1 shows the larger is the launch scale, the greater will be the rate of production and the grater is the rate of production, the launch with larger scale will be permitted. Price module is placed in a negative or balancing cycle with the launch scale (loop B1). That is, the lower is the product price, more sales will be achieved and in order to respond to the market demand, larger launch scale should be considered. If the launch scale increases, the required budget for launch will increase, too. Therefore, sales and marketing costs increase and product price, which is itself a function of sales and marketing costs, will increase in turn. The opposite is also true; as the launch costs decrease, product price will drop, too.

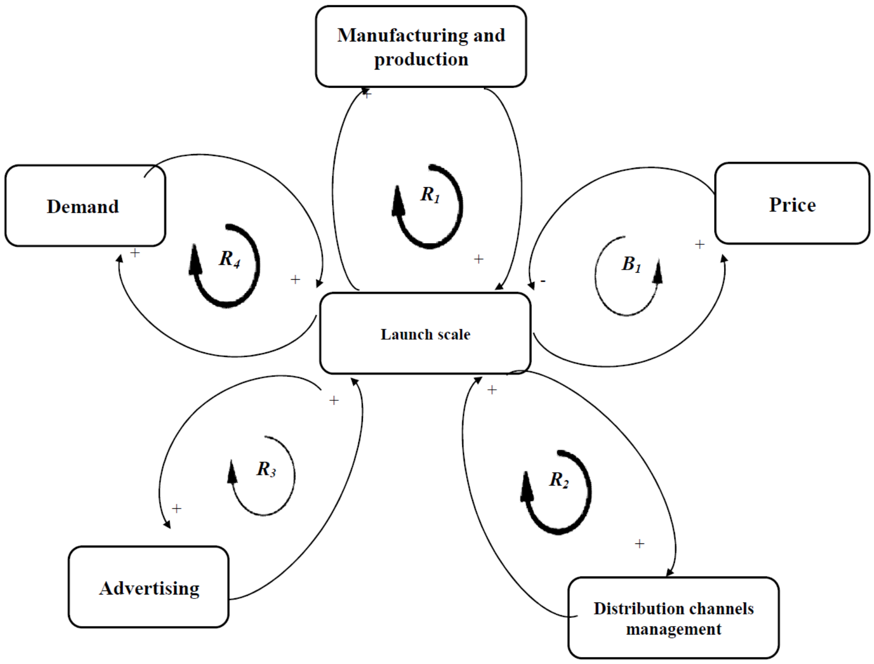

Figure 4: Model Level 0

The bigger is the launch scale, a wider network of distribution channel will be needed (see loop R2). Thus, the increase of launch scale leads to the increase of distribution channel and on the contrary, as the launch scale decreases, fewer distribution channels will be needed. If the distribution channel is expanded, scale of launch should be expanded to meet the demands created through the channels.

In loop R3, by increasing the advertisements, the range of product launch can be enhanced. Therefore, it must be stated that the launch scale will increase too. On the other hand, as the launch scale increases, more budget will be spent on advertizing; thus the rate of advertisement will increase.

The larger is the launch scale, more resources will be devoted to launch activities such as advertising, and as the speed of product acceptance in market increases, demand is expected to grow more, which in turn, requires further activities for demand management (Loop R4). In addition, if demand of a product grows, firms are needed to devote more resources to launch in order to meet the market demand and this will lead to increase of launch scale.

Model Level 1 is formed by adding the identified components of the so called variable (see Table 1) and the relationships between them. By adding more details to this model, Model Level 2 is developed which contains all the details such as fitness function, initial values and other auxiliary variables. Figure 2 shows the final or Level 2 Model.

Among five other modules, here we explain advertising module which is one of the main modules, in detail. For other modules the same process has been passed through. Advertising is an important driver of sales and a key decision in new product launch. This module explains how advertising efforts affect the customers' goodwill toward a new product. The concept of customers' goodwill is very extensive in advertizing and marketing literature and generally represents customers' positive feelings toward a product and their willingness to purchase the product. In this study, customer's goodwill is considered as stock variable ranging from 0 to 1. According to previous studies, if no advertising effort is made to maintain the customers, their goodwill will decline and deteriorate over time from past to present. Meanwhile, the level of customers' goodwill can be changed by doing a series of activities such as advertising and promotion. This issue is displayed by drawing an input flow toward the stock of goodwill level. The goodwill rate (GWR (t)) of the input flow is a function of advertising budgets (BGad) and the rate of customers' goodwill shortfall (GWSF (t)). Customers' goodwill shortfall is the difference between the target goodwill (TGW) and current goodwill level GW (t). Accordingly, follows the conventional behavior of goal seeking in the model. When the current level of customers' goodwill falls below target goodwill, efforts are made to increase it. Such increase is subject to constraints of advertising budget (BGad).

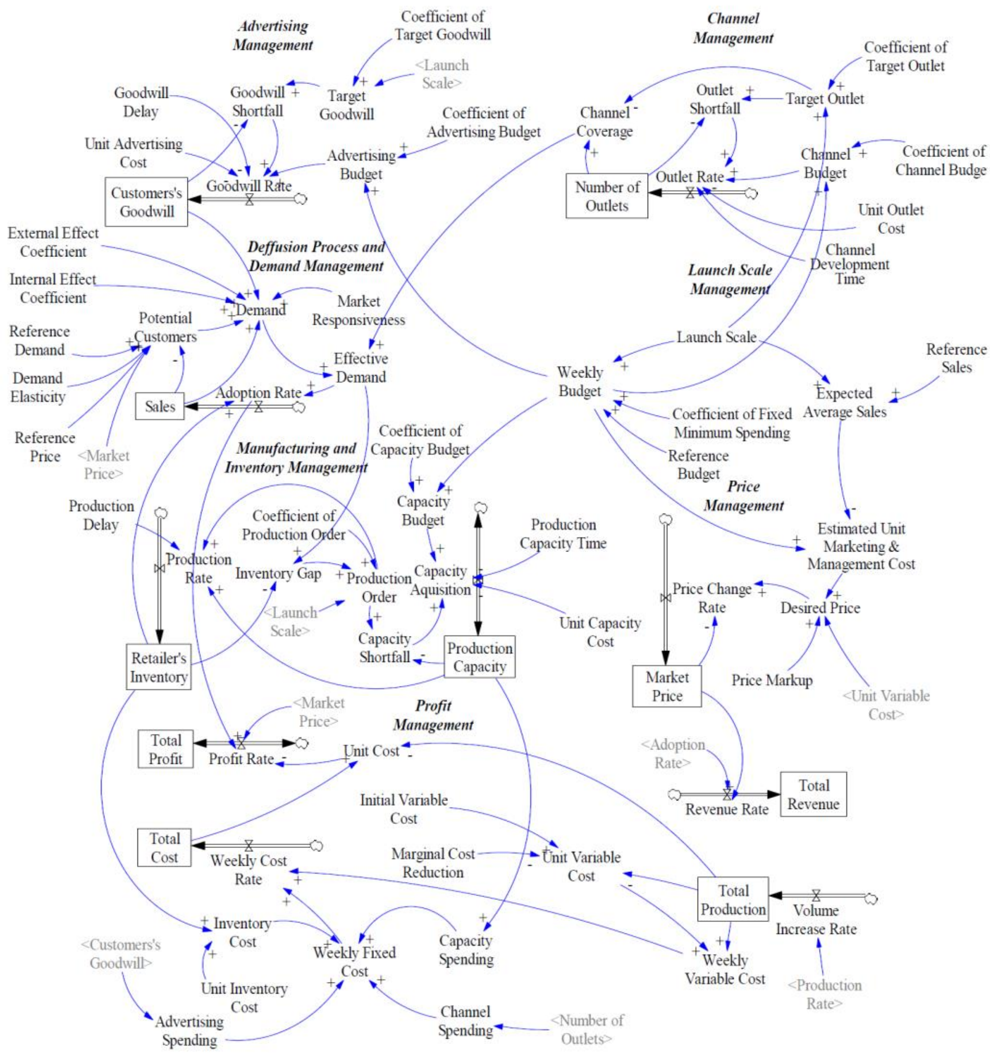

Figure 5: Final model (Level 2)

Equations (1) and (2) show the mathematical equations of this logic:

$$GWR(t) = \mathrm{Min}\left(\frac{GWSF(t)}{Tgw}, \frac{BGad}{Cad}\right) \quad \text{Eq. No. 1}$$

$$GWSF(t) = \mathrm{Max}(TGW - GW(t-1), 0) \quad \text{Eq. No. 2}$$

Since advertising efforts to generate goodwill takes time, i.e. they are followed by kind of delay, the time t-1 is considered for customers' goodwill stock. Similar logic and corresponding mathematical functions are applied for other modules, so that the above interpretation can be generalized for understanding other modules.

Model Validation

Before analyzing launch strategies under different scenarios, it was needed the model to be tested and validated. There are different methods to validate the model. Here we used three methods of structural adequacy, reference behavior reproduction, and behavior under extreme conditions.

Structural adequacy testing

Since the components of the model are derived from a deep literature review and verified by referring to research experts' it is expected the model structure contains necessary and sufficient components required.

Reference behavior reproduction testing

Validation testing of reference behavior reproduction is another method to validate the model. In this test, the consistency between the model behavior and the actual system behavior in the past (reference mode) is examined. Here, the actual behavior of new product development in terms of unit currency profit earned after 300 weeks of new product launch and it was compared to the simulated model behavior and the coefficient of determination (R2) was calculated. Figure 6 shows the results of the test. The calculated coefficient of determination was %92, indicating very good consistency between the simulated model and actual system behavior.

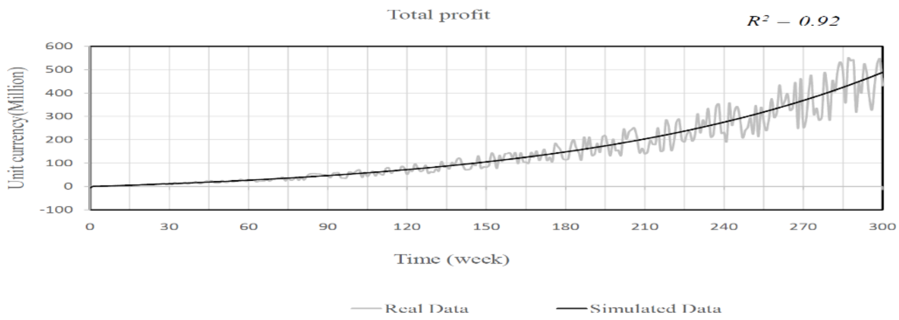

Figure 6: Reference behavior reproduction test

Extreme conditions testing

Another method of validation is extreme conditions behavior simulation. Extreme conditions tests investigate whether the model will continue to behave logically when its parameters or constant values tend to zero or infinity (Sterman, 2000). So, constant values of sales and launch budget were changed simultaneously. The launch budget turned to zero and the rate of sales increased up to one hundred times. Logically, model is valid when by applying the first change, total profit comes to zero, the launch scale drops to zero and the acceptance rate tends to zero too. By applying the second change, model was expected not to change that much; namely, continue to remain valid. After applying the changes, the model represented the expected logical behavior. Figures 7 and 8 show the results.

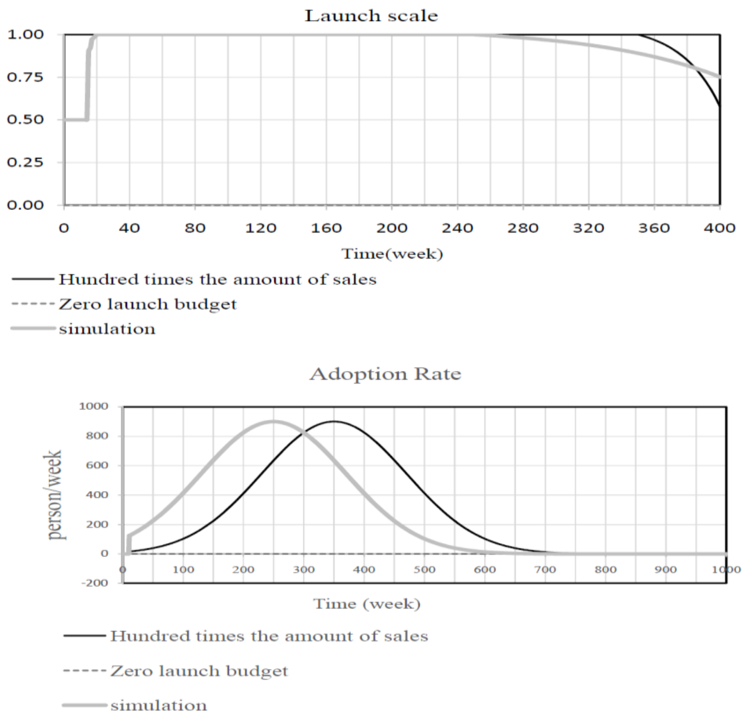

Figure 7: Extreme conditions test result

After ensuring the validity of the developed model, the behavior of the model was investigated under different scenarios.

Simulation

This study has considered a medium-term perspective (about 5 to 6 years) since the beginning of NPD launch. A short period will not be appropriate for studying the dynamics of new product launch process. A long-term approach, on the other hand, will cover the whole cycle of product life and the product will lose its novelty in this case. Total profit for the new product is used as a criterion to assess the performance of new product launch strategies because profitability is the ultimate objective of most of the firms. Furthermore, profit is the criterion whose measurement in the medium time is appropriate and possible.

As mentioned earlier, this study sought to compare the performance of dynamic launch strategies with static strategies under different scenarios related to the market response. High market response is an environmental condition in which, market welcomes the new product at a high level and vice versa, in low market response, market is reluctant to the new product. Static strategies are divided into fat and narrow launch strategies. Fat strategy, means that a large budget is allocated to new product launch and narrow strategy means that few and limited resources are devoted to the launch process. Dynamic launch strategy means that the scale of launch can change according to the market conditions. Market conditions are also considered in both low and high response.

The time unit of simulations is in week and the total period of simulation is 300 weeks (equal to 6 years by considering 50 working weeks per year).

Static Launch Strategies

Scenario 1: High Market Response

The following figure shows the simulation results for narrow and fat launch strategies under high market response conditions. Both strategies show the S-shaped curve of a product launch consistent to the base model and as product adoption increases over time, the total profit grows too. A comparison of the two launch strategies shows fat launch strategy clearly leads to a more rapid diffusion process; with regard to total profit, while, narrow launch strategy loses less money at the start and achieves profitability slightly earlier than the fat strategy, the total profit for fat launch strategy increases far more quickly than the narrow launch strategies.

Superior performance of fat launch strategy is driven by its serious and follow-up launch efforts such as advertising and distribution channel development, which accelerate the product diffusion process and generate more sales. Higher sales and production will also reduce product unit cost and allow the firm to boost market demand with a lower price. Fat launch strategy generates a lower profit margin and relies on larger sales volume and faster return on investment. When market is highly responsive, the low profit margin is able to produce high profit due to high market demand.

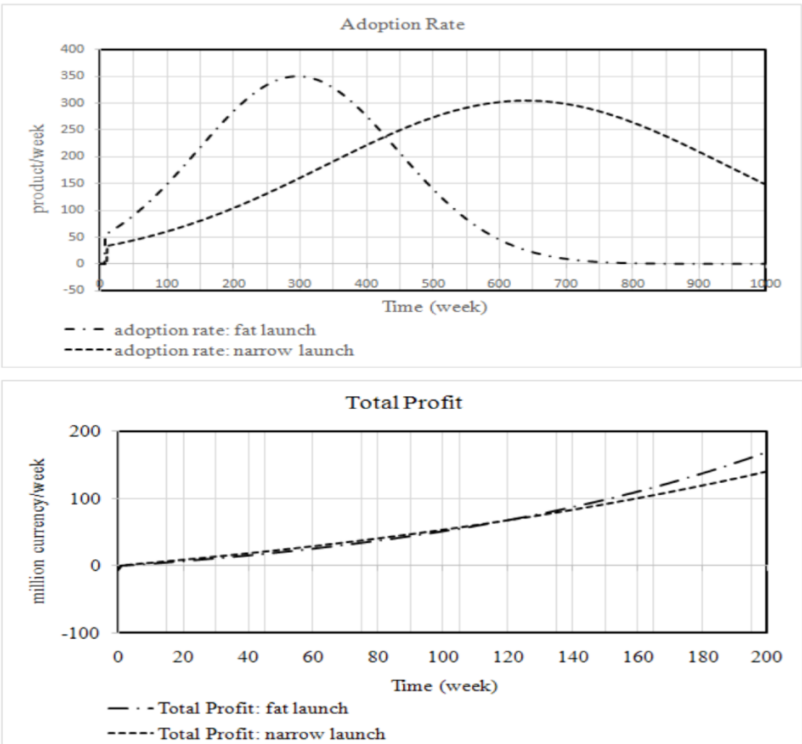

Figure 8: Simulation results of static launch strategies under high market response scenario

Scenario 2: Low Market Response

The following figure shows the simulation results for narrow and fat launch strategies under low market response. The adoption rate for fat launch strategy is still much greater than that of narrow launch strategy. However, the diffusion speed for each strategy is rather slow, and neither of them reaches its peak value by the week 100. In this scenario, even if the adoption rate for fat launch strategy is higher than narrow launch strategy, it is not high enough to compensate for the losses resulting from low profit margin. The market is not responsive to extensive resources and advertising allocated to fat launch strategies. So, this bulk of resources will be wasted. On the contrary, narrow launch strategy allocates only very few resources to the launch and charges a higher price for the products. It benefits from a larger profit margin rather than the time when we want to accelerate returns on investment by larger sales volumes. Thus, such strategy is able to stay profitable when the market is not much responsive and sales growth is low.

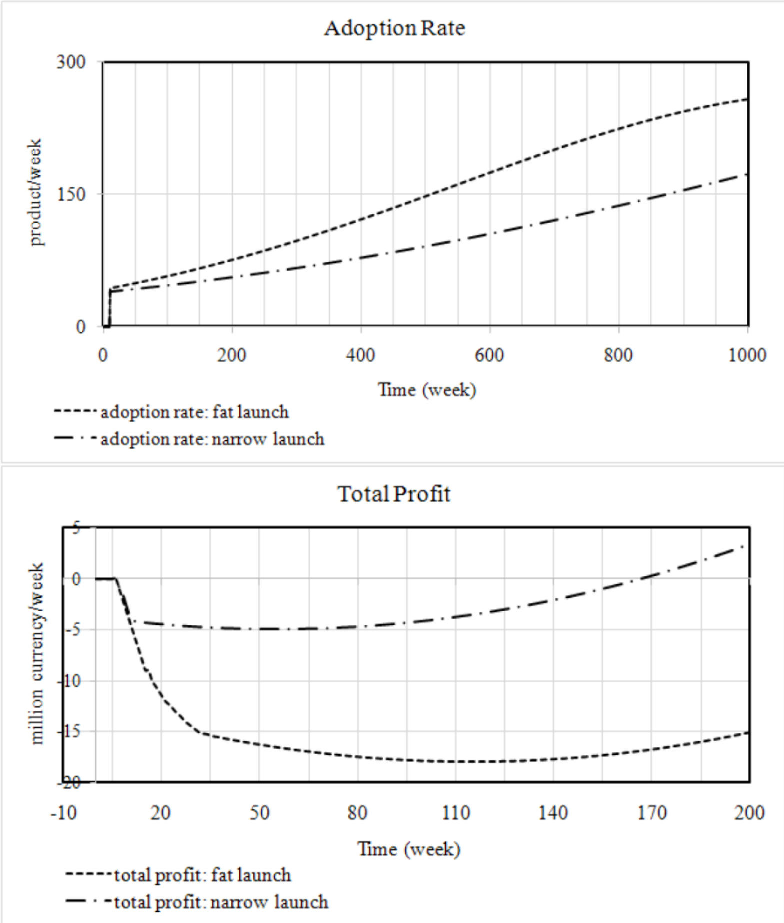

Figure 9: Simulation results of static launch strategies under low market response scenario

Results show that fat launch strategies are more effective when market is highly responsive and narrow launch strategies are more effective under low market response. These results indicate that static launch strategies can only be successful when actual market conditions are the same as pre-launch prediction. They are not able to manage the uncertainty associated with new product launch effectively.

Dynamic Launch Strategies

In dynamic launch strategies, launch scale can be adjusted in consistent with actual market conditions.

Scenario 1: High Market Response

When the market response is high, the launch scale increases quickly at the early stages and high market demand, enables the new product to take off faster. When adoption rate slows down, launch scale is reduces dynamically. Thus, dynamic strategy not only generates higher total profit than narrow strategy, but also outperforms fat launch strategy because of its ability to penetrate the market.

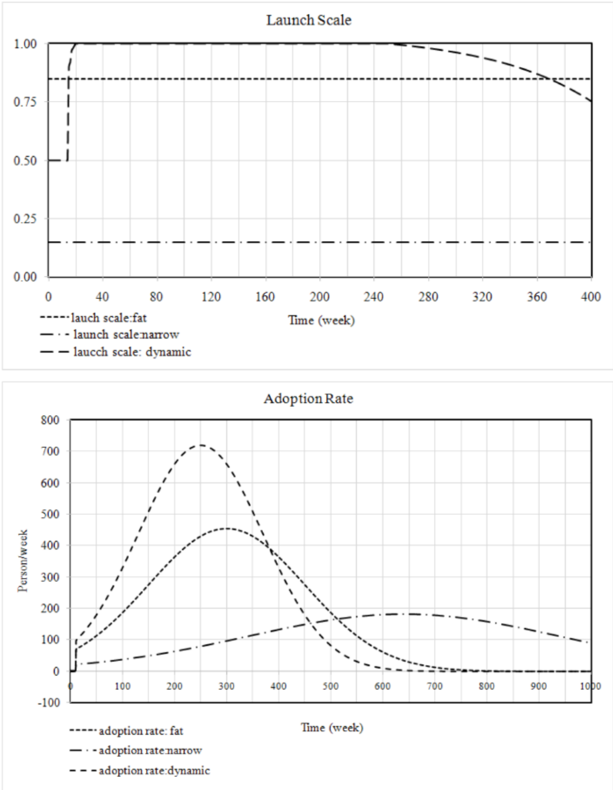

Figure 10: Simulation results of dynamic launch strategies under high market response scenario

Scenario 2: Low Market Response

When market response is low, dynamic launch strategy is able to adjust launch scale and allocated resources quickly to lower values of the launch scale. Although dynamic launch strategy does not generate more product adoption than fat or narrow launch strategies, it is able to keep a profit margin by keeping allocated resources low. The results indicate that at the end of the product launch period, dynamic launch strategies are able to achieve higher total profit than both fat and narrow launch strategies.

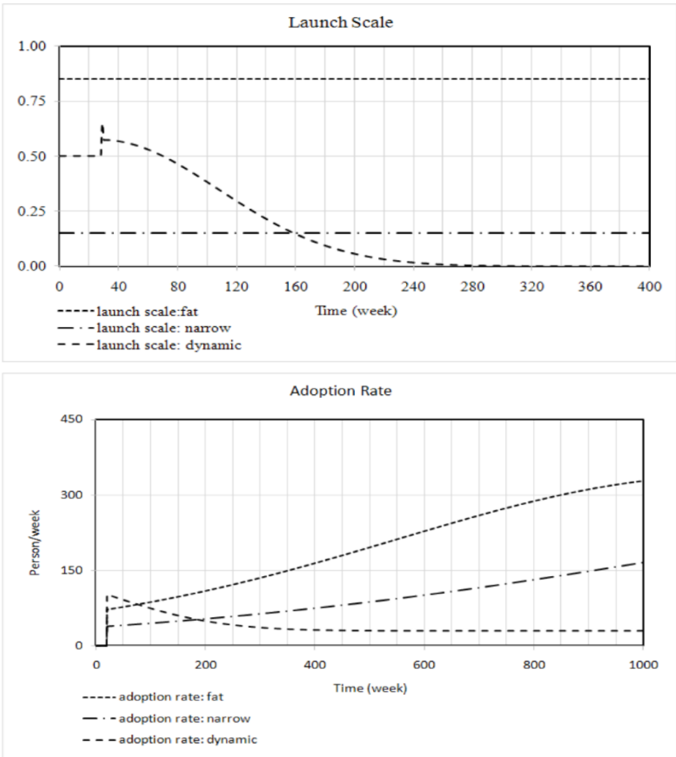

Figure 11: Simulation results of dynamic launch strategies under low market response scenario

Results from the dynamic launch model support the key argument that under high market uncertainty, product launch scale needs to be adjusted dynamically to actual market conditions. The following results are also obtained:

Dynamic launch strategies are superior to static launch strategies as they can dynamically adjust resources and launch efforts to market conditions.

Pre-launch market forecast is still an important factor in dynamic launch strategies.

Unlike static launch strategies, dynamic launch strategies are able to correct poor initial forecasts in relation to the launch and can quickly adapt to actual market conditions.

Conclusions and implications

This study examined the behavior of static and dynamic launch strategies. Findings provide support for the importance of strategic flexibility and suggest allowing such flexibility in pre-launch strategic planning which is critical for new product launch success.

Although the research literature expresses the importance of flexibility in new product launch, the argued concepts are very general and few attempts have been made to understand the dynamics in a systematic way. In this study, a dynamic system was presented. It was actually an integrated system including important feedback relationships during new product development.

The research model showed a fundamental difference between short-term and long-term adjustments. Short-term adjustments coordinate among marketing mix variables and are important part of new product launch process. However, a true flexible launch strategy needs to go beyond short-term adjustments to be able to adjust marketing efforts at a strategic level.

The model presented here allowed not only adjustment of launch efforts but also the managers' sale expectations according to updated sales information, which constitutes a truly dynamic new product launch process.

This study provides several important insights on managing market uncertainty for new product launches. First, firms can benefit from building in flexibility in pre-launch strategic plans, especially when market uncertainty is high. In launch tactics, it is very difficult to adjust different aspect,s especially channel and production, with changes. Secondly, the research model showed that dynamic new product launch requires frequent evaluation of market conditions. Thus, explicit procedures and tools of such evaluation could be highly useful and effective in making decisions.

Development of simulation procedures and tools led to better estimates and ease of decision-making. Lastly, managers can use the system dynamics model developed in this study as a “practice tool”. The model can help new product managers understand the dynamic interactions among different elements in new product launch and get aware of feedback dynamics resulting from the adjustment of launch scales and market demand changes. Moreover, the integrative nature of the model illustrates the interactions between marketing elements and supply chain elements, which focus on multidisciplinary (matrix) nature of the launch process. The model also illustrated different scenarios in a new product launch that can help managers form evaluations of their launch process through analysis of scenarios.

One of the limitations of the study is that only traditional advertising was considered and other modern ways such as electronic marketing, were over looked. While these new marketing techniques play an important role in new products launch. We restricted the model to traditional advertising to reduce the scale and complexity of the model. Future research can highlight the role of marketing process in new products launch by extending this model and considering new marketing techniques.

Moreover, since this model has only investigated market uncertainty of high versus low levels of market response, it is recommended that other modes of market uncertainty be examined and tested in future studies. And this model can be developed by adding other supplementary elements such as market competition to better fit the uncertainty inherent in the market.

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III
Improving management of modern organizations – case study analyses

ANALYSIS OF RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT (KM) AND CUSTOMER RELATIONSHIP MANAGEMENT (CRM) (CASE STUDY: SEPAH BANK OF LORESTAN PROVINCE, IRAN)

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Abstract

Customer Relationship Management (CRM) is a kind of marketing strategy which not only aims to increase transactions for short-term profitability but also an attempt to achieve a customer-based solution to improve long-term customer satisfaction and organizational profit. The research method of present research was of a descriptive-survey type. The statistical population consists of 340 staff of Sepah Bank of Lorestan province among whom 181 staff were selected as a sample using Morgan table. A questionnaire was used as the research data collection instrument with a reliability of 96%. The validity of questionnaire was also confirmed to be at a high level in terms of experts' opinions. Then, the collected data were analyzed using descriptive statistics (SPSS Software) and inferential statistics (Pearson's Multivariate Regression, T-test, and MANOVA[31]). The results indicated that there is a direct correlation between knowledge management with organization management, and customer relationship with customer retention. In other words, the positive Pearson value demonstrates that there is a direct strong relationship between organization management with knowledge management, customer relationship with knowledge management, and customer retention with knowledge management. Also, the results revealed that there is no significant relationship between length of service and customer relationship variables with customer retention. The statistical analysis of data at a significance level of 0.05% ($P < 0.05$) indicated there is a significant correlation between customer relationship management and knowledge management in Sepah Bank of Lorestan province.

Key words: Customer relationship management, Knowledge management, Customer knowledge management

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Introduction

Efficient customer relationship management has converted into one of the most important challenges facing today's highly competitive business. The organizations need information about their customers, needs and expectations and how to meet their needs. One of the organizations affecting the economic activities of a country particularly in developing countries is the banking system. Banks have been established to pursue objectives such as realization of economic objectives and policies of government using credit and monetary instruments, provision of necessary facilities for developing public cooperation and interest-free activities through absorbing cash revenues, savings and accounts, mobilization and equipment of these resources for creating job and investment opportunities, establishment of a fair credit and monetary system for regulating flow of money towards a healthy economic system and growth, keeping the value of national currency and facilitation of payments and transactions (Aghaei, 2009). This paper aims to investigate relationship between customer relationship management with knowledge management in banking industry.

Further, building customer relationship management at the whole banking system is one of the most important issues that needs immediate attention. Customer relationship management is part of the strategy of an organization to identify customers, keep them happy and convert them into permanent customers. In fact, building strong relationship with customers is at the heart of a good and healthy business (Rashidi, 2011). Organizations have allowed for innovative procedures, activities, products and services using knowledge management strategies that can enhance their performance and competitive advantage (Alvani, Nategh, Frahi, 2007).

Customer Relationship Management (CRM)

Customer Relationship Management is a business strategy designed to optimize profitability, revenue and customer satisfaction by organizing the enterprise around customer-segments, fostering customer-centric behaviors and implementing customer-centric processes that is greatly enhanced by the use of specially designed software programs or technology applications (Motmeni, Jafari, Mojarad, 2011).

Goodhue, Wixom, and Watson (2002) maintain that a practical and creative scheme for helping an organization to optimize contacts with its customers, suppliers or potential customers is through various customer contact methods such as a call center, salesperson, distributor, store, branch office, website or email to attract and retain customers or increase sales (Abtahim, Salavati, 2006).

It is very important for companies to consider customer relationship management as a system; a system that determines how to work with our customers, how to solve their business problems, how to persuade them to use our products and services and how to have financial transactions with them. The economic development of communities is dependent on organizations better relationship with their customers. The human's development is viewed as a product of his active involvement in the development processes. In this process, we need to depend on knowledge management to achieve a customer-based, progressive and evolving as well as creative and dynamic organization and arrangements in which the individual and organizational objectives are indistinguishable (Arani, 2005).

Knowledge Management (KM) refers to a set of mechanisms and practices thorough which knowledge is acquired, maintained and utilized with the objective of implementing intellectual assets to create new values, increase productivity and enhance competitiveness (Alvani, Nategh and Farahi, 2007). Knowledge management and implementation of the specialized knowledge and experience of bank staff and transferring it to other people in the organization in order to convert the intellectual assets into an organizational asset is one of the requirements for new banking system (Research and planning department of Sepah Bank, 2005). To achieve this purpose, customer relationship management including three dimensions, i.e. "organization management", "customer relationship" and "customer retention" and knowledge management involving five dimensions, i.e. "knowledge acquisition", "knowledge capture". "Knowledge transfer", "knowledge creation" and "knowledge application" have been used.

One of the organizations that the performance and effectiveness of its activities influences directly on the national assets and welfare of a society are banks. Although all the major banking operations and activities are performed in a bank branch under the supervision and managerial patterns of a central bank, each branch, from a new perspective, is viewed as an independent economic enterprise which is responsible for its executive and managerial operations where its success is reflected in the productivity and profitability of that branch. Therefore, we can acknowledge that the bank branches are the mirrors reflecting a bank image and their staff' knowledge as an asset for that bank (Ansari, 2007). Since individual and collective knowledge and wisdom is one of the main indictor of human development and a substantial factor affecting communities' development, the management of this knowledge is of considerable importance. Knowledge management is a new approach to convert the staff knowledge (human capital) into an organization's common asset (intellectual assets) (Shahraki, Chakhendi and Mollashahi, 2010).

The present research, for the first time, aims to investigate the relationship between customer relationship management and knowledge management in Sepah Bank of Lorestan province as the first Iranian bank established in this province. Customer relationship management is a strategy designed to help companies increase their customers value and as a correct instrument to encourage valuable customers to keep their royalty–in fact to repeat their purchase (Sharifzade, Boudlahi, 2008).

Theoretical Foundations

The purpose of this study is to find out a practical and creative method for helping an organization to optimize contacts with its customers, suppliers or potential customers through various customer contact methods such as a call center, salesperson, distributor, store, branch office, website or email to attract and retain customers' satisfaction or in turn increase their sales.

Knowledge Management (KM): refers to building necessary processes for identifying and managing knowledge, acquiring the essential knowledge from internal and external environments and transferring them for individual and organizational decisions and actions.

In this study, knowledge management has been defined as a set of organizational activities for creation, acquisition and distribution of knowledge and enhancing the knowledge sharing within the organization and surrounding environment (Hassanzade, 2008).

Customer Knowledge Management: customer knowledge management refers to understanding your customers, their needs and wants (Afraze, 2007). Knowledge management process (customer knowledge management) as explained by Rowley J. (2002:501-2) consists of the following stages:

Knowledge Creation: the creation and generation of knowledge through research and development, as well as creative and innovative methods such as systematic innovation, etc.

Knowledge Acquisition: the process of extracting, structuring and organizing knowledge from experts out of the organization and excluding some of the activities that are not considered as competitive advantage for an organization. It is one of the common methods for acquiring knowledge.

Knowledge storage: stored information from an organization's history that can be expressed to bear on present decisions, i.e. it is information stored about history of the organization, which are considered in these decisions.

Knowledge Transfer: activities that are performed to transfer the organization's knowledge from one part of organization to another (Pauleen, Corbitt, 2007).

Knowledge Application: involve activities that indicate an organization has utilized the available knowledge.

There are several studies which are in agreement with the present research findings as follows:

1. Mohamed Khalifa and Vanessa Liu (2003) performed a research entitled as "integrative model of KM success" in Department of Information Systems, City University of Hong Kong to identify the key factor that explains knowledge management programs (Dickson, 2003). The main research question of this study was "what are the key factors affecting knowledge management programs?". The findings of research indicated that organizational factors influencing knowledge management include knowledge management strategy, knowledge leadership, organizational culture and knowledge portals. Besides, processes for knowledge management involve creation, transfer, application and storage/retrieval. The research findings demonstrated the organizational factors and knowledge management processes are the most influential factors affecting knowledge management success. Further, the information technology influence knowledge management processes similar to transferring and storage of knowledge factors (Arani, 2005).

2. Halavi (2005) in his PH.D. Dissertation titled as "successful knowledge management systems in knowledge-based organizations" made an effort to develop a model for evaluation of knowledge management systems success in knowledge-based organizations. Successful knowledge management system containing the variables system quality, knowledge quality, quality of service, user application and satisfaction can measure the success of knowledge management systems. The findings showed that this model has the potential application in the studies of future knowledge management systems (Hoffman and Kashmeri, 2000).

Research Conceptual Model

To evaluate customer relationship management in three dimensions, i.e. organization management, customer relationship and retention as well as knowledge management, Bhatt (2004) knowledge management model including "knowledge creation, acquisition, storage, application and transfer" was used

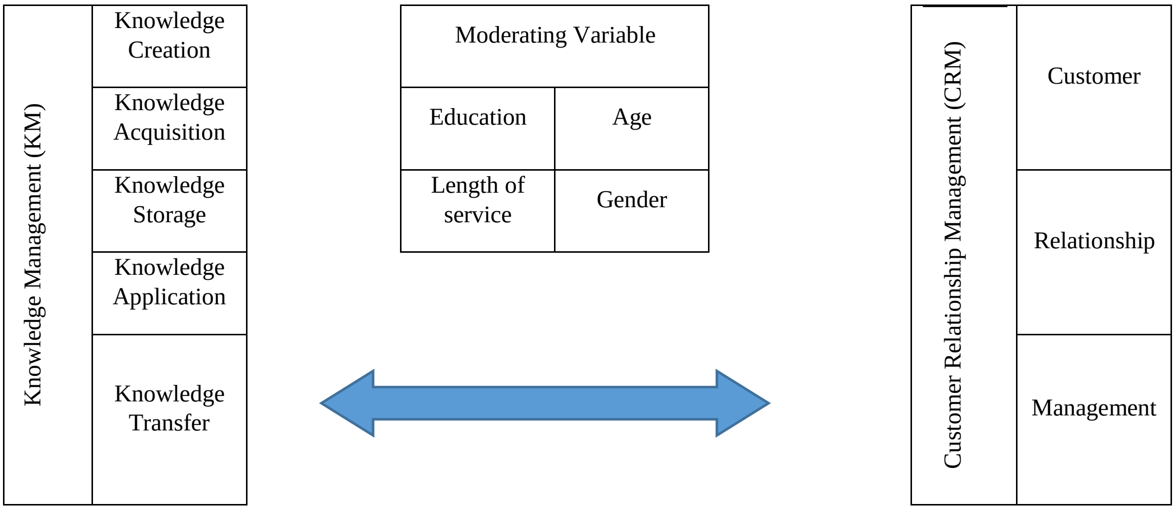

Figure 1:Research Methodology

The research method of this study was of a descriptive-survey type. The present research was performed at Sepah Bank of Lorestan Province since June, 2014 until September, 2014. The statistical population of research consists of 340 staff (307 males and 33 females) of Sepah Bank working in various branches of Lorestan Province and Sepah Bank Head Office among whom 181 staff were selected randomly as the research sample. However, the 173 questionnaires that were collected from the respondents were taken as the statistical sample for analyzing collected data.

The data collection instrument of study was a 48 item standard customer relationship management questionnaire with 4 questions related to respondents' individual variables, 48 questions for testing research hypotheses and 1 optional question. In this questionnaire, questions 1-8, 9-16, 17-24, and 25-48 were used to evaluate the organization management, customer relationship, customer retention and knowledge management variables, respectively. The Likert 5-point scale was used to analyze collected data ranging from "Strongly Disagree" to "Strongly Agree". The questionnaire validity was confirmed by the research advisor, supervisor and several other experts. To measure the reliability of questionnaire, 25 questionnaires were initially distributed among the respondents. Then, these questionnaires were collected and the questionnaire reliability was calculated using Cronbach'a alpha. The Cronbach's alpha was calculated to be 96% indicating that the questionnaire has an acceptable reliability.

To analyze the collected data, the descriptive statistics (Frequency, Mean and Standard Deviation) and inferential statistics including Pearson Correlation Coefficient were used. Further, the multivariate analysis of variance (MANOVA) was used for comparing multivariate sample means.

Findings

The results of analyzing the descriptive statistics indicated that among 173 staff participating in this study, 16.8 % and 82.6% were female and male staff, respectively. This might reveal that Sepah Bank managers are willing to hire male staff more than females. According to descriptive statistics, 13.3 %, 23.1%, and 25.5% of the respondents aged below 30, between 31-35, and 36-40 years old, respectively. Further, of the total respondents, 2.3 % had under diploma degree, 41% had diploma degree, 13.9 % had post diploma degree, 35.1 % had Bachelor's degree and 5.8 % had Master degree. It was observed that the bachelor and master's degrees with more than 75 % had the highest frequency among the Sepah Bank staff of Lorestan province. The results demonstrated that 14.5 %, 15.6 %, 17.3 %, 23.1 % and 24.3 % of staff had between 1-5, 6-10, 11-15, 16-20 and more than 21 years of service, respectively. This indicates that 47 % of the Sepah Bank staff of Lorestan province served more than 16 years.

The analysis of variables means revealed that the organization management, customer relationship, customer retention and knowledge management variables had a mean of 3.59 %, 3.61 %, 3.61 % and 3.59 %, respectively. In other words, the customer retention and knowledge management variables had similar means. In addition, the mean of most of these variables was above the mean test of the society.

The value of Pearson Correlation Coefficient (0.737) indicated that there is a significant relationship between organization management and knowledge management in the Sepah Bank of Lorestan province with a significance level of P<01 %. Moreover, the positive Pearson Coefficient value indicates that there is a direct relationship between these two variables so that an increase in one of these two variables leads to an increase in another one.

The statistical analysis of Pearson's Correlation Coefficient (r=0.806) revealed that there is a significant relationship between customer relationship and knowledge management in the Sepah Bank of Lorestan province (P<01 %). The positive Pearson Coefficient value indicates that there is a direct relationship between these two variables so that if one of these two variables increases, the other one increases, too.

Research question 1: Is there any relationship between the staff length of service and customer relationship?

Table 1: Pearson's Correlation Coefficient for research question 1

Variables	Pearson Correlation Coefficient Value	Number	Significance Level (Sig.)	Maximum Error
Customer relationship- Length of service	0.035	**164**	**0**.654	%5

According to Table 1, the significance level is above 5 % indicating that there is no significant relationship between the two variables, i.e. staff length of service and customer relationship variables.

Research question 2: Is there any relationship between staff length of service and customer retention?

Table 2: Pearson's Correlation Coefficient for research question 2

Variables	Pearson Correlation Coefficient Value	Number	Significance Level (Sig.)	Maximum Error
Customer retention- Length of service	-0.006	**164**	**0.942**	%5

As it can be seen from Table 2, the significance level (sig.) is greater than 5 % indicating that there is no significant relationship between the staff length of service and customer retention variables.

Research question 3: Is there any difference between staff relationship with customers in terms of their education level?

Table 3: Analysis of Variance (ANOVA) test to compare difference between staff relationship with customers in terms of their education level

	Sum of Squares	Df	Mean Squares	F	Significance Level (Sig.)
Inter-group	3.269	4	**0**.817	1.909	0.111
Intra-group	69.762	163	0.428		
Total	73.031	167			

As can be observed in Table 3, there is no significant distinction between staff relationship with customers and their educational level.

Research question 4: Is there any distinction between staff' customer retention with respect to their education level?

Table 4: Analysis of Variance (ANOVA) test to compare difference between staff' customer retention in terms of their education level

	Sum of Squares	Df	Mean Squares	F	Significance Level (Sig.)
Inter-group	2.464	4	**0**.616	1.909	0.111
Intra-group	71.722	163	0.440		
Total	74.186	167			

According to Table 4, the significance level of the test is above 5 % indicating that there is no significant distinction between staff' customer retention and their educational level.

Discussion and Conclusion

The statistical analysis of research hypotheses indicated that there is a direct relationship between knowledge management with organization management, customer relationship and customer retention variables. The results of testing research hypotheses are as follows:

Hypothesis One: there is a significant relationship between organization management and knowledge management at Sepah Bank of Lorestan province.

The Pearson Coefficient value (r=0.737) indicates that there is a direct relationship between these two variables so that an increase in one of these two variables leads to an increase in another one.

Hypothesis Two: there is a significant relationship between customer relationship and knowledge management at Sepah Bank of Lorestan province.

The positive value of Pearson Coefficient (r=0.771) revealed that there is a direct relationship between customer relationship and knowledge management variables so that as one of these two variables increases, the other variable increases, too.

Hypothesis Three: there is a substantial correlation between customer retention and knowledge management at Sepah Bank of Lorestan province.

The positive value of Pearson Coefficient (r=0.806) demonstrated that there is a direct relationship between customer retention and knowledge management variables so that an increase in one of these two variables results in a rise in another variable.

Further, the statistical analysis of research results indicated that there is no significant relationship between staff' length of service and customer relationship and customer retention variables.

Finally, the Analysis of Variance (ANOVA) test was used to compare distinction between staff' customer relationship and customer retention variables in terms of their education level. The results demonstrated that there is no significant distinction between staff customer relationship and customer retention with their educational level.

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INVESTIGATING THE RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND ORGANIZATIONAL LEARNING WITH JOB CREATION OF EMPLOYEES (CASE STUDY: MUNICIPALITIES OF SIRJAN)

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Abstract

The purpose of this study was to the study of investigating the relationship between intellectual capital and organizational learning with job creation of employees. A descriptive, quantitative, co relational design was used. The statistic population of research consist all municipal employees in Sirjan. The population consist of 292 employees. A data collection instrument is included demographic questionnaire, questionnaire of intellectual capital, organizational learning and job creation. Data analysis included descriptive statistics, pearson's r and spearman's correlations, regression analysis, ANOVA analyses and SPSS software [package of Spss / pc + + ver21]. The results of this study show the there is a significant relationship between intellectual capital and job creation of employees. According the results, there is a significant relationship between organizational learning and job creation. The results showed that average organizational learning, intellectual capital and creativity were moderate.

Key words: Intellectual Capital, Organizational Learning, Job Creation, Sirjan

JEL:D80

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Introduction

Intellectual capital is becoming a crucial factor for a firm's long-term profit and performance in the knowledge-based economy as more and more firms identify their core competence as invisible assets rather than visible assets (Allameh, Abbasi, Shokrani,2010). Intellectual capital is the ability to utilize knowledge, industry knowledge, organizational structures and flows, customer relationships and special techniques (Sheng Ting, 2012). Nonaka and Takeuchi pointed out the future society is a knowledge-based society in which knowledge storage and application are the basis of economic growth and accumulated capital (Sharifi, Eslamiyeh, 2008). Intellectual capital is a heart of organizational capabilities. The importance of intellectual capital is highly recognized as a successful factor not only in knowledge-intensive organizations but also for most other types of organizations intellectual capital is used to create and enhance the organizational value and performance (Khalique et al., 2014). Organizations have found that the sustainable competitive advantage is based on intellectual asset management. Increasing organizational learning provide an appropriate competitive position as a strategic orientation for the survival and competitive advantage (Allameh, Abbasi, Shokrani SAR,2010).

Intellectual Capital

Intellectual capital (IC) is a term now in common usage across different fields of academic and managerial activity. Intellectual capital is a term that a first time introduced by economist John Kenneth Galbraith in 1969 and it refers to the difference between an organization's market value and book value. Intellectual capital prepares a new tool to perceive the hidden values of an organization (Taghizadeh, Zeinalzadeh,2012)

Many researchers have come to regard intellectual capital as a firm's primary means of creating competitive advantage. Some researchers also contend that accumulating intellectual capital is beneficial to creating competitive advantage or business values. Following the above-mention literature, this study thus defines intellectual capital as the total capabilities, knowledge, culture, strategy, process, intellectual property, and relational networks of a company that create value or competitive advantages and help a company achieve its goals (Fang, Hsu,2009). Bontis et al, (2001) have adopted human capital, structural capital, and relational capital as the three basic dimensions of intellectual capital, also we adopted them in this study. In particular, intellectual capital is described, in one of its numerous and most famous definitions, as economic value of the combination of three categories of intangible assets (Bontis,1998):

• “Human capital” refers to the abilities, competences, and know-how of human resources;

• “Structural capital” defines the organizational knowledge, mainly contained in business processes, procedures, and systems;

• “Relational capital” takes account of the knowledge embedded in business networks, which includes connections outside the organization such as customer loyalty, goodwill, and supplier relations. These three categories are strongly complementary.

Organizational learning

Organizational learning is defined as the organizational and managerial characteristics or factors that facilitate the organizational learning process or allow an organization to learn (Chiva, Alegre, Lapiedra, 2007). Organizational learning is the success key of organizations. So, if the most successful organizations face with poor learning capabilities, they could not benefit from all their capabilities in the field of today’s various environments (Bahadori et al., 2012).

Chiva identified five essential facilitating factors of organizational learning: experimentation, risk taking, interaction with the external environment, dialogue and participative decision making. Experimentation can be defined as the degree to which new ideas and suggestions are attended to and dealt with sympathetically (Chiva, Alegre, Lapiedra, 2007). Experimentation involves trying out new ideas, being curious about how things work, or carrying out changes in work processes. Risk taking can be understood as the tolerance of ambiguity, uncertainty and errors. Interaction with the external environment is defined as the scope of relationships with the external environment. The external environment of an organization is defined as factors that are beyond the organization’s direct control of influence. Environmental characteristics play an important role in learning. Dialogue is considered as an essential process to develop common understanding for organizations, could help individuals to understand the hidden meanings in the communications. Participative decision making refers to the level of influence employees have in the decision-making process (Chiva, Alegre, Lapiedra, 2007). Organizations implement participative decision making to benefit from the motivational effects of increased employee involvement, job satisfaction and organizational commitment (Allameh, Abbasi, Shokrani SAR,2010).

Job creation

Organizations today are living in a changing and complex environment in such a way that the past can not predict. In today's world organizations to survive in the competition are required to have new and creative ideas. Our era to survive and thrive, should be continued during the renovation and innovation in organizations to prevent it from stagnation and destruction. Job creation is difficult to evaluate because it is difficult to measure. Creativity means to combine ideas in a unique way to create continuity between ideas. Creative dimensions include: Fluids, expansion, innovation and flexibility ([Sharifi,Eslamiyeh, 2008).

Conceptual Model

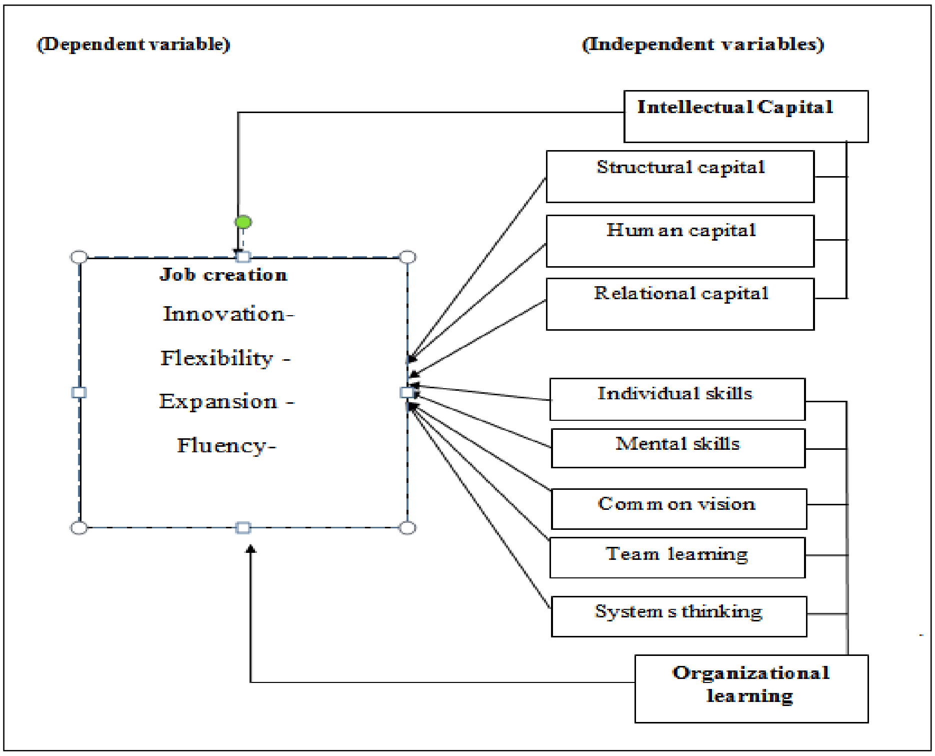

Figure 1: The Conceptual Model of Research

Principal Hypotheses

[1] There is a significant relationship between intellectual capital and job creation of employees.

[2] There is a significant relationship between organizational learning and job creation of employees.

Secondary Hypotheses

[1] There is a significant relationship between structural capital and job creation of employees.

[2] There is a significant relationship between human capital and job creation of employees.

[3] There is a significant relationship between relational capital and job creation of employees.

[4] There is a significant relationship between individual skills and job creation of employees.

[5] There is a significant relationship between mental skills and job creation of employees.

[6] There is a significant relationship between common vision and job creation of employees.

[7] There is a significant relationship between team learning and job creation of employees.

[8] There is a significant relationship between systems thinking and job creation of employees.

Research Methods

A descriptive, quantitative, co relational design was used. The Statistic population of research consist all municipal employees in Sirjan. 292 staff were selected with sampling method. A data collection instrument is included demographic questionnaire, questionnaire of intellectual capital, organizational learning and job creation. The staff answered the same questionnaire including, intellectual capital (Bontis,1998)(including 17 questions), organizational learning (Khalique et al., 2004) (including 24 questions), and job creation (Fang, Hsu,2009) (including 20 questions). The cronbach's alpha that obtained from the pilot data was 0.84 for intellectual capital, 0.83 for organizational learning and 0.98 for job creation (Bontis,1998). Data analysis included descriptive statistics, pearson's r correlations, regression analysis, ANOVA analyses and SPSS software (package of Spss / pc + + ver18).

Demographics Results

Of the 292 subjects enrolled in the study, 71.38 % were male and 28.62% were female. Among respondents aged 31 to 40 years were most frequent and least frequent in the age group 51 and older.

Results

Principal Hypotheses

[1] There is a significant relationship between intellectual capital and job creation of employees.

H0: There is a not significant relationship between intellectual capital and job creation of employees

H0: There is a significant relationship between intellectual capital and job creation of employees

The results of pearson and spearman correlation test show the there is a significant relationship between intellectual capital and job creation of employees and this relationship is the direct and at high level (Table 1). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.558 (Table 2).

Table 1: The correlation coefficient between intellectual capital and job creation

Variable	Job creation						Direct	Type of relationship
Intellectual capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.750	0.000	292	**0.728	0.000	292		

Table 2: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.750	0.563	0.558	0.31758

[2] There is a significant relationship between organizational learning and job creation of employees.

H0: There is a not significant relationship between organizational learning and job creation

H0: There is a significant relationship between organizational learning and job creation.

The results of pearson and spearman correlation test show the there is a significant relationship between organizational learning and job creation and this relationship is the direct and at high level (Table 3). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.242 (Table 4).

Table **3***: The correlation coefficient between organizational learning and job creation*

Variable	Job creation						Direct	Type of relationship
Organizational learning	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.481	0.000	292	**0.492	0.000	292		

*Table **4**: The result of regression model*

Model	R	r 2	modified r2	Standard error
1	0.492	0.230	0.242	0.211858

Secondary Hypotheses

[1] There is a significant relationship between structural capital and job creation of employees.

H0: There is a not significant relationship between structural capital and job creation

H0: There is a significant relationship between structural capital and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between structural capital and job creation and this relationship is the direct and at high level (Table 5). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.557 (Table 6).

*Table **5:** The correlation coefficient between structural capital and job creation*

Variable	Job creation						Direct	Type of relationship
Structural capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.669	0.000	292	**0.750	0.000	292		

*Table **6**: The result of regression model*

Model	R	r 2	modified r2	Standard error
1	0.750	0.562	0.557	0.211858

[2] There is a significant relationship between human capital and job creation of employees.

H0: There is a not significant relationship between human capital and job creation

H0: There is a significant relationship between human capital and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between human capital and job creation and this relationship is the direct and at moderate level (Table 7). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.223 (Table 8).

***Table 7:** The correlation coefficient between human capital and job creation*

Variable	Job creation						Direct	Type of relationship
Human Capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.467	0.000	292	**0.480	0.000	292		

*Table **8**: The result of regression model*

Model	R	r 2	modified r2	Standard error
1	0.480	0.231	0.223	0.42136

[3] There is a significant relationship between relational capital and job creation of employees.

H0: There is a not significant relationship between relational capital and job creation

H0: There is a significant relationship between relational capital and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between relational capital and job creation and this relationship is the direct and at moderate level (Table 9). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.379 (Table 10).

Table 9: The correlation coefficient between relational capital and job creation

Variable	Job creation						Direct	Type of relationship
Relational capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.621	0.000	292	**0.629	0.000	292		

Table 10: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.480	0.385	0.379	0.42136

[4] There is a significant relationship between individual skills and job creation of employees.

H0: There is a not significant relationship between individual skills and job creation

H0: There is a significant relationship between individual skills and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between individual skills and job creation and this relationship is the direct and at moderate level (Table 11). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.307 (Table 12).

Table 11: The correlation coefficient between individual skills and job creation

Variable	Job creation						Direct	Type of relationship
Individual skills	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.561	0.000	292	**0.557	0.000	292		

Table 12: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.561	0.314	0.307	0.39775

[5] There is a significant relationship between mental skills and job creation of employees.

H0: There is a not significant relationship between mental skills and job creation

H0: There is a significant relationship between mental skills and job creation.

The results of pearson and spearman correlation test show the there is a significant relationship between mental skills and job creation and this relationship is the direct and at moderate level (Table 13). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.204 (Table 14).

Table 13: The correlation coefficient between mental skills and job creation

Variable	**Job creation**						Direct	Type of relationship
Mental skills	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.461	0.000	292	**0.379	0.000	292		

Table 14: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.461	0.212	0.204	0.39775

[6] There is a significant relationship between common vision and job creation of employees.

H0: There is a not significant relationship between common vision and job creation

H0: There is a significant relationship between common vision and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between common vision and job creation and this relationship is the direct and at moderate level (Table 15). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.124 (Table 16).

Table 15: The correlation coefficient between common vision and job creation

Variable	Job creation						Direct	Type of relationship
Common vision	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.236	0.000	292	**0.249	0.000	292		

Table 16: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.236	0.112	0.124	0.39775

[7] There is a significant relationship between team learning and job creation of employees.

H0: There is a not significant relationship between team learning and job creation

H0: There is a significant relationship between team learning and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between team learning and job creation and this relationship is the direct and at moderate level (Table 17). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.232 (Table 18).

Table 17: The correlation coefficient between common vision and job creation

Variable	Job creation						Direct	Type of relationship
Common vision	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.485	0.000	292	**0.411	0.000	292		

Table 18: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.485	0.223	0.232	0.39775

[8] There is a significant relationship between systems thinking and job creation of employees.

H0: There is a not significant relationship between systems thinking and job creation

H0: There is a significant relationship between systems thinking and job creation

The results of pearson and spearman correlation test show the there is a significant relationship between systems thinking and job creation and this relationship is the direct and at moderate level (Table 19). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.242 (Table 20).

Table 19: The correlation coefficient between systems thinking and job creation

Variable	Job creation						Direct	Type of relationship
Systems thinking	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.449	0.000	292	**0.481	0.000	292		

Table 20: The result of regression model

Model	R	r 2	modified r2	Standard error
1	0.449	0.233	0.242	0.32762

Discussion

The purpose of this study was to the study of investigating the relationship between intellectual capital and organizational learning with job creation of employees. The results of this study show the there is a significant relationship between intellectual capital and job creation of employees**.** The intellectual capital on firm performance has a considerable impact (Chang, 2004). Intellectual capital in the field of innovation plays an important role . Jimenez-Jimenez (2008) reports the intellectual capital is an important source of innovation (Jimenez-Jimenez et al., 2008). Ahmed Al-Dujaili (2012) reports the there is a significant relationship between intellectual capital, innovation and creativity (Al-Dujaili,2012)- So intellectual capital is caused creativity and innovation. According the results, there is a significant relationship between organizational learning and job creation**.** In today's complex world, individuals of creative and innovative are valuable, that learning of continuous and permanent is essential to the survival of the organization (Sherehiy, 2008). The learning inject new ideas into the organization and capacity for understanding new ideas to enhance and improve the ability to explore new opportunities. So organizational learning, is structure factor for creativity. The learning is the bridge between work and creativity (Rahnavard, 1990). So organizational learning can also lead to job creation. Jorj (2009) reports the organizational learning has a positive and significant impact on creativity and innovation. Its findings indicate that when organizational learning is increased consequently also increases job creation (Delgado Verde, et al., 2011). Therefore, we can say that in organizations of creative or knowledge-creation, individuals continually increase your abilities to achieve intended results. In these organizations are encouraged thinking, group discussions, ideas and explore views and ideas and innovators are bred (Lozano ,2016).[According to the findings of this study suggest that managers of municipalities, encourage their employees to provide innovative solutions and creative ideals. The managers of company by taking necessary actions, including staff training were enhance creativity. Because by increasing learning and knowledge assets also increased creativity. Managers can through group activities, projects and encourages employees to learn and increase their knowledge and skills. The results showed that, inspirational motivation and individualized consideration received less points than other dimensions.

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THE STUDY OF THE EFFECT OF RELATIONSHIP-ORIENTED LEADERSHIP IN ACHIEVING ORGANIZATIONAL EVOLUTION (CASE STUDY: BRANCHES OF MELLI BANK OF GUILAN)

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Abstract

The main purpose of this research is to investigate the relation of relationship-oriented leadership in achieving organizational evolution. Research variables include relationship-oriented leadership and organizational evolution (recognition of needs, admission of change, and evaluation of change). The statistical population of the research comprises senior and middle managers of Melli Bank of Guilan from which 218 individuals are selected using Cochran formula. This study is descriptive. The data are collected using questionnaire and analyzed through structural equation modeling. The results indicate that the method of relationship-oriented leadership has significant effect on organizational evolution. Also relationship-oriented leadership has the most level of effect, respectively, on recognition of needs, admission of change, and evaluation of change.

Key words: Relationship-Oriented Leadership, Organizational Evolution, Senior Managers, Melli Bank

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Introduction

Evolution and change are among the issues and topics of today's organizations. In 80s and 90s, organizations experienced wide changes. Amongst these changes we can name the implementation of TQM, implementation of services regarding customers, re-engineering, organizational downsizing, decentralization, culture change and reduction of managing levels. Recently, due to global competitive environment and universal economic and financial shocks, most of organizations seek change and evolution in order to adapt these developments. To perform successful organizational changes in organization, managers are in need of staff cooperation and reduction of their resistance against change (Thomas, Hardy, 2011).

In complex and changing environmental conditions, the survival of organizations require applying a new approach in establishing organizational strategies. Some researchers believe that traditional methods of establishing strategy are not effective and efficient for today's environments. In their belief, in addition to avoid the challenge of intensive competitions in present situation and present environment, organizations should consider future competitions. They consider the discussion of the change and competition in the future as the current challenge for management. Many incentives can be mentioned for change, but generally, these motives include: reduction of profit or financial loss, increase in competition, economic downturn, appointment of new director, technology development, anticipating opportunities or events (Rezaian et al., 2007).

Evolution and change are among the issues and topics of today's organizations. In 80s and 90s, organizations experienced wide changes. Amongst these changes we can name the implementation of TQM, implementation of services regarding customers, re-engineering, organizational downsizing, decentralization, culture change and reduction of managing levels. Recently, due to global competitive environment and universal economic and financial shocks, most of organizations seek change and evolution in order to adapt these developments. To perform successful organizational changes in organization, managers are in need of staff cooperation and reduction of their resistance against change (Thomas and Hardy, 2011).

"Change" in a certain concept, can contain changes based on technology, can cover behavioral changes of individuals at the level of society or even organization, or can embrace spatial and temporal displacements. Scholars of our time share the same opinion that organizational evolution is a kind of planned change which occurs at the context of organization. Organizational evolution is of most important factors of organizational researches. People's reaction to change reflects their feelings. Individuals provide different reactions and responses to change in organization that can be categorized in two general branches: cognition and behavioral (Rocha & Granerad, 2011).

The studies indicate that, to implement the evolution, when the senior management admits the change, interests of staff, such as middle and operation level managers, should be considered and the need for change should be created within them. If environment creates the demand for change, a strong culture can resist upon it (Higgs, 2003). One of the challenges of leadership in organization is the preparation of staff of organization to make change. Although strategic and planned assessments are essential elements of the change process, but making change in organization is a kind of challenging task (Rangriz & moradi, 2012).

In change management, most of researchers believe that human side of change, which is what effect it has on people or what role do the people have in the change process, will be ignored. Three essential factors in organizational change is identified which include technical barriers, political barriers, and cultural obstacles; but all these factors are related to daily activities of employees and, consequently, directly to the support of staff. Many believe that resistance against change should not get fight back directly, but also individuals should be supported until they get trained and feel comfortable toward change. The process of supporting employees toward organizational change is in direct relation to management and leadership-style of managers (Mir Hosseini et al, 2008).

During the past two decades, researches on charismatic and transformative leadership revealed that organization's leasers can be effective on organizational change. Leadership possess vast concepts and dimensions, but this study focuses on relationship-oriented leaders. Relationship-oriented leaders ponder organizational structure, design, and control and try to achieve organizational objectives. The performance of such leaders is of great importance not only to achieve organizational objectives, but also it is necessary for developing organizational changes (Battilana et al, 2010).

Nadder and Tushman emphasized that relationship-oriented leaders affect making organizational changes. Beer and Nohria introduced two theories of E and O and granted some differences among these. The leaders of E theory, pay more attention to work and the leaders of O theory pay most of their attention to people. They also stressed that there are various categories for leadership. The effectiveness of relationship-oriented and task-oriented behaviors of leaders require different competencies. Relationship-oriented leaders are capable of clarifying work activities and individuals' task in organizational structure in order to achieve their missions and objectives. Task-oriented leaders also are capable of paying attention to others and their feelings. Managers may be good at both levels or be effective and efficient at one of them (Rezaian et al, 2007).

Three steps are required to perform changes in organization. In first step, leaders should show the demand for change to their followers. Members of organization need to understand that why they have to change their daily behaviors and activities. First, they will resist the change and show emotional reactions, they'll get confused and stressed and they will find themselves in face of environmental uncertainty. Task-oriented leaders can deal of people of such situations and they can control the conditions. On the other side, relation-oriented leaders put most of their efforts on developing procedures, processes, and systems (Battilana et al, 2010).

The second step of organizational change is admission of change. Leaders at this phase develop some capabilities amongst followers who admit organizational change. They create organizational coalitionswhich support organizational change. The establishment of such coalitions is a kind of political process so that individuals could cooperate and accompany with each other. Finally, leaders assess created changes in the organization. The changes which employees have admitted and applied. The target of these changes is daily activities or behaviors of individuals. Leaders assess the content of established changes, typically take one step back and evaluate new processes and procedures and assess the effect of performed changes on performance (Battilana et al, 2010).

This study aims to investigate the role of leadership in establishment of organizational change among senior and middle managers of Melli Bank branches at the level of Gilan Province. In the other words, the statistical population of the research comprises senior and middle managers of Melli Bank branches of Gilan Province. The present research seeks the answer to the question of whether relationship-oriented leadership leads to organizational change and facilitates it or not. In the following, figue 1 illustrates the conceptual model of the research.

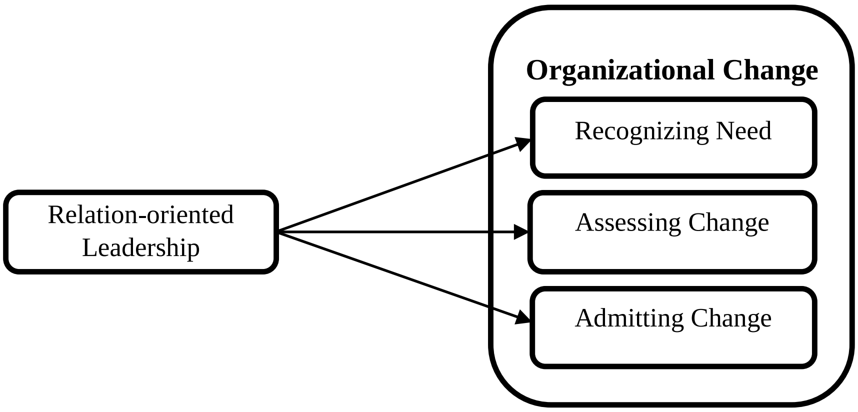

Figure1: The Research Conceptual Model (Battilana et al, 2010)

H1: Relationship-Oriented leadership has significant effect on recognizing the need.

H2: Relationship-Oriented leadership has significant effect on assessing the change.

H3: Relationship-Oriented leadership has significant effect on admitting the change.

Methodology

In terms of purpose, the present research is functional and is descriptive regarding method. The statistical population of the research comprises senior and middle managers of Melli Bank branches of Gilan Province. According to the statistics of informatics division of bank, the number of senior and middle managers of different branches of Melli Bank of Gilan province is 500 individuals. Therefore, the statistical population of the research includes 500 individuals. To determine the statistical sample, Cochran formula is used. The method of sampling is convenient non-probability sampling. Since the size of statistical population is 500 individuals, according to calculations, the sample size should be 218 people.

The questionnaire of the research is derived from Battilana et al, 2010. This questionnaire includes 20 questions which uses Likert Scale. In order to assess structure validity and content validity of the questionnaire and also to investigate the reliability of the questionnaire, Cronbach's alpha coefficient is applied and all variables obtained required reliability.

Descriptive Findings

In this section, main variables of the research are analyzed using descriptive indexes and their reliability and validity is shown.

Table 1: The results of descriptive statistics of variables.

Variables	No.	Cronbach's Alpha	Average	Standard Deviation	K-S Test
Need to change	1-4	0.891	3.9174	0.65436	0.302
Admission of change	5-8	0.883	3.2531	0.92287	0.095
Assessing the change	9-11	0.872	3.1843	0.87189	0.104
Relationship-oriented Leadership	12-20	0.894	2.9206	0.97278	0.899

According to table 1 and the results of Kolmogorov-Smirnov test, it can be observed that the level if significance obtained for each variable is higher than 0.05, therefore, the zero hypothesis is confirmed. Thus, the research variables at the studied sample have normal distribution. Now we can use parametric methods to investigate research hypotheses.

Testing Research Hypotheses

After ensuring the normality of data, structural equation modeling and LISREL software is used to analyze data. In table 2 the results obtained from application of inferential methods in the form of structural equations are illustrated.

Table 2: The resuts of testing research hypothese

Hypotheses	*B*	T	Result
Relation-oriented leaders have meaningful effect on recognizing the need.	0.46	4.30	Confirmed
Relation-oriented leaders have meaningful effect on admitting the change.	0.28	3.38	Confirmed
Relation-oriented leaders have meaningful effect on assessing the change.	0.27	4.30	Confirmed

Estimating the Research Model

When the estimation of parameters for an established and determined model is obtained, in should be determined to what extent the data are fitted to the estimated model. It means that to what extent the theoretic model is supported by sample data. To find that to what extent the model describes the observed relations among measured variables, some tests has been performed. Table 3 introduces types of fitness and significance indexes of the model.

Table 3: The Fitness and significance indexes of the model

	Index Name	Abbreviation	If it fits	Value in the obtained model	Result
Indexes of significance	Root Mean Square of estimated error	RMSEA	< 0.01	0.069	Confirmed
	Chi-square to degrees of freedom	$\frac{\chi^2}{d_f}$	=< 5	2.79	Confirmed
Indexes of fitness	Goodness index of fitness	GFI	> .8	0.84	Confirmed
	Not-normalized fitness index	NNFI	> .8	0.93	Confirmed
	Normalized fitness index	NFI	> .8	0.90	Confirmed
	comparative fitness index	CFI	> .8	0.94	Confirmed
	Increasing fitness index	IFI	> .8	0.94	Confirmed

According to the obtained results it can be mentioned that the research model is confirmed in terms of fitness and significance indexes.

Discussion and Conclusion

The t statistic for relationship-oriented leadership and recognition of need of change is 7.38 and for task-oriented leadership and recognition of need of change equals to 4.30. The correlation intensity among both styles of leadership with recognizing the need to change shows the meaningfulness of both styles of leadership on recognizing the need to change in Bank, but the amount of these two correlations indicate that relationship-oriented leadership, compared to task-oriented leadership, further recognizes the need to change and can make changes in the organization. The value of coefficient of determination shows that relationship-oriented leadership can anticipate 46 percent and task-oriented leadership can forecast 65 percent of recognizing the need to change. Thus, task-oriented leadership performs better in this part of organizational change. In the similar research conducted by Battila et al, 2010) similar results is achieved. The value of t statistic for the third hypothesis equals to 5.25 and this value is 3.38 for forth hypothesis. Therefore, both hypotheses are confirmed. Correlation intensity between relationship-related leadership and admission of change is 42 percent and task-oriented leadership with admission of change equals to 28 percent. This suggests that in Melli Bank, relationship-oriented leadership should be applied for admission of change. Relationship-oriented leadership can anticipate 60 percent of change and task-oriented leadership can only forecast 41 percent of admission of change. It seems that relationship-oriented leadership and managers who believe in this style of leadership within the organization more can make changes among employees and are able to make organizational change believable for their staff and adapt them. From the perspective of respondents to the questionnaire, relationship-oriented leadership performs better on recognizing the need to change and admission of change in organization. In a similar study conducted by Battila et al. 2010, similar results are obtained.

The t statistic between two variables of relationship-oriented leadership and assessing the change is 4.30 and for task-oriented leadership and assessing the change this value equals to 6.47. This indicates that both hypotheses are confirmed. The correlation intensity among these two hypotheses suggests that relationship-oriented leadership, compared to task-oriented leadership, has more direct relation to assessing the change, but this value does not have much difference compared to recognizing the need to change and admission of the change. It can be concluded that despite the little difference of relationship-oriented leadership and assessing the change compared to the previous two cases, the relationship-oriented leadership still performs better in assessing the change in organizational change. The determination coefficient indicates that relationship-oriented leadership can anticipate 27 percent of assessing the change and task-oriented leadership is able to forecast 54 percent of assessing the change in organizational change. In a similar work conducted by Battila et al. 2010, similar results are obtained. Generally, the value of t statistic for both styles of leadership in Melli Bank of Gilan Province indicates that task-oriented leadership with 3.25 has a higher average than relationship-oriented leadership with the average of 2.92. In the other words, the style of managers of Melli Bank is mostly work-oriented.

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A STUDY OF RELATIONSHIP BETWEEN SUBSYSTEMS OF HUMAN RESOURCES MANAGEMENT AND CORPORATE ENTREPRENEURSHIP (CASE STUDY: IMAM KHOMEINI RELIEF COMMITTEE, NORTH KHORASAN)

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Abstract

The current article was aimed to investigate the relationship between subsystems of human resources management and corporate entrepreneurship among the employees of Imam Khomeini Relief Committee, North Khorasan. For this purpose, the number of 150 people (112 men and 38 women), i.e. 25% of the sample size determined by the Morgan Sample Table from among 600 employees of the said Committee in North Khorasan in 2013-2014, was taken into account. Two credible questionnaires were used: the Standard Subsystems of Human Resources Management Questionnaire taken from a book by Dr. Moghimi (2013) with a validity of (a-0.89) and the Standard Corporate Entrepreneurship Questionnaire also taken from a book by Dr. Moghimi (2013). Also, since the data were normal, the Pearson Correlation Coefficient was applied to determine the relationship between the variables, and the Multiple Regression Analysis was used. The Questionnaire's Content Validity was also approved by the experts. According to the research findings, there was a positive and significant relationship between the subsystems of human resources management and corporate entrepreneurship, and there was a reverse and significant relationship between work affairs and corporate entrepreneurship. However, no relationship was found between the subsystem of development and corporate entrepreneurship. It appears that the efforts by the managers of the Imam Khomeini Relief Committee to create a creative, innovative and entrepreneurial environment will help this Committee materialize its objectives better.

Keywords: subsystems of human sources management, corporate entrepreneurship, attraction and provision of human forces, training

JEL:L26

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Introduction

Entrepreneurship is a process of new ideas, utilization of existing facilities and opportunities by relying on relevant knowledge and accepting risks which places various factors alongside each other so that the utilization and activation of the resources for meeting national interests are made possible and productive and creative institutes are created, and thus an all-out development is achieved (Anonymous, 2005). In this regard, the educational system is one of the most important measures adopted by advanced and developing countries for the development of entrepreneurship. Here, most universities in advanced countries have included training of entrepreneurship in their own curricula (Klofsten, 2000). Given the basic role of entrepreneurship in continuation and development of various economic sectors in the national and global levels, it is important to create an appropriate environment for supporting entrepreneurship and entrepreneurs. Management scholars consider them as the most important factors for corporate transformation and innovations in the modern era; thus, any environment where the employees enjoy some level of thinking and the art of entrepreneurship will have a dynamic economy. Entrepreneurship is a process which has a critical role in the national and even global development. Thus, it is imperative to create an appropriate setting for rational support, including material, spiritual, cultural supports and to do some researches in the future on entrepreneurship and entrepreneurs. Entrepreneur economists are considered as engines of economic growth (Schumpeter, 1934). Corporate entrepreneurship is known to be a phenomenon whose common goal is to promote a competitive situation and corporate financial function (Anonymous, 2005).

Since human resources are considered to be the most valuable factors of production and the most important capital for each organization, and hence they are also assumed to be the main sources generating competitive privileges, entrepreneurship and that they create basic capabilities in each organization, it can be concluded that, human resources planning is a major corporate planning. A major factor for human resources planning is planning for accomplishing skill, educational needs and in the end, for optimizing human resources. The most effective way for achieving some entrepreneurship related competitive privileges under current conditions is to make corporate employees be effective through improving their positions. What is of interest in this regard is that improving human resources will not be made by technical and specialized training alone; rather, one can strengthen and develop the employee through various ways, and this will not be made possible unless with an exercise of strategic entrepreneurship management within the realm of human resources management (Walker, 1997, quoted by 2013, p. 51). Human resources management has a critical role in entrepreneurship that can encourage or bar corporate entrepreneurship (Sanchez and De Mingo, 2011). Given the importance of entrepreneurship, one of the major goals of the Imam Khomeini Relief Committee in the third millennium was to develop an entrepreneurship force. Thus, the bureaus of the said Committee should be equipped with new trainings and introduce ethical and entrepreneurial people to the economic and industrial society so that graduates can optimize the products of the society and thus achieve all out development through this.

To meet this goal is to identify the most important factors affecting the way entrepreneur employees are formed are formed, and the way modern and effective plans are introduced to offices and departments to lay the ground for the entrepreneurship in the society. Kuratko et al. (1990), in their own studies, refer to five subsystems of human force provision, designing of jobs, training, development of human resources and work affairs as well as compensation for services in the human resources areas. Each of which can influence entrepreneurship. In a research on the subsystems of human resources, i.e. human force provision, designing of jobs, training, development of human resources and work affairs as well as compensation for services, Ahmadi (2012) state that human resource training cannot be effective in entrepreneurship alone, and human resource management contributes most to entrepreneurship indirectly or by way of creation of innovative and creative environmental conditions. There are various books on the role of human resources as strategic partners involving human resources theories (Universal views by Dewar& Werbel, 1979), which provide a framework of the best human resources management styles (Buttler, Falk, Napir, 1991). This framework describes various human resources policies as well as the Gestalt approach which is a comprehensive definition of strategic theory of human resources management (Rajat, 2016). The attraction of human force is a gate to any corporation; with the attraction of expert and capable people in all levels of corporation and organizations, one can witness a diversity of ideas and creativity as well as a competitive setting (Foss , Klein, Kor, Mahoney, 2006). Training and learning are general terms which involve various components such as education and development. Some research results suggest that the promotion of education level has a positive effect on entrepreneurship (Ecoloz, Christopher, 1998, 18).

A rational and fair adjustment of work affairs in the organization helps build trust and under such conditions, entrepreneurial processes and behaviors will be facilitated. In the subsystem of service compensation, large corporations need to pay more salaries and benefits so that they improve entrepreneurship and manage to effectively compete with others (Hayton, 2005). Given the impacts of the subsystem of human resources management on entrepreneurship followed by the impacts of entrepreneurship on corporate functions, various researches have sought to identify factors affecting entrepreneurship promotion. Despite this, there are scant researches in the field of the link between the subsystem of human resources and entrepreneurship in the Imam Khomeini Relief Committee. Thus, the current research seeks to explore the relationship between the subsystem of human resources and entrepreneurship. In modern competitive world, one of the major tools for corporate transformation and for meeting intended objectives and mission is the human being. In this vein, what affects transformation and guarantees the survival of organizations and corporations are human resources. The role of man in the organization and the way she/he is viewed will greatly contribute to the success or failure of the organization, Since, today human resources are the most valuable factors of production and most significant capital for each organization which generate competitive privilege and cerate basic capabilities; thus, one of the major planning is planning of human resources.

A major factor for human resources planning is planning for accomplishing skill, educational needs and in the end, for optimizing human resources. The most effective way for archiving some entrepreneurship related competitive privileges under current conditions is to make corporate employees be effective through improving their positions. What is of interest in this regard is that improving human resources will not only be made by technical and specialized training; rather, one can strengthen and develop the employee through various ways, and this will not be made possible unless with an exercise of strategic entrepreneurship management within the realm of human resources management (Walker, 1997, quoted by 2013, p. 51). Given the significance and role of human resources management, especially the subsystems of human resources and entrepreneurship on the efficacy of organizations, especially in the Imam Khomeini Relief Committee, this body, by polling the views of the employees, and by clarifying the existing situation, seeks to determine the outcomes of the subsystems of human resources on entrepreneurship. This finding can be quite effective in identifying the factors affecting the population under study, because a better understanding of these organizational problems and efforts for improving the conditions and functions of the staffs and entrepreneurs will help organizations become successful, thus resulting in the survival of the organization.

Methodology

The current research is a descriptive -correlative one. The subsystem of human resources was considered the independent variable and corporate entrepreneurship as the dependent variable. The statistical population of this research was consisted of all male and female employees at the North Khorasan's Imam Khomeini Relief Committee in the year 2013-2014 (N=600). The sampling method was a simple random method. The number of 150 people was selected as the statistical sample size based on the Krejesi and Morgan Table in a simple random method. To gather data, a Standardized Questionnaire of a five choice Likert Scale was used.

The content validity of the questionnaire was approved by experts ad its reliability was estimated to be 0.89 by the SPSS software. To analyze data, Correlation Test, Variance Analysis and Regression were used. To develop literature, library and field studies were used. To analyze data, two statistical methods were applied: a) descriptive statistics: classification and organization of data, relative frequency and calculation average; b) inferential statistics: correlation test, variance analysis and regression. In order to analyze data and do statistical tests, the SPSS software was applied.

Measurement tools

In this research, the researcher used two questionnaires as follows:

The Subsystems of Human Resources Questionnaire: To assess the subsystems of human resources management, the Subsystems of Human Resources Questionnaire taken from a book by Dr. Moghimi (2013) was used. This scale consists of six dimensions of human force provision, designing of jobs, and training, development of human resources and work affairs as well as compensation for services. This scale has 29 items which measures the said dimensions on a five choice Likert scale.

Standard Corporate Entrepreneurship Questionnaire: To assess corporate entrepreneurship, the Standard Corporate Entrepreneurship Questionnaire taken from a book by Dr. Moghimi (2013) was used. This inventory has been developed based on a Likert scale from 1 meaning (totally disagree) to 5 (totally agree).

Findings (analysis)

To investigate whether the variables were normally distributed or not, the Kolmogorov-Smirnov Test was used, and due to the fact that the variables were normally distributed, the Pearson Parametric Correlation Coefficient was used for testing the hypotheses.

As seen from Table 1 , it is observed that given the correlation coefficient of 0.255 and the significance level of 0.002, one can judge with 99% confidence level that there is a positive and significant relationship between the subsystem of human force provision and attraction and entrepreneurship, and between the subsystem of job design and employees' corporate entrepreneurship (Correlation coefficient of 0.329 and significance level of 0.000), and between the subsystem of training and employees' corporate entrepreneurship (Correlation coefficient of 0.265 and significance level of 0.001), and between the subsystem of service compensation and employees' corporate entrepreneurship (Correlation coefficient of 0.183** and significance level of 0.025). As observed from Table 1, it is seen that given the correlation coefficient of -0.098 and significance level of 0.235, one can judge there is no relationship between the subsystem of development and employees' corporate entrepreneurship, and also given the correlation coefficnt of -0.242** and the significance level of 0.003, one can judge that there is a reverse and significant relationship between the subsystem of work affairs and employee's' corporate entrepreneurship.

Discussion and conclusion

According to the research findings, there is a positive and significant relationship between the subsystems of human resources and corporate entrepreneurship. In other words, according to the subsystems of human resources, corporate entrepreneurship will also improve. The findings of this research conform to those of the previous researches. Most major researches done in this field indicate the indirect influence of the subsystems of human resources on creating entrepreneurial settings which lay the found for creativity and innovation for all employees. Human resources are among the rarest and most valuable capital of each organization. Thus, to promote its own employees, the organization should employ people who are creative, innovative and proficient in resolving problems and are able to communicate with others better. Education department employees used to consider the giving of official test for the employment of applicants for work in form of a structured interview, i.e. questions related with similar questions for all applicants with ranking scale; a matter that was also approved by previous findings. In different researches, it was shown that there was a significant relationship between job design and employees' corporate entrepreneurship (Shmadi et al. 2012; Solomon, 2000 and Macmillan, 1987). Numerous studies have also suggested that job design in successful entrepreneurial companies are less structured, more complicated and have a hierarchy with more authority (Taumy and Harris, 2000). Solomon (2000) also found that human resources management affects entrepreneurship through creating an entrepreneurial culture, i.e. a culture which places emphasis on internal rewards, ceding responsibility and avoiding extreme control.

According to the findings obtained, there is a positive and significant relationship between the subsystem of training and corporate entrepreneurship, while no significant and positive relationship was seen between the subsystem of development and corporate entrepreneurship (Ecoloz, and Christopher, 1998; Anderson et al. 2006; Armstrong, 2008; Chen et al. 2011; Hasangholi pur, 2008; Farzane et al. 2016; Ekrami et al. 2016). However, this finding is not in line with the findings of Ahamdi's research (2012). The reason why these two contradict is due to the working conditions, the available facilities and the statistical population. In the current era, the development of a country hinges, to a great extent, on the identification of talents, abilities, attraction and training of expert forces engaged in producing knowledge and expanding borders of knowledge and acquiring up to date technology. Upon investigating the indices of knowledge-oriented development and with reliance on the infrastructure of educational development in the current era, one can state that training and its role can be regarded as one of the most important and effective tools by societies to deal with the challenges of the third millennium and to take steps in the process of development. In the highly changing, turbulent, unpredictable and uncertain environments, organizations, in order to maintain their own survival, guarantee their development and acquire success, should enjoy creative, continuing and generating Organizational-Learning Capacity so that they can produce superior value for all beneficiaries, especially their clients. The Organizational-Learning Capacity and its continued expansion depend on various factors including organizational intelligence and talent management (Ghasemi et al. 2015).

It appears that once education affects entrepreneurship when it enhances the capacity of imagination, innovation flexibility and the "capacity to use knowledge in an actual environment of humans' activities". Researches have substantiated this point that, unlike education, development affects entrepreneurship positively, and can promote the value and position of employees. In general, one can say that there is no agreement over the effects of education on entrepreneurship. In other words, it can be stated that higher education level has been considered an obstacle to entrepreneurship (Cason, 1982).

Findings revealed that there is a significant and reverse relationship between work affairs and employees' corporate entrepreneurship, where this conflicts with the finding by Ahmadi et al. (2012) and other researchers. The reason for this conflict can be sought in the research tools, cultural factors, and the statistical population. An adjustment of rational and fair relations will bring about entrepreneurial behaviors. One of the major variables in the work affairs index is reciprocal trust and reciprocal relationship. Under such circumstances, relations followed by entrepreneurial behaviors will be fostered. Maybe, the existence of some factors like cooperation and empathy with colleagues and participation in decision makings related with the work environment could, on the one hand, strengthen work affairs and also the existence of some factors like bureaucracy, pessimism, mistrust and other psychological actors on the other hand, weaken work relations. Since social capital depends on the relations between people and the effects of the emotional intelligence on interpersonal relations, the social capital assumes significance as it causes people to come together and make possible the very successful conduct of activities. The emotional intelligence has also a basic role on the working environment (Mesbahi et al. 2015). The results also indicated that there is a significant relationship between services compensation and employee's corporate entrepreneurship (Ahmadi et al. 2012), Hayton (2005), Taumy and Harris, (2000) and Castro Giovanni et al. 2011).

Hayton's studies (2005) indicated that incentives will promote cooperation commitment, contribution of knowledge and voluntary behaviors by employees, especially in the area of superior technologies. This will, in the end, result in improvement (Hayton, 2005). Today, human resources are major tools for transformation, and guarantee the organizations' survival. The role of employee in the organization and the way they are viewed greatly contributes to the success or failure of the organization. With the beginning of the third millennium, the role of human resources becomes more significant and it is currently considered the only factor of success and sustainable competitive privilege in the organization. Despite this, human resources management in organizations faces many challenges, of which, one can refer to globalization, lack of skilled and committed workforce, pyramid of decision making, non-understanding of employees' needs, lack of programs, lack of meritocracy, discrimination, insufficient utilization of human resources, lack of motivation, lack of participation by employees, and lack of cooperation between employees and the organization. Studies have shown that training of employees will lead to the continuation and survival of the organization. Also, trained employees are more able to coordinate with changing environmental pressures. Therefore, the growth and survival of the organization and the organization's compatibility with environmental changes depend on the employees' development.

In addition to this, what is of interest in this regard is that improving human resources will not only be made by technical and specialized training; rather, one can strengthen and develop the employee through various ways. To conclude, we can say that attention by the relevant officials to the subsystems of human resources and corporate entrepreneurship can result in individual success, peoples' satisfaction and finally corporate productivity. However, inattention to human resources could have the reverse results, because human resources play a major role in the development of human societies. Thus, in the current era, the development of a country hinges to a great extent on identification of talents, abilities, attraction and training of expert forces engaged in producing knowledge and expanding borders of knowledge and acquiring up to date technology. The relevant officials should, by expanding and developing a sufficient environment and providing standard equipment and facilities in the Relief Committee, reduce the employees' concerns so that they can guarantee the growth and survival of the organizations. Given the positive and significant relationship between the subsystems of human resources and corporate entrepreneurship, it is necessary for all employees of the Relief Committee to build a creative, innovative and entrepreneurial setting so that objectives are met.

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AN INVESTIGATION OF THE EFFECT OF MANAGERIAL COMPETENCIES ON ORGANIZATIONAL EFFICIENCY (CASE STUDY: EAST AZERBAIJAN HOUSING BANK)

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Abstract

Organizations are attempting to identify, recruit, and retain the most qualified managers as a competitive advantage. In this paper, we have investigated the use of the components associated with competencies to enhance the organizational efficiency by managers in the branches of Housing Bank. In terms of data collection in testing the hypotheses, the present research is considered a descriptive and survey study. In terms of the research objectives and its nature, the present research is an applied study. Moreover, in terms of statistics, the study is considered an inferential investigation. The statistical population of this study consists of 80 employees in Housing Bank located in East Azerbaijan province. The sample size is comprised of 66 participants based on Cochran's formula. With respect to data collection, two questionnaires of organizational efficiency and managerial competency were used and their reliability was examined by Cronbach's alpha in SPSS-21. The results of the test showed that the competency of the managers at Housing Bank has a positive and significant relationship with organizational efficiency. The impact of managerial competency at individual levels on organizational efficiency was 0.759.

Key words: The competency of managers, organizational efficiency, individual competence, social competence

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Introduction

Today, in the fast-changing world of business, organizations compete to identify, recruit and retain the the most qualified managers as a competitive advantage. In the complicated and changing circumstances of modern societies, programs of managerial competency development are implemented at the various levels of management and this is the most important and valuable goal and mission of the organizations (Tayebi et al., 2010). The existence of a meritocratic system in any country enhances its endurance, desirability, and legitimacy. Thus, the selection of competent managers in leading organizations is particularly important and ensures the achievement of organizational goals. For the same reason, management is currently considered the most basic phenomenon in communities and organizations and managers are viewed as strategic assets. The administration of organizations and enterprises in the modern age is based on the rule of law along with knowledge, insight, expertise and moral commitments. This can only be achieved by those considered to be the elite and competent individuals (Nikraftar, 2011). The establishment of a meritocratic system has been emphasized as one of the major and strategic policies of the country in the twenty-year perspective document and the law of the fourth program (Bagherian, 2005).

Due to limited resources, unlimited human needs, population growth, and intense and brutal competition in the global economy, efficiency enhancement is not an option but a necessity. The existence of an appropriate organization structure, efficient administrative procedures, functional equipment and work instruments, balanced work environment and, more importantly, qualified and competent human resources are the prerequisites that must be noted by the managers in order to ensure desirable efficiency (Soltani et al., 2002).

Investigations done by scholars have confirmed that 78% of the administrative managers’ time is dedicated to verbal interaction and, finally, most managers tend to use personal and mental judgments in making decisions (Yeganegi, 2010). Based on this expert view, the necessity of increasing and developing insight and attitude among managers becomes evident through a new approach such as the use of competencies. Today, organizations are being put under tremendous pressure due to stiff competition, technological changes and their diverse expansion. The human resources are now expected to have a stronger effect on the services and products that they offer. This is exactly why competencies are emphasized in a competitive environment. Highlighting the role of managers in the branches is one aspect of efficiency enhancement in creating added value in an organization with an emphasis on their required competencies to counter the challenges and capitalize on opportunities. Nevertheless, two personality levels are raised to determine the level of competency including individual and social levels. At the individual level, factors such as professional knowledge, information, personal characteristics, skills, attitudes and the insight of individuals are considered and, at the social level, professional and public reputations are considered (Yeganegi, 2010). All of these cases are effective in the development of acceptable managerial competency while this competency would consequently lead to increased efficiency. However, the question is to what extent each level of competence has an impact on efficiency. Therefore, in this research, we discuss the effects of social and individual levels of managerial competency and the bank managers on organizational efficiency. In other words, the main research question is whether the individual and social competencies of managers affect organizational efficiency in the Investment Bank in the province of East Azerbaijan.

The main hypotheses

1. There is a significant relationship between the individual competency of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

2. There is a significant relationship between the social competency of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

Moderation hypotheses

1. There is a significant relationship between the personal characteristics of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

2. There is a significant relationship between the attitude and insight of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

3. There is a significant relationship between the managerial skills and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

4. There is a significant relationship between the professional knowledge and information of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

5. There is a significant relationship between the professional reputation of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

6. There is a significant relationship between the general reputation of managers and organizational efficiency in the Investment Bank in the province of East Azerbaijan.

The conceptual model of research

The conceptual model includes all the research variables and all the studied research dimensions. Thus, the conceptual model of the present study is illustrated as below:

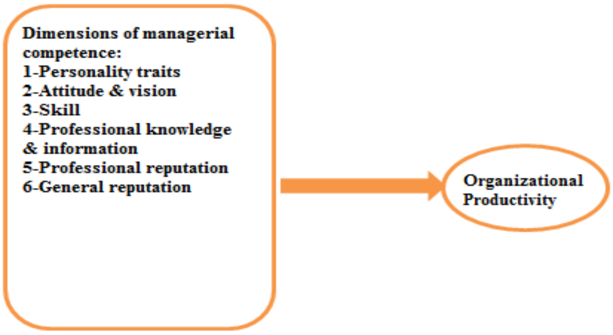

Figure 1: Conceptual model

Research Methodology

The present study is a descriptive and survey research study in terms data collection in testing the hypotheses. Moreover, as the results of this study can be used in practice, it is considered an applied study in terms of objectives and nature. Statistically, the present research is an inferential study as we have used a sampling method and the sample has been used to infer and generalize the findings to the population.

The questionnaire

In order to prepare and organize the questionnaire items, a number of indicators were obtained using relevant articles and theses from East Azerbaijan and English sources based on the research population for both sections related to the individual and social competency of managers and organizational efficiency. To formulate the responses to the questionnaire, a five-point Likert scale was used which is one of the most common measurement scales in relation to closed-ended responses. After a review of the literature, 39 indicators of the individual managerial competency, 30 variables of social managerial competency, and 9 variables of organizational efficiency have been identified. Individual competency includes the sub-criteria of personality traits, the managerial attitudes and insight, the managers' skills and their professional knowledge.

Reliability

The value of Cronbach's alpha coefficient has been provided for all the variables in the table with the coefficient. The value of Cronbach's alpha coefficient was above 0.7 for all variables.

Table 1: Reliability

The individual level of managerial competency	
The value of pretest Cronbach's alpha	Variables
0.903	Personality traits
0.848	Attitude and insight
0.864	Skills

0.719	Professional knowledge and information
The social level of managerial competency	
The value of pretest Cronbach's alpha	Variables
0.802	Public reputation
0.796	Professional reputation
Organizational efficiency	
The value of pretest Cronbach's alpha	Variables
0.821	Organizational efficiency

Statistical population

In this study, 80 employees of the Housing Bank of East Azerbaijan Povince were selected as sample members. As the variance of the studied quality was not available, an estimate of the proponents and advocates was obtained. Then, the sample population was estimated as 66 participants by Cochran's formula and they were directly involved through simple randomization. Based on Cochran's formula, the computational sampling formula is as follows:

$$n = \frac{Nt^2p(1-p)}{Nd^2 + t^2p(1-p)}$$

N: Statistical population

T: Student's t-test, error probability = (0.05), confidence coefficient 0.95 (t=1.96)

P: The ratio of the studied quality (p-1)

d: Half of the confidence interval (10%)

n: Sample size

Thus, given the calculations, 66 managers were selected as research sample members. The information derived from the questionnaires, the age frequency of participants, gender and characteristics such as work experience and educational level of the participants have been reported in table 2:

Table 2: Demographic information of the statistical sample

Demographics			
Percentage	N	Cases	Variable
3.03	2	Between 25 and 35	Age
18.18	12	Between 36 and 45	
53.03	35	Between 46 and 55	
25.75	17	55 and older	
10.61	7	Less than 5 years	Managerial work experience
19.7	13	6 to 10 years	
25.75	17	11 to 15 years	
43.94	29	Over 16 years	
0	0	Any degree below BA	Education
81.82	54	Bachelor's Degree	
18.18	12	MA & PhD	
34.85	23	Management	Academic field
65.15	43	Other fields	
21.21	14	Female	Gender
78.79	52	Male	

Investigating the normal distribution of variables

Table 3: The result of the normality test for the distribution of model variables

Conclusion	Hypothesis confirmation	Significance level	Questionnaire items	Variables
Normal	H_0	0/403	Personality trait	Individual level of competence
Normal	H_0	0/083	Attitude and insight	
Normal	H_0	0/257	Skills	
Normal	H_0	0/445	Knowledge and information	
Normal	H_0	0/302	Professional reputation	Social level of competence
Normal	H_0	0/461	General reputation	
Normal	H_0	0/093	Organizational efficiency	

With regard to table 3, as the significance level of the variables in this model is above 0.05%, the first hypothesis is rejected and we conclude that the model variables have a normal distribution.

The test of research hypothesis

The main hypothesis: the individual competence of the managers has a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

Table 4: Pearson test between the individual managerial competence and organizational efficiency

Correlations

		The level of individual competence	Efficiency
Individual level of competence	Pearson correlation	1	.759**
	Sig. (2-tailed) Significance level		.000
	Number	66	66
Organizational efficiency	Pearson correlation	.759**	1
	Sig. (2-tailed) Significance level	.000	
	Number	66	66

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

According to the data from the Pearson test and as Sig <0.05, there is a positive and significant relationship between the individual competence of managers and organizational efficiency at a 99% confidence level.

Table 5: Pearson test results between the social competence of managers and organizational efficiency

Correlations

		Social level of competence	Efficiency
Social level of competence	Pearson correlation	1	.763**
	Sig. (2-tailed) Significance level		.000
	Number	66	66
Efficiency	Pearson correlation	.763**	1
	Sig. (2-tailed) Significance level	.000	
	Number	66	66

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

As regards the data from the Pearson test and as Sig <0.05, there is a positive and significant relationship between the social competence of managers and organizational efficiency at a 99% confidence level.

The results from the software output have been provided in table 6 in order to examine the relationship between personality traits and organizational efficiency. The Spearman test of correlation coefficient in the statistical analysis of 66 managers at Housing Bank was calculated as 0.54 which is significant at 0.01 level indicating that there is a positive and significant relationship between personality traits and organizational efficiency.

Table 6: The results of Pearson test to examine the relationship between personality trait and organizational efficiency

Correlations

			Personality trait	Efficiency
Spearman test	Personality trait	Correlation coefficient	1.000	.540**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	Efficiency	Correlation coefficient	.540**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

The second hypothesis: the attitude and insight of the managers have a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

Table 7 shows the Spearman correlation coefficient which is 0.64 for managers in Housing Bank. This amount is significant at 0.01 level indicating a positive and significant relationship between the managers' attitude and insight and organizational efficiency.

Table 7: Spearman test results for the relationship between the attitude and insight of managers and organizational efficiency

Correlations

			Attitude and insight	Efficiency
Spearman test	Attitude and insight	Correlation coefficient	1.000	.639**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	Efficiency	Correlation coefficient	.639**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

The third hypothesis: Managerial skills have a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

The results of the investigation of the relationship between managerial skills and organizational efficiency show that there is a relationship with a 0.62 correlation coefficient that is significant at 0.01 level.

Table 8: The results of Spearman test for the relationship between managerial skill and organizational efficiency

Correlations

			Managerial skills	Efficiency
Spearman test	Managerial skill	Correlation coefficient	1.000	.621**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	Efficiency	Correlation coefficient	.621**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

The fourth hypothesis: the managerial knowledge and information have a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

The Spearman correlation coefficient shows 0.625 in investigating the relationship between managerial knowledge and information and organizational efficiency that is significant at a 0.01 level that means there is a positive and significant relationship between the managers' knowledge and information and organizational efficiency.

Table 9: The results of Spearman test for the relationship between managerial knowledge and information and organizational efficiency

Correlations

			Knowledge and information	Efficiency
Spearman test	Knowledge and information	Correlation coefficient	1.000	.625**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	Efficiency	Correlation coefficient	.625**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

The fifth hypothesis: the managers' professional reputation has a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

With regard to the results shown in table 10, the Spearman correlation coefficient shows 0.625 in investigating the relationship between the managers' professional reputation and organizational efficiency which is significant at 0.01 level while this means there is a positive and significant relationship between the managers' professional reputation and organizational efficiency

Table 10: The results of Spearman test for the relationship between managers' professional reputation and organizational efficiency

Correlations

			Professional reputation	Efficiency
Spearman test	Professional reputation	Correlation coefficient	1.000	.529**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	Efficiency	Correlation coefficient	.529**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

The sixth hypothesis: the managers' general reputation has a significant relationship with organizational efficiency in Investment Bank in East Azerbaijan.

The results from the software output have been provided in table 11 in order to examine the relationship between general reputation and organizational efficiency. The spearman correlation coefficient test in the statistical analysis of 66 managers of Housing Bank was calculated as 0.60 which is significant al 0.01 level and indicates that there is a positive and significant relationship between general reputation and organizational efficiency.

Table 11: The results of Spearman test for the relationship between managers' general reputation and organizational efficiency

Correlations

			General reputation	Efficiency
Spearman test	General reputation	Correlation coefficient	1.000	.608**
		Sig. (2-tailed)Significance level	.	.000
		Number	66	66
	efficiency	Correlation coefficient	.608**	1.000
		Significance level Sig. (2-tailed)	.000	.
		Number	66	66

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

As observed in the above tables, there is a positive and significant relationship between organizational efficiency and the criteria of the individual and social level of competence among managers at 0.01 level. The variable of organizational efficiency has the highest correlation as 0.639 and 0.608 with the criterion of attitude and insight from the individual level of competence and the criterion of general reputation from the social level of competence. Therefore, all research hypotheses are confirmed.

The fitness of the regression model of organizational efficiency and the criteria of the individual level of managerial competence

According to the results of Pearson test, the correlation coefficient between the dependent variable and the variable of the individual level of managerial competency is 0.759. The Spearman test also confirmed the correlation between organizational efficiency and the criteria of personality traits, the attitude and insight, skills, and managerial knowledge and information. At this stage, we determine the predictive equation of organizational efficiency in Housing Bank in East Azarbaijan province based on the criteria of the individual level of competence. The adequacy indicators of the model have been reported in table 12 and hence we provide the fitness model.

The coefficient of determination (R Square) has been calculated as 0.566 and this value indicates that 56% of the changes regarding organizational efficiency are related to the criteria of the individual level of competence among the managers. As the Durbin-Watson value is greater than 1.5 which is the standard value, we conclude that the remaining values are independent. According to the provided indexes, it can be said that the model enjoys the required adequacy.

Table 12: Multiple regression statistics and the summary of the fitness regression model

Model Summary b

Model	R Correlation coefficient	R Square Determination coefficient	Adjusted determination coefficient	The standard deviation of the estimate error	Durbin-Watson
1	.759	.566	.537	.50587	2.147

a. Predictors: (Constant), I.C1, I.C4, I.C2, I.C3
b. Dependent Variable: Efficiency

In table 13, the significance of the regression has been calculated by F test. Given the information in the above table, the level of significance is 0 and this means that the regression is significant as this is below 0.05.

Table 13: Multivariate regression analysis of variance

ANOVA a

Model		Sum of Squares	Df Degree of freedom	Mean Square The mean of the sum of squares	F Statistic	Sig.
1	Regression	20.327	4	5.082	19.858	.000b
	Residual	15.610	61	.256		
	Total	35.938	65			

a. Dependent variable: Efficiency
b. Predictive variable: Personality trait, attitude and insight, managerial skill, knowledge and information

With respect to the obtained regression model in table 14, the managerial attitude and insight are the most effective criteria in organizational efficiency among other criteria with a 0.193 coefficient.

Table 14: The statistics of the variable entering the fitness regression model of organizational efficiency

Coefficients a

Model		Non-standard coefficient B	Non-standard coefficient Std. Error	Standard coefficient Beta	t	Sig.
1	Constant value	.840	.267		3.146	.003
	Knowledge and information	.193	.109	.231	1.773	.001
	Managers' skills	.147	.095	.196	1.539	.000
	Attitude and insight	.245	.100	.305	2.465	.017
	Personality traits	.114	.077	.158	1.475	.000

a. Dependent variable: Efficiency

With regard to the results of multiple regression analysis, the predictive equation of organizational efficiency is as below:

Knowledge and information (0.231) + managers' skill (0.196) + attitude and insight (0.305) + personality traits (0.158) + 0.840 = Organizational efficiency

With respect to the obtained regression model, managerial attitude and insight are the most effective criteria in organizational efficiency among other criteria with a 0.193 coefficient.

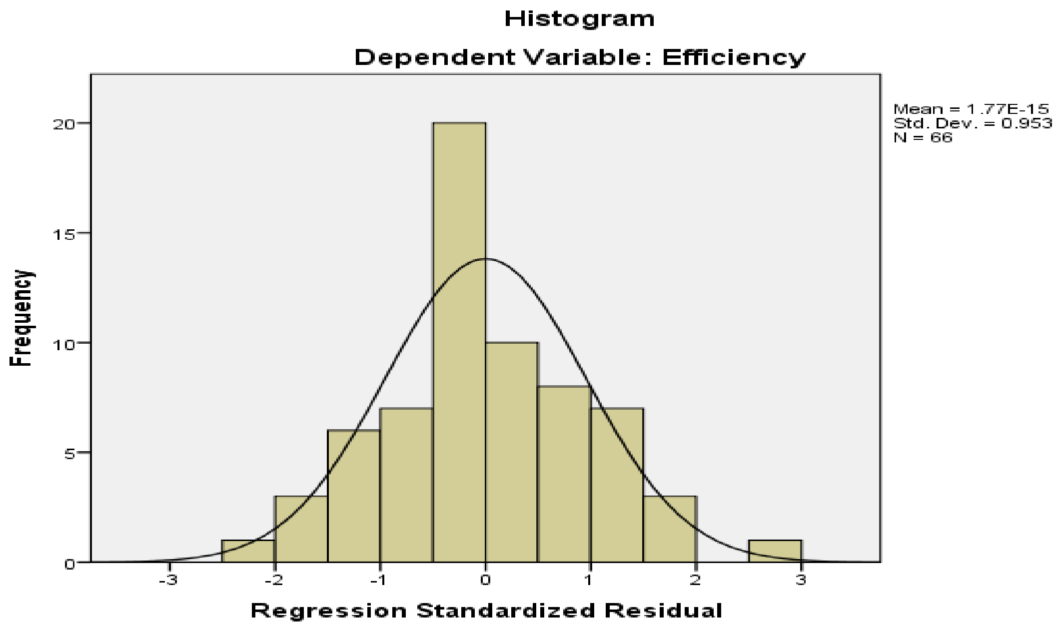

Figure 2: The histogram of the relationship between the individual level of competence and organizational efficiency

The histogram diagram designed in Figure 2 for the regression model has confirmed the normality assumption of the data, therefore, the estimated linear regression is accepted.

The regression model fitness of organizational efficiency and the criteria of the social level of competence in managers

According to the results of Pearson test, the correlation coefficient between the dependent variable of the model and the variable of the social level of managerial competence is 0.763. The Spearman test also confirmed the correlation between the dependent variable of the model and the criterion of general and professional reputation of the managers. At this stage, we determine the predictive equation of organizational efficiency in Housing Bank in East Azerbaijan Province based on the criteria of the social level of competence. The adequacy indicators of the model have been reported in table 15 and hence we provide the fitness model.

The coefficient of determination (R Square) has been calculated as 0.399 and this value indicates that 40% of the change regarding organizational efficiency is related to the criteria of the social level of competence among the managers. As the Durbin-Watson value is 1.972 and as this value is greater than 1.5, we conclude that the remaining values are independent. According to the provided indexes, it can be said that the model enjoys the required adequacy.

Table 15: Multiple regression statistics and the summary of the fitness regression model

Model Summary b

Model	R Correlation coefficient	R Square Determination coefficient	Adjusted coefficient of determination	Standard deviation of estimate error	Durbin-Watson
1	.763	.399	.380	.58531	1.972

a. Predictive hypothesis (Constant): General and professional reputation
b. Dependent variable: Efficiency

In table 16, the significance of regression has been calculated by the F test. According to the information in the above table, the significance level is 0 and as it is below 0.05, the regression is significant.

Table 16: Multivariate regression ANOVA

ANOVA a

Model		Sum of Squares	Df Degree of freedom	Mean Square The mean of the sum of squares	F Statistic	Sig.
1	Regression	14.355	2	7.177	19.858	.000b
	Residual	21.583	63	.343		
	Total	35.938	63			

a. Dependent variable: Efficiency
b. Predictive variable(constant): General reputation and professional reputation

Given the obtained regression model in table 17, the effect of the criterion of professional reputation on organizational efficiency is 0.369 and the effect of the criteria of general reputation on organizational efficiency is 0.159 in the model.

Table 17: The statistics of the variable entering the fitness regression model of organizational efficiency

Coefficients a

Model		Non-standard coefficient		Standard coefficient	t	Sig.
		B	Std. Error	Beta		
1	Constant value	1.407	.300		4.690	.000
	General reputation	.369	.090	.501	4.080	.000
	Professional reputation	.159	.104	.187	1.520	.000

a. Dependent variable: Efficiency

With regard to the results of multiple regression analysis, the predicting equation of organizational efficiency in the studied population is as below:

Professional reputation (0.187) + General reputation (0.501) + 1.407 = Organizational efficiency

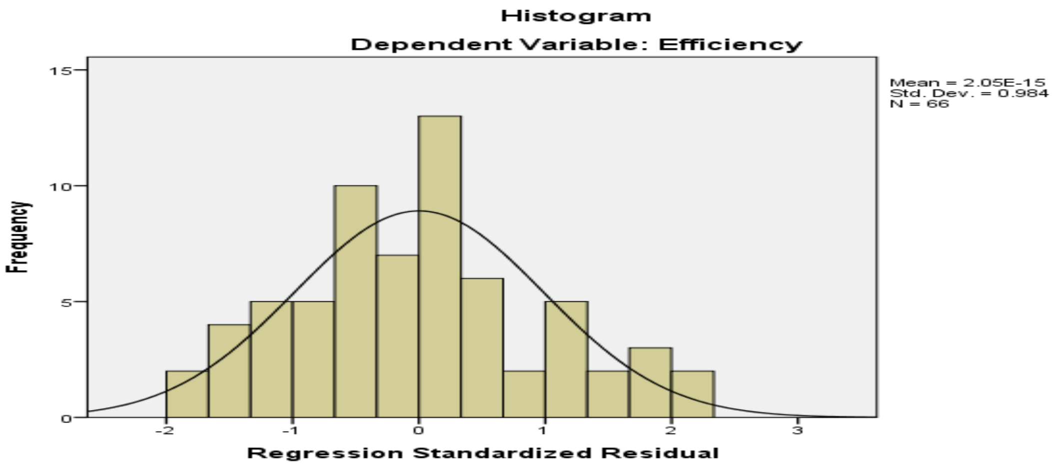

Figure 3: The relationship histogram regarding the criteria of the social level of competence and organizational efficiency

The histogram diagram designed in Figure 3 for the regression model has confirmed the normality assumption of the data, therefore, the estimated linear regression is accepted.

Conclusion

In this study, the extant theories and the conducted studies were used to identify the required indicators were in order to examine the relationship between organizational efficiency and the level of personal and social competence among managers. With respect to the research hypotheses, a questionnaire was obtained to assess the attitudes of managers in Housing Bank in East Azerbaijan as the research purpose and this relationship was examined according to the results of 66 questionnaires.

Attention to the evaluations of managerial competency is undeniable and self-evident in achieving the objectives and strategies of the bank and enhancing organizational efficiency. Through a review of literature, two personality levels are identified to determine managerial competency and they include the individual and social levels. Personality traits, attitudes, insights, skills and professional knowledge and information of individuals are discussed at the individual level. At the social level, the professional and general reputation have been raised and the influence of these factors on the organizational efficiency has been investigated.

By investigating the average numerical values calculated for each variable of the individual and social levels of managerial competency and the variable of organizational efficiency, the results showed that the status of the managers at Housing Banks in East Azerbaijan equals 3.21 in terms of individual competence and 3.20 in terms of the social level of competence. These values are above average but the condition of organizational efficiency in Housing Bank in the province of East Azerbaijan is 2.79 which is a little lower than the average.

Practical recommendations

- With regard to the effect of the criteria of individual and social levels of competence among managers on organizational efficiency and its low level in Housing Bank in East Azerbaijan Province, it is suggested that the following measures be taken to promote the organizational efficiency in Housing Bank in the province of East Azerbaijan.

At the individual level, measures such as efforts to increase the academic and professional level, tolerance respecting disagreements and conflicted opinions and the proper communication of one’s positions with clarity, the ability to communicate effectively with employees, understanding the feelings of employees, empathy and management can be effective. The other contributive actions include a systematic view of the collection and the holistic and relevant view of its sections, the delegation of organizational tasks and duties to the staff according to their abilities, the encouragement of creative and innovative employees in order to generate ideas and new thoughts, compatibility with changes and response to new information and changes occurring in a particular situation, the promotion of cooperative spirit and partnership among staff members, the ability to manage the conflicts and disputes between individuals and groups effectively in order to change destructive conflicts to constructive ones and the general use of one’s capabilities for planning, designing, implementing and evaluating the existing activities of the organization.

On the social level, measures such as increasing the credibility in adopting the appropriate strategy for dealing with various issues in order to achieve the objectives of the organization, presenting one’s own capabilities in predicting, planning and directing the processes of change in the organization in line with the facilitation of constructive change and active adaptation to them which shows the credit of management can be taken.

The attempt to increase awareness, knowledge, experience, and skills in management that are required for the professional reputation of management, the moral and professional commitment, work ethic towards any tasks and increased positive self-confidence and self-awareness in one’s private life, respect for the rights of others, adherence to the rule of law in all matters in order to increase one’s professional reputation are among other recommendations.

- In this study, the general reputation of the management at the social level and the attitudes and insights of management at the individual level had the strongest effect on the variable of efficiency in banks, thus strengthening these two factors can be effective in the improvement of organizational efficiency.

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INVESTIGATING THE IMPACT OF IMPLEMENTING SUGGESTION SYSTEMS ON PROMOTING EMPLOYEES' SATISFACTION IN NATIONAL IRANIAN GAS COMPANY (CASE STUDY: GAS COMPANY OF YAZD PROVINCE)

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Abstract

This study aimed to gauge the impact of implementing suggestion systems on promoting employees' satisfaction in Gas Company of Yazd province. Given the purpose of study, it was an applied research and regarding the method and nature of data collection, it was a descriptive-assessment survey.The research population included those employees of Gas Company of Yazd provincewith high school diplomasand higher degrees,including a group of experts and managers of the company. Besides, questionnaires were used to collect the required data. Regarding the statistical methods, it was decided to make use of descriptive and inferential statistics using SPSS Software.The results indicated that the factors of leadership, appropriate rewards, organization, culture-building practices and knowledge management positively affected the level of employees' satisfaction.

Key words: Job satisfaction, National Iranian Gas Company, participatory management, suggestion systems

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Introduction

Today, human resources are the most important factors affecting the growth and sustainability of any given company and they are regarded the most important competitive advantages of organizations.When human resources are said to be the most important factors affecting the growth of any given organization, one should not envisage impoverished, corrupt or dissatisfied human resources but they are meant to be vibrant, stimulating and involved in work.Although there are many organizations that spend much money on attracting the best employees, their improper management put them in a position where all their talents and motives are spoiled and destroyed.Unfortunately, there is no room for employees' participation and feedback in many organizations.

Participation is a mental and intellectual involvement in a group position that persuades and motivates employees to achieve their collective goals (Stenmark, 2001).

Participation is a complex and subjective phenomenon which cannot easily be defined because the term does not have the same meaning among different cultures and the system of labor relations.In other words, participation in decision making is conceived as a unique concept but it comes into reality through several ways and formats and that is why people have different perceptions on the concept of participation. Accordingly, participation can be seen as the process of engagement of employees in the strategic and tactical decisions of the organization which takes place formally and informally in a direct and indirect manner and with a certain level and degree.

All human beings of any age, knowledge, culture, level of occupation and organizational rank need to be encouraged to think and their ideas must be appreciated and encouraged.Every human being needs to think and he/she feels good when he/she thinks and solves a problem. These requirements are the deep needs of each individual and responding to these needs leads to mental and psychological well-being.Therefore, the creation of a system that can respond to these needs will ultimately be beneficial to the interests of each organization.The suggestion systems are among the most effective executive tools in participatory management and they give this opportunity to all relevant stakeholders along with their executing agencies, including employees, customers, suppliers and even employees' family, to offer their individual or collective suggestions to improve the status and position of organization. Actually, they will receive an appropriate reward in return for the generated benefits. In other words, the suggestion systems provide a mechanism through which the mental findings of human capitals and their potentials for continuous improvement of the organization can be achieved. Besides, the latter flourishes and actualizes employees' creativity and potentials (Olia and Amin, 2000). The system of acceptance and consideration of suggestions is one of the most powerful and effective mechanisms of participatory management that has been widely used in many industrial, commercial and service organizations in the private sectors across the world (Ismailpour and Khosrawi, 2008).

Following the implementation of the suggestion systems in the Gas Company of Yazd province (so far, more than a decade has passed since its inception), there have been some ups and downs in its performance and function. Since each system needs to be evaluated after implementation, the present research gauged the impact of the implementation of the suggestion systems on the improvement of employees' satisfaction.

Definitions

Participatory management

Participatory management is a space and systemcreated by management in such a way that involves all employees, customers and contractors of a given organization in the decision-making process and solving organizational problems and issues.The main emphasis and focus of this kind of management is on the voluntary cooperation and participation of employees, customers and contractors. In fact, it attempts to make use of their ideas, suggestions, initiatives, creativity as well as their technical and specialized capabilities to solve organizational problems and challenges and continuously improve the organization's activities (Sheikh Mohammadi and Toliat Zavareh, 2005).

Participatory management system is one of the dynamic systems that plays an important role in the development of human resources of organizations.Helping employees to improve their field of work through the implementation and development of suggestion systems is an effective way of troubleshooting and resolving them as well as offering suggestions for improving procedures and processes by those who have the most involvement with the problems.

Job satisfaction

It is a set of positive emotions and attitudes held byindividuals about their jobs. When a person says he/she is satisfied with his/her job, this means that he/she really loves his/her job, feels good about his/her job and respects his/her job. The research findings show that employees with higher job satisfaction are in good physical fitness and mental ability or job satisfaction is a set of feelings and beliefs held by individuals about their current jobs (George and Gras, 1999). Job satisfaction is one of the important factors in job success that increases the efficiency and also the sense of individual satisfaction. In fact, job satisfaction means that an individual loves his/her job and its circumstances and conditions in which the work is carried out and for whom the reward is received (Tajik, 2012).

Job satisfaction is a concept that has received much attention in the field of organizational behavior and related literature on management. This significant attention is due to the existence of a relationship between job satisfaction and other concepts such as organizational commitment, change and conversion, job abandonment, job engagement, job performance, organizational citizenship behavior and so on.In today's turbulent environment, which has affected the environmental changes of organizations, itis essential to keep employees satisfied, make them as efficient at work as possible and make them committed to their jobs (Mousavi Davoudi, 2012). Academic definitions of job satisfaction include assessment components. For example, Locke (1976) defines job satisfaction as a pleasant feeling which results from the assessment of various aspects of the job.

Alternatively, Motaz (1988) defines job satisfaction as an emotional response which results from the assessment of working conditions.Elsewhere, it is stated that job satisfaction is subject to rewards and values related to the job.It is worth noting that most approaches towards job satisfaction are based on motivational theories proposed by Herzberg, Maslow, and Vroom (Motaz, 1988).

Suggestion systems

It is a technique through which the mental findings and thoughts of human capitals can be achieved in order to solve problems and create new questions and optimal solutions in line with culture of continuous change and improvement of the organization.In other words, thesuggestion systems are obedient to knowledge and the circulation of thought through which the organization finds readiness to enter puberty and promotes the spirit of participation. Actually, the suggestion systems do not create anything new but they allow the ideals to be realized through thought and the organization may achieve amazing progress and achievements (Khodayifard, Khoshkam and Pour Qarai, 2010).

The suggestion systems are techniques that can be used to take benefit of the thought and knowledge of employees to identify issues and solve them so that the employees at all levels may participate inthe management process.It seems that proper use of this tool leads to honoring human values and assisting individuals to achieve the predetermined common goals.If participatory programs are appropriately selected according to the socio-cultural conditions of the organization, they will last positive impacts on the organization in terms of improvement and growth.

Participatory programs are a set of regular activities conducted in such domains as employees’ engagement (i.e. suggestion systems and quality control teams). Perhaps the simplest participatory program is the suggestion systems by which the employees strengthen their creativity and gradually develop their willingness to participate in group decisions and deepen their motivation to take part in positive organizational changes (Rostami, 2008).

The management practices currently dominated the most Iranian companies and economic institutions are mainly based on the management principles and concepts which were prevalent in the 1920s and 1930s in the Western countries as well as the principles of Taylorism Management.This management style is a major barrier to employees’ participation and a principal factor in reducing the efficiency and effectiveness of Iranian organizations.

The low level of efficiency among Iranian manufacturing and economic organizations and institutions is due to imposing inappropriate management practices and policies.In such a situation and given the importance of group participation and decision making in increasing the efficiency and effectiveness of organizations and the need for employees’ participation in organizations, it seems that the role of the suggestion systems as one of the most effective ways of implementing participatory management is more likely to be revealed (Ismailpour and Khosrawi, 2008).

The background of suggestion systems in Iran

The comprehensive implementation of the suggestion systems in Iran has begun since 1987 following the visit of a group of experts ofIndustrial Development and Renovation Organization of Iran from Japan as well as the support and assistance of the Ministry of Heavy Industries.Thus, in the first months of 1988, it was decided to run the suggestion systems in 4 heavy industrial and manufacturing companies in order to determine the extent of their application and effectiveness. Besides, the team of experts examined the role and impact of the suggestion systems in Iran's work environments and they took into account the concerned results of statistics and figures in order to take into account unpredictable problems and issues that might occur in practice. Consequently, they could obtain the necessary feedback and, when necessary, refined and resolved the concerned initiative. These four companies were as follow: Iranian Radiatorization Company, Navard and Steel Production Company, Akam Felez Company and Suliran Company. The implementation of the aforementioned project in these four companies was very successful and even beyond the experts' expectation and prediction (Moqimi, 2006).Currently, more than 100 private and public companies in Iran are characterized with suggestion systems (Ramezani, 2005). In August 1998, the Supreme Administrative Council ratified the establishment of suggestion systems in all ministries, institutes, corporations and public banks (Modifying Processes and Procedures, 2005). Regarding the advantages and necessities of establishing the suggestion systems in accordance with the Resolution No. 13.43 adopted by Supreme Administrative Board on March 3, 2001,all administrative and executive agencies of the country were required to implement the suggestion systems by the end of 2004.In the same vein, the preparations for the establishment and institutionalization of the culture of participation in the public sector were followed as the main agenda of Comprehensive Administrative Transformation Program (Moqimi, 2006).

The background of suggestion systems in Gas Company of Yazd province

The participation systems of employees in Gas Company of Yazd province was started on April 16, 2001 and, during these years, it continued to pursue the following courses:

1) From 2001 to 2005

2) From 2006 to 2008

3) From 2009 up to now.

Regarding the new regulations and subsequent analyses conducted later this year, it is clear that the suggestion systems have improved since 2010 to the extent that various indicators of the suggestion systems have reasonably increased. Actually, the number of suggestions received in 2009 (N=285) increased up to 2.5 times in 2010 (N=702). The process of obtaining and tracking the suggestions in terms of physical written registration was started in2001 and then, using the Excel and Access software, it was continued accordingly. Since specific software has been prepared by Parsian Gas Refining Company, the latter project is now entering into a new phase. Given the large number of suggestions, the company has run some sub-committees since 2011.At present, 12 sub-committees are active in this company and parts of the council's duties have been delegated to these sub-committees.In addition, the secretariats of the subcommittees have also been set up and these secretariats operate under the supervision of the original secretariat and they actualize some parts of the participation process. In fact, the year 2012 was the masterpiece of suggestion systems of Gas Company of Yazd province at the provincial level.During this year, several meetings were held jointly by the Secretary of the Participation System of Gas Company of Yazd province and provincial managers such as the governor, governorate and other provincial directors. Furthermore, the results and outcomes of these meetings are still ongoing.Table 1 shows some research done in the subject area of the research.

Review of Related Literature

Table 1: Some previous research in this area

Author/researcher	Year	Results
Reza Habibnia	1997	The result of the research suggested that there was a significant relationship between the factors such as training employees and managers, granting various and appropriate rewards and providing the necessary conditions for implementation of the suggestion systems and the success of these kinds of systems.
Jalal Ramezani	1999	Having examined the relationship between participatory management and quantity, quality and cost of production, it was concluded that there was a positive relationship between participatory management and production quality and quantity but there was a negative relationship between participatory management and cost of production.
Abdolqafor Ziai	2003	Participatory management increased employees' motivation, job satisfaction and accountability but it reduced costs and resistance againstorganizational decisions.
Davoud Feiz	2003	Factors affecting the success of the suggestion systems were identified. Then, the relationship between such factors as age, education, work experience, organizational position, salaries and benefits and their participation in the suggestion systems in the Qom Telecommunication Company was examined.
Hassan Yusefi	2004	The most important organizational barriers to participation (suggestion systems) were personnel-related, administrative, cultural, structural and, ultimately, managerial barriers, respectively.
Kazem Mehri	2006	The attitudes of the staff and managers of concerned departments towards the implementation of the suggestion systems were measured. After

		analyzing the data and examining the descriptive and inferential statistics, it was indicated that staff and managers of the Physical Education Department of West Azarbaijan provincehad positive attitudes towards the implementation of these systems.
Dehestani Ardakani	2010	The comprehensive support of the suggestion systems, adoption and implementation of appropriate suggestions, linking the suggestions and the performance evaluation system, encouragement and motivation and the preferred use of employees' idea instead of using the ideas of external experts to solve the problems of organization were suggested.
Ferris	1999	Successful suggestion systems should provide the ground for active participation and cooperation of all personnel in the presentation of suggestionsin such a way that not only their level of education does not impede the participation of staff, but also it increases their motivation and sense of belonging and organizational membership.
Yohe and Hatfield	2003	Participatory management was helpful in increasing employees' satisfaction and efficiency as well as customers' satisfaction. In fact, problems faced witheffective implementation of these systems were due to staff and managers' attitudes, lack of adequate training, poor management and lack of appropriate leadership for the organization.
Bhatti and Qureshi	2007	Increased level of employees' participation has had a positive impact on employees' job satisfaction, commitment and loyalty. Besides, it was indicated that the process of increasing employees' participation was a long-term process that should be taken into account both by staff and managers.
Shagholi and Sufean	2009	There was a significant relationship between all components of participatory management. Then,they proposed the use of these 15components to achieve an appropriate strategy for the rational use of human resources in educational organizations.
Gudarzi and Sohrabi	2016	The study showed that there was a significant relationship between reward management strategies and efficiency. Actually, relevant distribution of rewards in different organizations increased the efficiency thereof.

Research hypotheses

1) The leadership approach in the suggestion systems is effective in improving the employees' satisfaction.

2) The reward payment in the suggestion systems is effective in improving the employees' satisfaction.

3) The organization in the suggestion systems is effective in improving the employees' satisfaction.

4) The culture-building practices in the suggestion systems are effective in improving the employees' satisfaction.

5) The training in the suggestion systems is effective in improving the employees' satisfaction.

6) The knowledge management in the suggestion systems is effective in improving the employees' satisfaction.

7) The processes in the suggestion systems are effective in improving the employees' satisfaction.

Research model

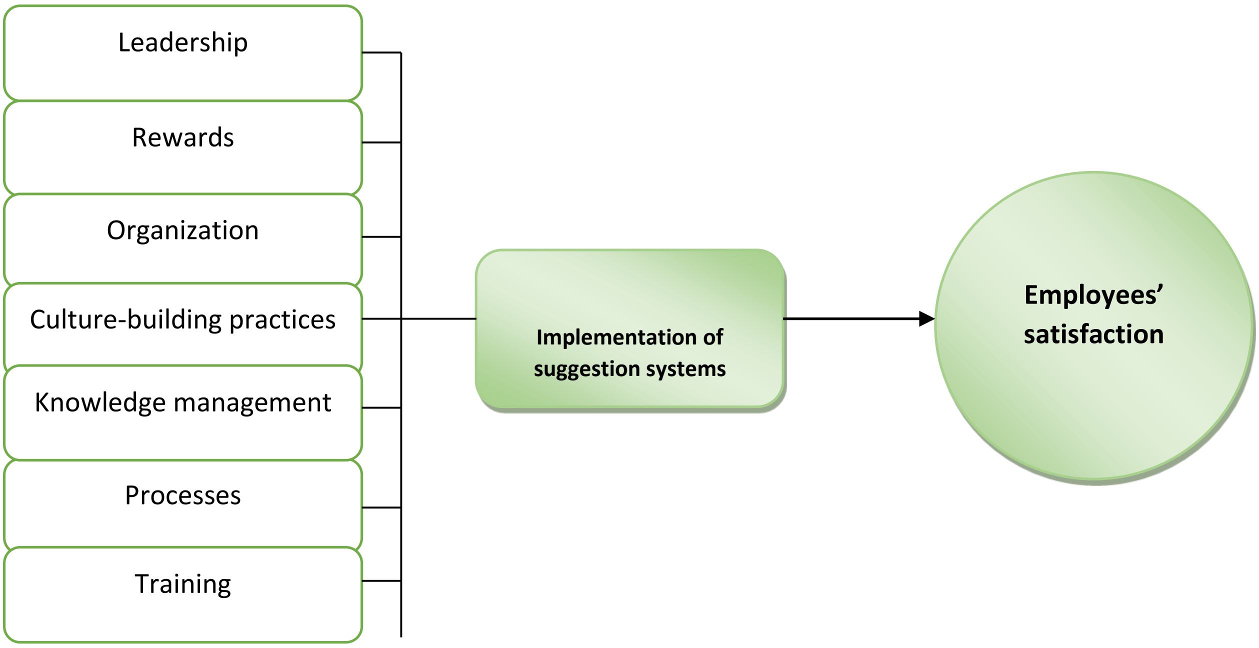

Figure 1: The conceptual research model

Research methodology

Given the purpose of study, it was an applied research and regarding the method and nature of data collection, it was a descriptive-assessment survey. Besides, questionnaires were used to collect the required data. Furthermore, a random sampling method was used to determine the sample size of 234 employees based on Morgan Table at95% confidence level. The research population included those employees of Gas Company of Yazd province with high school diplomas and higher degrees including a group of experts and managers of the company. The Gas Company of Yazd province was consisted of more than 570 staff as one of the provincial gas companies of National Iranian Gas Company. Actually, it was established in early 1999 with the aim of networking and installing gas transmission branches for the purpose of distributing clean energy in terms of domestic, commercial and industrial consumptions.

The Cronbach's alpha was used to determine the reliability of the questionnaires. In this research, the amount of Cronbach's alpha obtained for 35 items (questions) and 234 respondents was equal to 0.956 which was high enough and acceptable.

The obtained data were analyzed using descriptive statistics and inferential statistics.Before performing the statistical tests, it was decided to run a fitness test with normal distribution on the obtained data and it was determined that the data followed the normal distribution. Given the descriptive statistics, it was attempted to make use of frequency, percentage, mean and standard deviation. Regarding the inferential statistics, it was decided to make use of the following tests:

* T-test was run in order to:

- Compare the achieved mean and the expected mean based on paired considerations,

- Compare the mean of viewpoints of women and men.

* ANOVA was run in order to:

- Compare the viewpoints of different groups of respondents in terms of work

experience. The tests were performed using SPSS Software.

Findings

Table 2: The results of the first hypothesis

	Test value = 12					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Leadership	8.576	233	0.000	1.87607	1.4451	2.3071

According to Table 2, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the first hypothesis was confirmed.Therefore, top managers should pay due attention to place the suggestion systems among employees in order to play a decisive role in the development in that the latter positively affects employees' satisfaction.

Table 3:The results of the second hypothesis

	Test value = 15					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Rewards	8.086	233	0.000	-1.31197	-1.8202	-0.8037

According to Table 3, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the second hypothesis was confirmed.Accordingly, paying desirable reward (physical and non-physical) in return for accepted comments and suggestions affects employees' satisfaction.

Table 4: The results of the third hypothesis

	Test value = 12					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Culture-building practices	3.2111	233	0.002	-0.66239	-1.0688	-0.2560

According to Table 4, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the third hypothesis was confirmed.Accordingly, running culture-building practices in terms of suggestion systems and notification and announcing the benefits of suggestions through installing charts and banners positively affects employees' satisfaction. +

Table 5: The results of the fourth hypothesis

	Test value = 12					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Organization	2.533	232	0.012	-0.50644	-0.9003	-0.1126

According to Table 5, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the fourth hypothesis was confirmed.Accordingly, the proper organization of the suggestion systems (establishing systematic rules and regulations coded to help committees to pay remuneration) positively affects employees' satisfaction.

Table 6: The results of the fifth hypothesis

	Test value = 15					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Training	-1.529	232	0.128	-0.37179	-0.8508	0.1072

According to Table 6, since the significance level of the test was higher than 0.05, it was concluded that the test was not statistically significant at 95% confidence level and the null hypothesis was confirmed and the fifth hypothesis was rejected.Accordingly, providing required training positively affects employees' satisfaction.

Table 7: The results of the sixth hypothesis

	Test value = 9					
	T-test statistics	Df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Knowledge management	2.532	232	0.012	-0.40773	-0.7248	-0.0906

According to Table 7, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the sixth hypothesis was confirmed.Accordingly, the existence of an appropriate information system as well as a mechanized system and software positively affects employees' satisfaction.

Table 8: The results of the seventh hypothesis

	Test value = 30					
	T-test statistics	df	Sig.	Mean difference	95% confidence interval for difference	
					Lower limit	Upper limit
Processes	2.87	232	0.005	-1.33906	-2.2726	-0.4055

According to Table 8, since the significance level of the test was less than 0.05, it was concluded that the test was statistically significant at 95% confidence level and the null hypothesis was rejected and the seventh hypothesis was confirmed.Accordingly, proper implementation of suggestion systems positively affects employees' satisfaction.

Prioritizing the effect of factors on employees' satisfaction

To answer this question, the Friedman Statistical Test was used. Accordingly, the results are shown in Table 9.

Table 9: The results of Friedman Statistical Test

Factor	Ranking mean	Priority
Leadership	4.35	1
Rewards	4.02	2
Organization	3.44	3
Culture-building practices	2.13	4
Knowledge management	1.11	5
Processes	1.09	6
Training	1.08	5

As the results of Friedman Test show, leadership has had the greatest impact on employees' satisfaction.It has been indicated that such factors as leadership, rewards, organization, culture-building practices, knowledge management, processes and training have had major impacts on employees' satisfaction, respectively.

Discussion and Conclusion

This study aimed to gauge the impact of implementing suggestion systems on promoting employees' satisfaction in Gas Company of Yazd province.The results of hypotheses testing indicated that all components of suggestion systems, except training, have been effective in improving employees' satisfaction.Also, the ranking of the components is shown in Table 9. Actually, paying due attention to suggestion systems on the part of top manager, playing a decisive role in development, paying desirable reward (physical and non-physical) in return for comments and accepted suggestions, notification and pronouncement ofthe advantages of suggestions through banners, organizing the suggestion system appropriately (via establishing systematic rules and regulations coded to help committees to pay remuneration), providing a suitable, mechanized and software notification system in the suggestion systems and appropriately implementing the suggestion systems played the major roles in boosting employees' satisfaction. Also, the results showed that the component of training in the suggestion systems has had no significant impact on boosting employees' satisfaction. In this regard, it is necessary to examine the issue more precisely and identify the appropriate strategies and methods for training in the organization.

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