

## **Analyzing Correlation of Leadership Style with Organizational Maturity a Military Organization: A Case Study**

Yashar Salamzadeh<sup>1</sup>, Shakiba Pajoochi Hajiseydivadi<sup>2</sup>

<sup>1</sup> PhD in Public Administration, Management Group, Farabi Institute of Higher Education, Mehrshahr, IRAN

<sup>2</sup> Researcher and Master Student, Farabi Institute of Higher Education, Mehrshahr, IRAN

---

**ABSTRACT:** Management and leadership are the pillars of every organization and society. Advancement of technology, complexity and size of today's organizations, and organizations' continuous effort to gradually evolve their processes and achieve organizational maturity to gain competitive advantage and greater sustainability have highlighted the role of organizational leadership more than ever. Conducted in 2016, the present research is an attempt to determine the Correlation between Leadership Style and Organizational Maturity in a Military Organization. This research is an applied study in terms of objective, and a descriptive-survey study with respect to data collection method. The statistical population included 150 personnel of a military organization. The data is collected using two questionnaires: the leadership style questionnaire and the organizational maturity questionnaire. The questionnaire's reliability is 0.98 using the Cronbach's alpha for all dimensions of the questionnaire. A construct validity assessment is conducted to calculate the questionnaire's validity, and results reflected validity of the research instrument (AVE>0.5). Data analysis is carried out through structural equations modeling in Smart PLS. Results revealed that the variance and path coefficients have significantly adequate values. Findings were also reflective of a significant Correlation between leadership style and organizational maturity of employees. However, a significant negative Correlation is observed between organization's leadership goal setting and organizational maturity on the one hand, and leadership style and organizational maturity on the other. As a result, the research hypotheses were rejected. In addition, there is no Correlation between organizational maturity and leadership style, and thus the related hypothesis is rejected in studied organization.

**Keywords:** Management and leadership, organizational maturity, leadership style, employees' capability, organizational growth and improvement

---

### **I. INTRODUCTION**

Today's organizations are making efforts to achieve gradual procedural evolution and higher levels of organizational maturity to gain competitive advantage and sustainability in this surge of evolution. "This is because organizational maturity is like a ruler, which assesses organization's measures and processes and helps organizations prioritize important operational processes. In fact, by assessing different processes in areas related to its primary mission, the organization understands its potential for that process or whether it has reached organizational maturity with respect to that particular process." (Paulk, Curtis, Chrissis, & Weber, 2009). A maturity level is a specific evolutionary state for the success of an organization, which has reached maturity. Since organizational culture and professional areas are closely related to leadership styles in organizations, (Rizzo, Gilman, & Mersmann, 1994) Alfred Chandler believes characterless managers could not be held responsible for today's organizations (Chandler, 1962). An effective leadership method is associated with employees' preparedness or their "organizational maturity" (Hersey & Blanchard, 1988). Research on leadership has revealed that leaders do not differ considerably in their presupposed behaviors (Vroom & Jago, 1988), but they may demonstrate different behaviors in reaction to different working conditions or employees (Dansereau, Graen, & Haga, 1975).

Today's world is rapidly changing and evolving. The advancement of technology has increased the complexity and dimensions of modern organizations such that management of organizational affairs is facing a challenge (Frank, Eckrich, & Rohr, 1997). Hence, the role of leadership in an organization is more important than ever. Managers' leadership is associated with organizational effectiveness, competence, and productivity (Frank, Eckrich, & Rohr, 1997). In addition, managers' leadership style is closely related to job satisfaction and organizational commitment on the part of employees (Mowday, Porter, & Steers, 1982). In fact, it is leadership that leads to collaboration between employees and formation of workgroups (San Juan, 1998). The same factor is the reason for effective, efficient, disciplined, and coordinated accomplishment of tasks (San Juan, 1998). In their investigations, Likert and Paul Hersey recommend managers to pay more attention to their organizations and try to adopt a proper leadership style in their organizations in order to achieve personal growth and organizational maturity (Hersey & Blanchard, 1988). Leadership success goes beyond a number of particular behaviors or qualities and necessitates regard for situational factors and their effects. The reason is

that a person may be successful in a situation using a specific method, but he/she should opt for a different leadership method in a different situation, because the leader has to use a different leadership method or style depending on the situation. Hence, an understanding of the effect of leadership style on organizational success and maturity is extremely important. (Perra, 2000). The success of a group depends on the harmony between the leadership style and the organizational situation the group experiences (Fiedler, 1967). As one of the major organizations and manufacturing-military industries of Iran, A Military Organizations not an exception, and thus it is necessary to investigate the leadership style and its effect on organizational maturity, especially in research units and design divisions.

There is a consensus that proper leadership is necessary for business, commerce, state affairs, groups, and numerous organizations that shape our lives or in which we are employed. Leadership refers to the management's effort to encourage employees to work toward organizational goals (Agrowal, 1982). In this regard, based on theoretical fundamentals and research literature as well as different studies on the basis of this literature, the present study aimed at identifying and analyzing the effect of leadership style on organizational maturity of research departments and design divisions of A Military Organization from the perspective of the defense industries experts (as a small sample population that is constantly faced with management challenges and is currently trying to deal with technological advancements and organizational maturity) using the validity and reliability assessment techniques.

The author attempted to answer the following question: "What is the Correlation between organizational maturity of research departments and of design divisions of Iran's defense industries with managers' leadership style?"

## **II. STATEMENT OF THE PROBLEM**

Research results suggested that managers' leadership style is related to organizations' maturity, effectiveness, competence, and productivity( Frank, Eckrich , & Rohr , 1997) (Chiok, 2001).In addition, managers' leadership style is closely related to employees' job satisfaction and organizational commitment (Dunham, 2000)& (Mowday et.al, 1982).

Managers' leadership style contributes to proper guidance of employees toward organizational goals. Utilization of the best leadership style or management style also increases employee effectiveness and maturity.

**General Research Objective:**The general objective is to study the mutual effects of leadership style and organizational maturity in a military organization. In this research, it is tried to identify the suitable organizational leadership style by studying the effect of variables depending on organizational maturity and assessing maturity levels. It is also tried to examine the effect of variables associated with leadership style and selection of a suitable leadership style on organizational maturity.

### **Secondary Research Objectives:**

- Analyzing the effect of organizational leadership goal setting on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership style guide on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership motivation on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership control and monitoring on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership decision making on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership decision making on organizational maturity of the organization under study.
- Analyzing the effect of organizational leadership connections on organizational maturity of the organization under study.
- Analyzing the effect of organizational structure on leadership style of the organization under study.
- Analyzing the effect of organizational Guidelines on leadership style of the organization under study.
- Analyzing the effect of skills and expertise of staff on leadership style of the organization under study.
- Analyzing the effect of organizational culture on leadership style of the organization under study.
- Analyzing the effect of organizational structure on leadership style of the organization under study.
- Analyzing the effect of accountability on leadership style of the organization under study

**Research Hypotheses:** There is a significant mutual Correlation between a proper leadership style and level of organizational maturity in Iran's Defense Industries.

**Secondary Hypotheses**

- There is a significant Correlation between organizational leadership goal setting and organizational maturity.
- There is a significant Correlation between organizational leadership motivation and organizational maturity.
- There is a significant Correlation between organizational leadership Guidance and organizational maturity.
- There is a significant Correlation between organizational leadership control and monitoring and organizational maturity.
- There is a significant Correlation between organizational leadership decision making and organizational maturity.
- There is a significant Correlation between organizational leadership connections and organizational maturity.
- There is a significant Correlation between organizational instructions and leadership style.
- There is a significant Correlation between organizational Guidelines and leadership style.
- There is a significant Correlation between skills and expertise of staff and leadership style.
- There is a significant Correlation between organizational Culture and leadership style.
- There is a significant Correlation between accountability and leadership style.

### III. LITERATURE REVIEW

**Leadership:** Leadership is one of the concerns of the ever-changing global economy. The considerable difference in research results indicates that leadership styles are constantly changing. Moreover, in today's society, organizations are dealing with challenges and growing competitions. Therefore, efficient leadership has become an extremely important issue, which should be studied to understand the methods for motivating employees and helping them toward organizational goals ( Kao & Craven, 2006). Since the success of a company depends on organizational performance and employees' job satisfaction and emotional commitment (Tella, Ayeni, & Popoola, 2007) (Bass & Riggio, 2006), the leader should understand and promote the factors that motivate supporters and their progress in proportion to the organization's goals. (Bass & Avolio, 1994) (Strong, Wynn, Irby, & Lindner, 2013). Hence, many researchers and experts argue that leadership is one of the most important factors influencing employees' morality and honesty. (Ciulla, 1998)

Leadership is a multipurpose process that requires collaboration with others through personal and professional relation so as to attain a goal or promote a positive change ( (Strong, Wynn, Irby, & Lindner, 2013)Today, many experts believe that leadership styles are developed based on internal or external organizational parameters and variables( (Bratton & Gold Bratton, 2012)In addition, since all people share similar skills, motivations, or goals/plans, the leadership style must be flexible to obtain the highest level of value provided that the organization's supporters achieve maturity(Hersey & Blanchard, 1988). This argument forms the basis of situational leadership. (Galloway & Haniff, 2015)

**Leadership Style:** Leadership style or competency is an important factor behind the success of projects and management of organizations, as an appropriate leadership style can improve performance(Turner & Müller, 2005). A leadership style is a means of obtaining desirable results through employee activities( (Cable , Kim, & Kim , 2005)). From the organizational perspective, since a leader enjoys influence over personal and group behaviors of employees, his/her leadership style is critically important. Although many factors influence organizational performance, there is no question about the vital effect of leadership( (Prybil, 2003). Investigations have revealed that the leader can improve collaboration between groups by formulating a suitable model, because the supporters reflect the leader's behavior in their choices. (Vesterlund, 2003)

Selection of a leadership style may depend on the leader's interest in conforming to priorities of other group members. Moreover, incentives other than personal interests may considerably influence the leader's decisions ( (Kocher, Pogrebna, & Sutter, 2009).

Three definitions of three leadership style dimensions have been proposed:

1. Benevolent or advisory: The leader is known as a loved guardian, who insists on respect, cooperation, consultation, inspiration, encouragement, patriarchy/support, norm-based approach, and mediation. He/she also maintains a mild yet friendly Correlation.
2. Credible, charitable, or parental: It is characterized by conditional shady care. The leader expects respect and obedience, fears inspiration, prescription, and task-oriented approaches, and keeps his/her distance.
3. Imperious: It is defined as an autocratic approach. The leader demands respect, ordering, and guiding and keeps his/her distance. The leader also acts feudally and fears inspiration and intimidation. (Karadakil, Goud, & Thomas, 2015)However, it shall be noted that research on appropriate leadership styles, especially

the situational leadership model, especially situational leadership, suggests that there is no style that is best for all situations because effectiveness of a leadership style or method depends on preparedness of employees or their “organizational maturity”. (Hersey & Blanchard, 1988)

**Table1: The Six Leadership Styles of Goleman**

	<b>Commanding</b>	<b>visionary</b>	<b>Affiliative</b>	<b>Democratic</b>	<b>Pace setting</b>	<b>Coaching</b>
<b>The Leader's Methods operandi</b>	Demands immediate compliance	Mobilizes people toward a vision	Creates harmony and builds emotional bonds	Forges consensus through participation	Sets high standards for performance	Develops people for the future
<b>The Style in a phrase</b>	“Do what I tell you.”	“Come with me“.	“People come first“	“What do you think?”	“Does I do ,now”	“Try this”
<b>Underlying Emotional intelligence Competencies</b>	Drive to achieve, initiative, self-control	Self–confidence, empathy, change catalyst	Empathy building relationships, communication	Collaboration, team Leadership , communication	Conscientious ness, drive to achieve, initiative	Developing others , empathy ,self-awareness
<b>When the style works best</b>	In a crisis, to kick start a with problem employees	When changes require a new vision , or when a clear direction is needed	To heal rifts in a team or to motivate people during stressful circumstances	To build buy-in or consensus, or to get input from valuable employees	To get quick result from a highly motivated and competent team	To help an employee improve performance or develop long-term strengths
<b>Overall impact on climate</b>	Negative	Most strongly positive	Positive	positive	Negative	positive

**Paul Hersey’s Situational Leadership:** Research results clearly indicate that there is no all-embracing leadership style, and successful leaders are those who manage to adapt their behavior to achieve their goals under unique circumstances. Situational leaders should analyze employees’ skills, needs, talents, and strengths and react to different situations accordingly(Hersey & Blanchard, 1988). Flexible leaders are those who select the correct style under correct circumstances ( Kao & Craven, 2006)

**Leader’s Duty:** The leader is obliged to ensure the direction, balance, and commitment in teams and organizations (MacCauley & Van Velsor, 2004)

**Effect of Leadership on Organizational Performance:** Although many factors influence organizational performance, leadership is undoubtedly one of the most important factors determining the organization’s ultimate success (Pettigrew, Woodman, & Cameron, 2001).To achieve success, the organization needs to balance the stakeholders’ demands (i.e. owners, employees, customers, and society) and employees’ demands. Hence, success of a company is the outcome of organizational performance, employees’ job satisfaction, and employees’ emotional commitment. Using effective leadership styles, managers seek to motivate, manage, inspire, reward, and help employees obtain analytical skills. Increased employee satisfaction and improved organizational performance are the outcomes of the existence of all these elements. The leader should be capable of promoting creativity and innovation and encouraging employees to challenge their value systems and to improve their value systems and personal performance (Hurduzeu, 2015).

**Organizational Maturity:** Many organizations try to grow more mature in their gradual evolution. A large percentage of these organizations utilize capability maturity models to plan for future and allow for preparedness and more welfare. (Guldentops, 2010)

**What is a maturity model and why should it be used?:** Use of a maturity model allows the organization to assess its procedures and processes against a specific set of external criteria in proportion to the management. Organizational maturity is like a ruler, which assesses organization’s measures and processes and helps organizations with prioritizing important operational processes. In fact, by assessing different processes in areas related to its primary mission, the organization understands its potential for that process or whether it has reached organizational maturity with respect to that particular process (Curtis, Hefley & Miler, 2009).” A maturity level is a specific evolutionary state for the success of an organization, which has reached maturity (Paulk M. , Curtis, Chrissis, & Weber, 1997)

**Table 2: Summary of maturity models**

No.	Title	Symbol	Symbol explanation	Explanation
1	<b>Capability Maturity Model</b>	CMM	Capability Maturity Model	Capability Maturity Model for development processes, provides a framework for improving processes that organizations are able to improve.
2	<b>Project Management Maturity Model</b>	OPM3	Project Management Maturity Model	The purpose of this model is to help organizations understand and measure Management Maturity by the measures of standards that are known as best way to manage enterprise project.
3	<b>Staff Capability</b>	P-	People Capability	This model is to create or choose route maps, points of

	<b>Maturity Model</b>	CMM	Maturity Model	identification and designs of processes that consistently led to the development of human resource capabilities
4	<b>Knowledge Management Maturity Model</b>	KM3	Knowledge Management Maturity Model	The purpose of this model is to transport knowledge and data flow in order to provide a top-down measurement system and also constantly improve the organizational learning in knowledge-based and process-driven organizations.
5	<b>Process Maturity Model</b>	PMF	Process Maturity Framework	This model provides a framework for the maturity of organizational processes.
6	<b>Service-oriented Architecture Maturity Model</b>	SOAM M	Service-oriented Architecture Maturity Model	The goal of this model is to support the gradual use of SOA and provide examples for the process. This model focuses on SOA.
7	<b>Services Maturity Model Integration</b>	SIMM	Services Maturity Model Integration	The aim of this model is to gradually support the use of SOA and provide a method for this is the process just like SOAMM model. It should be noted that this model doesn't talk about SOA maturity itself, but it focuses on services that are caused by integrating maturity models.

**Work Force Capability Improvement Code:** The process maturity framework was designed to be applied to measures directly affecting business performance of an organization. That is to say, it is the organization's capability for providing high-quality products and services. Since an organization's work force capability is vital to its performance, management measures and development of these measures are excellent means of improving the process maturity framework's applications. (Curtis, Hefley, & Miller, 2003.)

**Organizational Maturity:**

**Managing: Structures and related roles and responsibilities are identified and defined:**

- Defined Team and Roles
- Individual Goals

**Optimizing: Fully implanted structures with all roles executing to Team is a fully functional center of Excellence:**

- Value Aligned Incentives
- Resource planning
- Team vision and goals

**Transforming: Evolving organization structures , roles and decision rights; synchronous collaboration ; team drives change :**

- Robust Team Goals
- Individual Rotation
- Resource management (Andersen & Henriksen, 2006)

**OPM3 Standard:** The Organizational Project Management Maturity Model(OPM3) helps with reexamination of organizational strategic goals using the best organizational project management models. This model is used as an analytical model to decide, plan, and implement organizational revolutions. (Hemmati, Mojtaba, & Ahmadifard, 2012)

**Strategic Management Maturity Model (SMMM):**It is used to monitor the progress of strategic management maturity and determine procedure identification criteria for an entire organization or its departments. There are two substantial questions about management: Are we working properly? Are we doing the right thing? These two strategic and operational dimensions of management complete each other, and thus should be examined to determine the overall management capabilities of the organization (Arveson, et al., 2010)

**Table 3: Evaluation of Strategic Management Maturity Models**

	<b>Level 1: Ad hoc &amp; static</b>	<b>Level 2: Reactive</b>	<b>Level 3: Structured &amp; Proactive</b>	<b>Level 4: Managed &amp; Focused</b>	<b>Level 5: Continuous Improvement</b>
<b>Leadership</b>	Leaders dictate/command & control; otherwise disengaged	Leaders dictate but gather feedback sporadically	Leaders engage with direct reports only, but do model desired behaviors and values	Leaders empower many employees through ongoing engagement	Leaders & employees fully engage in a continuous dialog based on a team-based culture
<b>Culture &amp; Values</b>	Vision & values undefined or not shared	Vision & values published, but	Vision and values communicated & understood	Vision and values collaboratively developed	Vision & values fully integrated into organization culture

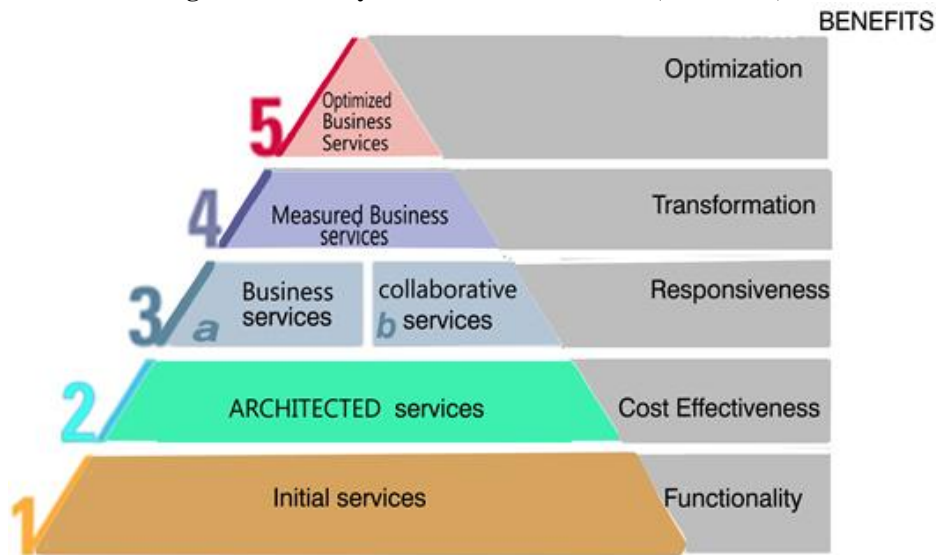
		not lived			
<b>Strategic Thinking &amp; Planning</b>	No strategic planning occurs within the organization: no goals defined	Strategic planning is the responsibility of a small team and dictated to the organization	A structured and open planning process involves people throughout the organization every couple of years	Plans are developed and revised regularly by trained, cross-functional planning teams	Strategy drives critical organizational decisions and a continuous improvement planning process is maintained
<b>Alignment</b>	Work is narrowly focused based on organization structure, with little customer input	Customer needs and feedback start to influence more aligned decision making	Employees know their customers and align strategy to those needs	Vision, customer needs, strategy, and employee reward and recognition systems are cascaded and aligned	All structures and systems are aligned with strategy, and organizational alignment is continuously improved
<b>Performance Measurement</b>	No date, or only ad hoc performance measures are collected	Performance data collected routinely; but are mostly operationally focused	Strategic performance measures and collected, covering most strategic objectives	Strategic measures are broadly used to improve focus & performance and inform budget decisions	Measurements comprehensively used and routinely revised based on continuous improvement
<b>Performance Management</b>	No emphasis on using performance as a criterion to manage the organization	Performance reviews required but not taken seriously; no accountability for performance exists	Measures are assigned owners and performance is managed at the organizational and employee level	Measurement owners are held accountable and performance is managed in all levels	Organizational culture is measurement and accountability focused; decisions and evidence-based
<b>Process Improvement</b>	Processes are undocumented and ad hoc with evident duplication and delays	A few key processes documented, and process improvement models (TQM, Lean Six Sigma, etc) introduced	All key processes are identified and documented, and strategy guides successful process improvement initiative and improvement	All key processes are tracked and improved on continuous basis and new process improvement ideas are accepted	Employees are empowered and trained, and formal process exists for improving process management
<b>Sustainability</b>	Lack of structure and champions lead to short-term focus on tasks	Strategy "champions" identified	Formal organization structure in place to maintain focus on strategy	Organization has an "Office of Strategy Management" or equivalent	Strategic thinking and management are embedded in the culture of the organization

**Table4: Maturity Models' Comparison: (Williams, 2012)**

Maturity Model	Goals	Areas Assessed	Classification
<b>OPM3(PM1)</b>	Align PM to strategy	Project, Programs, Portfolios	1 (standardize) to 4 (Continuously improve)
<b>P2M-Japan</b>	Align PM to strategy	Project, Programs	1 (haphazard) to 5 (optimization)
<b>P3m3-UK</b>	Improve project practices	Project, Programs, Portfolios	1 (awareness) to 5 (optimized)
<b>Project Excellence Model</b>	Improve project practices	Project	Continuous scale from 1 to 1000

**Service-oriented Architecture (SOA) Maturity Models:** A long-term SOA outlook with ultimate goals and management goals can be established using SOA maturity models. The special technical and organizational needs can be assessed along with business advantages, and investment can be planned. By controlling all of these factors, these models can help companies in risk management.

Figure1: Maturity Model SOA - SOA MM (Soni, 2005)



6- Review of Literature:

Here a short literature review is presented.

Table 5: A Short Review of Literature

1	Leadership Style And Organizational Structure In The Context Of Mintzberg's Vision	Mihai Vărzaru Anca Vărzaru	2013	New Management For The New Economy, ) VĂRZARU & VĂRZARU2, (2013)
2	Leadership Style And The Organization Life Cycle	Rochelle J. Bayers	2011	Leadership Style And The Organization Life Cycle, ) Bayers, (2011)
3	The Maturity Of Project Management In Different Industries: An Investigation Into Variations Between Project Management Models	Terence J. Cooke-Davies, B , Andrew Arzymanowc	2003	International Journal Of Project Management ) Cooke-Davies & Arzymanowc, (2003)
4	Transformational Leadership And Human Capital Management In 21st Century Organizations	Dr. Ruth J. Tube Mary Odenyo Winnie T. Chebet Jacob Rotich,	2015	J European Journal of Research and Reflection in Management Sciences (Tubey, Odenyo, Chebet, & Rotich, 2015)
5	The Future Of Leadership In Learning Organizations	Bernard M. Bass	2000	Studies Journal Of Leadership & Organizational ) Bass B. M., The Future of Leadership in Learning Organizations, (2000)
6	Managing Projects In Architecture: A Study Of Leadership In A Creative Industry	Laura Galloway And Amos Haniff	2015	Open Economics And Management Journal) Galloway & Haniff, (2015)
7	Effect Of Leadership Style On Employee Performance	Iqbal, Anwar And Haider	2015	Arabian Journal Of Business And Aibara Management Review .)Iqbal, Anwar & ,Haider, (2015)
8	From The Trenches: Leadership Strategies From The US Navy Seals Applied To Healthcare	Colin Korschak, Commander Jamie Sands	2015	Divurgent) Korschak & Sands, (2015)
9	Organizational Maturity Rating (OMR) Research Note	Organizational Maturity Services	2015	OMS Organizational Maturity Services LLP !) Services, February (2015)
10	Leadership And Leadership Development In Health Care: The Evidence Base	Michael West, Kirsten Armit, Regina Eckert, Thomas West, Allan Lee	2015	Center For Creative Leadership) West, Kirsten, Eckert, West & ,lee, (2015)
11	Effects Of Leadership Style On Organizational Performance: A Survey Of Selected Small Scale Enterprises In Ikoiki-Ketu Council Development Area Of Lagos State, Niger	Obiwuru Timothy C. Okwu, Andy T. Akpa, Victoria O. Nwankwere, Idowu A.	2011	Australian Journal Of Business And Management Research ,)C., Andy, Okwu, Victoria & , Nwankwere, October-(2011)
12	The relationships between management styles, user participation, and system success over MIS growth stages	His-Peng Lu Jyun-Yu Wang	1997	Information & Management, Lu & Wang, (1997)

*Analyzing Correlation of Leadership Style with Organizational Maturity a Military Organization: A ..*

13	Leadership Effects On Organizational Climate And Financial Performance Local Leadership Effect In Chain Organizations	Bas A.S. Koene Ad L.W. Vogelaar Joseph L. Soeters	2002	The Leadership Quarterly Koene , Vogelaar & ,Soeters, (2002)
14	An Introduction To Organizational Maturity Assessment: Measuring Organizational Capabilities	Selena Rezvani, M.S.W	2011	International Public Management Association Assessment Council Rezvani, (2011)
15	Strategy And The Learning Organization: A Maturity Model For The Formation Of Strategy	John Kenny	2006	The Learning Organization ,)Kenny, (2006)
16	Measurement Of Knowledge Management Maturity Level Within Organizations	Neda Khatibian Tahmoores Hasan Gholoipour Hasan Abedi Jafari	2010	Business Strategy Series ) Khatibian, gholoipour & ,Abedi Jafari, (2010)
17	People Capability Maturity Model (P-Cmm) Version 2.0, Second Edition	Bill Curtis Bill Hefley Sally Miller	2009	Software Engineering Process Management . People Capability Maturity Model (P-CMM) Version 2.0, Second Edition, July 2009)
18	The Study Of Second Level Of People Capability Maturity Model On The Industrial Control Industry In Taiwan	Yin-Che Chen*, King-Ching Hsieh, Mei-Tai Wu	2012	Journal Of Quality Chen*, Hsieh, & Wu, (2012)
19	Enhancing Employee Outcomes: The Interrelated Influences Of Managers' Emotional Intelligence And Leadership Style	Cheok San Lam, Eleanor R.E. O'Higgins	2012	Leadership & Organization Development Journal .(San Lam & O'Higgins, 2012)
20	The Project Manager's Leadership Style As A Success Factor On Projects: A Literature Review	J. Rodney Turner Ralf Müller,	2005	Project Management Journal ) Turner &Muller, (2005)
21	The Impact Of Youth Sports On Leadership Styles In The Hospitality Industry	James Arthur Williams	2012	Digital Repository @ Iowa State University ) Williams, (2012)
22	The Impact Of Leadership On Organizational Performance	Elena Hurduzeu	2015	Transformational Leadership Organizational Performance )Hurduzeu, (2015)
23	Towards A Maturity Model For E-Collaboration – A Design Science Research Approach	Stefanie Hain,Andrea Back	2011	Proceedings Of The 44th Hawaii International Conference On System Sciences) Hain & Back, (2011)
24	E-Government Maturity Models: Extension Of The Layne And Lee Model	Kim Viborg Andersen, Helle Zinner Henriksen	2006	Elsevier: Government Information Quarterly ) Andersen & Zinner Henriksen, (2006)
25	Development And Dissemination Of A Capability Maturity Model For Research Data Management Training And Performance Assessment	PI: Jian Qin Co-PI: Kevin Crowston	2014	School Of Information Studies Syracuse University) Qin & Crowston, Development and Dissemination of A Capability Maturity Model for Research Data Management Training and Performance Assessment
26	The Review Of The Correlation Between Leadership Styles And Organizational Commitment Of Employees In Petrochemical Complexes Of 'Asalūyeh In Bushehr Province, Iran	Toraj Hassanzadeh Samarin, Alireza Sahranavard	2015	Journal Of Applied Environmental And Biological Sciences, (9S)213-218, (2015 )
27	The Relationship between Emotional Intelligence and Leadership Styles of Principals in High Schools of Rasht, District 1 and District 2	Azadehdel. M. R. Avakh.A	2015	Journal Of Applied Environmental And Biological Sciences. 5(11S)497-505, (2015)
28	The Correlation Between Leadership Styles And Organizational Maturity Of Staff In The Petrochemical Complex In Assaluyeh	Toraj Hassan Zadeh Samarin And Ali Reza Sahranavard	2015	Research Journal Of Fisheries And hydrobiology
29	An Investigation On Correlation Between Leadership Style And Organizational Maturity Nurses In Educational Hospitals	G. Abedi, A. Hedayatizadeh And F. Rostami	2011	World Applied Sciences Journal 12 (7): 939-943, (2011)
30	Correlation Between Students' Self-Efficacy And Teachers' Educational Leadership Style In Iranian Midwifery Students	Zohreh Sohrabi, Masoomah Kheirkhah, Elahe Sadegi Sahebzad, Seyedehsahel Rasouli ghasemlouei, & Siamak Khavandi	2016	Global Journal Of Health Science; Published By Canadian Center Of Science And Education

Considering the rapid evolutions and advancements, since A Military Organization is a large organization that grows in relation to changes of the environment and the time, the best leadership style for this organization seems to be the situational leadership style. Moreover, as studies suggest, Iran's Ministry of Deference organizational maturity model is based on the service-oriented architecture.



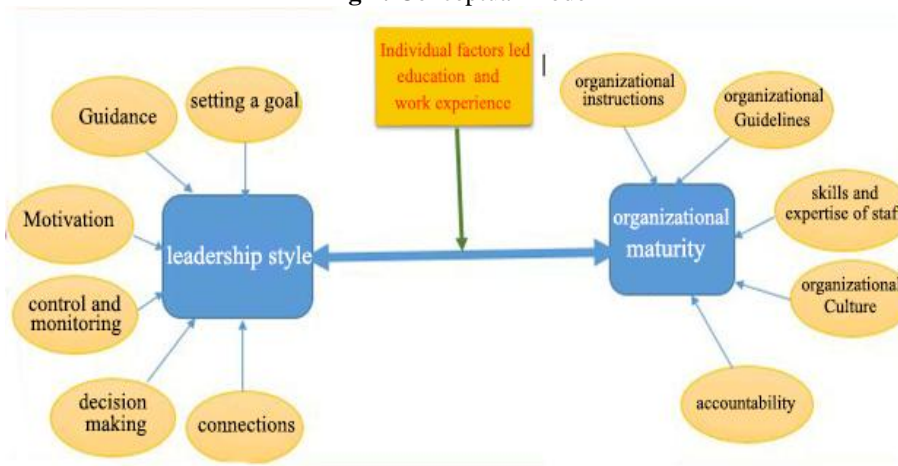
There is an unanimous consensus that the proposed maturity model suits the model perspective, and members believe that the proposed maturity model is suitable, applicable, and realizable and security considerations and local qualities have been properly taken into account in its formulation (Karimi Ghroodi, Fesharaki, & Nezami Pur, 2013)

#### IV. METHODOLOGY

This a posteriori research was carried out with a realistic and interpretive approach based on philosophical fundamentals. In terms of objective, it was an applied study on social sciences, which was carried out using the mixed research method as well as the survey-field strategies and historical-archived research reports. It was conducted in 2016 by converting the qualitative variables into quantitative variables using a questionnaire ranked based on the Likert scale. The main objective is to find a mutual Correlation between leadership style and organizational maturity from the viewpoints of experts and managers of a military organization. Leadership style and organizational maturity were assumed to be independent variables with a mutual Correlation. In addition, goal setting, guidance/leadership, motivation, control/supervision, decision-making, and communications were examined as dependent variables depending on leadership style, whereas organizational structure, instructions, employees’ skills and expertise, organizational culture, and employees’ accountability were assessed as dependent variables depending on organizational maturity. Leader’s certificate and management background (from the personal factors category) were the research mediator variables. For the purpose of a precise field investigation, a standard questionnaire is developed and distributed in a statistical population consisting of 150 experts and managers of Defense Industries Organization of Iran. These individuals are operating in the staff division of the organization, and 150 of them were randomly selected to form the research sample.

The research model is depicted in the following:

**Fig 2: Conceptual Model**



**Research Variables, Main Variables:** There are two independent main variables in this research, whose Correlation and interaction is measured: 1) leadership style, 2) organizational maturity.

**Leadership Style:** A leadership style is the method employed by the leader to exercise his/her influence to attain goals. (Spencer,1998).

**Secondary Dependent Variables Related to Leadership Style:** This main variable includes constituent factors and dependent variables whose performance is affected by the main variable: goal setting, leadership, motivation, control and supervision, decision-making, communications

**Goal setting:** An important characteristic of good leadership is setting clear goals from the beginning so that everybody can focus on your goals and understand them fully. Basically, goal-based management is a planning attempt focused on outcomes of operations.

**Leadership:** Influencing employees’ performance in accomplishing tasks to attain organizational goals

**Motivation:** Motivation or need is an internal feeling driving human to act. Effectiveness of management activities depends on the organizational members’ tendencies to accomplish tasks. (Freeman, Finch Stoner, & Gilbert, 1995).

**Control and supervision:** Supervision and control are among the main components of leadership, without adequate concern for which other components (such as planning, organization, and guidance) will be deficient and no guarantee would exist for their accurate implementation.

**Decision-making:** Decision-making is a response to a problem. Knowledge of existence of a problem and the need for making decisions is a perceptive issue. Moreover, the decision maker's interpretation influences assessment of information in every decision-making process.

**Communications:** Managers exchange information and notions with people inside and outside of organizations through communications. (Glueck, 1977)

**Organizational Maturity:**

Organizational maturity can be defined as a component which enables organizations to achieve stability and success and outpace their rivals through standardized utilization of accurate management knowledge, skills, techniques, and procedures. (Benbasa, Dexte, Mantha, 1980)

**Secondary Variables Related to Organizational Maturity:** These variables include constituent factors and dependent variables influencing their performances: organizational structure, instructions, employees' skills and expertise, organizational culture, employees' accountability

**Organizational structure:** It determines formal relations and reflects levels of the administrative hierarchy. It also specifies managers' scope of privileges. . (Robbins & Judge, 2007)

**Instructions:** Regulations guide tasks, activities, and operations without a specific time schedule and time difference plan. (Agarwal, 1982)

**Employees' skills and expertise:** It refers to utilization of specific sciences, techniques, and equipment to fulfill duties. (Katz, 1955)

**Organizational culture:** It is a set of shared values, beliefs, ideas, hypotheses, and norms governing the organization. (Schein, 2010)

**Employees' accountability:** A person's commitment to his/her duties and consequences of his/her decisions and mistakes. (Ryan & Bohlin, 1999)

## V. ANALYSIS AND FINDINGS

**Data Collection Tools:** In this descriptive cross-sectional study, it is tried to use a standard questionnaire to assess the questionnaire validity. However, due to the unavailability of a number of questions two basic questionnaires were designed for data collection. After developing the questionnaires, the researcher distributed them among a number of professors and experts to seek their opinion. Afterwards, modifications were made in accordance with the final opinion of the esteemed supervisor, and after validity of the questionnaires were approved by professors, experts, and professionals of the field, they were distributed among the participants. The questionnaire's reliability is assessed using the Cronbach's alpha. The questionnaires were printed and distributed for the sample population size, which is derived from the Morgan table. The first questionnaire consisted of 31 items about leadership style. Of these 31 items, 5, 6, 5, 4, 5, and 5 items covered goal setting, guidance/leadership, motivation, control/supervision, decision-making, and communications, respectively. This questionnaire is distributed among the experts. The second questionnaire consisted of 22 items about organizational maturity, and of these questions, 4, 6, 5, 5, and 3 items covered organizational structure, instructions, employees' skills and expertise, organizational culture, and employees' accountability, respectively. This questionnaire is distributed among the managers. The structural equations modeling (SEM) method is used to analyze the data in PLS.

**Table 6:** The value of Cronbach's alpha

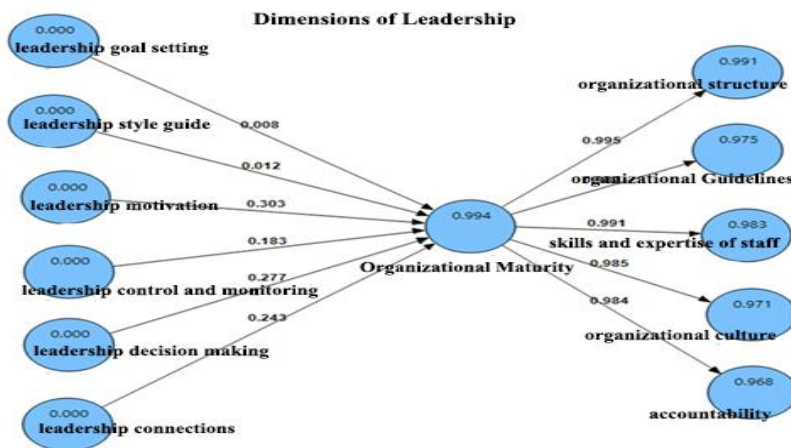
Number of variables	Cronbach's alpha
52	0.988

**Data Analysis:** After selecting the research method, the researcher collected data required for testing the research hypotheses using suitable tools. Afterwards, using the appropriate statistical techniques (which complied with the research method, variable types, etc.) the data is classified and analyzed. Finally, the hypotheses introduced to the research were tested to find a solution to the research question. Establishment of a link between the research topic and the existing set of information calls for creative thinking. Normally ideas occur to the researcher, which require mental creativity to be analyzed based on the existing data sources. Data arrangement also involves creativity. Data analysis is a multistage process during which the data obtained from the statistical population (sample) using data collection methods is summarized, encoded, classified, and finally processed to allow for different types of analyses and examination of Correlations between the data to test the hypotheses. Information analysis is considered a scientific phase and an essential pillar of every scientific study, using which it is possible to control and lead research activities to achievement of results. In this chapter, the research data is described and each hypothesis is tested. We are going to analyze the data collected from the samples using the questionnaire in the following.

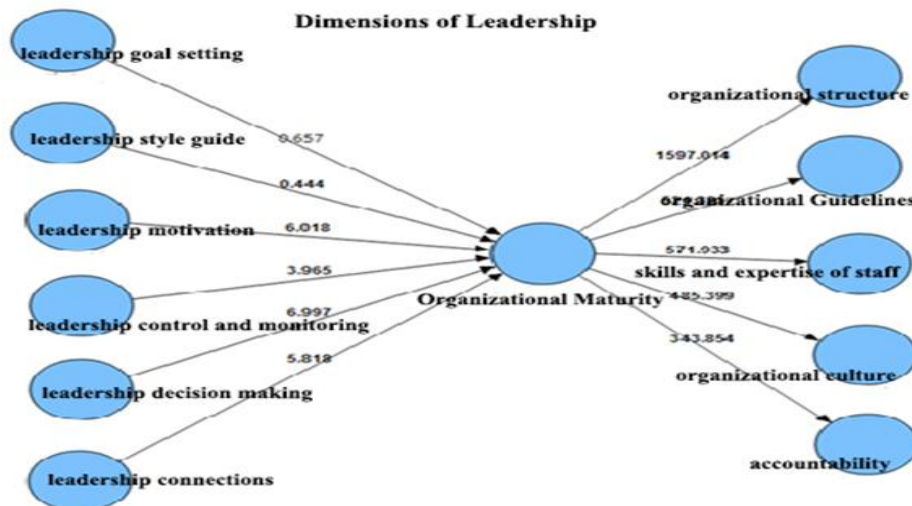
**Testing Research Model and Hypotheses:** The model is formally stated in this phase, which is one of the most important steps in structural equations modeling. In fact, this stage involves no analysis unless the researcher

specifies and expresses the model which is about the Correlations between variables. After specifying the model, free parameters are estimated based on a set of observed data. Iterative methods such as maximum likelihood, generalized least squares, or partial least square (PLS) method were used to estimate the model. The partial least square method, which is introduced as PLS in regression modeling, is a multivariate statistical method for the simultaneous modeling of one or several solution variables in exchange for several descriptive variables despite such limitations as unknown distribution of the solution variable, few observations, or severe autocorrelation among descriptive variables. Due to the small sample size and lack of normality of distribution of the response variable the PLS method is employed to analyze the data and test the research hypotheses. The PLS method determines the coefficients such that the resulting model displays the highest potential for interpretation and explanation. In other words, the model should be able to predict the final dependent variable with highest precision and accuracy. The PLS method also estimates all of the model relations, such as the mutual Correlation between latent variables and eights of all of the measurable indices related to each latent variable (i.e. coefficients not included in the measurement model). PLS is a statistical method used to analyze latent variables of structural models. Unlike methods such as Lisrel, the objective of PLS is to obtain latent variables for predicting goals using measurable indices.

**Test Method:** In this diagram, figures show the Correlations between latent variables, and are used to test the hypotheses. These coefficients are known as the path coefficients, which can be estimated during estimation of the model coefficients. Figure shows the research conceptual model in estimation of standard coefficients of structures for secondary hypotheses advocating the effect of components and dimensions of leadership style on organizational maturity.



**Fig 3:** Standard assumptions of the model parameters are sub-study (effect of dimensions of leadership style on organizational maturity)



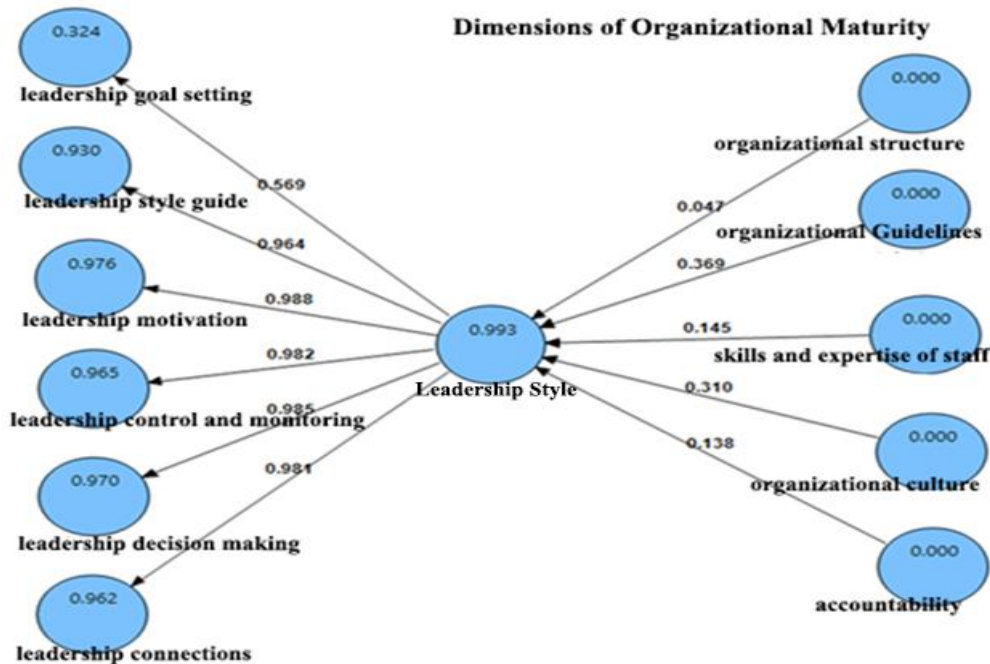
**Fig 4:** Estimation of standard coefficients of the secondary hypotheses (effect of dimensions of leadership style on organizational maturity)

This figure shows the research models with significant coefficients (t-value). This model tests all of the structural equations (path coefficients) using the t statistic. According to this model, the path coefficient is significant at a significance level of 95% provided that the t statistic is not in the -1.96 to +1.96 range. Therefore, the path coefficient is not significant if the t statistic is in the aforementioned range.



**Fig 5:** Significance coefficients of model hypotheses for the secondary research hypotheses (effect of leadership style Dimensions on organizational maturity)

According to these results, organizational leadership goal setting, leadership style, and organizational leadership do not significantly affect organizational maturity (because t is not in the -1.96 to +1.96 range). Other relations are significant at the 95% level. It could also be stated that leadership motivation had the highest effect on organizational maturity from the category of leadership style dimensions and components, because it demonstrated the highest path coefficient (0.303). In addition, Figure (9-3) shows the research conceptual model when estimating standard coefficients of structures for secondary hypotheses advocating the components and dimensions of organizational maturity on leadership style.



**Fig 6:** Estimation of standard coefficients of secondary hypotheses (the effect of organizational maturity on leadership style)

This figure shows the research models with significant coefficients (t-value). This model tests all of the structural equations (path coefficients) using the t statistic.

According to the results, the effect of organizational structure (as the organizational maturity component) on organizational leadership style is not significant (because t is not in the -1.96 to +1.96 range). Other relations are significant at the 95% significance level. It could also be stated that from the components and dimensions of organizational maturity, organizational instructions had the largest effect on leadership style because it scored the highest path coefficient (0.369).

Figure (9-5) shows the standard coefficient estimation state and Figure (9-6) shows the path significance for the primary hypothesis advocating the mutual effect of leadership style and organizational maturity on one another in the organization under study.

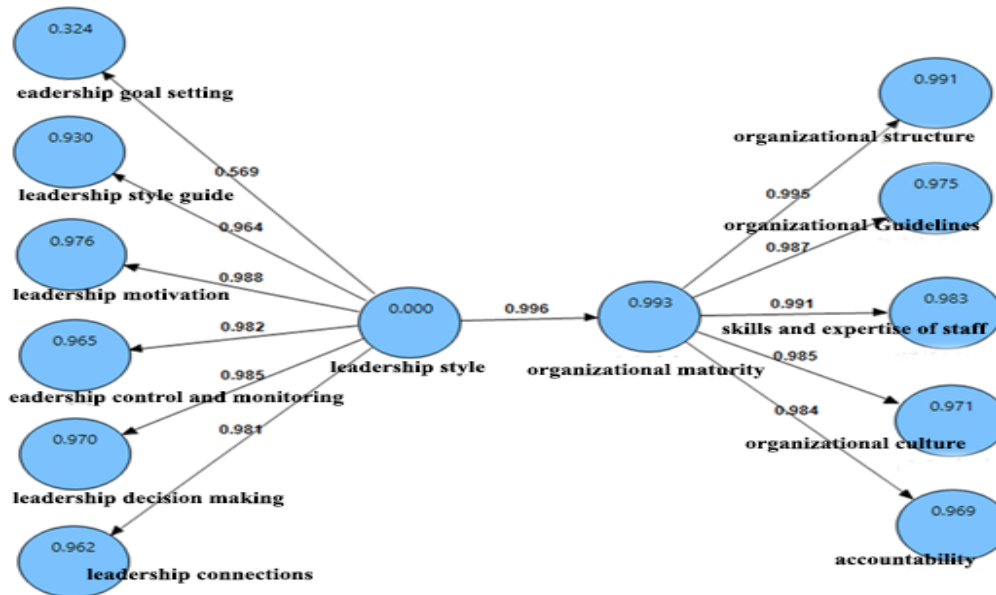


Fig 7: Standard coefficient estimation for the primary research hypothesis

Considering the standard coefficient it could be stated that the effect of intellectual capital on the organizational performance of A Military Organization is 0.996, and considering Figure (9-5) significance of the Correlation is verified at the significance level of 95%.

Table 7: Frequency of variables

		Leadership	Target	Guidance	Motivation	Control	Decision	Relationship
N	Valid	150	150	150	150	150	150	150
	Missing	0	0	0	0	0	0	0
Mean		3.2983	3.3720	3.6100	3.3307	3.2500	2.9844	3.2333
Std. Error of Mean		.06466	.03789	.04823	.10727	.07586	.08983	.08683
Median		3.3871	3.4000	3.6667	3.6000	3.7500	2.8333	3.4000
Mode		1.71 <sup>a</sup>	3.40	3.83	5.00	3.75	4.17	4.00
Std. Deviation		.79193	.46402	.59070	1.31384	.92912	1.10019	1.06347
Variance		.627	.215	.349	1.726	.863	1.210	1.131
Skewness		-.378	-.272	-.573	-.409	-.592	-.032	-.346
Std. Error of Skewness		.198	.198	.198	.198	.198	.198	.198
Kurtosis		-.795	.197	-.002	-1.091	-.651	-.836	-.476
Std. Error of Kurtosis		.394	.394	.394	.394	.394	.394	.394
Minimum		1.61	1.80	2.00	1.00	1.00	1.00	1.00
Maximum		4.55	4.40	4.67	5.00	4.75	5.00	5.00

a. Multiple modes exist. The smallest value is shown

**Statistics**

		Structure	Instructions	Skill	Culture	Accountability	Maturity
N	Valid	150	150	150	150	150	150
	Missing	0	0	0	0	0	0
Mean		3.4883	3.6400	3.4600	2.8617	3.3711	3.3902
Std. Error of Mean		.08674	.07866	.08583	.10043	.08650	.08559
Median		3.5000	3.6667	3.6250	3.0000	3.6667	3.5000
Mode		4.25	4.17	4.25	1.75	4.00	3.33 <sup>a</sup>
Std. Deviation		1.06237	.96336	1.05116	1.23005	1.05941	1.04824
Variance		1.129	.928	1.105	1.513	1.122	1.099
Skewness		-.643	-.788	-.112	-.025	-.438	-.383
Std. Error of Skewness		.198	.198	.198	.198	.198	.198
Kurtosis		-.330	.137	-1.135	-1.145	-.596	-.745
Std. Error of Kurtosis		.394	.394	.394	.394	.394	.394
Minimum		1.00	1.17	1.50	1.00	1.00	1.14
Maximum		5.00	5.00	5.00	5.00	5.00	5.00

a. Multiple modes exist. The smallest value is shown

**Significance coefficients of the primary research hypothesis in the model for the primary hypothesis**  
**Answers to Research Hypotheses Based on the Partial Least Squares (PLS) Method:** Another type of Correlation between latent variables in the SEM model is direct influence, which is in fact a constituent component of SEM models and shows a directed Correlation between two variables. These relations are mainly assessed through one-way analysis of variance. This effect reflects the linear causal effect of one variable on the other. In a model, each direct effect reflects a Correlation between a dependent variable and an independent variable. However, a dependent variable can be an independent variable in another direct effect, vice versa. In addition, in a multiple regression model, a dependent variable may be associated with several dependent variables, while in a multiple/multivariate analysis of variance an independent variable can be associated with several dependent variables. Table (9-5) presents the direct effects, t statistic, and results of research hypotheses based on results of analyses.

**Table 8:** direct effects, t-statistics and hypothesis results:

Research Objectives		Path coefficient (β)	Statistics t	Significant	Consequent hypothesis
General research Objective	effects of leadership style and organizational maturity in a military organization.	<b>51.735</b>	<b>&gt;0.05</b>	approved	approved
Dimensions of Leadership	effect of organizational leadership goal setting on organizational maturity	<b>0.657</b>	<b>&gt;0.01</b>	rejected	rejected
	effect of organizational leadership style on organizational maturity	<b>0.444</b>	<b>&gt;0.01</b>	rejected	rejected
	effect of organizational leadership motivation on organizational maturity of the organization under study.	6.018	>0.01	approved	approved
	effect of organizational leadership control and monitoring on organizational maturity	3.965	>0.05	approved	approved
	effect of organizational leadership decision making on organizational maturity	6.997	>0.05	approved	approved
	effect of organizational leadership connections on organizational maturity	5.818	>0.05	approved	approved
Dimensions of Organizational Maturity	effect of organizational structure on leadership style	<b>0.555</b>	<b>&gt;0.05</b>	rejected	rejected
	effect of organizational Guidelines on leadership style	7.755	>0.05	approved	approved
	effect of skills and expertise of staff on leadership style	2.914	>0.05	approved	approved
	effect of organizational culture on leadership style	5.786	>0.05	approved	approved
	effect of accountability on leadership style	3.379	>0.05	approved	approved

**Fitting the Conceptual Model:** On PLS measurement model level, statements' loadings and residues' covariance are estimated. On the structural level, path coefficients, correlation between latent variables, explained variance, and average variance of latent variables (AVE) are estimated. The t statistic is calculated for each path and factor loadings using the cross-section method or bootstrapping. The appropriate model fit calls for satisfaction of the following requirements for each construct: a significant path coefficient, an acceptable explained variance, and an internal consistency of higher than 0.05. Acceptable values of factor loadings reflect the model's goodness of fit. Moreover, the GOD index is designed for testing fit of a model for prediction of the

endogenous variables. Values 0.01, 0.25, and 0.36 were introduced as weak, moderate, and strong values of GOF.

Since the calculated GOF values were larger than 0.36, goodness of the model fit is proved. In addition, all of the path coefficients were significant, the explained variance is acceptable, and internal consistency of structures is above 0.05.

**Table 9:** Value of communalities and R for the model fitness examination

Components		communalities	R values
leadership style	leadership goal setting	0.87523	0.324
	leadership style guide	0.6805	0.930
	leadership motivation	0.9342	0.976
	leadership control and monitoring	0.8478	0.965
	leadership decision making	0.9280	0.970
	leadership connections	0.9298	0.962
	leadership style	0.6713	-
organizational maturity	organizational structure	0.9310	0.991
	organizational Guidelines	0.8806	0.975
	skills and expertise of staff	0.9190	0.983
	organizational culture	0.9301	0.971
	Accountability	0.9561	0.969
	organizational maturity	0.8976	0.993
Average		0.8754	0.9174

## VI. CONCLUSIONS AND SUGGESTIONS

This research is an attempt to determine the Correlation between managers' leadership style and organizational maturity of a military organization.

In the case of the primary research hypothesis (i.e. the Correlation between leadership style and organizational maturity), diffusion of respondents determined based on analyses of direct effects, the t statistic, and the outcome indicate that there is a mutual significant Correlation between leadership style and organizational maturity. In other words, level of employees' organizational maturity influences the managers' choice of leadership style, while the leadership style also influencing organizational maturity and growth. In addition, results of the secondary research hypotheses indicated that the effect of organizational leadership goal setting on organizational maturity is significantly negative in a similar vein to the effect of leadership style and organizational leadership on organizational maturity. Hence, these hypotheses are rejected. In the case of organizational maturity dimensions, the hypothesis about the effect of organizational structure on leadership style is significantly negative, which indicates rejection of the related hypothesis. Other research hypotheses are reflective of the positive significant and mutual effect of leadership style dimensions and organizational maturity. In this case, it could be stated that there is a significant Correlation between managers' leadership style and organizational maturity.

In sum, research results suggest that in the military organization under study, organizational instructions had the highest effect on leadership style, while employees' accountability had the lowest effect on leadership style. In addition, leadership motivation had the highest effect on organizational maturity, while leadership control and supervision demonstrated the lowest positive significant effect. These findings indicate that limitation, control, and supervision can negatively influence organizational maturity.

In sum, data analysis results suggest that this research corresponds to previous similar studies mentioned in the "research background" section. A comparison between this research and other studies in this field revealed that management style can result in a high level of correlation between employees and a low level of job stress between employees. The reduction in job stress increases service quality and eventually improves employee and customer maturity and satisfaction. The results of this research are associated with limitations because of the special organizational culture and structure of military organizations, and thus these results cannot be extended to other studies. However, it is recommended to conduct other similar studies on this topic to allow for examination of the Correlation between leadership style and organizational maturity in military organization. This is because adequate studies have not been carried out in this regard especially in military organizations of Iran. In any event, results of this research could improve awareness of the Correlation between managers' leadership styles and organizational maturity. More awareness of this Correlation may result in utilization of leadership styles suitable for increasing growth and productivity of organizations.

## REFERENCES

- [1]. Anwar, S., & Haider, N. (2015). Effect of Leadership Style on Employee Performance. *Arabian Journal of Business and Management Review*, 5(5), 5-146. doi:0.4172/2223-5833.1000146
- [2]. Abedi, G., Hedayatizadeh, A., & Rostami, F. (2011). An Investigation on Relationship Between Leadership Style and Organizational Maturity Nurses in Educational Hospitals. *World Applied Sciences Journal*, 12(7), 939-943

- [3]. Agarwal, R. (1982). *Organization and Management*. USA: Tata McGraw-Hill Education.
- [4]. Andersen, K. V., & Henriksen, H. Z. (2006). E-government maturity models: Extension of the Layne and Lee model. *Elsevier:Government Information Quarterly*, 23(2), 236-248
- [5]. Arveson, P., Rohm, H., Wilsey, D., Perry, G., Halbach, L., & DeCarlo, J. (2010). *he strategic management maturity model (Vol. 4)*. Carolina: Balanced Scorecard Institute.
- [6]. Azadehdel, M. R., & Avakh, A. (2015). The Relationship between Emotional Intelligence and Leadership Styles of Principals in High Schools of Rasht, District 1 and District 2. *Journal of Applied Environmental and Biological Sciences*, 5(11), 497-505I
- [7]. Bass, B. M. (2000). The Future of Leadership in Learning Organizations. *Journal of Leadership & Organizational*, 18-40.
- [8]. Bass, B. M., & Avolio, B. J. (1994, Spring). Transformational leadership and organizational culture. *Public Administration Quarterly*, 17, 112-122.
- [9]. Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership*. NewYork: amason.
- [10]. Bayers, R. J. (2011). *Leadership Style and the Organization Life Cycle*. Management and Organizational Leadership.
- [11]. Benbasat, I., Dexte, A. S., & Mantha, R. W. (1980). Impact of Organizational Maturity on Information System Skill Needs. *MIS Quarterly*, 4(1), 21-34.
- [12]. Bratton, J., & Gold Bratton, J. (2012). *Human resource management : theory and practice*. English: <http://trove.nla.gov.au/work/5522252>
- [13]. Cable, D., Kim, S., & Kim, T. (2005, Mar). Socialization tactics, employee proactivity, and person-organization fit. *National Institutes of Health*, 90(2), 232-241.
- [14]. Chandler, A. D. (1962). *Strategy and structure: chapters in the history of the industrial enterprise*. USA: Cambridge: M.I.T. Press.
- [15]. Chen, Y.-C., Hsieh, K.-C., & Wu, M.-T. (2012). The Study Of Second Level Of People Capability Maturity Model On The Industrial Control Industry In Taiwan. *Journal of Quality*, 19(1).
- [16]. Chiok, F. L. (2001). Leadership behaviours: effects on job satisfaction, productivity and organizational commitment. *Journal Nurs Manag*, 9(4), 191-204.
- [17]. Ciulla, J. B. (1998). *Ethics: The Heart of Leadership*. PRAEGER Westport, Connecticut London: Praeger.
- [18]. Cooke-Davies, T. J., & Arzymanowc, A. (2003). The maturity of project management in different industries:An investigation into variations between project management models. *International Journal of Project Management*, 471-478 [www.elsevier.com/locate/ijproman](http://www.elsevier.com/locate/ijproman)
- [19]. Dunham, T. J. (2000). Nurse executive transformational leadership found in participative organizations. *The Journal of Nursing Administration*, 30 (5), 241-250.
- [20]. F.dansereau, graen, g., & haga, w. (1975). A vertical dyad linkage approach to leadership within formal organizations a longitudinal investigation of the rolemaking process. *Organizational behavior and human performance*, 13, 78-46.
- [21]. Fiedler, F. (1967). *A theory of leadership effectiveness*. New York: McGraw-hill.
- [22]. Frank, B., Eckrich, H., & Rohr, J. (1997). Quality nursing care ,leadership makes the difference. *Journal of Nursing Administration*, 27(5), 13-14.
- [23]. Freeman, R., Finch Stoner, J. A., & Gilbert, D. (1995). *Management*. USA: Prentice-Hall International.
- [24]. Galloway, L., & Haniff, A. (2015). *Managing Projects in Architecture: A Study of Leadership in a Creative Industry*. *Open Economics and Management Journal*, 38-44.
- [25]. Glueck, W. F. (1977). *Management*. Georgia: Hinsdale/III. : Dryden Pr.
- [26]. Guldentops, E. (2010, March). Maturity Measurement-First the Purpose, Then the Method. *Information Systems control Journal*, 4, 1-12. Retrieved from <http://www.isaca.org/>
- [27]. Hain, S., & Back, A. (2011). Towards a Maturity Model for E-Collaboration A Design Science Research Approach. *Proceedings of the 44th Hawaii International Conference on System Sciences*.
- [28]. Hemmati, A., Mojtaba, H., & AhmadiFard, M. (2012, October ). An imperialist competitive algorithm mixed model assembly line sequencing problem on just in time system. *Academic Journal*.
- [29]. Hersey, P., & Blanchard, K. (1988). *Management of organizational behavior*. India: prentice-hall.
- [30]. Hsi, P. L., & Wang, J.-Y. (1997, April ). The relationships between management styles, user participation, and system success over MIS growth stages. *Information & Management* 32(4), 203-213.
- [31]. Hurduzeu, E. (2015). The Impact Of Leadership On Organizational Performance. *SEA - Practical Application of Science*, 3(7), 289-294.
- [32]. Kao, T.-Y., & Craven, A. E. (2006). The Relationship Between Leadership Style & Demographic CharacteristicsOf Taiwanese Executives. *International Business & Economics Research Journal*, 5(2), 35-48.
- [33]. Karadakil, N., Goud, N., & Thomas, P. (2015). Impact of leadership role perspective on conflict resolution styles - a study on small and medium sized entrepreneurs of Karnataka State in India. *Journal of Global Entrepreneurship Research*, 5(4).
- [34]. Karimi Ghhroodi, M., Fesharaki, M., & Nezami Pur, G. (2013). Vision and maturity of the organization in 1404 with the development of information and communication technology foresight approach. *Improve management*, 137-161.
- [35]. Kenny, J. (2006). Strategy and the learning organization: a maturity model for the formation of strategy. *The Learning Organization*, 13(4), 353 - 368.
- [36]. Khatibian, N., gholoipour, T., & Abedi Jafari, H. (2010). Measurement of knowledge management maturity level within organizations. *Business Strategy Series*, 11(1), 54 - 70.
- [37]. Kocher, M. G., Pogrebna, G., & Sutter, M. (2009, March). Other-Regarding Preferences and Leadership Styles. *Discussion Paper Series*.
- [38]. Koene, B. A., Vogelaar, A., & Soeters, J. (2002, June). Leadership effects on organizational climate and financial performance: Local leadership effect in chain organizations. *The Leadership Quarterly*, 13(3), 193-215.
- [39]. Korschak, C., & Sands, J. (2015). *Leadership Series From the Trenches: Leadership Strategies from the US Navy Seals Applied to Healthcare*. *DIVURGENT*, 1-15.
- [40]. MacCauley, C., & Van Velsor, E. (2004). *Handbook of Leadership Development*. San Francisco: Jossey-Bass.
- [41]. Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). Employee-organization linkages : the psychology of commitment, absenteeism, and turnover. New York: Academic Press.
- [42]. Obiwuru, T., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on Organizational performance: A Survey of selected small scale enterprises in Ikosi-Ketu council development area of lagos state, nigeria. *Australian Journal of Business and Management Research*, 11(7), 100-111.
- [43]. Organizational performance : A Survey of selected small scale enterprises in Ikosi- Ketu council developoement area of logos state , Nigeria.*Australian Journal of Business and Management Research*.



- [44]. Paulk, M. C., Curtis, B., Chrissis, M. B., & Weber, C. V. (2009). People Capability Maturity Model (PCMM) Version 2.0 (2nd ed.). Pittsburgh, Pennsylvania: Carnegie Mellon University.
- [45]. Paulk, M., Curtis, M. C., Chrissis, M., & Weber, C. (1997). "The Capability Maturity Model for Software" in Software Engineering Project Management. IEEE Computer Society Press, 48-59.
- [46]. Perra, B. M. (2000). Leadership: The key to quality outcomes. *Nursing Administration Quarterly*, 24(2), 56–61.
- [47]. Pettigrew, A. M., Woodman, R., & Cameron, K. (2001, Aug). Studying Organizational Change and Development: Challenges for Future Research. *The Academy of Management Journal*, 44(4), 697-713.
- [48]. Prybil, L. D. (2003). Challenges and Opportunities Facing Health Administration Practice and Education. *Journal of Healthcare Management*, 48(4), 223–231.
- [49]. Qin, J., & Crowston, K. (n.d.). Development and Dissemination of A Capability Maturity Model for Research Data Management Training and Performance Assessment. School of Information Studies Syracuse University.
- [50]. Rezvani, S. (2011). An Introduction to Organizational Maturity Assessment: Measuring Organizational Capabilities. International Public Management Association Assessment Council.
- [51]. Rizzo, J. A., Gilman, M. P., & Mersmann, C. A. (1994, May ). Facilitating care delivery redesign using measures of unit culture and work characteristics. *Journal of nursing administration*, 24(5), 9-71.
- [52]. Robbins, S. P., & Judge, T. (2007). *Organizational Behavior*. Slovakia: Pearson Prentice Hall.
- [53]. Ryan, K., & Bohlin, K. E. (1999). *Building character in schools: practical ways to bring moral instruction to life*. Chicago: Wiley.
- [54]. Samarin, T. H., & sahranavard, A. (2015). The review of the relationship between leadership styles and organizational commitment of employees in petrochemical complexes of 'Asalūyeh in Bushehr Province. *Journal of Applied Environmental and Biological Sciences*, 213-218.
- [55]. samarin, T. H., & sahranavard, A. (2015, may). The relationship between leadership styles and organizational maturity of staff in the petrochemical complex in Assaluyeh. *Reserch Journal Of Fisheries and Hydrobiology*, 10(9), 166-177.
- [56]. San Juan, S. (1998,). Team building: a leadership strategy. *The Journal of the Philippine Dental Association*, 5(1), 49-55.
- [57]. San Lam, C., & O'Higgins, E. R. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership & Organization Development Journal*, 33 (2), 149 - 174.
- [58]. Schein, E. H. (2010). *Organizational Culture and Leadership*. San Francisco: by Jossey-Bass.
- [59]. Sohrabi, Z., Kheirkhah, M., Sadegi Sahebzad, E., Rasoulighasemlouei, S., & Khavandi, S. (2016). Correlation between Students' Self-Efficacy and Teachers' Educational Leadership Style in Iranian Midwifery Students. *Global Journal of Health Science*, 8(7), 260-265.
- [60]. Soni, B. (2005). A New Service-Oriented Architecture (SOA) Maturity Model. Sonic Software Corporation, AmberPoint Inc., BearingPoint, Inc., Systinet Corporation. All rights reserved.
- [61]. Spencer, E. (1998). Leadership Models and Theories: A Brief Overview. *Leadership Quarterly*, 9, 321-332.
- [62]. Strong, R, Wynn, J., Irby, T., & Lindner, J. (2013). The Relationship between Students' Leadership Style and Self-Directed Learning Leve. *Journal of Agricultural Education*, 54(2), 174 –185
- [63]. Tella, A., Ayeni, C., & Popoola, S. O. (2007). Work Motivation, Job Satisfaction, and Organisational Commitment of Library Personnel in Academic and Research Libraries in Oyo State, Nigeria. *Library Philosophy and Practice* .
- [64]. Tubey, R. J., Odenyo, M., Chebet, W., & Rotich, J. (2015). Transformational leadership and human capital management in 21st century organizations. *European Journal of Research and Reflection in Management Sciences*, 3(5).<http://www.idpublications.org>
- [65]. Turner, J. R., & Muller, R. (2005, June ). The Project Manager's Leadership Style as a Success Factor on Projects: A Literature Review. *Project Management Journal*, 36(2), 49-61.
- [66]. Vesterlund, L. (2003, March ). The Informational Value of Sequential Fundraising. *Journal of Public Economics*.
- [67]. Vroom, V. H., & Jago, A. G. (1988). *The new leadership: Managing participation in organizations*. Englewood Cliffs: Prentice-Hall.
- [68]. West, M., Kirsten, A., Eckert, R., West, T., & lee, A. (2015). *Leadership and Leadership Development in Health Care: The Evidence Base*. Center for creative leadership.
- [69]. Williams, J. A. (2012). *The Impact of Youth Sports on Leadership Styles in the Hospitality Industry*. Business Administration, Management, and Operations Commons.
- [70]. People Capability Maturity Model (P-CMM) Version 2.0, Second Edition.