

The Eight Managerial Competencies: Essential Competencies for Twenty First Century Managers

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(Received: 15 December 2012; Revised: 17 February 2013; Accepted: 1 March 2013)

Abstract

The objective of the present study was to identify managerial competencies. This study reviewed existing managerial competencies in a cultural context resulting in the development of a broad based psychometrically sound leadership questionnaire. The unit of analysis of the research was a theoretical and experimental research related to managerial competencies, provided from seventeen Iranian and non-Iranian databases. Two Islamic books, Nahjul-Balaghah and Nahjul-Fasahah, were selected to focus on Islamic management and naturalization of competency modeling in Iran. In sum, the 137 data (135 researches of databases and 2 books) were analyzed through content analysis. The total number of 380 concepts relating to managerial competencies was classified into the 82 competency clusters (sub-core competencies). The factor analysis (principal components analysis with Varimax rotation) of sub-core competencies resulted in an 8-factor structure of core competencies labeled value, analysis, decision-making, knowledge, adaptation, performance, leadership, and communication. Face and content validity as well as Kappa reliability of the new managerial competency model were established for this new measure. This analysis resulted in the development of the Managerial Competencies Questionnaire (MCQ) composed of eighty-two items, which will be useful for researchers, students, educators, managers, and organizations.

Keywords:

Eight managerial competencies, Managerial competency model, Analysis content, Managerial competencies questionnaire, Sub-core competencies, Core competencies.

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Introduction

The human resources are key element of one country. Whereas some countries with large endowments of valuable natural resources are in the category of poor countries, the others with no natural resources and favorable geographical conditions and a mere reliance on effective and qualified human resources are in the category of advanced countries. key human resources of any country are managers, and capital enough, the other natural resources can still be insufficient if they do not have effective and successful managers. One of the most important criteria for having effective managers is competency. Thus, this study explores the competencies required for a manager to be effective in the workplace.

Literature Review

What is competency? Depending on the context and perspective, in literature, multiple meanings are found for the term “competency” (Garavan & McGuire, 2001; Viitala, 2005; Wickramasinghe & Zoyza, 2008). One reason for these multiple meanings is that the term competency usually includes potentiality, trait, value, abilities, knowledge, skills, preference, opinion, and aptitude.

This approach to competency is not new. The early Romans practiced a form of competency profiling in attempts to detail the attributes of a “good Roman soldier”. Later, McClelland proposed a test for skills and competencies, rather than, intelligence (Draganidis & Mentzas, 2006). In the late 1970s, in the U.S. the first person who used the term “competency” in the managerial context was Boyatzis (1982) to identify the characteristics, which distinguish superior from average managerial performance. Since then, a body of research has emerged focusing on the role of competencies in predicting both engagement and productivity of leaders at all levels of the organization (Tahir & Abu Bakar, 2010).

In recent years, studies on managerial competency and competency modeling have gained more and more interest and attention (Qiao & Wang, 2009). Researchers have attempted to explore the role of competencies with diverse organizational outcomes (for example Boyatzis, 1982; Cripe & Mansfield, 2002; Goleman, Boyatzis, and McKee, 2002). The theory of great eight is one of the theories in competency. According to this theory, there are eight competencies: Leading and deciding, supporting and cooperating, interacting and presenting, analyzing and interpreting, creating and conceptualizing, organizing and executing, adapting and coping, enterprising and performing (Bartram, 2005). Researchers are also trying to develop competency modeling for organizations (Wickramasinghe & De Zoyza, 2009; Fortier, 2009; Sanchez & Levine, 2009; Qiao & Wang, 2009; Tahir & Abu Bakar, 2010; Chong, 2011).

In Iran, the managerial competency modeling has also improved in recent years, as it has been highlighted in papers, articles, books, and organizations (Zahedi & Sheikh, 2010; Dargahi, Alipoor, Fallah Pasand, and Heidari Gharehbelagh, 2011). Furthermore, in Iran, with religious background, many researchers have studied managerial competency from Islamic perspectives by the use of Quran and Nahjul-Balaghah¹ (Danaee Fard, Rajabzadeh Ghatari, and Darvishi, 2009; Mousazadeh & Adli, 2009).

Although there is an enormous diversity in the scope of managerial competencies literature, in the domain of experimental studies such as organizational researches, researchers have focused on the managerial competencies in specific organizations or the level of managers. In addition, in the domain of theoretical researches, studies related to past decades, like Boyatzis (1982) in the 1970s, or the researches emphasizing specific areas, such as emotional intelligence in Goleman, Boyatzis, and McKee (2002) theory, have been in focus. The

1. Nahjul-Balagha is a collection of sermons, letters, and utterances by the first Shi'a Imam, Imam Ali (Peace and blessings of Allah be upon him)

exception is the study of Bartram (2005) in which the emphasis is also on *technical and instrument competencies* and *value competencies*. Hence, theoretical and empirical research studies are necessary to fill this gap in literature. This paper fills some of these gaps.

Objectives of the Study

As mentioned before, the focus of this paper is to present the results of the theoretical and empirical investigation into the managerial competencies in Iran and other countries. The specific aims of the paper are as follow:

1. Identify the managerial competencies (with emphasis on Islamic perspective).
2. Develop a managerial competency model relevant to cultural aspects and factors in Iran.
3. Examine the psychometric properties of managerial competency model.
4. Enhance the Managerial Competencies Questionnaire (MCQ)

Methodology

A review of the literature was undertaken to identify broad and relevant competencies cited within the leadership and management literature. The identification of a relevant cross-cultural managerial competency model was derived based on content analysis of the researches.

Population

The population of this study was both theoretical and empirical researches (papers, conferences, articles, and thesis) related to managerial competencies published in Iranian and non-Iranian databases: Ebsco, Emerald Insight, Jstor, Pro Quest, Science Direct, Sage, Taylor and Francis, Wiley, Springer, SID, Magiran, Noormags, Civilica, DID Digital Library, Ensani, Regional Information Center for Science and Technology (RICEST) and Namamatn.

Some limitations should be noted in the data collection process: existence of some words as “competency and manager” in the title or keywords of data; document type: article, paper, conferences and thesis; date of publication: up to June 2012; language of data: English for non-Iranian databases and Persian for Iranian databases; and many of researches appeared in more than one databases, so, the repeated ones were eliminated. We also used the “Google” search engine to find full texts that were not accessible in the databases, and then sent e-mails to the correspondent authors. In addition, to focus on Islamic management and naturalization of competency modeling in Iran, present authors used two books: 1) Nahjul-Balaghah, Letter 53 (Feizoleslam, 2008), and 2) Nahjul-Fasahah¹ (Shirvani, 2011), one hundred thirty seven studies were used in this analysis.

Statistical Analysis

The construct validity of the competencies was evaluated by exploratory factor analyses, using Kaiser’s criterion (eigenvalue >1), estimated by the principal components analysis, and rotated with the Varimax method (DeVellis, 2003). The face and content validity, and reliability also were estimated using specialists' view, content validity ratio (CVR) and Kappa respectively. Statistical analyses of construct validity and Kappa were made using the statistical package for social sciences (SPSS).

Results

A content analysis of the one hundred thirty seven studies was conducted using the following criteria:

Choosing the word or statement as the level of analysis (word or statement constitutes a concept); deleting irrelevant information; developing a list of concepts incrementally during the process of coding (disuse of predefined concepts); recording the concepts in

1. Nahjul-Fasahah is a great collection of the sayings of Prophet Muhammad (Peace and blessings of Allah be upon him)

some altered or distorted form; coding of explicit concepts; dealing with the frequency or emphasis of words and statements in resources.

Steps in developing a managerial competency model

In the current study, we adopted a six-step methodology to identify competencies that define a successful manager (Figure 1).

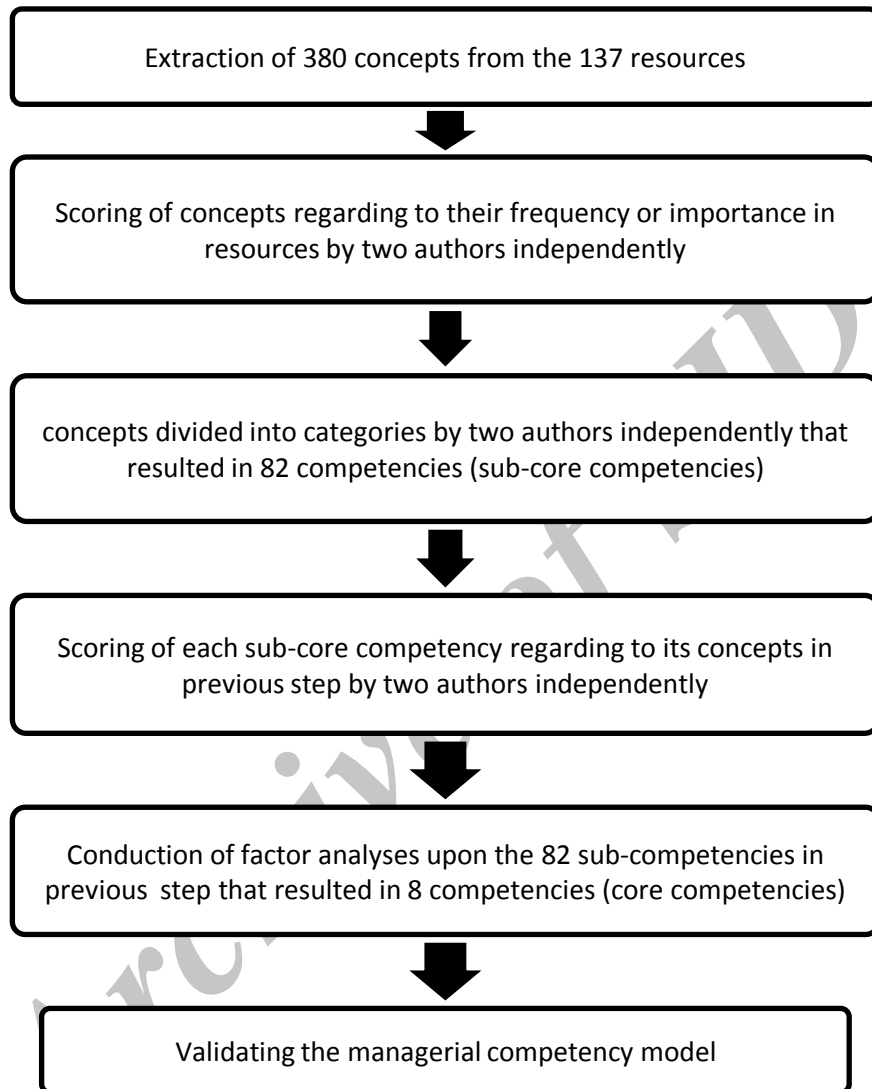


Figure 1. Process of developing a competency model

Step 1:

The industrial and organizational psychology specialist (first author) coded concepts out of the one hundred thirty seven resources related to managerial competencies. In addition, in order to ensure inter-rater agreement for consistent extraction of concepts, the other industrial and organizational psychology specialist (second author), independently highlighted words and statements relevant to managerial competencies. The two sets of coded concepts were compared which showed an acceptable inter-rater agreement of (83%). Thus, three hundred eighty concepts associated with managerial competencies were extracted from the research studies.

Step 2:

After identifying and labeling the concepts, the two authors provided a numerical score for each concept. A 10-point Likert scale was used and initially, each author scored each concept independently and achieved the derived pooled rating based on a mathematical average of both author's scores.

Step 3:

In this step, based on competency literature, the two industrial and organizational psychology specialists (authors) independently classified the list of concepts into the competency clusters. They named these competencies as sub-core competencies. If there was a difference, authors discussed until they reached an agreement. Eighty two sub-core competencies were extracted.

Table 1 summarizes the major competencies and examples of concepts that resulted from the analyses.

Table 1. Concepts related to managerial competencies

| SUB-COMPETENCY | CONCEPT | SUB-COMPETENCY | CONCEPT |
|------------------------------------|--|--------------------------------------|--|
| Faith | Verbal acceptance, heartily belief and bring into action the behavior toward afterlife | complex management | Determination of resources to meet in complex conditions |
| Piety | Obedience to God's commands | Financial resource management | budget |
| Belief in God's supervision | Belief in God's supervision | Strategic thinking | Understands the organization's strengths and weaknesses as compared to competitors |
| Trust to God | Hope in God in all the situations | Analytical thinking | Makes a systematic comparison of two or more alternatives |
| Courage moral | Desire to defy immoral orders | Conceptual thinking | Quickly identifies the central or underlying issues in a complex situation |
| Honesty | Correspondence between speech and behavior | Systematic thinking | Considers multiple factors in construction of a problem |
| Good moral | Ability to be affable | Critical thinking | Ability to argue |
| Tolerance | Patience in problem or difficulty | Initiative thinking | Anticipates possible problem |
| Forgiveness | Condo nation of reparable mistakes | Commercial thinking | Pursues gainful commercial opportunity |
| Justice | Avoids injustice | Decision analysis | Investigation of solutions before decision making |
| Good background | Reputation in previous jobs | Planning | Prioritization |
| Humility (modesty) | Avoids flattery | Organizing | Allocation of appropriate resources or individuals to accomplish a task |
| Simple Life | Lack of strong attachment to job position | Responsibility | Acceptance of responsibility against one's own decisions |
| Trimness | Aromatic | Risk taking | Decision making with limited information |
| Commitment | Avoids procrastination | Decisiveness | Quickly makes decision in difficult or ambiguous situations |

| | | | |
|--------------------------------|---|------------------------------------|---|
| Sincerity | Avoids duplicity | Self-confidence | To have confidence in one's own ability to accomplish goals |
| Safekeeping | Secrecy | Counsel | Pay attention to reasonable idea of individual |
| Tenacity | Ability to persevere with a problem until the matter is settled | Initiative | Does more than what is normally required in a situation |
| Flexibility | Demonstrates openness to new structures, procedures, or technology | Ambiguity management | Decision-making with limited informations |
| Resilience | Tolerance of frustration | Performance management | Provides specific performance feedbacks |
| Optimism | Possesses a positive attitude | Control | Monitors the achievement of goals |
| Criticizable | Acceptance of one's own mistakes | Result orientation | Maintains commitment to goals in the face of obstacles or frustrations |
| Diversity management | Examines bias to avoid stereotype actions | Customer orientation | Respect for customers |
| Self management | Right balance between work and life | Quality orientation | Accomplishing tasks by considering all area involved |
| Crisis management | Determination of resources to meet with crisis | Motivation orientation | Effort for improvement |
| Stress management | Maintains a sense of humor under difficult circumstances | Rule orientation | Law executor |
| Change management | Support needful changes | Entrepreneur orientation | Encourages entrepreneurial behavior in others |
| Self awareness | Aware of one's own strengths | Coaching | Constant support of individuals |
| Interpersonal awareness | Understands strengths of others | Individual leadership | Use of appropriate interpersonal styles in guiding individuals toward task accomplishment |
| Job awareness | Work experience | Group leadership | Use of appropriate interpersonal styles in guiding groups toward task accomplishment |
| Organization awareness | Use of knowledge of organizational situation to identify potential organizational problems or opportunities | Development of subordinates | Encourages groups to resolve problems on their own and avoids prescribing a solution |

| | | | |
|--------------------------------|--|--------------------------------|--|
| National awareness | Use of knowledge of country situation to identify potential organizational problems or opportunities | Delegation | Effective allocation of decision making and other responsibilities to the appropriate individual |
| International awareness | Use of knowledge of international situation to identify potential organizational problems or opportunities | Succession planning | Identification of individual talents |
| learning orientation | Support training sessions | Project management | Motivate others involved in a project |
| Self-development | Seeks feedback from others | Oral communication | Maintains eye contact when speaking with others |
| Intelligence | Ability to learn new technology | Written communication | Tailors written communications to effectively reach an audience. |
| Creativity | Challenges current approaches | Listening communication | Asks appropriate questions |
| Innovation | Execution of new ideas | Impact | Makes a good first impression on people |
| Problem analysis | Identifying possible causes of problem | Persuasiveness | Presents several different arguments in support of a position |
| Judgment | Decision-making based on logical assumptions | Conflict management | Identifies a conflict |
| Information management | Identifies the needful information | Teamwork | Shares one's own expertise with others |

Step 4:

After classifying concepts, the first author provided a numerical score for each sub-core competencies on a 10-point Likert importance scale.

Step 5:

Kaiser-Meyer-Okin (KMO) and Bartlett test analyses were conducted on the data (sub-core competencies) and KMO was determined as (0.775) and Bartlett test valued as $\chi^2=21071.40430$ ($p=0.000$). The results indicated that the variables were appropriate for the factor analysis. According to Tabachnick and Fidell (1996), orthogonal Varimax rotation allowed the factors to be independent (not correlated) and oblique approaches allowed the factors to be correlated. A principal component analysis with an Oblimin rotation was performed followed by a second analysis using Varimax procedure.

The initial eigenvalues of the competencies were inspected to determine the number of factors used for the factor analysis. The initial eigenvalues with a total value higher than one indicated a strong extraction (Pallant, 2010). We found eight factors to have eigenvalues exceeding one. This eight-factor model was (78.755%) of the total variance.

Table 2 shows the results of factor analyses. According to the table, the eight factors (core competencies) were extracted. The (19.37%) of the whole variance was interpreted by the first factor, named *Value*. The values are important, enduring beliefs or ideals shared by the individuals of a culture about what is good or desirable, and what is not. The (12.92%) of the whole variance was interpreted by the second factor, named *Analysis*, namely a detailed examination of the elements or the structure of something, typically as a basis for discussion, interpretation, conclusion. The (10.58%) of the common variance was explained by the third factor, named *Decision-making*, namely identifying and understanding issues, problems, and opportunities and using effective approaches for choosing a course of action or developing appropriate solutions. The (8.57%) of the common variance was explained by the fourth factor, named *Knowledge*, describing Information and skills acquired through experience or education. The (7.55%) of the common variance was

explained by the fifth factor, named *Adaptation*, meaning maintaining effectiveness when experiencing major changes in personal work tasks or the work environment; adjusting effectively to work within new work structures, processes, requirements, or cultures. The (7.02%) of the common was explained by the sixth factor, named *Performance*, the ability to take responsibility for one's own or others' performance, by setting goals, expectations, needs and business opportunities. The (6.13%) of the whole variance was interpreted by the seventh factor, named *Leadership*, namely using appropriate interpersonal styles and methods to inspire and guide individuals or groups toward goal achievement. The (4.58%) of the common variance was explained by the eighth factor, named *Communication*, namely clearly conveying and receiving information and ideas through a variety of media to individuals or groups in a manner that engages the audience.

Table 2. Factor analysis of core competencies

| | Value | Analysis | Decision-making | Knowledge | Adaptation | Performance | Leadership | Communication |
|----------------------------------|--------------|-----------------|------------------------|------------------|-------------------|--------------------|-------------------|----------------------|
| Faith | .862 | .002 | -.104 | -.025 | .081 | -.044 | .029 | -.029 |
| Piety | .940 | -.025 | -.143 | -.060 | .030 | .000 | .023 | .086 |
| Belief to Holy God's supervision | .882 | .022 | -.104 | -.172 | -.028 | -.069 | .028 | .069 |
| Trust to God | .933 | -.009 | -.178 | -.116 | -.024 | -.043 | .006 | .075 |
| Courage moral | .925 | .021 | -.146 | -.130 | .028 | -.043 | .012 | .106 |
| Honesty | .954 | -.009 | -.162 | -.102 | .007 | -.039 | .010 | .092 |
| Good moral | .862 | .033 | -.172 | -.089 | -.016 | -.057 | .064 | .048 |
| Tolerance | .963 | -.002 | .059 | .148 | -.008 | -.025 | -.038 | -.102 |
| Forgiveness | .821 | .157 | .000 | .182 | .077 | -.074 | -.046 | -.184 |
| Justice | .958 | -.001 | .063 | .151 | .001 | -.022 | -.037 | -.093 |
| Good background | .958 | -.006 | .053 | .143 | -.020 | -.029 | -.038 | -.112 |
| Humility | .962 | -.001 | .057 | .147 | -.010 | -.027 | -.038 | -.105 |
| Simple life | .938 | .024 | -.125 | .009 | -.043 | -.067 | -.049 | -.024 |
| Trimness | .926 | -.026 | -.167 | -.076 | .003 | -.001 | .030 | .063 |
| Commitment | .962 | .008 | .054 | .150 | -.005 | -.035 | -.031 | -.112 |

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|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------|-------|-------|
| loyalty | .874 | .028 | .055 | .167 | .040 | -.051 | -.026 | -.161 |
| Safekeeping | .963 | -.006 | .066 | .151 | -.002 | -.020 | -.045 | -.097 |
| Tenacity | .946 | -.009 | .146 | .082 | .000 | -.035 | -.061 | -.107 |
| Intelligence | -.124 | .807 | .188 | .074 | .080 | .058 | -.075 | -.157 |
| Creativity | -.033 | .836 | .049 | .112 | .106 | .002 | .058 | .062 |
| Innovation | .050 | .826 | .121 | .142 | .197 | .079 | .134 | -.123 |
| Problem analysis | .000 | .826 | .344 | .070 | .176 | .019 | .072 | -.040 |
| Judgment | -.050 | .833 | -.086 | -.066 | .179 | .060 | .072 | .084 |
| Information management | .005 | .899 | .000 | -.002 | .170 | -.045 | .110 | .058 |
| Complex management | .035 | .904 | -.019 | -.037 | .109 | .018 | .124 | .093 |
| Financial resource management | -.058 | .862 | -.077 | -.069 | .173 | -.008 | .099 | .102 |
| Strategic thinking | .095 | .906 | .034 | -.070 | .091 | .052 | .128 | .113 |
| Analytical thinking | .077 | .817 | .299 | .048 | .286 | -.022 | .061 | -.148 |
| Conceptual thinking | .021 | .829 | .299 | .090 | .162 | .007 | .102 | -.119 |
| Systematic thinking | .079 | .831 | .298 | .060 | .206 | .073 | .044 | -.130 |
| Critical thinking | .165 | .816 | .296 | .056 | .065 | .102 | .025 | -.070 |
| Initiative thinking | -.106 | .823 | .222 | .051 | .077 | .156 | .046 | -.159 |
| Commercial thinking | .068 | .909 | -.034 | -.058 | .143 | .009 | .089 | .078 |
| Decision analysis | -.094 | .191 | .906 | .140 | .081 | .084 | .145 | .012 |
| Planning | -.103 | .150 | .851 | .218 | .091 | .051 | .198 | .035 |
| Organizing | -.011 | .150 | .890 | .103 | .084 | .153 | .131 | .050 |
| Responsibility | -.059 | .186 | .847 | .128 | .081 | .185 | .108 | .036 |
| Risk Taking | -.048 | .211 | .761 | .223 | .139 | .224 | .195 | .020 |
| Decisiveness | -.066 | .120 | .844 | .130 | .072 | .247 | .148 | .142 |
| Self-confidence | .052 | .174 | .401 | .431 | .120 | .266 | .283 | .013 |
| Counsel | -.081 | .071 | .815 | .192 | -.001 | .229 | .176 | .060 |
| Initiative | -.125 | .112 | .852 | .140 | .127 | .203 | .038 | .094 |
| Ambiguity management | -.068 | .157 | .874 | .147 | .096 | .115 | .159 | .028 |
| Self awareness | .110 | -.022 | .116 | .904 | .039 | .145 | .114 | .210 |
| Interpersonal awareness | .111 | .003 | .128 | .919 | .008 | .127 | .141 | .200 |
| Job awareness | .130 | .027 | .129 | .903 | .017 | .131 | .119 | .205 |
| Organization awareness | .089 | -.029 | .102 | .812 | -.019 | .144 | .078 | .249 |
| National awareness | -.024 | .028 | .259 | .530 | .108 | .294 | .178 | .134 |
| International awareness | .087 | .068 | .201 | .915 | -.048 | .055 | .095 | .165 |
| Learning orientation | .022 | .041 | .271 | .823 | -.098 | -.014 | .048 | .190 |
| Self- development | -.027 | .251 | .273 | .679 | .032 | .228 | .252 | -.069 |
| Flexibility | .040 | .241 | .096 | -.016 | .928 | .163 | -.032 | -.061 |
| Resilience | .038 | .279 | .115 | -.224 | .580 | -.240 | .028 | -.020 |

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|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Optimism | .035 | .248 | .089 | -.008 | .932 | .143 | -.027 | -.066 |
| Criticizable | .059 | .233 | .078 | .009 | .926 | .119 | -.001 | -.055 |
| Diversity management | -.088 | .298 | .169 | .180 | .440 | .229 | -.012 | .088 |
| Self management | .037 | .245 | .095 | -.018 | .930 | .151 | -.025 | -.062 |
| Crisis management | .000 | .331 | -.090 | .189 | .420 | -.004 | .212 | .107 |
| Stress management | -.054 | .296 | .176 | .017 | .621 | .070 | -.100 | -.182 |
| Change management | .013 | .241 | .082 | .006 | .918 | .136 | -.014 | -.080 |
| Performance management | -.280 | .091 | .275 | .086 | -.046 | .362 | .186 | .107 |
| Control | -.120 | .101 | .203 | .120 | .057 | .766 | .148 | .071 |
| Result orientation | -.046 | .000 | .153 | .157 | .135 | .905 | .114 | .124 |
| Customer orientation | -.042 | .071 | .137 | .172 | .056 | .836 | .048 | .182 |
| Quality orientation | -.055 | .004 | .146 | .180 | .095 | .905 | .146 | .110 |
| Motivation orientation | -.050 | .249 | .299 | -.043 | .124 | .566 | -.022 | -.113 |
| Rule orientation | -.078 | -.008 | .289 | .064 | .282 | .560 | .021 | .009 |
| Entrepreneur orientation | -.039 | .023 | .156 | .147 | .084 | .911 | .160 | .114 |
| Coaching | -.089 | .217 | .176 | .116 | -.056 | .009 | .860 | .104 |
| Individual leadership | .299 | -.102 | .161 | .250 | .034 | .027 | .383 | .164 |
| Group leadership | -.012 | .037 | .187 | .261 | .111 | .215 | .684 | .225 |
| Development of subordinates | -.047 | .271 | .242 | .032 | -.114 | .078 | .831 | .003 |
| Delegation | -.062 | .211 | .209 | .139 | -.094 | .046 | .857 | .054 |
| Succession planning | -.068 | .075 | .191 | .221 | .105 | .184 | .786 | .268 |
| Project management | .033 | .180 | .184 | .087 | -.035 | .203 | .820 | .055 |
| Oral communication | -.101 | .025 | .261 | .243 | .058 | .122 | -.010 | .594 |
| Written communication | .060 | .276 | .114 | -.210 | .062 | .115 | -.192 | -.439 |
| Listening communication | -.114 | .160 | .002 | .166 | -.208 | .077 | .179 | .749 |
| Impact | -.061 | -.102 | .052 | .219 | -.132 | .145 | .073 | .775 |
| Persuasiveness | -.044 | -.007 | .073 | .258 | -.123 | .103 | .167 | .775 |
| Conflict management | -.050 | -.056 | .117 | .225 | .120 | .240 | .296 | .547 |
| Teamwork | -.101 | -.041 | .102 | .274 | -.045 | .329 | -.051 | .370 |
| Eigenvalue | 15.886 | 12.235 | 8.682 | 7.034 | 6.192 | 5.763 | 5.030 | 3.758 |
| Variance explained (%) | 19.373 | 12.921 | 10.587 | 8.578 | 7.552 | 7.028 | 6.134 | 4.583 |
| Variance cumulative (%) | 19.373 | 34.294 | 44.881 | 53.458 | 61.010 | 68.038 | 74.172 | 78.755 |

Notes: Extraction Method: Principal Component Analysis

Notes: Rotation Method: Varimax with Kaiser Normalization

Questionnaire items loading at (0.30) or above were considered in the factor solution. Some items loaded > 0.30 on more than one factor, on basis of competency content, items placed on one factor.

Step 6

This step is validation of managerial competency model. The model was validated via face and content validity as well as Kappa reliability.

Face validity

For face validity, a group of four industrial and organizational psychologists and two industrial management specialists with MA or PhD degrees were recruited. For this purpose, specialists and managers analyzed each competency and indicated the ones that did not have clear meanings and then suggested new terms for them.

Content validity

For content validity of the competencies, other twelve industrial and organizational specialists and psychologists with MA degrees were recruited. According to Bonini Campos and Prado (2012) the competencies were classified into (a) “essential”, (b) “useful, but not essential”, and (c) “not necessary”. For each competency, the number of professionals who classified it “essential” was computed. The competency was considered valid when ($\geq 50\%$) of the psychologists classified it essential. The content validity of each item was greater when a larger number of psychologists classified it essential. The content validity ratio (CVR) was calculated for each item during the validity process.

Table 3. Content validity ratio (CVR) of competencies

| Items | Essential | Useful, but not essential | Not necessary | CVR | Items | Essential | Useful, but not essential | Not necessary | CVR |
|-----------------------------|-----------|---------------------------------|------------------|------|-------------------------------|-----------|---------------------------------|------------------|------|
| Faith | 10 | 2 | - | 0.67 | Complex management | 12 | - | - | 1 |
| Piety | 10 | 2 | - | 0.67 | Financial resource management | 12 | - | - | 1 |
| Belief in God's supervision | 10 | 2 | - | 0.67 | Strategic thinking | 12 | - | - | 1 |
| Trust in God | 10 | 1 | 1 | 0.67 | Analytic thinking | 12 | - | - | 1 |
| Courage moral | 10 | 1 | 1 | 0.67 | Conceptual thinking | 12 | - | - | 1 |
| Honesty | 11 | 1 | - | 0.83 | Systematic thinking | 12 | - | - | 1 |
| Good moral | 12 | - | - | 1 | Critical thinking | 12 | - | - | 1 |
| Tolerance | 11 | 1 | - | 0.83 | Initiative thinking | 11 | 1 | - | 0.83 |
| Forgiveness | 10 | 1 | 1 | 0.67 | Commercial thinking | 11 | 1 | - | 0.83 |
| Justice | 12 | - | - | 1 | Decision analysis | 12 | - | - | 1 |
| Good background | 11 | - | 1 | 0.83 | Responsibility | 12 | - | - | 1 |
| Humility | 10 | 2 | - | 0.67 | Planning | 12 | - | - | 1 |
| Simple life | 8 | 3 | 1 | 0.33 | Organizing | 12 | - | - | 1 |
| Trimness | 11 | - | 1 | 0.83 | Risk Taking | 11 | - | 1 | 0.83 |
| Commitment | 12 | - | - | 1 | Decisiveness | 12 | - | - | 1 |
| loyalty | 11 | - | 1 | 0.83 | Counsel | 12 | - | - | 1 |
| Safekeeping | 12 | - | - | 1 | Self- confidence | 12 | - | - | 1 |
| Tenacity | 12 | - | - | 1 | Initiative | 10 | 1 | 1 | 0.67 |
| Flexibility | 12 | - | - | 1 | Ambiguity management | 12 | - | - | 1 |
| Resilience | 12 | - | - | 1 | Performance management | 12 | - | - | 1 |

| | | | | | | | | | |
|-------------------------|----|---|---|---|-----------------------------|----|---|---|------|
| Optimism | 12 | - | - | 1 | Result orientation | 10 | 1 | 1 | 0.67 |
| Criticizable | 12 | - | - | 1 | Customer orientation | 12 | - | - | 1 |
| Diversity management | 12 | - | - | 1 | Quality orientation | 12 | - | - | 1 |
| Self management | 12 | - | - | 1 | Motivation orientation | 12 | - | - | 1 |
| Crisis management | 12 | - | - | 1 | Rule orientation | 11 | 1 | - | 0.83 |
| Stress management | 12 | - | - | 1 | Entrepreneur orientation | 12 | - | 1 | 0.83 |
| Change management | 12 | - | - | 1 | Control | 12 | - | - | 1 |
| Self awareness | 12 | - | - | 1 | Coaching | 11 | 1 | - | 0.83 |
| Interpersonal awareness | 12 | - | - | 1 | Individual leadership | 12 | - | - | 1 |
| Job awareness | 12 | - | - | 1 | Group leadership | 12 | - | - | 1 |
| Organization awareness | 12 | - | - | 1 | Development of subordinates | 12 | - | - | 1 |
| National awareness | 12 | - | - | 1 | Delegation | 12 | - | - | 1 |
| International awareness | 12 | - | - | 1 | Succession planning | 12 | - | - | 1 |
| learning orientation | 12 | - | - | 1 | Project management | 12 | - | - | 1 |
| Self- development | 12 | - | - | 1 | Oral communication | 12 | - | - | 1 |
| Intelligence | 12 | - | - | 1 | Written communication | 12 | - | - | 1 |
| Creativity | 12 | - | - | 1 | Listening communication | 12 | - | - | 1 |
| Innovation | 12 | - | - | 1 | Impact | 12 | - | - | 1 |
| Problem analysis | 12 | - | - | 1 | Persuasiveness | 12 | - | - | 1 |
| Judgment | 12 | - | - | 1 | Conflict management | 12 | - | - | 1 |
| Information management | 12 | - | - | 1 | Teamwork | 12 | - | - | 1 |

Kappa reliability

To establish the reliability of the managerial competencies, an inter-rater reliability analysis was calculated. Kappa was calculated to assess inter-rater reliability. The two industrial and organizational psychologists and two industrial management specialists with MA or PhD degrees were recruited. The Kappa score (mean= 0.88), indicating that human experts in this study reliably represented very similar categorization from factor analysis (see Table 4).

Table 4. Kappa values for managerial competencies

| | R2 | R3 | R4 |
|----|------|------|------|
| R1 | 0.90 | 0.87 | 0.87 |
| R2 | | 0.90 | 0.85 |
| R3 | | | 0.92 |

Note: N=4

Discussion and Conclusion

The purpose of this study was to explore managerial competencies and to develop competency model. To achieve the purpose, we used a six-step methodology to identify the competencies that define a meritorious manager. In the first step, there were one hundred thirty seven researches analyzed through content analysis and three hundred eighty extracted concepts related to managerial competencies. In the second step, concepts in each source were scored independently. In scoring the concepts, we used a 10-point Likert scale of importance. In the third step, based on competency literature, the list of concepts was independently classified into the eighty-two competency clusters. These competencies were named as sub-core competencies. In the fourth step, the scores of each sub-core competency were obtained through the average of scores of concepts related to the same sub-core competency. In the fifth step, factor analyses were conducted upon the sub-core competencies of the previous stage that resulted in eight competencies contributing to (78.755%) of the total variance. About (22%) of the remaining variance was related to other factors or the factors unpredicted in this research; in other words, due to the great extent of analyzed data, these factors remained unrecognized.

These core competencies labeled are: 1) value, 2) analysis, 3) decision-making, 4) knowledge, 5) adaptation, 6) performance, 7) leadership, and 8) communication. In the sixth step, the managerial competency model validated via face and content validity as well as Kappa reliability and its results were satisfying. After designing a managerial competency model and its validation, managerial competencies questionnaire (MCQ) based on competency model was developed. The MCQ is an eighty-two -item scale that measures the importance of competency in 10-point Likert scale, from zero (no importance) to nine (extremely important).

All of eight MCQ competencies (core competencies) have content validity as they were extracted from a careful review of the leadership and management literature. Some of competencies such as “faith” were deeply ingrained in individual beliefs and values. Others, such as “written communication” were job and task specific, developed and based on job requirements and tasks.

In spite of the widespread interest in managerial competencies and methods to measure them, the literature is limited with respect to cross-cultural implications for both leadership and managerial practices. Recent attempts to identify a comprehensive competency model such as the “great eight competencies” (Bartram, 2005) do not incorporate individual values and cultural norms as identified in the present study. The current study identifies cross-cultural competencies based specially on Islamic texts as well as religious beliefs in Iran.

There were some limitations in conducting this study, which had some influence on the results of the study. First, data of this study were collected only from the databases and two books, so the other studies that were not published in the databases or the books were not included which influences the comprehensiveness and generalization of the study. Second, the data were from an analysis of theoretical and experimental researches. Replication of this study within a different organizational setting and comparison of its psychometric properties with theoretical results are suggested for future works. Third, the data analysis on the researches was based on the explicit statement of authors or inferential statement of authors in the researches. Further

researches are needed to use inter-rater by using other judges to interpret the data.

Despite these limitations, there is a threefold implication out of this study. First, it is not enough for managers to have technical and instrumental competencies; they must possess value competencies as well. Second, there are similarities and differences in the managerial competency across cultures and work environments. Third, the model presented in this article is intended to help and guide the future model designers or researchers in measuring managerial competencies.

Acknowledgement

The authors thank Dr. Kenneth Nowack for very helpful comments in the preparation of this paper.

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هشت شایستگی مدیریتی: شایستگی‌های ضروری برای مدیران قرن ۲۱

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چکیده

هدف این پژوهش، شناسایی شایستگی‌های مدیریتی، بود. واحد تحلیل پژوهش، تحقیقات نظری و تجربی مرتبط با شایستگی‌های مدیریتی بود که در ۱۷ پایگاه اطلاعاتی ایرانی و غیرایرانی ارائه شده بود. دو کتاب دینی (نهج‌البلاغه و نهج‌الفصاحه) نیز به جهت توجه به مدیریت اسلامی و بومی‌سازی الگوی شایستگی در ایران انتخاب گردید. در مجموع ۱۳۷ منبع (۱۳۵ پژوهش از پایگاه‌های اطلاعاتی و دو کتاب) از طریق تحلیل محتوا تحلیل شد. ۳۸۰ مفهوم مرتبط با شایستگی مدیریتی از این منابع استخراج شد و به ۸۲ شایستگی، طبقه‌بندی شدند (شایستگی‌های محوری فرعی). با انجام تحلیل عوامل (روش مؤلفه‌های اصلی و چرخش از نوع واریماکس)، شایستگی‌های محوری فرعی، به ۸ شایستگی محوری (ارزش، تحلیل، تصمیم‌گیری، دانش، سازگاری، عملکرد، رهبری و ارتباط) طبقه‌بندی شدند. سپس اعتبار محتوا، اعتبار صوری و ضریب کاپا برای الگوی شایستگی‌های مدیریتی محاسبه شد که نتایج رضایت‌بخش بود. در نهایت بر اساس شایستگی‌های شناسایی شده، پرسشنامه شایستگی‌های مدیریتی (MCQ) با ۸۲ گویه، تدوین گردید که برای پژوهشگران، دانشجویان، اساتید، مدیران و سازمان‌ها سودمند خواهد بود.

واژگان کلیدی

هشت شایستگی مدیریتی، الگوی شایستگی مدیریتی، تحلیل محتوا، پرسشنامه شایستگی مدیریتی، شایستگی‌های محوری فرعی، شایستگی‌های محوری.