

Managerial Intelligence: The Conceptual Skills of Top Managers in Financial System

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ABSTRACT

Cognitive bases of managers directly linked to organizational outcomes. Intelligence has had a long history in psychology research, but it has an effect on management as well. Thither is a relationship between cognitive ability and task performance of managers, but the IQ base traditional intelligence can only explain some portion of the variation in outcome measurement of effective management because not alone, there is a broader concept of multiple intelligences but also implementation of these on primary managing processes are different. Different intelligences have different applications for managers also the reverse is true that different managers have different way of performing managerial process with different intelligences. Financial system managers must use multiple type intelligences. Financial system managers' intelligence and how corresponding measure intelligence is important to be more effective. Effects of top financial managers' managerial intelligence types researched on achievement, occupational performance and status from managerial roles perspective.

Keywords Management, Intelligence, Multiple Intelligence, Managerial Intelligence, Conceptual Skill.

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INTRODUCTION

Diversity among executives influence a firm's strategic decision process, but researchers have focused on demographic diversity rather than (Miller, Burke, & Glick, 1998) cognitive diversity. Person's cognitive system linked to various mental processes such as perception, memory, abstract thinking and reasoning, and problem solving as well as the more integrative and control processes related to executive functions such as planning, choosing strategies, and the enactment of these strategies (Sparrow & Davis, 2000). However, in this paper intelligence and cognition are considered synonymous.

Sometimes the people most qualified to succeed are the least capable of handling managerial roles or (Riggio, 2008) selection of necessary strategies because of intelligence have distinct variations and it is a

question if these variations are perquisite in management. Managerial behaviors and activities rated important, are related to the managerial effectiveness (Yukl, 2010) and Upper Echelons' capabilities linked to organizational effectiveness (Hambrick & Mason, 1984). But brain structures underlying cognition and emotion are not identical (Hunt, 2005) whereas cognitive diversity among upper-echelon executives affects organizational outcomes (Miller, Burke & Glick, 1998). Also, intrapersonal skills, inter-personal skills, technical skills, and leadership can be trained in some sense (Furnham, 2008) that managerial intelligence can be thought as well for managing effectively.

Managerial roles according to Mintzberg (1973), information processing, decision making and interpersonal relations, are requiring different types of intelligence. Furthermore, Yukl (2010) described four general managerial processes; relationship

development, exchange of information, decision making, and influencing. Leaders should be able to select, compare and combine relevant working knowledge because all these activities require some reasoning, decision making and information processing or in short IQ (Sternberg, 2004; Furnham, 2008).

Early research IQ traditionally depends on academic or IQ-based traditional intelligence but there are broader conceptualizations of intelligence like emotional intelligence, linguistic (language skills), logical-mathematical (numerical skills), interpersonal (understanding and relating to others), interpersonal spatial (understanding relationships in space), Contextual intelligence (Maltby, Day & Macaskill, 2007). Also, there are always reliability and validity concerns about these tests.

To define measure intelligence has important contributions to literature and practice. First understanding the managerial intelligence capabilities, organizations can choose more proper managers to tenure. Second outcomes of managers can be predicted by higher echelons for outcomes of the organization. Third while decisions depend on managers' cognitive capability (Hambrick & Mason, 1984), their lacking capabilities can be substituted by other means like computers or assistants. Fourth competitor managers' moves can be evaluated and can be counter moved. And more research is required to understand the abilities of managers to perform these moves.

Organization of paper starts with intelligence and multiple intelligence theories followed by managerial intelligence theory, research and conclusion. Intelligence theories sorted out from traditional intelligence types to more recent theories at the same time arranged by its affective scope from individual to organizational/cultural levels.

INTELLIGENCE

There is not, and may never be, a single universally accepted list of human intelligences (Gardner, 2011), but concepts of intelligence for management are important for many reasons. First, theories shape the evaluation and perception of peoples' own and others intelligence which is also the reason of judging own and others abilities and decisions (Hambrick & Mason, 1984). Second, understanding of implicit intelligence theories is useful in elucidating explicit behaviors. Third, to imply the correlations between implicit and explicit intelligence. Furthermore last, understanding, intelligence concepts are useful for determining the reasons under expectations about different intelligence, performance among cultures (Sternberg, 2004; Maltby *et al.*, 2007).

However there are more intelligence types (Multiple intelligence or Qs) other than IQ (general or academic intelligence). For example, Gardner posited eight or more relatively autonomous intelligences (Sternberg and Kaufman, 2001). The question is if these Qs predict management effectiveness other than IQ. This is because the first cognitive ability (IO) rarely explains more than a third to a half of the variance in any outcome measure, such as academic achievement, job performance or health. Secondly, intelligence has been recognized, but it is difficult to improve or teach cognitive ability and last multiple intelligence theories have long before proofed their existence and importance (Furnham, 2008).

If there is one explanation for intelligence to be represent it will be measuring an agent's effectiveness to achieve goals among changing environments (Legg & Hutter, 2007). To measure and relate to business intelligence should be observed behaviorally, affects process outcomes, different from other personality constructs and be measurable (Boyatzis, 2011). In the management field the question is how the intellectual power should be used by managers, but propriety of parceling intellect into parts research has still be going (Gardner, 2011).

GENERAL VS. MULTIPLE INTELLIGENCE THEORY

Cognition and intelligence makes a big difference, in leader emergence and performance however the relationship of intelligence to leader emergence and performance varied as a function of context (Mumford, Friedrich, Caughron & Byrne, 2007). Earliest intelligence researchers were depending on only the mental abilities represented in logical or linguistic problem solving (The Information-Processing Approach). What the intelligence tests measure, psychometrically defines intelligence (Sternberg & Pretza, 2005) but the assessment of intelligence and cognition is in a fluid rather than crystallized state (Sparrow & Davis, 2000). Spearman introduced general factor (g) to this area (Sternberg and Kaufman, 2011). These approaches based on information-processing and Piagetian type IQ, focus on logical or linguistic problem solving; nevertheless fails to fathom biology, creativity and the role of intelligence in relevant to the societies in which they live (Gardner, 2011) and another weak point of analytic intelligence is that technology of measurement define the concept, rather than the concept defining an appropriate measurement technology (Sternberg & Pretza, 2005).

Early intelligence research started with Piaget working with children. Like adult child's intelligence based on same core mental structures about cognitive

development, but in his time Piaget avoided any description of any intelligence (Gardner, 2011). Sternberg and his colleagues found three dimensions of intelligence; Practical problem solving, Verbal ability and social competence (Sternberg, 2002; Maltby *et al.*, 2007). Later, Sternberg (2004) introduced six aspects of intelligence (Nisbett, Aronson, Blair, Dickens, Flynn, Halpern, & Turkheimer, 2012):

Practical intelligence sees attainable goals and accomplish them and adaptation, shaping, and selection in everyday life.

Verbal ability – refers to learning and performing on tasks that involve words (Sternberg & Kaufman, 2011).

Intellectual balance and integration– Descriptors included ‘has the ability to recognize similarities and differences’ and ‘makes connections and distinctions between ideas and things’.

Goal orientation and attainment – Descriptors included ‘tends to obtain and use information for specific purposes’ and ‘possesses the ability for high achievement’.

Contextual intelligence is defining intelligence by the contexts in which the people of each particular culture reside (Kaufman & Grigorenko, 2009). Leaders must know the mission of organization and learning from experiences. It includes understanding the various campus cultures of employees and colleagues as well as knowledge of governmental issues that define their institutional policymaking.

Fluid thought – Descriptors included ‘thinks quickly’ and ‘has a thorough grasp of mathematics’. (Maltby *et al.*, 2007).

Crystallized intelligence (What you have learned) is influenced by fluid intelligence (how easily you learn) (Furnham, 2008).

How the mind works, theories of intelligence try to go beyond test scores to connect differences between individual, environmental and cultural variables (Sternberg & Pretz, 2005). Multiple intelligences‘ have been found or identified over the past ten or so (Table 1). However among these intelligences only linguistic and logical mathematical intelligences have been evaluated and proven. There was more to intelligence than the mental abilities represented in these traditional intelligence tests like emotions play a role in the performance of certain human cognitive abilities (Megill, 2013). So The “Symbol Systems” Approach came to fore encompassing musical, bodily, communication, and even personal symbol systems, including unique domains, areas of skill in which initially only one or a tiny smattering of individuals

make progress (Gardner, 2011). Social intelligence introduced around 1920s after Gardner, Sternberg (2004) and Goleman have argued for specific, multiple fields of intelligence (Riggio, Murphy, & Pirozzolo, 2002). Intelligence spectrum has been more broadly defined and conceptualized since then. Recent years the Neurobiological Perspective added by Canalization Versus Plasticity concepts. Canalization is following certain developmental paths rather than others vs effected by a wide scope of environments concept plasticity (or flexibility) (Gardner, 2011).

The traditional intelligence concept involves analyzing and evaluating existing systems and the environment, but shaping, balancing and finding the environment is required for successful management. Because leaders or managers are living in a cultural, spiritual, competitive and emotional environment, thus leaders should apply their academic intelligence to skills or vice versa (Riggio *et al.*, 2002).

Interpersonal intelligence is relating to other people, like comprising Empathy, Social Responsibility, and Interpersonal Relationship (Druskat, Sala & Mount, 2006).

Intrapersonal intelligence is understanding ourselves such as comprising Self-Regard, Emotional Self-Awareness, Assertiveness, Independence, and Self-Actualization (Sternberg and Sternberg, 2012).

Spiritual intelligence (SQ) at work is substantiated in the display of values such as unity, honesty, duty, compassion, respect and courage (Cook *et al.*, 2004). SQ is generally about being controversy to other Qs about doing and experiencing. Being is about demonstrating your true self, allowing your identity and purpose to shine through in a way that is attractive and potentially inspiring for others.

Social intelligence means fundamentally that leader effectiveness is determined by how well leaders navigate through social dilemmas when generating problem solutions and putting through them within complex organizational dynamics (Riggio *et al.*, 2002).

Emotional intelligence (EQ) is the ability to perceive emotions accurately, approach and generate emotions to assist thought, to understand emotions and emotional knowledge, and to managing emotions reflectively to promote emotional and rational development (Riggio *et al.*, 2002; Maltby, 2007).

Organizational intelligence is mobilizing value added benefits of intangible assets (Liebowitz, 2006) from a business point of view (Silber & Kearny, 2010). Organizational culture, management process, strategy, performance pressure, shared fate and alignment have an enhanced role of organizational intelligence (Albrecht, 2003; Liebowitz, 2006). Gonyea & Kuh (2009)

used organizational intelligence framework under three tiers: factual knowledge and analytical skills (Technical and Analytical Intelligence), understanding the substantive and procedural problems (issues intelligence) and historical and cultural perspective intelligence (Contextual Intelligence).

Strategic intelligence is about organization's strategic decision-making capabilities and related to knowledge management, competitive intelligence and business intelligence. Strategic intelligence provides specific guidance for specific actions in pursuit of particular ends by a complex matrix of individual or collective mental constructs (Akhgar & Yates, 2011). Competitor intelligence is having strategic knowledge about the competitive environment and considering competitive factors effectively. Business intelligence is developing an organization-wide data architecture and developing a plan for member relationship management and competitive intelligence is making key decisions by help of organizational experts (Liebowitz, 2006; Xu, 2007).

With the variety of concepts, cultures, individuals (Gruszka *et al.*, 2010) and the life span (Maltby *et al.*, 2007) and their effects in business are changing. CEOs' ability to learn well (fluid intelligence) and age and experience (Crystallized intelligence) and motivation may be the key to success (Furnham, 2008). For example, in western cultures speed of mental processing is important in contrast, some cultures emphasize depth rather than speed (Sternberg, 2004). Also education and social class have effects on IQ (Nisbett *et al.*, 2012).

It is also true that all Qs are correlated with each other (Furnham, 2008; Sternberg & Kaufman, 2011) so meaningful distinctions among types of knowledge can be devised.

MANAGERIAL INTELLIGENCE: THE CONCEPTUAL SKILLS OF FINANCIAL MANAGERS

Intelligence and management have been long researched fields. Only there isn't any clear account of managerial intelligence (MI) because conventional psychometrically measured IQ is one piece of managerial intelligence, it is not all there is to managerial intelligence (Sternberg, 1997) due to some researchers clearly don't accept other intelligences as a function of general or cognitive intelligence. But a broad perspective, used in management and business, is taken toward the applied intellectual style frameworks, including newly validated instruments in this area that managerial intelligence may be used in organizations to inform and improve the quality of decision making, selection of executives, task and learning performance, internal communication, career guidance and counseling, fit with the organization climate, task design, team composition, conflict management, team building, management style, and training and development (Cools, 2012). But there are differences between cognitive dimensions across different professional fields and systematic investigation of the relationship between professional specialization and cognitive style is yet to be conducted (Blazhenkova & Kozhevnikov, 2012).

Some researchers defined MI in terms of leader traits and psychology of intelligence (Capraz, Kesken, Ayyıldız, & Ilic, 2009). Some researchers defined eight categories under derived from three main categories; cognitive and emotional under analytic intelligence, political, sociocultural, and organizational and network intelligence under practical intelligence and last they divided creative intelligence into two categories innovative and intuitive intelligence (Furnham, 2008, Harvey, 2002). In that respect are other essential words, ranging from the psychologist Larry Gross's list of five styles of communication (lexical, social-gestural, iconic, logical-mathematical, and musical) and to the philosopher Paul Hirst's list of seven kinds of knowledge (math, physical skills, interpersonal understanding, religion, literature and the fine arts, ethics, and philosophy) (Gardner, 2011).

Managerial intelligence is using intelligence in managing. Building up and sustaining relationships, knowledge management, decision making, and influencing are these processes (Yukl, 2012). So with the management process all the management and leadership factors come to the fore, including individuals, civilizations, beliefs, organization and so forth because intelligence reflects knowledge gained from living in a specific social and educational environment (Gardner, 2011).

Table 1: Different Intelligences (Furnham, 2008)

Analytical	Sternberg	1997
Bodily-kinesthetic	Gardner	1999
Creative	Sternberg	1997
Emotional	Salovey and Mayer	1990
Interpersonal	Gardner & Bar-On	1999-1997
Intrapersonal	Gardner & Bar-On	1999-1997
Mathematical	Gardner	1999
Musical	Gardner	1999
Naturalistic	Gardner	1999
Practical	Sternberg	1997
Sexual	Conrad and Milburn	2001
Spatial	Gardner	1999
Spiritual	Emmons	2000
Verbal	Gardner	1999
Stress management	Bar-On	1997

For leaders and management Eichinger and Lombardo (2004) described six Qs (Furnham, 2008); IQ: Intelligence Quotient, TQ: Technical Quotient and know-how, MQ: Motivational Quotient and ambition to achieve goals, XQ: experience Quotient, PQ: People Quotient and how well you handle yourself and work with others (sometimes referred to as EQ) including empathy. Social responsibility, intrapersonal (self-regard, emotional self-awareness, assertiveness, independence and self-actualization), Adaptability (reality testing, flexibility), Stress management and general mood (Cook, Macauley, & Coldicott, 2004), LQ—Learning Quotient: how deftly you adopt new skills, behaviors and beliefs.

As expectations about MI varies based on the organizational culture and individual's personal relationships across organizations based on expectations about intelligence (Furnham, 2008; Sternberg, 2004). Also same social class and same educational background shape the expectations of MI where components differ from profession to profession. A profession based intellectual potential can be formed after a lengthy educational process, in the form of a cultural role (Gardner, 2011). Last researchers concluded that even exercise and age too has an effect on MI (Nisbett *et al.*, 2012) that same lifestyle professions can have alike MI. For instance, management of complex organizations like financial firms depends on the person's ability to manage objectives and uncovering relations among different points of complexity (Sternberg & Grigorenko, 2002). Also cumulative cognitive abilities are different among professions due to the changing environment, situational demands and being exposed to a particular culture (Zhang *et al.*, 2012; Sternberg and Kaufman, 2011). CEOs' fluid intelligence, personality and motivation that come out to be the key to success in business (Furnham, 2008).

Carrying out or doing tasks effectively is resulting from processing mental information (Sternberg and Kaufman, 2011; Carroll, 1993). Predictor of managerial performance simulations is Conventional intelligence tests, personality, styles, and interpersonal orientation that cognitive abilities varies to manage different organizations (Sternberg & Grigorenko, 2002; Sternberg and Kaufman, 2011). Also to manage different kind of organizations depend upon different intellectual styles which are cognitive, affective, physiological, psychological and sociological (Zhang, Sternberg, & Rayner, 2012). As the environment and organizations' structure change also business logics (Silber & Kearny, 2010) start to differentiate among companies due to complexity and information processing. Therefore a manager isn't using the same intellectual capacity or

intelligence when managing a small farm or a giant financial organization.

Organizational structure in finance is another functioning determinant on MI. Their formalization, Similarity of functions and Geographic continuity, Complexity of functions, Coordination and Planning are quite different so the MI will be differentiated. For example balance between the maintenance of group feeling and solidarity, against, individual attainment of proficiency and skill, is very delicate between geographically dispersed bank agencies and complexity of functions and greater variety of intellectual profiles, need mobilized Human intellectual competencies in a variety of ways (Gardner, 2011).

Finance organizations and banks are generally multinational or transnational organizations, even though they may be domestic but have to work on international rules. So international management differs because it involves operating of internationally, under the large scope of disparate economics, within different value systems and institutions, in widely different industrial areas, often over greater geographical distance, in national markets varying greatly in population and area (Certo & Certo, 2012). Under these operational conditions MI is also being differentiated.

Financial organizations and environment that they operate in are also determiner of specific intelligence types. Financial firms have to be smart to respond to alterations in the business environment, to be agile as they possess no monopoly rights and subject to economic crises. In addition, global competition is much tougher and as becoming to have more privatization means more risk exposure and more organizational intelligence is needed to survive under faster competition. Organizational failures increase the organizational intelligence (Brito, 2012) that financial firms have recently experienced both national and global crises. It should be said that the financial sector is more globally tied than other industrial agencies so even if they have separate identities or cultures the way they operate in general terms is similar or may be same. As seen before this makes financial firms to have more shared fate and alignment controversially to have more performance pressures that may cause of similar organizational intelligence, differentiated than other industrial organizations.

Leaders in financial management are operating in a complex environment. Financial crises are not always burst out aligning with mathematical models. So financial leaders also should use social and emotional intelligence. As game theory predicts individuals could make decisions without competitor decisions but not in today's globalized world. So each leader in finance

has to have both social and emotional intelligence. May be that kind of multi intelligence sometimes more important than traditional IQ, especially for the strategic level. For example, former Federal Reserve Chairman Alan Greenspan, confessed that economic crisis left

him in a “state of shocked disbelief” That led to a breakdown in how the free market system functions even though he is good at both mathematics and quantum physics (Greenspan, 2014). Because people play a key role in the banking sector (Table 2).

Table 2: The Relationship Between Numbers of Employees With Various Variables

Independent Variables	Dependent Variables	Correlation	R ²	ADJ. R ²	F	Sig.
# of Branches	Total Deposits	0,979	0,959	0,958	998,554	0,000
Pax	Total Deposits	0,975	0,951	0,950	838,186	0,000
Pax	Total Assets	0,972	0,945	0,943	733,815	0,000
# of Branches	Total Assets	0,967	0,935	0,934	621,335	0,000
Pax	Net Profit	0,953	0,908	0,906	424,297	0,000
# Of Branches	Net Profit	0,944	0,890	0,888	348,807	0,000
Pax	Total Shareholders' Equity	0,938	0,880	0,877	315,941	0,000
# of Branches	Total Shareholders' Equity	0,920	0,847	0,843	237,701	0,000
Pax	Share Capital	0,647	0,419	0,405	30,989	0,000
# of Branches	Share Capital	0,605	0,366	0,351	24,771	0,000

As seen in Table 2, as number of branches and number of employees (PAX) getting higher total deposits, total assets and profit getting higher. Nearly number of branches and PAX explain the all of reason in this dependent variable (ADJ. R²). From that table in the future, it is obvious that the banking system will increase their branch and employee number in managerial terms, which means more span of control, dispersed work units and more networking activities.

The finance sector has its own, educational setting, social organization, procedures, jurisdiction and culture, but differentiated environment, employee profile, systems and customers. If all factors considered natural consequence will be using of variety of managerial intelligences. Simply due to differentiated elements while managerial intelligence is in the large spectrum, alike features with other sectors same MI will be practiced. The challenge in the finance sector with a wide spectrum of cultures and intellectual profiles, is obtaining a success between intelligence and method.

RESEARCH

The banking sector has been growing (Figure 1) and more globalized in Turkey. By 2013 there are 49 banks (including both government and private) with a total of 10,330 branches and 188.747 personnel (including national and international) in Turkey (Table 3-4). As it can be seen 17 banks are foreign banks and only three state owned so banking sector in Turkey becoming more global and international. The reason for sampling banking sector professionals are that they tend to use multiple intelligences because banking sector especially in developing countries like Turkey, is in turbulent-field

environment and staff should deal with large scope of problems from dyadic relations to mathematical predictions. So in banking sector professionals should convince customers, monitor environment not just local but global and use mathematical and statistical calculations for persuading customers which need multiple intelligence factors. Disproportionate stratified random sampling method used under probability sampling to represent a particular stratum (Balvanes & Caputi, 2001) which are managers in banking sector in Tekirdağ city of Turkey.

Table 3: General View of Banking Sector in Turkey

	2009	2010	2011	2012	2013 March
Deposit Banks	32	32	31	32	32
State-owned	3	3	3	3	3
Private Foreign	11	11	11	12	12
SDFI	1	1	1	1	1
Dev. and Invest. Banks	13	13	13	13	13
Participation Banks	4	4	4	4	4
Total	49	49	49	49	49

Limitations for this research is only managers of limited province bank sector involved. So with the questionnaire actually managers' intelligence is measured by other managers or white collars. But as mentioned intelligence is somehow different through perspective of people or cultures. So not just managers but also other employees and customers should be involved.

For the questionnaire nationally and international bank offices in the Tekirdağ central province were selected. Twenty bank agencies, two governmental and 18 private sector controlled, with around 500 hundred employees have been present in central province of Tekirdağ (<http://www.tbb.org.tr>). For the research 250

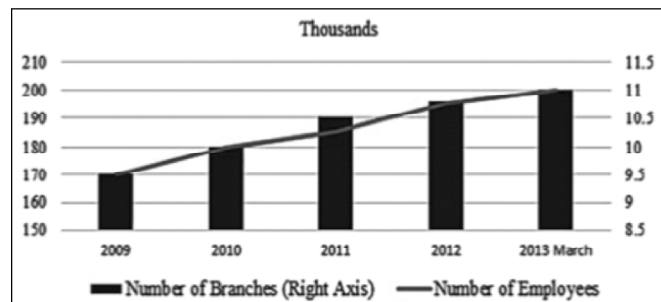


Figure 1: Number of Branches and Employees of banking sector in Turkey

questionnaire sent but only 142 proper questionnaire were taken in consideration. With $\pm 7\%$ Precision Level where confidence level is 95% and $P = 0.5$, sample size 145 is enough from population 500 (Israel, 2013) so 142 sample size can be considered eligible.

The male and female distributions, by 2013, are approximately same, 50% (Table-4).

Ended 2001 and 2009 economic crisis there were close to strict measurement taken both nationally and globally that can bear on both procedures and procedures so the MI.

Table 4: Distribution of Employees by Sex (Percentage)

	2009	2010	2011	2012	2013 March
Female	49.9	49.9	49.8	50.1	50.5
Male	50.1	50.1	50.2	49.9	49.5

Source: Banking Sector in Turkey 1960-2013 retrieved from <http://www.tbb.org.tr>

Table 5: KMO, Variance, Reliability and Factor Loadings (Sorted on Factor Loadings)

Sort by FL		Number of Factors	KMO	Total Variance Explained	Factors Loading	Reliability
1	Strategic	4	0,848	82,745	0,889-0,930	0,931
2	Cultural Infrastructure	3	0,740	81,213	0,883-0,913	0,886
3	Communication	4	0,834	81,866	0,877-0,922	0,927
4	EQ Intuitive Q	3	0,686	79,912	0,842-0,937	0,875
5	Political	5	0,871	73,975	0,837-0,888	0,913
6	Self-Management	3	0,713	72,896	0,835-0,865	0,816
7	Socio-political	4	0,793	74,107	0,826-0,907	0,883
8	Network-Communication	8	0,932	76,229	0,823-0,904	0,958
9	Cultural Adaptation	4	0,823	79,941	0,821-0,934	0,917
10	Awareness	4	0,816	74,432	0,807-0,890	0,890
11	Influence	11	0,946	71,996	0,781-0,894	0,962
12	Creativity	5	0,836	66,183	0,765-0,867	0,876

contd. table 5

QUESTIONNAIRE AND RESULTS

The survey consists of 128 plus seven demographic questions. Consist of 18 subcategories under 13 main categories which are Cognitive, Emotional, Social, Cultural, Organizational, Political and Verbal, Creative, Spiritual, Strategic, Interpersonal, Intrapersonal and Practical intelligences.

Descriptive statistics for participants are 50% male and 50% female, for age general frequency is cumulated to ages between 20-30 and 31-40, years in the current work 1-5 years 23% and 6-10 years 33%, 51% university graduate-15% post graduate-7% under graduate-8% other and 20% did not answer education questions.

Sample is normally distributed because skewness is less than plus or minus one ($< +/ -1.0$), the variable is at least approximately normal (Leech, Barrett, & Morgan, 2011).

Reliability measurement made by Cronbach's alpha tests. Above 0.8 is generally appropriate accepted (Field, 2009). According to Table 6 all reliability coefficients are around 0.9 which approves that all the question groups are reliable.

To identify groups or clusters of variables and to reduce a data set to a more manageable size while retaining as much of the original information as possible factor analysis is done. Kaiser-Meyer-Olkin (KMO) measure should be greater than 0.7 and is inadequate if less than 0.5.

KMO test tells us whether or not enough items are predicted by each factor (Leech et al., 2011) in other words indicating sufficient items for each factor (Table-5).

For the factor loading highest factor loading is for strategic I (0,889-0,930), interpersonal I (communication) (0,877-0,922), Self-management I,

<i>Sort by FL</i>		<i>Number of Factors</i>	<i>KMO</i>	<i>Total Variance Explained</i>	<i>Factors Loading</i>	<i>Reliability</i>
13	Capacity	6	0,854	65,237	0,764-0,849	0,895
14	Problem Solving and Decision Making	11	0,932	66,841	0,749-0,881	0,952
15	Organizational	11	0,920	67,025	0,735-0,868	0,952
16	EQ Spiritual Q	6	0,873	68,770	0,717-0,916	0,909
17	Flexibility	4	0,767	72,683	0,712-0,923	0,873
18	EQ Emotional	17	0,945	62,313	0,680-0,877	0,963
19	Cognitive	11	0,902	61,348	0,603-0,864	0,934
	Total	124	0,944	84,330	0,458-0,825	0,994
16 Sub-groups						

Political I (0,837-0,888) but interesting conclusion is cognitive IQ seems to have least factor loading.

CONCLUSIONS

Upper echelon theory states that organizational outcomes-strategic choices and performance levels-are partially predicted by managerial background characteristics (Hambrick & Mason, 1984). So researching intelligence bases of managers may help to understand organizational outcomes, selection of managers and competitors' actions. Same cognitional bases or background of people will be required to have similar MI that is also true at the organizational layer. As people affected with the profession, its culture embedded more deeply as they live in globalized system. Finance is operating very cruelly one mistake may kill a startup or a bad prediction can bankrupt a system. As discussed, it is not a numbers problem starting a conversation with a readable, defensible valuation may be beginning of ideas worth millions. Experience and preparedness to lead a team is the key ability of sustainable venture to scale and grow. All of these multiple intelligences are required that personal and organizational intelligences can play significant characters.

Financial sector organization structure also a potent determinant of MI. First of all finance sector has stricter sector rules, more clearly defined organizational hierocracy, formal process, more educated employees, more global and geographically dispersed transnational organizational structure.

For the financial sector, it is natural to expect cognitional or mathematical intelligences mostly used, but from the results it is obvious that social or networking intelligences rated most in contrast cognitional intelligences rated lower.

This research, managerial intelligences listed in the finance sector of the Tekirdağ central province. As it was discussed before culture and environmental

factors effects MI so more research is needed to exemplify the global or national MI scale of the financial sector.

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