Management Skills of Pakistanis: a Comparison of Technical, Human and Conceptual Differences

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Abstract

This study focuses on the management skills of respondents from Sahiwal, Pakistan, to see if gender and education can be significant factors in their technical, human and conceptual competencies. The results of 470 Pakistani adults show that there are significant differences in their management skills. No significant gender differences were found. In terms of the education variable, this study demonstrated that having a master's degree does not necessarily increase a person's human, technical or conceptual skills. Implications for educators, managers, and human resource professionals are presented.

JEL classification numbers: M10, M12, M53

Keywords: Management skills, technical, human relations, conceptual, gender, education, Lahore, and Pakistan.

1 Introduction

Management is traditionally seen to be synonymous with leaders and these concepts both appear to be process of getting things done with and through one or more individuals (Mujtaba and Afza, 2011; Sikander et al., 2012; Tajaddini et al., 2009).. Often people assume that such variable as age, education, experience, gender, and expertise might make a difference in effective management (Kaifi and Mujtaba, 2010; Mujtaba and Kaifi,

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2010). For thousands of years, it has been assumed that aging and experience can make people mature and wise. This is assumed in promotions in military organizations as well as in the government area and private organizations (Afza et al., 2011; Kaifi & Mujtaba, 2010; Mujtaba & Afza; 2011; Mujtaba & Kaifi, 2010; Mujtaba et al., 2011; Tajaddini et al., 2009). The modern workplace is diverse, filled with men and women professionals from different generations and years of management experience. Workers bring different values and expectations; as such managers and organizational leaders must create an inclusive workplace and this necessity comes from the pluralization of society (Cooper, 1998, p. 51; Tajaddini et al., 2009). Today's organizational leaders and managers must have good technical, human, and conceptual skills in order to build strong teams in these competitive times. Consequently, this study focuses on understanding the management skills (technical, human, and conceptual) of respondents Pakistan based on gender, education, age, and years of experience in the management ranks.

Older managers with more years of experience are likely to make good long-term strategic decisions (Mujtaba & Sadat, 2010). This is why organizations usually seek to hire experienced managers because the choices made by "management are influential on organizational outcomes" (Voges et al., 2009, p. 33). Of course, effective strategies require management teams that are diverse in terms of age, gender and overall experience. It has been documented that the "primary mover of the organization is its strategy, which details its purpose and direction...organizational strategy influences the effectiveness of diversity in the organization" (Knouse, 2009, p. 348). Some authors claim that using the talents and skills of diverse individuals from different departments or organizations "often leads to opportunities for cost reduction that might not otherwise be considered" (Pudlowski, 2009, p. 39).

Tzabbar writes that "firms interested in exploring new knowledge boundaries and changing their capabilities should hire personnel whose knowledge is different from that already residing in the firms" (2009, p. 891). Diverse workers and managers are needed to successfully capitalize on different opinions, experiences, and talents that might exist in the organization as well as in the community. Having a diverse management team "is especially important when there are significant complementarities and spillovers between the actions of different individuals or groups" (Postrel, 2009, p. 273).

2 Management Concept in Practice

Academicians and practitioners see the term management as the achievement of organizational goals with and through people using available resources in the most efficient manner possible (Mujtaba, 2007; Tajaddini et al., 2009). Generally, according to Mujtaba (2007), people use the four functions of management which are planning, organizing, leading, and controlling (POLC) to achieve their organizational objective. *Planning* means clarifying an organization's goals and specific strategies for achieving these stated objectives. Making these management functions work well for the organization is a key function or responsibility of the managers. *Organizing* includes determining what tasks must be done, who will do them, how the tasks will be grouped, who will report to whom, and where decisions will be made. *Leading* includes motivating and directing employees, and communicating and resolving conflicts. *Controlling*, on the other hand, means monitoring performance, comparing results and goals, and making corrections and adjustments as needed in a timely manner.

Management is divided into three levels: first-level supervisors (managers), middle managers and top management (Kaifi & Mujtaba, 2010; Mujtaba & Kaifi, 2010; Tajaddini et al., 2009). The changing story in management today, of course, is that the layers and layers of middle managers that most large organizations used to have are giving way to self-empowered teams and flatter organizations. In their interpersonal, informational, and decisional roles, managers try to balance efficiency (how things get done) with effectiveness (what gets done) depending on the situation, tasks, and people involved (Mujtaba, 2007, pp. 36-37). It should be noted that effectiveness and efficiency can only be achieved if the managers are working on implementing based on a long-term strategy. If a manager or leader has a sense of purpose and direction, this will become contagious among his/her peers, colleagues and employees. Effective leaders tend to set high standards to meet and exceed the stated goals and objectives. Furthermore, effective leaders are honest and truthful; they look reality in the eye and face the facts, while strategically planning to move forward. Of course, the three basic skills that managers use are technical, human, and conceptual and that the proportion of one's time spent in these areas may change as managers go up the hierarchy (Katz, 1955). For example, senior managers may not spend as much time in technical functions as those who are in first line management. Top managers tend to spend more time using their conceptual skills. Top management has been found to be an important component in enacting an organization's vision and ultimately its performance (Smircich & Stubbart, 1985; Tajaddini et al., 2009; Voges et al., 2009).

As emphasized by most management scholars (Tajaddini et al., 2009), research has shown that education and experience help managers acquire relevant managerial skills that let them perform their jobs effectively, especially conceptual, human, and technical. Management authors provide the following definitions for human, technical, and conceptual skills:

- 1. Technical skills are job-specific knowledge and techniques.
- 2. *Human skills* include the ability to understand, alter, lead, and control the behavior of people and groups.
- 3. *Conceptual skills* include the ability to analyze a situation and distinguish between cause and effect. Conceptual skills are often gained through formal education, reflection, and experience (Jones & George, 2009, pp. 17-18).

It should also be noted that promotion in management hierarchy is often linked to a manager's ability to acquire the management skills and competencies that a particular company believes are important. Of course, the variables of age, education, gender, and management experience might be factors for consideration in various positions in the firm (Kaifi & Mujtaba, 2010; Mujtaba & Kaifi, 2010; Tajaddini et al., 2009). Buddhapriya (2009) states that although conflict between career and family roles in the modern workplace can be a potential source of stress for both women and men managers of all ages, it usually affects women more than men, especially when their children are young. Buddhapriya (2009) explains that family responsibilities have hindered many women from entering the workforce. However, modern organizations tend to be more open to encouraging, recruiting, promoting, and retaining more women to higher levels of management, but they are usually complaining that the talent pool of qualified women candidates for the top level is somewhat limited. With globalization creating more opportunities, education for men and women has become more prevalent and a necessity the political leaders cannot and must not ignore (Tajaddini et al., 2009).

Cultural background and context have a strong impact on leadership and management. Leaders and managers need to possess skills that can help them motivate their subordinates to achieve departmental goals within the cultural context. For example, technical skills are the "power card" of German managers. Effective German managers are those who possess high technical skills and are considered a specialist rather than a generalist (Lawrence, 1994; Warner & Campbell, 1993 as cited in Nguyen et al., 2012). According to Nguyen et al. (2012), employees in Germany often go to school and learn technical skills through a unique system which is called the "vocational apprenticeship." Passing this apprenticeship makes them feel competent as an employee and as a manager. The main management approach in Germany is "competent first", which emphasizes the importance of technical skills and how competence can help managers better manage their department's resources and employees. German middle managers often rely on their technical expertise as their main source of power and focus on their technical responsibilities simultaneously (Schneider & Littrell, 2003). Technical skills, experience, and expert knowledge are among the most important factors for employment, promotion, evaluation, and social acceptance in Germany. In the Netherlands, expertise is also a major power of effective managers. Dutch managers are expected to have particular skills and background in the areas they manage. In addition, outstanding Dutch managers and leaders are expected to have human skills as well as conceptual skills. They should be visionary but stay connected with their subordinates, and decisive but human-orientated. Integrity, inspiration, and vision seem to be to key to success for Dutch leaders and managers (Thierry et al., 1998). In high-context culture, such as Pakistan, Vietnam, China, and Thailand, leaders and managers focus on building human skills to be able to manage their groups and deal with people effectively as relationship-orientation is the preferred leadership style (Nguyen & Mujtaba, 2011). In these high power distance and collectivistic cultures, people emphasize group efforts and place high priority on maintaining high superior-subordinate hierarchical relationships, or "guanxi", to be considered as an "in-group" (Nguyen & Mujtaba, 2011). Managers may not have the equivalent technical skills for the job but if they make the employees believe that they are honest, dependable and trustworthy, the employees will still follow their leadership. Therefore, building a good relationship with the employees through trust and respect is the key to effective leadership and management in these unique cultures.

Recent research has indicated that German people, besides their traditional "competent first" management principle, also prefer a softer "human relation" approach from their leaders (Nguyen et al., 2012). The new generations of workers in high power distance and collectivistic cultures such as Pakistani workers demand leaders and managers who have high humanistic attributes to help enhance morale and productivity in the workplace. Thus, it becomes important to learn what dominant skills (technical, human, or conceptual) Pakistani men and women bring to the workforce.

3 Culture in Pakistan

The culture of Pakistan is made up their diverse traditions, norms and daily practices. Today, Pakistani workers are made up of younger and older individuals, men and women, as well as professionals with different educational backgrounds and years of management experience (Afza et al., 2011; Mujtaba & Afza; 2011; Mujtaba et al., 2011; Sikander et al., 2012).

Pakistan is the sixth most populous country of the world with estimated population of 173.51 million at the end of 2010. Pakistan is the 10th largest country in the world according to the size of the labor force. Pakistan's literacy rate is around 58%. Over 42% of the total population is functionally illiterate. Population is growing at an average rate of 2.05 percent and is projected to become fourth largest nation of the world by 2050. Pakistan is a young country with population of 104 million below the age of thirty and with a median age of around 20 years. The people living in urban areas have risen to 36%. On the basis of a participation rate of 32.8 percent, the labor force is estimated to be around 54 million individuals. Of the total labor force, there is an unemployment rate of around 6 percent.

In most South Asian countries, especially in Pakistan, the institution of family is the bedrock of society. Institution of family is considered a key to economic success and basis of continued superiority. The cultural context of Pakistani society is patriarchal patriarchal (Afza et al., 2011; Mujtaba et al., 2011; Sikander et al., 2012). Men and women are conceptually divided into two separate worlds. Home is defined as a woman's legitimate space, while a man dominates outside the home. Male members have traditionally been given better education and are equipped with business and management skills to compete for resources in the public arena, while female members are socialized with domestic skills to be good mothers and wives (Mujtaba, 2010).

Compared with Westerners, Pakistani males are more likely to agree that "women's happiness lies in marriage". They are more likely to say women should give up work when they get married or have children. Due to these customs and cultural practices, many educated females tend to stay home instead of advancing their careers after their college education (Mujtaba et al., 2011). However, it should be noted that now Asia is changing and this is true in Pakistan as well. The pressures of wealth and modernization upon family life have been relentless. In Asia, the results include later marriage, and the mean age of marriage has risen by five years in some countries over the past three decades. Education is changing women's expectations. Rates of non-marriage are rising at every stage of education. Furthermore, more education leaves the best-educated women with fewer potential partners. Marrying was necessary in the past when women could not get an education and female literacy was low. But now many women are doing as well or better than their male counterparts (Afza et al., 2011). Pakistani women have the legal rights to own and inherit property from their families and businesses, but due to cultural norms, very few women who have access and control over these resources. With more education and fairness in the enforcement of their rights, this situation is changing.

Better education provides more employment for females, and having a job increases a woman's autonomy. Asian women will not necessarily choose a job over marriage. Rather, they will struggle to balance the conflicting demands of work and family. Despite higher incomes and education, females tend to have lower socioeconomic status than men in Pakistan and most other Asian countries. As in most traditional societies, women in Asia have long been the sole caregivers for children, elderly parents or parents-in-law.

4 Study Methodology

Many instruments have been used by different researchers to assess an individual's skills for management and leadership (Afza et al., 2011; Buttner & Gryskiewicz, 1999; Egbu,

1999; Garman et al., 2006; Katz 1955; Mumford et al., 2000; Rahman & Yang, 2009; Sikander et al., 2012).

The skills inventory is designed to measure three broad types of management skills: technical, human, and conceptual (Kaifi & Mujtaba, 2010; Mujtaba & Kaifi, 2010; Tajaddini et al., 2009). One can score the questionnaire by adding the scores for each category. First, sum the responses on items 1, 4, 7, 10, 13, and 16. This is one's technical score. Second, sum the responses on items 2, 5, 8, 11, 14, and 17. This is one's technical skill score. Third, sum the responses on items 3, 6, 9, 12, 15, and 18. This is one's conceptual score. A highest score in each category would be a maximum of 30 for each skill area.

The research question for this study is: Do age, education, gender, and longevity in management experience make a significant difference in the technical, human and conceptual skills of Pakistanis in Peshawar? For this survey, the higher the overall sum of the scores, the more likely that the participant is better at that skill. The research hypotheses for this study are as follows:

- *Hypothesis 1* Pakistani respondents will have similar scores for technical, human and concept*ual* skills.
- *Hypothesis* 2 Pakistani men and women will have similar scores for technical, human, and conceptual skills.
- *Hypothesis 3* Pakistanis with a bachelor's level education and those with a master's level education will have similar scores for technical, human, and conceptual skills.

Respondents in Sahiwal, Lahore and other neighboring cities of Pakistan were given questionnaires in both the English and Urdu languages as per their preference. A total of 650 surveys were given our and a total of 470 usable returned responses were analyzed for this study. Of the total responses, 110 came from females and 361 belonged to male participants. All of the participants had a college degree or above with a majority (341) having had a bachelor's degree and 129 having a master's degree or above. Majority of the participants were between the ages of 23-28 years of age and all of them reported being a Muslim.

5 Analysis and Results

The first hypothesis, "Pakistan respondents will have similar scores for technical, human and conceptual skills", as can be seen in Table 1, cannot be fully supported as there are significant differences among the skills, except in the comparison of technical and human skills which appear to be similar. Therefore, the first hypothesis is rejected.

	Number	Technical	Human	Conceptual
		21.91 (3.76)	21.89 (3.64)	21.41 (3.81)
		Vs. Human*	Vs. Conceptual*	Vs. Technical*
Pakistan	470	*t = 0.08;	*t = 1.97;	*t = 2.03;
		p = 0.93	p = 0.05	p = 0.04

Table 1: Pakistan Management Skill Scores (St. Deviations)

^{*} Computed using alpha = .05

The second hypothesis, "Pakistan men and women will have similar scores for technical, human and conceptual skills," as can be seen from Table 2, can be supported as no significant differences were found among the technical, human and conceptual skills.

Table 2. I akistani Wen and Women Management Skin Scores (St. Dev.)					
	Number	Technical	Human	Conceptual	
Women	110	21.89 (3.49)	21.85 (3.5)	21.19 (4.01)	
Men	361	21.92 (3.85)	21.91 (3.69)	21.47 (3.75)	
		*t = 0.07;	*t = 0.15;	*t = 0.67;	
TOTAL	470	p = 0.94	p = 0.88	p = 0.50	

Table 2: Pakistani Men and Women Management Skill Scores (St. Dev.)

The third hypothesis, "Pakistanis with a bachelor's level education and those with a master's level education will have similar scores for technical, human, and conceptual skills," as can be seen in Table 3, is partially supported for technical and conceptual skills. However, respondents with a master's degree level education have significantly lower human relation scores. Therefore, the hypothesis is partially supported.

Table 3: Pakistani	Management	Skills and	Education ((St. Dev.))
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	Number	Technical	Human	Conceptual
Bachelors or Less	341	21.97 (3.41)	22.14 (3.56)	21.52 (3.88)
Masters or Higher	129	21.78 (3.83)	21.22 (3.79)	21.09 (3.62)
		*t = 0.52;	*t = 2.46;	*t = 1.09;
TOTAL	470	p = 0.60	p = 0.01	p = 0.28

^{*} Computed using alpha = .05

This study has demonstrated that there are statistically significant differences in the technical, human and conceptual skills of Pakistani respondents. A comparison of the gender variable has shown that men and women have similar scores for human, technical and conceptual skills. Finally, this study has shown that a master's degree does not necessarily increase a person's interpersonal skills since those with less education had higher human relation skills in this study. While those with less education did have higher technical and conceptual skills in this study, the differences were not statistically significant. So, this has demonstrated that graduate level education does not necessarily increase a person's technical or conceptual skills.

6 Discussion and Implications

This study has demonstrated that Pakistani participants in this research scored highest on the technical skills, followed by human skills and then conceptual skills. Since Pakistan is a collective culture, technical competency is very important and emphasized throughout one's socialization in the education system (Afza et al., 2011; Sikander et al., 2012). These results are very similar to the study by Tajaddini et al. (2009) which was conducted with respondents in Iran. Since Iran and Pakistan are neighbors and Islamic countries, perhaps there are similar expectations and socialization on management skills. However, unlike Tajaddini et al. (2009) study, gender did not demonstrate any significant

^{*} Computed using alpha = .05

differences in managerial skills. Furthermore, our results with Pakistani respondents are inconsistent with the findings of Ziefle et al. (2004) who found that women usually report lower subjective technical scores. Despite the fact that females are more likely to be victims of gender discrimination and unfair treatments in the organization, managers should feel comfortable in promoting females to managerial positions since Pakistani women in this study demonstrated that are as skilled in management as their male counterparts.

While women have not been in the workplace for too long in the Pakistani culture (Afza et al., 2011), similar to previous researchers, this study has demonstrated that management skills can be acquired through education and appropriate training (Baum et al., 2001). Despite the fact that females are as good as their male counterparts in management, studies have shown that it is still difficult for women to break through the glass ceiling and concrete walls even though they have achieved a high level of job performance (Peng et al., 2009). Pakistani public sector leaders and business executives need to do more to create fair promotional and employment practices for females so they take better advantage of the skills that women bring to the workplace. It is true to that women have not been in top management as the same rate as their male colleagues. As such, they may not have too many female role models to benchmark leadership and management behaviors. However, researcher as such Mumford et al. (1999) state that managerial and leadership skills are learned; as such training programs can be utilized for employee development in their career progression within the organization (Kaifi & Mujtaba, 2010; Mujtaba & Kaifi, 2010; Tajaddini et al., 2009).

College education helps develop a person through his/her cognitive skills. Cognitive skills are the most fundamental of the leadership skills (Mujtaba & Afza; 2011; Mumford et al., 2007; Sikander et al., 2012). They are comprised of those skills related to capacities, such as collecting, processing, learning, disseminating information, and oral and written communication. Cognitive skills require leaders to be engaged in critical thinking, learn and adapting to new situations (Carroll & Gillen, 1987). It has been proven that educated workers are more likely to work in occupations that require greater cognitive/conceptual skills (Farkas et al., 1997). In contrast, as stated by Tajaddini et al. (2009), human capital theory suggests higher levels of education and cognitive skill can enhance one's performance on the job, and thereby lead to higher salary as a reward for higher productivity on job (Murnane & Levy, 1996). This study demonstrated that those with a college education (bachelor's degrees) are likely to be as good as those with graduate level education (master's degrees) in their technical, human and conceptual skills. More education can develop one's level of expertise and qualification in one's field, but it does not necessarily increase one's ability to become a better manager (Afza et al., 2011).

This research has shown that Pakistani respondents scored fairly close in all three management skills; therefore, supervisors should feel comfortable in knowing that most of these employees, regardless of their gender, are able to perform their tasks with an acceptable level of managerial skills.

7 Limitations of the Study

There are some limitations to this study and one is the limited amount of responses from cities in Pakistan. The fact that this study was conducted with a small sample population living in just a few cities around Lahore and Sahiwal areas was a further limitation. It is

also acknowledged that the convenient sample collected by the authors without any funding is small for a big country like Pakistan. This study used a self-report measure (questionnaire) that entails the problems of common method variance and consistency bias. As such, further research is required using alternative methods for data collection, such as interviews combined with self-reported data. In addition, a longitudinal study and in-depth interviews with the participants can better explain the relationships between the various aspects of management skills and age, gender and years of formal education or management experience. In the future, it would be of interest to know if it is possible to draw a connection between age and management experience, or age and longevity with the company.

8 Conclusion

This study focused on the technical, human and conceptual skills of men and women Pakistan respondents who had a college degree. The results show that there are statistically significant differences in the technical, human and conceptual skills of respondents and higher education does not increase one's management skills. It is suggested that leadership development programs be designed in the context of one's specific job and industry since general education does not necessarily increase one's management skills.

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