



Turkish Managerial Skills by Gender, Education, and Public Sector Experience

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Abstract

Management skills are necessary in every part of life and can be honed through work experience and education. Effective management skills can provide a competitive advantage to any profession and organization. This study focuses on the technical, human, and conceptual skills of 503 Turkish respondents to determine if independent variables such as public sector work experience, education, and gender differences can be a factor. The results show that Turkish working adults have significantly different management abilities as those with work experience have enhanced skills compared to others. We found statistically significant results based on education, management and public sector experience.

Keywords Management skills · Conceptual · Human · Technical · Gender · Turkey

Introduction

Today's workplaces and organizations in Turkey are likely to be very diverse as the Turkish workforce tends to come from pools that are educated in many different cultures, such as Asia, Europe, and North America (Mujtaba et al., 2025; Uru et al.,

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2024). Consequently, managers must be culturally competent by understanding and respecting unique cultural norms, backgrounds, and interests of each of their workers (Mujtaba et al., 2013a, 2013b; Mujtaba, 2022a). Cultural competency has become a necessity for effective management in ethical business leadership (Reischl et al., 2010), and “this necessity grows out of the relativity of values and the pluralization of society” (Cooper, 1998, p. 51).

Assessing and researching the management skills of working male and female professionals in Turkey is crucial for understanding the country's current and future leadership landscape. Turkey's unique cultural and economic context, situated between Eastern and Western influences, presents a fascinating case study for management skills research. By examining the management skills of both men and women, researchers can identify strengths, weaknesses, and areas for development, ultimately informing strategies to enhance leadership effectiveness and drive business success (Mujtaba, 2022b).

Moreover, researching management skills in Turkey can provide valuable insights into the impact of gender on leadership styles and effectiveness. Turkey has made significant strides in promoting gender equality, but challenges persist (Uru et al., 2024). By comparing the management skills of male and female professionals, researchers can uncover potential differences in leadership approaches, communication styles, and decision-making processes (Jones & George, 2023). This knowledge can help organizations develop targeted training programs and policies to support the growth and development of female leaders, ultimately promoting inclusion in the workplace.

The findings of such research can have practical implications for Turkish organizations, policymakers, and educators, as well as cross-cultural professionals working in the country. By understanding the management skills of young students and working adults in Turkey, organizations can design more effective training and development programs, tailored to the unique needs and challenges of the Turkish market. Policymakers can use the research to inform initiatives aimed at promoting entrepreneurship, innovation, and economic growth. Educators can develop curricula that address the specific management skills gaps identified in the research, ensuring that future generations of Turkish leaders are equipped with the skills and competencies needed to succeed in a rapidly changing cross-cultural work environment.

As such, the focus of this study is to determine if there are differences in the management skills of Turkish adults based on gender, education, work experience, management experience, and public sector experience in the government.

Literature

Employees, managers, and organizations face different challenges and opportunities on a periodic basis, which requires effective leadership and problem-solving skills. According to Northouse (2010, p. 39), “Beginning in the early 1990s, a group of researchers, with funding from the U.S. Army and Department of Defense, set out to test and develop a comprehensive theory of leadership based on problem-solving skills in organizations”. In modern times, where some of the tasks are completed virtually, the problem-solving skills needed are constantly changing due to the com-

plexity of the economy, society, and changing expectations (Mujtaba, 2024; Kanaris & Mujtaba, 2024; Kyaw, Harland, and Mujtaba, 2017). All in all, to lead and solve complex problems in a timely manner, managers must have sufficient competency in technical, human, and conceptual skills (Kaifi & Mujtaba, 2010; Mujtaba et al., 2013a, 2013b). Therefore, this study focuses on understanding the Turkish management skills (technical, human, and conceptual) of respondents as they relate to their experience, education, gender, and culture.

Management Skills

It has been well documented that the three basic skills managers use are technical, human, and conceptual (Katz, 1955). Depending on the manager's rank and experience, the proportion of his or her time spent in these areas may change as supervisors and leaders rise in the hierarchy of management ranks in each organization. Higher ranked managers are not always involved too closely with technical functions and may plan strategically for the long-term using their conceptual skills.

According to past research, education and experience do help managers acquire the needed managerial skills to successfully perform their jobs (Clem & Mujtaba, 2010; Kyaw et al., 2017). According to Clem and Mujtaba (2010),

1. *Technical skills* are job-specific knowledge and techniques for a given position in the organization.
2. *Human skills* would be one's ability to understand, alter, lead, and control the behavior of employees, colleagues, and groups through effective communication, coordination, and motivation.
3. *Conceptual skills* require a thorough analysis of a situation to distinguish between cause and effect to plan strategically for achieving the long-term vision of the organization.

Most Turkish managers use these skills as part of their management style on a day-to-day basis, while expecting to climb up in the hierarchy of leadership. However, males and females often face different barriers when it comes to promotional opportunities in the workplace (Wyld, 2008). As such, it is not clear whether variables such as a person's gender, education, management experience, and culture are statistically significant factors in the management practices of male and female working adults in Turkey. This study will assess the extent to which these management skills are being used by male and female professionals in Turkey.

The post-Covid work environment, which has more hybrid and remote workers, has changed how jobs are done, and this has major implications for managers (Mujtaba, 2022b). Today's work environment has become even more global, complex, dynamic, highly competitive, and extremely volatile compared to several decades ago (Kyaw et al., 2017). The globalization of commerce has resulted from the consumer demands, cost imperatives, increased competition, and governmental policy changes (Holt et al., 2010). Amid challenges are opportunities related to talent flow, management of diverse employees and a shortage of specific competencies to manage local and global firms (Bucker & Poustma, 2010). Nowadays, there is an increas-

ing focus on good human relations in the community, fairness, and ethical conduct in the Turkish society (Engin & Akgöz, 2016; Mujtaba et al., 2025; Uru et al., 2024).

Managing with a Global Mindset

To be successful in the modern global economy, today's employees and managers must possess a set of skills and attributes that will be beneficial to the organization to work across local, regional, national, and international boundaries to direct their institutional goals forward (Mujtaba, 2024). All management professionals should essentially be able to function as "global managers" using relevant technical, human, and conceptual skills (Kyaw et al., 2017).

Managers are responsible for the work performance of group members and employees in their department, as they often hold the formal authority and accountability of committing organizational resources to achieve their goals (Matison, 2012). Managers must work interdependently with other stakeholders to efficiently achieve organizational goals in a timely manner with and through people using available resources, tools and technologies (Khanfar et al., 2024). The main functions of management are planning, organizing, leading, and controlling (PLOC) (Mujtaba, 2022a). In management, people function as diverse characters which can include serving in interpersonal, informational, and decisional roles (Mintzberg, 1990), to coordinate and interact with employees and other stakeholders. The manager is usually required to transmit essential information in a timely manner to all stakeholders. Additionally, managers must make important decisions regarding the use of available resources to achieve organizational goals.

Barlett and Ghoshal's (2003) model of management balances the local, regional, and global demands placed on companies operating across the world's many borders.

Bartlett and Ghoshal identified three groups of specialists (business managers, country managers, and functional managers) each with different organizational goals and roles. Baruch (2002) concluded that the mindset, the "right frame of mind" (characterized by openness, awareness, and a genuine appreciation of diverse cultures and customs) coupled with the basic qualities essential to successful managers will enable them to manage successfully locally and globally.

Some believe that global managers are those who understand the nature of different cultures and can effectively lead mixed-nationality teams, while unleashing human potential in both individuals and groups to leverage the richness of cultural diversity (Cleverworkarounds, 2008; Whitfield, 2003). Such essential management skills and competencies will assist modern leaders in maintaining a competitive advantage while ensuring their continual success in a complex and dynamic market.

Turkey's unique culture is a fascinating blend of Eastern and Western influences, shaped by its strategic location between Europe and the Middle East (Mujtaba et al., 2025). This cultural melting pot is reflected in the management styles of Turkish professionals, who often combine traditional values with modern practices. Turkish managers tend to be hierarchical and paternalistic, with a strong emphasis on respect for authority and tradition (Uru et al., 2024). At the same time, they are known for their hospitality, warmth, and strong interpersonal skills, which are highly valued

throughout the culture. This blend of traditional and modern approaches creates a distinctive management style that is both assertive and relationship oriented.

Management Style Reflections in Turkey

It is challenging to categorize or identify management styles of entire groups of populations due to the influence of so many distinct factors. Numerous research in literature has examined various organizational components and challenges. The organizational phrase "management style" is frequently used to explain the "how" of management. It is a result of personality-related behavior (Mcguire, 2005). An organization's everyday operations can be characterized by its management style. Management styles encompass all the opportunities and constraints of human learning and are collectively learned behaviors. Decision-making procedures and content are all a part of management styles (Jain & Premkumar, 2010).

Autocratic rule was the sole prevalent administrative style in use from the time of the Egyptian pharaohs through the Dark Ages and the early phases of the feudal system. The autocrat was the ultimate ruler. His own whims, fantasies, and wants were intimately linked to the system he governed. "His" leadership was complete and utter. This grassroots response to the excesses of authoritarians and autocrats came into being during the industrial revolution. The idea that child labor, worker exploitation, sweatshops, and similar practices were immoral spread across cultures, including in Turkey. In both government and industry, the use of absolute power was no longer acceptable. Management styles underwent a significant shift with the industrial revolution and the establishment of democratic nation-states. While autocrats were merely the holders of a symbolic throne, voters had the power to select the country's ruling party. A new definition of "management" resulted from all these changes. Throughout the 1900s and 2000s, management perceptions in Turkey as well as other place around the globe changed quickly along with the times, people, and organizations (Duft, 2016).

Management style, according to Shahmohammadi (2015), is a specific and consistent manner of behavior that managers use to inspire staff members to meet company objectives. Organizational culture and identity are also linked to management style. Ramos et al. (2016) contend that national culture influences these factors either entirely or in part. Management experts and researchers argue that management styles are culturally determined and differ from culture to culture (Morris & Pavett, 1992).

The foundation of management style can also be linked to religion. Religion is a vital component of culture and has a big influence on society's lifestyle, social atmosphere, and actions. Within a given culture, management techniques differ from industry to industry, from religion to religion, and from culture to culture (Jain & Premkumar, 2010). A business's dominant management style may also be impacted by managerial behavior and industry circumstances. An infinite number of management styles can be developed under the influence of culture and religion.

It is possible to evaluate well-known parallels between Japanese and American businesses to comprehend how culture shapes managerial style. Following Japan's success in the late 1900s, some academics investigated Japanese management practices. Paternalism, collectivism, lifetime employment, seniority, lifelong learning,

collective decision-making, hard labor, cooperation, ethics, and constant adaptation and improvement are all aspects of the Japanese management style that these researchers emphasized. The American firms' management style was very different from the Japanese model, which emphasizes individualism, core values, a highly competitive workplace, a highly flexible structure, business unit autonomy, interactivity, and innovation (Uche & Timinepere, 2012). Even if both countries have many prosperous businesses, it is evident that they are accomplishing their objectives using distinct management approaches.

Turkish management tends to be more dictatorial and top-down, and business is hierarchical (Uru et al., 2024). Because those in the uppermost echelons of business are typically from the upper class, social class differences exist in industry. Instead of trying to come to an agreement, managers usually tell their staff what they want done. However, in modern Turkey, effective management techniques necessitate a flexible leadership style and a thorough comprehension of cultural dynamics. Building successful teams and organizations requires an understanding of the value of connections, indirect communication, and group decision-making (Evans & Farrell, 2023). Effective management techniques are essential to the success of organizations in Turkey. It is crucial to comprehend the cultural quirks and implement suitable tactics when leading teams and companies in Turkey.

Katz (1955, 1974) emphasized three types of skills that are essential for any successful manager in Turkey and elsewhere, which are technical, conceptual, and human skills. Arguably, the most crucial abilities for first-level managers are technical ones. In the case of top managers, these abilities are not as important since technical skills become less significant as people move up a hierarchy from the lowest to the highest levels. As the name suggests, these abilities provide the management with the knowledge and capacity to employ various strategies to accomplish their goals. Not only are technical skills linked to machinery, production tools, or other equipment, but they are also necessary for increasing sales, designing various products and services, marketing, credibility, and more.

A manager's knowledge and capacity to collaborate with others are facilitated by human management abilities and this is very important in Turkey as people are more relationship oriented. Working with people is one of the most important management responsibilities in Turkey. The existence of management and managers is rendered unnecessary in the absence of people. These skills empower managers to take on leadership roles and inspire staff to achieve greater success. They also assist them in utilizing human talent within the organization more efficiently. To put it simply, these are necessary competencies for every level of the organization's hierarchy.

A manager with conceptual talents can apply their knowledge or capacity for more abstract thought to diagnose between causes and symptoms. Conceptual skills become more crucial as public and private sector professionals move up the administrative hierarchy (Fikri, 2024; Mujtaba & Kaifi, 2011; Mukarromah et al., 2019; Rasaki & Abioye, 2018). So, leaders of modern organizations must acquire specific skills to become effective, as nobody is a born leader. Working with people is a human talent; knowledge of a particular activity or subject is a technical skill; and the capacity to work with novel concepts is a conceptual skill (Northouse, 2010; Caf-ferkey et al., 2024).

Ultimately, a management style allows an executive to rely on the initiative of an organization's people's resources and is a way of life that permeates the entire business. Several ideas have been developed to explain the phenomenon of management styles. As many managers use different methods to carry out their duties during their official employment, several management styles have developed (Uche & Timinepere, 2012).

Burns and Stalker (1961) distinguished between organic and mechanistic management styles, whereas Likert categorized four management techniques that make up a continuum: consultative, exploitative and autocratic, paternalistic, and participative. Mintzberg (1997/1990) examined strategic planning and entrepreneurship as management philosophies that managers in organizations use. Authoritarian, coercive, authoritative, democratic, affiliative, permissive, indifferent, coaching, pacesetting, visionary, bureaucratic, and defensive management styles are among the ones that have been frequently displayed in recent years (Uche & Timinepere, 2012). The social sciences literature contains a wide range of management style definitions and research. Some studies concentrate on intra-organizational, managerial, and/or human resources challenges, while others are culture-based (Cafferkey et al., 2024).

Turkish managers often prioritize building strong personal relationships with their team members, which is seen as essential for trust, loyalty, and effective communication (Langaas & Mujtaba, 2023). Decision-making processes can be slow and consensus-driven, reflecting the importance of maintaining social harmony and avoiding conflict. However, once a decision is made, Turkish managers can be decisive and action-oriented, driving their teams to achieve results. The concept of "*çalışma ruhu*" (work spirit) is deeply ingrained in Turkish culture, emphasizing the importance of hard work, dedication, and teamwork. Overall, Turkey's unique cultural context and management styles offer valuable lessons for international businesses and organizations seeking to operate effectively in this vibrant and dynamic market. As such, this research focused on the assessment of technical, human, and conceptual management skills in Turkey.

Study Methodology

There is a plethora of instruments which can be used by researchers to assess an individual's skills for management and leadership in the workplace (Katz, 1955; Rahman & Yang, 2009). Most of these instruments are designed to generate useful attitudinal, philosophical, and demographic information about a person's skills that can be used for future training and development purposes. Rahman and Yang (2009, p. 141) explain that using surveys in the past, "Business ethics was found to be the top-rated business skill, and personal integrity was found to be very important among management skills, whereas transport and traffic management was found to be the top-ranked logistics skill."

Like many other researchers in the past (Ping et al., 2012; Tajaddini et al., 2009), this study used the Style Inventory instrument provided by Northouse (2010, pp. 64–65) to survey working adult respondents in Turkey. The survey was distributed to Turkish adults in different organizations around Istanbul and surrounding areas.

Northouse's Style Inventory instrument measures three types of management skills, which include technical, human, and conceptual. Using the Style Inventory survey, researchers can score the questionnaire by first summing the responses on items 1, 4, 7, 10, 13, and 16 to get the respondent's technical score. Second, adding items 2, 5, 8, 11, 14, and 17 shows the human skill score. Third, summing up the responses for items 3, 6, 9, 12, 15, and 18 results in the respondent's conceptual score (Mujtaba et al., 2013a, 2013b).

The research question for this study is: *Do Turkish respondents have similar or different orientations in their management skills based on gender, work experience, having been in management, public sector employment, and education?* For this survey, the higher the overall sum of the scores, the more likely that the respondent is better at that skill. The research hypotheses for this study with Turkish working adults are as follows:

- 1 Hypothesis 1 – Turkish respondents will have similar scores for technical, human, and conceptual skills.
 - H1.1* – Turkish men and women will have similar scores for technical skills.
 - H1.2* – Turkish men and women will have similar scores for human skills.
 - H1.3* – Turkish men and women will have similar scores for conceptual skills.
- 2 *Hypothesis 2* – Turkish respondents will have similar skills regardless of work experience (no experience vs. those with one or more years of experience).
- 3 *Hypothesis 3* – Turkish respondents will have similar skills regardless of government work experience (no experience vs. those with eleven or more years of experience).
- 4 *Hypothesis 4* – Turkish respondents will have similar management skills regardless of management experience (no experience vs. those with eleven or more years of experience).
- 5 *Hypothesis 5* – Turkish respondents will have similar management skills despite different educational levels (high school degree vs. master's degree and above).

For the assessment of management skills of Turkish working adults, the self-administered questionnaires offer anonymity, which can be important when conducting research with various populations since the questions are very personal in nature regarding one's values, beliefs, and day-to-day management practices (Mujtaba et al., 2025). The English version of the survey was translated by a native Turkish professor and speaker into the Turkish language, and then it was given to three university professors for back-translation to check the accuracy of the final survey. The multilingual researchers agreed that the meaning of the survey was the same in the Turkish-translated version.

This study targeted Turkish working adults living, studying, and working in Turkey. The surveys come from Turkish respondents mainly living, studying, and/or working in the following cities: Istanbul, Ankara, Izmir, and other nearby cities. For this study, 900 questionnaires were sent to candidates by email and through face-to-face gatherings. The convenience sample was obtained from Turkish adults through

universities, businesses, and public sector employees through in-person sessions as well as online communications. No respondent was identified by name or organization. The purpose of this research and confidentiality were emphasized as an introductory statement in each survey. The respondents voluntarily completed the questionnaire and were reminded that they could discontinue at any time. Out of the total distributed surveys, 503 returned surveys comprised a response rate of 56%.

Results and Findings

The analysis demonstrates that Turkish respondents in this sample have high scores on human skills, followed by technical skills, and then conceptual skills (Table 1). Since effective leaders need all three skills and the flexibility to use that which is needed depending on the situation, Turkish respondents seem to be able to maintain a good relationship with colleagues (human), focus on mastering their profession (technical), and could analyze a situation and distinguish between cause and effect.

As shown in Table 2, although not statistically significant, females had higher average scores on technical and human management skills, while males had higher average on the conceptual skill.

Regarding *work experience*, we analyzed the data of those with no work experience, compared to those with one or more years of work experience and found statistically significant differences, as shown in Tables 3, 4, and 5. So, work experience seems to be a significant factor in building and enhancing one's technical, human, and conceptual management skills.

Table 1 Management Skills of Turkish Adults

	Technical	Human	Conceptual
Average =	25.22	25.40	22.96
St. Dev. =	3.43	3.59	3.82

Table 2 Management Skills Averages based on Gender

	Males	Females
Technical	25.11	25.28
Human	25.021	25.62
Conceptual	23.19	22.82

Table 3 Technical Skill based on Work Experience (t-Test: Two-Sample Assuming Unequal Variances)

	No Experience	Work Experience
Mean	23.64285714	25.41387
Variance	10.34285714	11.61981
Observations	56	447
df	71	
t Stat	-3.85834335	
P(T<=t) one-tail	0.000124375	
t Critical one-tail	1.666599658	
P(T<=t) two-tail	0.00024875	
t Critical two-tail	1.993943368	

Table 4 Human Skill based on Work Experience

	<i>No Experience</i>	<i>Work Experience</i>
Mean	23.625	25.62
Variance	14.05682	12.29
Observations	56	447
df	68	
t Stat	-3.77968	
P(T<=t) one-tail	0.000167	
t Critical one-tail	1.667572	
P(T<=t) two-tail	0.000333	
t Critical two-tail	1.995469	

Table 5 Conceptual Skill based on Work Experience

	<i>No Experience</i>	<i>Work Experience</i>
Mean	20.482	23.27
Variance	13.49	13.91
Observations	56	447
df	70	
t Stat	-5.342	
P(T<=t) one-tail	0.000	
t Critical one-tail	1.667	
P(T<=t) two-tail	0.000	
t Critical two-tail	1.994	

Regarding *government work experience*, we analyzed the data of those with no public sector work experience, compared to respondents that reported having at least 11 or more years of experience in government civil servant types of jobs. While public work experience did not show any difference, as shown in Table. 6, 7 and 8, there are statistically significant differences in human and conceptual skills. Those that work in the government sector seem to have a significantly higher score in human and conceptual management skills.

Regarding *management experience*, we looked at the results of those with no experience, compared to those Turkish respondents that reported having been in management for 11 or more years. As seen from the data in Tables. 9, 10 and 11, manage-

Table 6 Technical Skill based on Government Experience

	<i>No Experience</i>	<i>Most Gov. Experience</i>
Mean	25.26	26.13
Variance	10.97	10.73
Observations	365	53
df	68	
t Stat	-1.81349999	
P(T<=t) one-tail	0.037083741	
t Critical one-tail	1.667572281	
P(T<=t) two-tail	0.074167483	
t Critical two-tail	1.995468931	

Table 7 Human Skill based on Government Experience

	<i>No Experience</i>	<i>Most Gov. Experience</i>
Mean	25.38904	26.415
Variance	12.60647	8.3628
Observations	365	53
df	77	
t Stat	-2.33964	
P(T<=t) one-tail	0.010948	
t Critical one-tail	1.664885	
P(T<=t) two-tail	0.021896	
t Critical two-tail	1.991254	

Table 8 Conceptual Skill based on Government Experience

	<i>No Experience</i>	<i>Most Gov. Experience</i>
Mean	22.72	24.45
Variance	14.13	14.52
Observations	365	53
df	68	
t Stat	-3.1026	
P(T<=t) one-tail	0.0014	
t Critical one-tail	1.6676	
P(T<=t) two-tail	0.0028	
t Critical two-tail	1.9955	

Table 9 Technical Skill based on Management Experience

	<i>No Experience</i>	<i>Most Mgmt. Experience</i>
Mean	24.56	26.41
Variance	13.46	9.78
Observations	241	82
df	163	
t Stat	-4.442165779	
P(T<=t) one-tail	8.18753E-06	
t Critical one-tail	1.654255585	
P(T<=t) two-tail	1.63751E-05	
t Critical two-tail	1.974624621	

Table 10 Human Skill based on Management Experience

	<i>No Experience</i>	<i>Most Mgmt. Experience</i>
Mean	24.72	27.04
Variance	14.41	7.48
Observations	241	82
df	194	
t Stat	-5.96968	
P(T<=t) one-tail	5.56E-09	
t Critical one-tail	1.652746	
P(T<=t) two-tail	1.11E-08	
t Critical two-tail	1.972268	

Table 11 Conceptual Skill based on Management Experience

	<i>No Experience</i>	<i>Most Mgmt. Experience</i>
Mean	21.838	25.28
Variance	14.411	11.143
Observations	241	82
df	158	
t Stat	-7.7817	
P(T<=t) one-tail	4E-13	
t Critical one-tail	1.6546	
P(T<=t) two-tail	9E-13	
t Critical two-tail	1.9751	

ment experience makes a statistically significant positive difference in enhancing a person's technical, human, and conceptual skills.

Regarding *education*, we compared those that earned a high school degree with those that have acquired at least a master's degree (112 with masters, and 16 have a doctorate degree). As shown in Tables. 12, 13 and 14, education makes a statistically significant positive difference in a person's technical, human and conceptual skills.

As shown in Table 15, this study has demonstrated that Turkish male and female citizens, employees and managers surveyed have similar management skills. However, years of work, management experience, having been employed in the public sector, and higher levels of education do appear to make a positive difference in being prepared to more effectively manage and lead in today's globally connected cross-cultural workplace.

Table 12 Technical Skill based on Education

	<i>High School</i>	<i>Master+</i>
Mean	24.75	26.26
Variance	17.08	9.06
Observations	44	128
df	59	
t Stat	-2.225920801	
P(T<=t) one-tail	0.014926279	
t Critical one-tail	1.671093032	
P(T<=t) two-tail	0.029852559	
t Critical two-tail	2.000995378	

Table 13 Human Skill based on Education

	<i>High School</i>	<i>Master+</i>
Mean	24.43182	26.375
Variance	17.13478	9.5118
Observations	44	128
df	60	
t Stat	-2.8535	
P(T<=t) one-tail	0.002963	
t Critical one-tail	1.670649	
P(T<=t) two-tail	0.005926	
t Critical two-tail	2.000298	

Table 14 Conceptual Skill based on Education

	<i>High School</i>	<i>High School</i>	<i>Master+</i>
Mean		21.84	24.58
Variance		14.28	13.096
Observations		44	128
df		72	
t Stat		-4.1899	
P(T<=t) one-tail		4E-05	
t Critical one-tail		1.6663	
P(T<=t) two-tail		8E-05	
t Critical two-tail		1.9935	

Table 15 Management Skills Hypotheses Findings and Summary

HYPOTHESES	FINDINGS
Hypothesis 1-Turkish respondents will have similar scores for technical, human, and conceptual management skills	Partially Supported
• <i>Hypothesis 1.1</i> – Turkish men and women will have similar scores for technical skills	Supported
• <i>Hypothesis 1.2</i> – Turkish men and women will have similar scores for human skills	Supported
• <i>Hypothesis 1.3</i> – Turkish men and women will have similar scores for conceptual skills	Supported
Hypothesis 2-Turkish respondents will have similar skills regardless of work experience (no experience vs. those with one or more years of experience)	Rejected
Hypothesis 3-Turkish respondents will have similar skills regardless of government work experience (no experience vs. those with eleven or more years of experience)	Rejected
Hypothesis 4-Turkish respondents will have similar management skills regardless of management experience (no experience vs. those with eleven or more years of experience)	Rejected
Hypothesis 5-Turkish respondents will have similar management skills despite different educational levels (high school degree vs. master's degree and above)	Rejected

Discussion and Implications

The management styles of businesses have evolved dramatically over time due to experience, globalization, technology, education, and many other such factors. Since a socio-economic environment is a resource of workers and customers, organizations had to adjust working conditions, management practices, and the atmosphere of established relations to the demands of society. The environment and conditions at work affect the effectiveness of the organization and make the business more competitive in the marketplace. Better financial outcomes follow, and the organization's reputation and image are improved (Sulich et al., 2021).

Effective management techniques in Turkey are heavily impacted by cultural elements, so it is critical for leaders to comprehend and adjust to local customs. While hierarchical systems emphasize the value of authority and seniority in decision-making, the nation's strong emphasis on collectivism promotes a feeling of community and values close-knit connections. Since relationships are essential to corporate success, establishing trust and fostering personal ties are essential components of professional encounters. Furthermore, managers must pay close attention to gestures and context to ensure clear and successful communication in Turkey, where indirect expressions and subtle nonverbal indications are frequently used.

Turkish managers frequently take an authoritative stance that upholds hierarchy and organized direction, reflecting the country's cultural values. However, in this modern era, it is critical to strike a balance between inclusive decision-making and authority to improve employee engagement. Collective decision-making is highly regarded in Turkish workplaces, and managers are urged to solicit feedback from stakeholders and staff to establish agreement and promote cooperation. Expectations and goals must be communicated clearly since a clear structure promotes efficiency and alignment. Furthermore, the workforce in Turkey is heterogeneous in terms of gender, generations, and cultural backgrounds, which necessitates management inclusive practices. Leaders who want to foster a positive and cooperative work atmosphere should be culturally sensitive, steer clear of prejudices, and welcome diverse viewpoints. Even though there has been progress in gender equality, there are still issues, so managers must support equal opportunities for women and other minorities in leadership positions to create a more welcoming workplace.

In Turkey, to attract and retain a productive team of top talent, modern organizations and managers are placing a greater emphasis on employee well-being and preserving a healthy work-life balance. Flexible work policies, such as remote work choices and adjustable schedules should be used by managers to foster a positive work atmosphere and increase productivity and job satisfaction. A positive workplace culture is created by actively involving employees through open communication, frequent feedback, and acknowledgment of their accomplishments. Performance and motivation are further increased by acknowledging accomplishments and providing chances for professional growth. Turkey has witnessed significant digital transformation in recent years. Additionally, managers need to embrace technology to streamline processes, boost productivity, and facilitate distant collaboration given Turkey's rapid digital transition. Long-term success in the digital age can be ensured by fostering digital literacy and offering training to staff members so they can adjust to changing technological developments.

Regardless of the management skills possessed by modern supervisors in any culture, all managers need to remain flexible and become continual learners, since “the successful manager is often distinguished not by command of any single set of knowledge or skills, but by an ability to master changing demands—to learn, in other words” (Austin et al., 2009, p. 338).

Continuous education and gaining relevant work experience are essential for effective management and leadership in today's complex and rapidly changing workplace. The modern workplace is characterized by technological advancements like artificial intelligence or robotics (Nafei et al., 2025), globalization, and shifting workforce demographics, which demand that managers and leaders possess a unique blend of management skills, knowledge, and adaptability (Aaman et al., 2024). Continuous education enables employees and managers to stay up to date with the latest industry trends, best practices, and technological innovations, which will allow them to make informed decisions and drive organizational success. Moreover, ongoing education fosters critical thinking, creativity, and problem-solving skills, which are vital for navigating complex business challenges.

Work experience, on the other hand, provides modern professionals and managers with the opportunity to apply theoretical knowledge in real-world settings, develop

practical skills, and refine their leadership style. As managers navigate various work experiences, they encounter diverse perspectives, challenges, and cultures, which broaden their understanding of the business landscape and enhance their ability to lead effectively (Mujtaba, 2022a). Furthermore, work experience enables managers to develop emotional intelligence, build professional networks, and cultivate a deeper understanding of their organization's specific needs and challenges. By combining continuous education with work experience, managers can develop the expertise, confidence, and agility required to excel in today's fast-paced and increasingly complex business environment.

Today's college students, working adults, and entrepreneurially minded professionals in Turkey and other places around the globe can enhance their technical, human, and conceptual management skills through a combination of formal education, strategic or specialized training programs, and experiential on-the-job learning. Technical skills can be developed through specialized courses, certifications, and workshops that focus on specific areas such as artificial intelligence, human resources management, data analytics, digital fluency, or project management.

Human skills, such as communication, teamwork, and leadership, can be improved through training programs that emphasize interpersonal skills, emotional intelligence, and conflict resolution. Additionally, students and working professionals can engage in mentorship programs, coaching, and feedback sessions to refine their human skills.

Conceptual skills, which involve strategic thinking, problem-solving, and decision-making, can be enhanced through executive education programs, MBA courses, and online certifications. Professionals can also engage in self-directed learning by reading business literature, attending industry conferences, and participating in online forums and discussions. Furthermore, taking on new challenges, volunteering for cross-functional projects, and seeking feedback from diverse stakeholders can help professionals develop their conceptual skills. By investing in these developmental opportunities, professionals can enhance their overall management skills, stay competitive in the job market, and drive business success.

There are many ways that individuals and organizations can enhance everyone's management capabilities, and the following are some specific ways people in Turkey can boost their technical, human relations, and conceptual skills:

Technical Skills

1. *Take online courses:* Virtual programs now offer a wide range of courses on technical skills like website creation, data analysis, digital commerce, and general management.
2. *Attend industry conferences:* Attend conferences and seminars related to their industry to stay updated on the latest trends and technologies.
3. *Join professional associations:* Joining professional associations like the Turkish Management Association (TÜAD) or the Istanbul Chamber of Commerce (ITO) can provide access to training programs, workshops, and networking opportunities.

4. *Pursue certifications*: Obtain certifications like PMP (Project Management Professional), ITIL (Information Technology Infrastructure Library), or Six Sigma to demonstrate expertise in specific technical areas.

Human Skills

1. *Take leadership development programs*: Enroll in leadership development programs offered by universities, business schools, or training institutions to improve human skills like communication, teamwork, and leadership.
2. *Practice mindfulness and self-awareness*: Engage in mindfulness practices like meditation or yoga to develop self-awareness, emotional intelligence, and empathy.
3. *Join a mentorship program*: Find a mentor who can provide guidance, support, and feedback on human skills development.
4. *Participate in team-building activities*: Engage in team-building activities like escape rooms, scavenger hunts, or volunteer work to improve teamwork, communication, and collaboration skills.

Conceptual Skills

1. *Read business literature*: Read books, articles, and research papers on business, management, and leadership to develop conceptual skills like strategic thinking, problem-solving, and decision-making.
2. *Take strategic management courses*: Enroll in courses or programs that focus on strategic management, innovation, and entrepreneurship to develop conceptual skills.
3. *Join a business incubator or accelerator*: Join a business incubator or accelerator to learn from entrepreneurs, innovators, and experts in various fields.
4. *Participate in case study competitions*: Participate in case study competitions or business plan competitions to develop conceptual skills like analysis, problem-solving, and decision-making.

Management development programs should not be limited just to technical, human, and conceptual skills. Organizations should consider other areas of their employees to help them become better in their professions and society in general. As such some additional recommendations for professionals in Turkey could include such improvements as learning English as they deal with many diverse nations. Developing their English language skills to access global resources, networks, and opportunities could be an important factor in managing a diverse workforce. Everyone should learn to network by building fruitful relationships with professionals from various industries and backgrounds to learn from their experiences and gain new insights. Additionally, Turkish managers and aspiring leaders should stay up to date with industry trends

by following industry leaders, researchers, and experts on social media, blogs, or podcasts to stay informed about the latest developments and best practices. Finally, those without higher education credentials can pursue a graduate business degree such as an MBA or executive education program to develop a comprehensive set of management skills.

Conclusion

This study focused on the technical, human, and conceptual skills of Turkish respondents. The results indicate that both men and women in Turkey are equally capable of leading and managing today's cross-cultural organizations. The findings demonstrate that work experience, managerial roles, employment in the government sector, and higher education levels are all statistically significant factors in enhancing a person's technical, human, and conceptual management skills.

There are some limitations to this study, one of which is the small number of responses from each surveyed Turkish group. Future researchers can expand the sample size, particularly among individuals with ten or more years of management and government experience. Additionally, this study assessed the responses of the general Turkish population. Future research could focus on professionals in specific industries, such as telecommunications, healthcare, technology, and education, to provide industry-specific insights. The survey was offered mostly in print format in both English and Turkish to accommodate respondent preferences. Future studies could offer the survey to more populations online in both languages, which would facilitate greater accessibility and participation. Another potential research avenue is examining whether age is a significant factor in the management skills of professionals in Turkey or neighboring European nations.

This study empirically demonstrated that management skills can be learned, enhanced, and developed through education and experience. Effective management practices are crucial for success, enabling workers, managers, and organizations to optimize resources, drive productivity, and achieve strategic objectives. By implementing effective management practices, organizations can foster a culture of innovation, collaboration, and continuous improvement, leading to enhanced employee engagement, customer satisfaction, and financial performance. Effective management practices also facilitate informed decision-making, risk management, and adaptability to change, allowing organizations to navigate complex and dynamic business environments with confidence. Ultimately, effective management practices are essential for driving sustainable growth, competitiveness, and success in today's fast-paced and interconnected world.

Building on the findings of this study, future research could explore the impact of digital transformation on managerial skill development, particularly in sectors undergoing rapid technological change. Investigating how artificial intelligence and automation influence the demand for technical, human, and conceptual skills in management would provide valuable insights. Additionally, cross-cultural comparisons between Turkish professionals and those in other countries could offer a broader perspective on how national culture and economic conditions shape management

competencies. Longitudinal studies tracking the career progression of managers over time could also help assess the long-term effects of education and experience on leadership capabilities. Finally, further research could explore the role of soft skills, such as emotional intelligence and adaptability, in shaping managerial effectiveness in dynamic and uncertain environments.

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Declarations

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