IJISRR

Research Article

THE ANALYSIS IMPACTS OF PROFESSIONAL SKILLS, COMMUNICATION SKILLS, KNOWLEDGE MANAGEMENT, ETHIC ON LEADERSHIP: THE CASE OF NATIONAL FORENSIC SCIENCE INSTITUTE OF MONGOLIA

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ABSTRACT

The objectives of this paper are to analyze the correlations between professional skills, communication skills, knowledge management, managerial ethic and managerial leadership. Also, we are for implementing the main objective such as the goal of National Forensic Science Institute of Mongolia for "Improving the legal environment of the organization, digitalizing its activities, and improving the professional skills, working conditions, and leadership of its employees". We determined the factors that directly affect the leadership and management style of employees in the implementation of the strategic program, goals, objectives and plans of the forensic organization. We worked on this study based on the basic theory of management theory and social science developed work assumptions and new conceptual models which were used by international researchers in their studies. The survey was conducted online channel by 152 staff, which made it possible to classify and compare some of the results. We used SMART PLS-3.0, a qualitative research program, to analyze correlational, multifactorial, and pathologies, and to summarize the results of the forensic scientist's analysis of how factor variables affect leadership skills. For the future, our paper can be significant to consider both theoretical and practical issues and inserting further most necessary practices in the National Forensic Science Institute of Mongolia.

Keywords: professional skills, communication skills, knowledge management, managerial ethic, managerial leadership, National Forensic Science Institute of Mongolia.

INTRODUCTION

Management and leadership are important for managing size of organizations. Although the two are similar in some respects, they may involve different types of ethics, attitudes, behaviors and managerial essential skills. Best managers should strive to be good leaders and good leaders, need managerial skills to be more effective. The concept of "leadership," as used from last era until today, made its own way across the general literature. Nevertheless, only recently it has become more popular between social sciences and researchers. This paper is significant considering both theoretical and practical issues and for practices in Mongolian public special sector. Data were estimated by SPSS 25 and SMART PLS 3.0 software.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS LEADERSHIP

Management is all possible and positive activities consisting of process which are mainly concerned with important task of organizational goal achievement. From the late 1800s to about 1930, leadership theories emphasized control and centralization of power. The "Great Man" theory, which suggests that leaders are born and not made, supported the existence of some mysterious qualities vested in select individuals and frequently passed between generations. This model faded from popularity in the 1930s and 1940s as "trait" theories appeared that attempted to identify specific traits qualifying an individual for leadership. Stogdill identified six trait

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groupings associated with leadership, including capacity, status, achievement, responsibility, participation, and situation, but concluded that these traits did not sufficiently explain leadership: "A person does not become a leader by virtue of the possession of some combination of traits (Stogdill, 1948). The late 1940s brought psychoanalytical theories that explored why individuals are motivated to lead, or to follow a particular leader, with an increased focus on the role of groups and organizations. Investigators in the 1960s emphasized how people are influenced toward shared goals (Hencley, 1973), (WK Hoy, 1987). In the 1970s there was a shift away from social psychology and toward organizational behavior and management science. Leadership and management roles became generally confused and integrated to look at how followers attribute certain qualities to leaders. "Transformation" became a term describing leadership and "transactional" was associated with management (Burns, 1978). Since the 1980s, the leadership literature has become overwhelming in size and scope, often recycling concepts such as the "Great Man" and "social" and "organizational behavior" thinking, but with a twist toward "influence," "transformational," "servant," and "collaborative" structures. Leaders have become more responsible to their followers, with a more spiritual or value- or principle-based relationship between leaders and followers. "Vision" was introduced as a new leadership characteristic, and "managing the dream" or "vision" has become the responsibility of the leader (Burns, 1978). (Bennis, 1990). Today, functional leadership is seen not as a permanent position but, rather, as a temporary service role, with individuals moving in and out of leadership responsibility as situations change (Klingborg, 2014). While language including the words "leader" and "leadership" and the study of influence are relatively recent phenomena, the popular models of leadership have been fluid throughout history (Klingborg, 2014).

Our study explains how professional skills, communication skills, knowledge management, managerial ethic and managerial leadership. The conceptual model of factors on managerial leadership is drawn in Figure 2.1.

Figure 2.1. Conceptual models of factors on Leadership skills
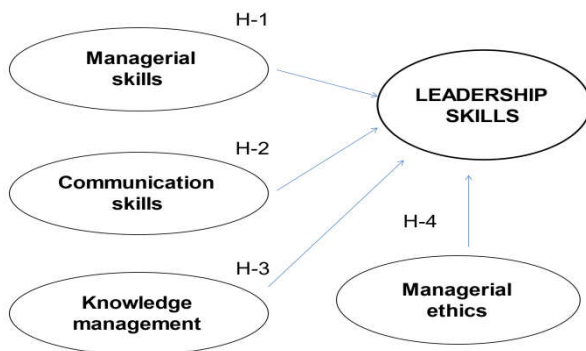
Source: Own diagram

Managerial skills and leadership

The theory of personality traits postulates that people naturally deal with different situations and interact with their environment in different ways. Ahmed, (1998), Eastman, Eastman, & Tolson (2001), Hsieh, Hsieh, & Wang (2011) defined that however, personality traits may also be key indicators of other facets of an individual's life, including innovativeness (Imran, 2019).Petr Smutny *et al.,* (2016), argued that five managerial skills were measured in their study: organizational skills, motivational skills, communication skills, evaluation and supervisory skills and cooperativeness (Smuthy, 2012). According to the literature review, we were hypothesized as below:

H1. Managerial skills have an influence on leadership skills.

Communication skills and leadership

It communicates skills are a greater area for improvement than we might think. In every scholarly work on leadership, we read that a leader should be a good communicator, that he/she has to have an ability to articulate his/her vision to his/her followers, and so on. Hackman and Johnson (2004) even define leadership as a specific form of communication, with the aim of influencing and persuading others and conveying the leader's visions and goals. Therefore, it is interesting to notice that it is only in the last 15 years (since 2000) that the focus of leadership scholars started to include leadership communication, and an interdisciplinary approach blending the findings of leadership studies, sociology, political science, and linguistics, the theory of communication, and media studies. This textbook is another small contribution (Bednarikova, 2014). According to the literature review, we were hypothesized as below:

H2. Communication skills have an influence on leadership skills.

Knowledge management and leadership

Research on knowledge management (KM) has intensified in recent years because knowledge is considered one of the most important assets or organizations in the 21st century (Mas-Machuca, 2014) Davenport *et al.,* (1998) defined knowledge management as a process of collection, distribution, and efficient use of the knowledge resource throughout an organization. Lopez *et al.,* (2004) argued that knowledge management and learning go hand in hand in organizations(Singh, 2008). Knowledge management is a circle process that facilitates knowledge sharing and establishes learning as

directly process within an organization. According to the literature review, we were hypothesized as below:

H3. Knowledge management has an influence on leadership skills.

Managerial ethics and leadership

During the many years, philosophers and researchers studied people on ethical ways to work. Human beings often have a tendency to depart from the path that they know is right. It is a well-known fact that power can corrupt a person in authority, and leadership is a power relationship (Janie, 2006).G.Yukl (2006) agreed that ethical leadership is a construct that appears to be ambiguous and includes various diverse elements. Daft (2007) examined those ethical values in an organizational setting are emphasized and strengthened primarily through values-based leadership, that can be defined as a relationship between leaders and co-workers, based on shared, internalized values, that are acted upon by the leader (Mihelič, 2010). According to the literature review, we were hypothesized as below:

H4. Managerial ethics have an influence on leadership skills.

RESEARCH METHODOLOGY

Data collection and questionnaire design

The qualitative survey of our research questionnaires is a common method of collecting primary data in the survey. Based on the discussion above, the questionnaire method was chosen for the following reasons:

- The questionnaires of study were administrated during employees who work in National Forensic Institute of Mongolia.
- The questionnaires were able to gather data in a short period of time.
- The questionnaires were collected by online /Google form/ between October and December in 2021.

We used Likert five-point scales make it possible to discriminate opinions more finely, restrict for chosen more rather than other scales. Cooper (1998) described that most causal research relies on designed experimentation and simulation programs (Cooper, 1998). There are many software programs used to process data analysis. In this paper, SPSS and SmartPLS-3.0 were chosen for their simplicity and completeness. The internal reliability of each factor was assessed using Cronbach's alpha coefficient (Tsogtsuren, 2021).Thus, we were conducted to check the consistency of all related factors in the study based on Cronbach's Alpha value. The Cronbach Alpha testing will be used as it is the most well accepted reliability test tool applied by social researchers. Cronbach (1946) identified that in Cronbach's Alpha reliability analysis, the closer Cronbach's Alpha to 1.0, the higher the internal consistency reliability (Cronbach, 1946). Cronbach's measures:

- Reliability less than 0.6 considered poor.
- Reliability in the range 0.7 is considered to be acceptable.
- Reliability more than 0.8 are considered to be good (Bayasgalan Tsogtsuren, 2021).

Of all the 152 respondents were working on our research, frequency distributions were of National Forensic Science Institute of Mongolia. The basic demographic information about male 96, female 56 employees in our study.

Table 3.1. Sex of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	96	63.2	63.2	63.2
	Female	56	36.8	36.8	100.0
	Total	152	100.0	100.0	

Table 3.2. Education level of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	bachelor	83	54.6	54.6	54.6
	master	69	45.4	45.4	100.0
	Total	152	100.0	100.0	

Table 3.3. Work years of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 years	55	36.2	36.2	36.2
	5.1-10	46	30.3	30.3	66.4
	10.1-15	37	24.3	24.3	90.8
	15.1 more	14	9.2	9.2	100.0
	Total	152	100.0	100.0	

Table 3.4. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
sex	152	1.00	2.00	1.3684	.48397
education	152	1.00	2.00	1.539	.49952
Valid N	152				

Image 3.1. Correlations between sex and education of respondents
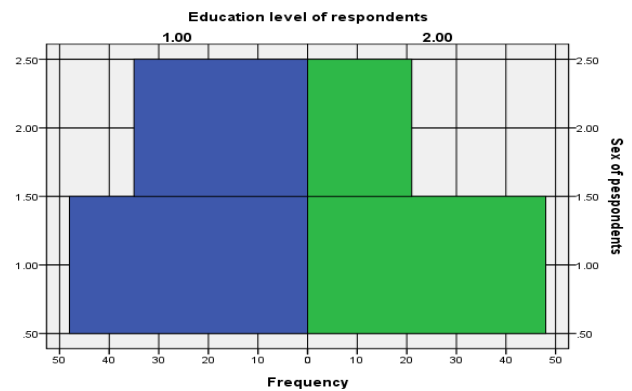
Figure 3.1. Results of Structure Analysis of leadership skills (algorithm)

Table 3.5. List of items of managerial skills for each Construct of respondents

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Managerial skills	Sk-1	0.819	0.614	0.905	0.906
	Sk-2	0.874			
	Sk-3	0.783			
	Sk-4	0.685			
	Sk-5	0.728			
	Sk-6	0.797			

Notes: Sk- managerial skills, The result of study

In table 3.5, managerial skills of 6 items measuring ranged from 0.685-0.874, Average Variance Extracted (AVE) was 0.614,Composite Reliability (CR) of 0.905,Cronbach's Alpha of 0.906.

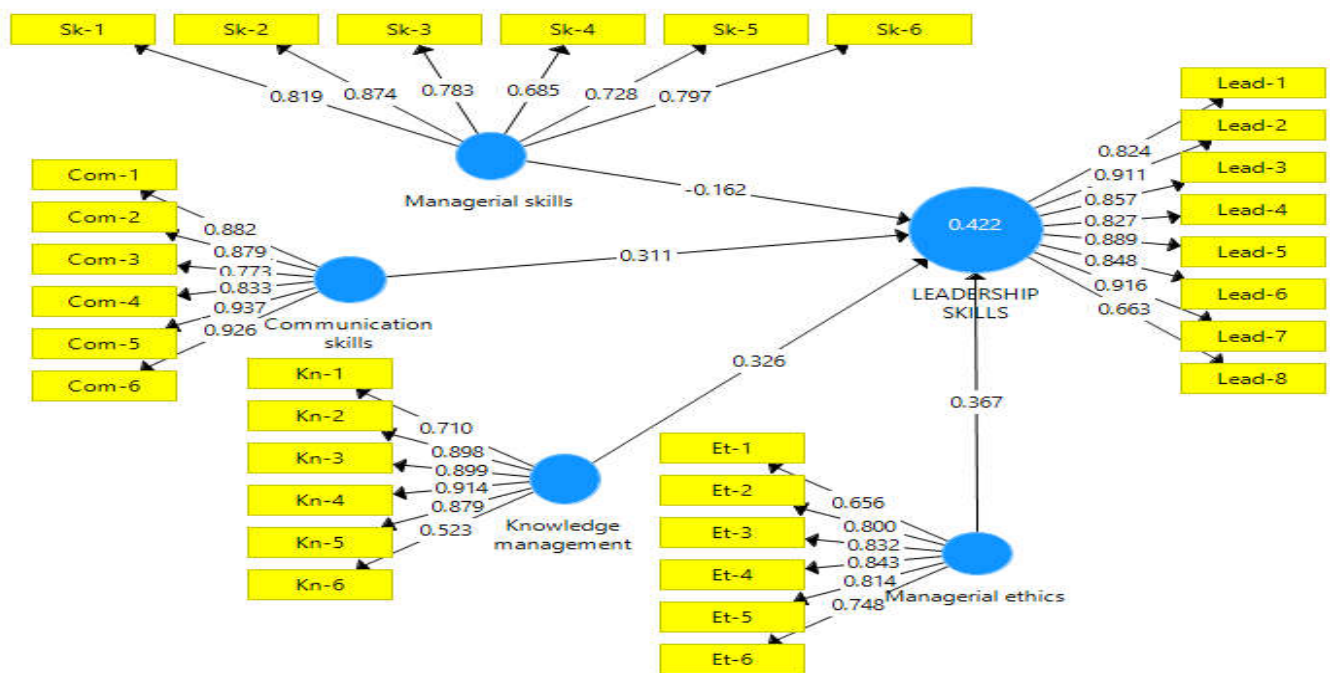**Table 3.6. List of items of communication skills for each Construct of respondents**

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Communication skills	Com-1	0.882	0.763	0.951	0.937
	Com-2	0.879			
	Com-3	0.773			
	Com-4	0.833			
	Com-5	0.937			
	Com-6	0.926			

Notes: Com- communication skills, The result of study

In table 3.6, communication skills of 6 items measuring ranged from **0.773-0.937,** (AVE) was **0.763,** (CR) of **0.951,** Cronbach's Alpha of **0.937.**

Table 3.7. List of items of knowledge management for each Construct of respondents

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Knowledge management	Kn-1	0.710	0.667	0.921	
	Kn-2	0.989			0.893
	Kn-3	0.899			
	Kn-4	0.914			
	Kn-5	0.879			
	Kn-6	0.523			

Notes: Kn-Knowledge management, The result of study

In table 3.7, knowledge management of 6 items measuring ranged from **0.523-0.989,** (AVE) was **0.667,** (CR) of **0.921,** Cronbach's Alpha of **0.893.**

Table 3.8. List of items of managerial ethics for each Construct of respondents

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Managerial ethics	Et-1	0.656	0.616	0.905	0.874
	Et-2	0.800			
	Et-3	0.832			
	Et-4	0.843			
	Et-5	0.814			
	Et-6	0.748			

Notes: Et- managerial ethics, The result of study

In table 3.8, managerial ethics of 6 items measuring ranged from **0.656-0.843,** (AVE) was **0.616,**(CR) of **0.905,** Cronbach's Alpha of **0.874.**

Table 3.9. List of items of leadership for each Construct of respondents

Factor	item	Results of item	Average variance Extracted	Composite Reliability	Cronbach's alpha
Leadership	Lead-1	0.824	0.714	0.952	0.941
	Lead-2	0.911			
	Lead-3	0.857			
	Lead-4	0.827			
	Lead-5	0.889			
	Lead-6	0.848			
	Lead-7	0.916			
	Lead-8	0.663			

Notes: Lead- Leadership, The result of study

In table 3.9, leadership of 8 items measuring ranged from **0.663-0.911,** (AVE) was **0.714,**(CR) of **0.952,**Cronbach's Alpha of **0.941.**

Table 3.10. Estimated Path Coefficients of respondents

Hypothesis	Mean	Standard deviation	T Statistic	P value	Remarks
H1. Managerial skills have an influence on leadership skills.	-0.140	0.145	1.121	0.263	No supported
H2. Communication skills have an influence on leadership skills.	0.313	0.175	1.780	0.076	No supported
H3. Knowledge management has an influence on leadership skills.	0.306	0.131	2.489	0.013	Supported
H4. Managerial ethics have an influence on leadership skills.	0.389	0.140	2.614	0.009	Supported

Notes: The result of study

In table 3.10, Hypothesis 1 such as managerial skills have no influence on leadership skills (mean -0.140), (Standard deviation 0.145), (T statistic 1.121) and (P value 0.263). Hypothesis 2 such as communication skills have no influence on leadership skills (mean 0.313), (Standard deviation 0.175), (T statistic 1.780) and (P value 0.076). Hypothesis 3 such as knowledge management have influence on leadership skills (mean 0.306), (Standard deviation 0.131), (T statistic 2.489) and (P value 0.013). Hypothesis 4 such as managerial ethics have influence on leadership skills (mean 0.389), (Standard deviation 0.140), (T statistic 2.614) and (P value 0.009).

CONCLUSION

In the fiscal year of 2021our paper collected and delivered an online-form- questionnaire with an official inquiry that requested quantitative and qualitative surveys. Moreover, this paper attempted to explore leadership skills in contemporary management which the human resource development program will provide through the updated including system thinking, analysis of a wide range of social policies and programs, decision-making in emergencies, leadership skills in organizations. We are recommending our study as bellow:

- To study annual result in the future.
- To study and compare with other organization's leadership skills of employees
- To study and compare with international study in the future.

Finally, we will study our next paper, need to correlation leadership with job satisfaction, correlation leadership with performance management and etc.

BIBLIOGRAPHY

Bayasgalan Tsogtsuren et al., (2021). The empirical study of employers' satisfaction: The case of Executive Leadership Academy, University Of Internal Affairs, Mongolia. International Journal of Asian Social Science, 365-375.

Bayasgalan Tsogtsuren, E. D. (2021). The determinants of students' satisfaction on librarian service quality: The case of University Of Internal Affairs, Mongolia. International Journal of Innovation Scientific Research and Review, 1931-1937.

Bednarikova, I. M. (2014). Introduction to leadership communication . Olomouci: ISBN 978-80-244-4304-1.

Bennis, W. (1990). Managing the dream: leadership in the 21st century. New York: New York.

Burns, J. (1978). Leadership. New York: Harper and Row, 141-168.

Cooper, H. (1998). Synthesizing research: A guide for literature 3rd ed. Oaks: CA: Sage Publications, Thousand.

Hencley, S. (1973). Situational behavioral approach to the study of educational leadership. Leadership: The Science and Art Today, 139-164.

Imran, A. (2019). Personality traits, individual innovativeness and satisfaction with life. Journal of Innovation and Knowledge , 38-46.

Janie, B. B. (2006). Ethics in Organizations and Leadership. Jones and Bartlett .

Klingborg, D. J. (2014). What Is Leadership? Leadership and Professional Development, 280-285

Mas-Machuca, M. (2014). The Role of Leadership: The Challenge of Knowledge Management and Learning in Knowledge-Intensive he Role of Leadership: The Challenge of Knowledge. International Journal of Educational Leadership and Management, 97-116.

Mihelič, K. K. (2010). Ethical leadership. International Journal of Management and Information Systems, 31-44.

Sharma, R. T. (n.d.). Managerial Skills for Managers in the 21st Century.

Singh, S. K. (2008). Role of leadership in knowledge management: A study . Journal of Knowledge management , 3-15.

Smuthy, P. (2012). The Relationship between Managerial Skills and Managerial Effectiveness in a Managerial Simulation Game . Etrategia Organizaion Czech Science Foundation, 11-21.

Stogdill, R. (1948). Personal factors associated with leadership: A survey of the literature. Psychol, 64.

WK Hoy, C. M. (1987). Educational Administration:Theory, Research, and Practice 3rd ed. New York: Random House .

EVIDENCE OF PAPER

Discriminant Validity

Fornell-Larcker Crit...	Cross Loadings	Heterotrait-Monotra...	Heterotrait-Monotra...	Copy to Clipboard:

	Communication skills	Knowledge man...	LEADERSHIP S...	Managerial eth...	Managerial skills
Communication skills	0.873				
Knowledge management	0.378	0.817			
LEADERSHIP SKILLS	0.541	0.418	0.845		
Managerial ethics	0.604	0.173	0.518	0.785	
Managerial skills	0.707	0.546	0.447	0.576	0.783

emes Calculate Info Language

v Project	New Path Model	Hide Zero Values	Increase Decimals	Decrease Decimals

20220131 Joy BJ.txt   *J B 20220201.splsm   PLS Algorithm (Run No. 1)

Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliabili...	Average Variance E...

	Cronbach's Al...	rho_A	Composite Rel...	Average Varian...
Communication skills	0.937	0.941	0.951	0.763
Knowledge management	0.893	0.936	0.921	0.667
LEADERSHIP SKILLS	0.941	0.946	0.952	0.714
Managerial ethics	0.874	0.881	0.905	0.616
Managerial skills	0.875	0.906	0.905	0.614

Path Coefficients

Mean, STDEV, T-Values, ...	Confidence Intervals	Confidence Intervals Bi...	Samples	Copy to Clipboard:	Excel Format

	Original ...	Sample Me...	Standard Devia...	T Statistics (|O/...	P Values
Communication skills -> LEADERSHIP SKILLS	0.311	0.313	0.175	1.780	0.076
Knowledge management -> LEADERSHIP SKILLS	0.326	0.306	0.131	2.489	0.013
Managerial ethics -> LEADERSHIP SKILLS	0.367	0.389	0.140	2.614	0.009
Managerial skills -> LEADERSHIP SKILLS	-0.162	-0.140	0.145	1.121	0.263

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