



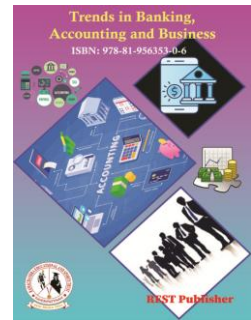
## Trends in Banking, Accounting and Business

Vol: 2(1), 2023

REST Publisher; ISBN: 978-81-956353-0-6

Website: <http://restpublisher.com/book-series/tbab/>

DOI: <https://doi.org/10.46632/tbab/2/1/1>



# Evaluation of Managerial Behaviour and Effectiveness Using PROMETHEE Method

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**Abstract:** Managerial Behaviour and Effectiveness. Managerial conduct depends on aptitude, drive, and opportunity. Mirrored in different circumstances. There is a behavior pattern. Similar to putting forth a multiplicative relationship between aptitude and drive. A variety of abilities and skills work together to make up managerial effectiveness, which aids in efficient staff management. A manager's effectiveness includes energizing workers, speaking with and hearing workers, rewarding workers for excellence in performance, and more. The efficiency of managers is gauged by how well the organization performs in attaining its objectives. Managerial Efficiency: The percentage of a firm's total resources that go toward boosting productivity during the production process is known as managerial efficiency. The MCDA process, uses the PROMETHEE technique method for Situational awareness, Tactics employment, Time management, Function allocation, and Communication. Whole Mission, Mission Planning, Low Level, Airdrop, Air Refueling, Infil/Exfil. Situational awareness, Tactics employment, Time management, Function allocation, Communication Whole Mission, Mission Planning, Low Level, Airdrop, Air Refueling, Infil/Exfil. Time management has the highest rank whereas Communication has the lowest rank.

**Keywords:** Managers and pollution, Environmental knowledge, PROMETHEE METHOD.

## 1. INTRODUCTION

This cross-cultural study is based on two pieces of literature, one on the effectiveness of management training and the other on the effectiveness of management and leadership. Its specific goal is to find data that scientifically shows how important it is to be a good coach in order to be a good manager and executive leader. We consult both management and leadership literature to guide this research. Due to the fact that, despite claims made in the classic management and leadership literature, the terms "manager" and "management" are separate from "leader" and "leadership," the contributions of each are rarely acknowledged, and many academics and practitioners consider it to be less. Use these phrases interchangeably while keeping them distinct. This strategy has already been examined and summarised, but its specificity is still elusive. This is regrettable for a number of reasons. First, explanations of what seems to be an "approach" that is more or less discrete describe its distinctive qualities and how it differs from other approaches; Second, the uniqueness of the approach should be considered in critical assessments. The management behavior approach challenges traditional management ideas historically and substantively; Reviews must consider this distinctive research background as well as a distinctive study object, focus, and methodology. The technique is distinctive in that it will be used to analyze and assess current disputes and that it will draw from and assess current research areas. Third, the viewpoint can be broadened into an analogous strategy in the academic subject of public management; and fourth, to determine potential future study topics. The goal of this study was to use a qualitative method to explore the connection between cognitive types and management conduct. The study is special because it takes a qualitative approach to this problem and integrates managerial behavior that is both task- and people-oriented. Thus, this study aims to enhance and broaden the conclusions of earlier, primarily quantitative investigations of the relationship between cognitive types and particular management behavior traits. Despite the fact that there is a lot of empirical interest in cognitive styles, there isn't much qualitative research that adds to the evidence for their applicability in organizations. Research on the impact of individual characteristics on managing behavior is especially pertinent given the growing usage of management training

and management assessment. A wide variety of subcontractors provide services to the building sector. Nevertheless, nothing is known about the managerial style of these companies' owners. The organizational behavior of small subcontractor business owners who offer services to the construction industry is the subject of this essay. The goal of the study was to determine how much these franchise managers relied on clinical decision-making vs intuition while managing their businesses, and to compare what they really did to what theories suggested they should do.

## **2. MANAGERS AND POLLUTION**

There is no question that managers have an excessive and typically detrimental impact on the environment. To understand the breadth and depth of this impact, one only needs to identify three large-scale infrastructure projects or events of extreme environmental calamity. However, as was already mentioned, the aggregate impact of everyday decisions and actions done by numerous major and small firms is still higher. These later activities include routine tasks including selecting a route of transportation, creating items, maintaining equipment, packaging goods, and disposing of garbage. Additionally, the corporate community frequently has a big impact on the government and its policies. A current illustration of this is the supposed impact on energy policies. Commercial interests can have a wide range of powerful and varying influences. The government has undoubtedly been kept captive by real estate developers, leading to stupid measures like subsidizing construction waste and reclaiming encroached property on a rapidly disappearing terrain. These connections frequently fall under the category of "cronyism" and are much "darker," having a bigger effect on society and the environment. On the other hand, the boundaries between business and government are more blurred, particularly at the local level where, for instance, municipal governments effectively run local businesses for profit that give the government resources. Many observers come to the conclusion that managers should be the environment's saviors, just as they have previously been accused of being environmental villains. Thus, whether we like it or not, multinational corporations—the future's economic engines—are essentially responsible for guaranteeing a sustainable planet. The state-owned sector is the only organization other than "enterprise" that possesses innovative energy and resources, despite the fact that the business community has historically had relatively little political "impact" on the terrain. a growth path that is more sustainable. This is demonstrated by the dominance of the tiny, private firms, the appeal for entrepreneurs to join the Communist Party, and the prominence of the new business elite in the quickly expanding private sector.

## **3. ENVIRONMENTAL KNOWLEDGE**

The term "environmental knowledge" refers to a general understanding of information about the natural world and its main ecosystems. Therefore, to put it simply, environmental knowledge encompasses people's understanding of the environment, the fundamental connections that result in environmental characteristics or consequences, respect for "whole systems," and the shared responsibilities required for sustainable development. Environmental literacy is a concept that is similar to this one. The term, as it is currently employed, has significant ethical implications as well as profound spiritual components. Increased environmental awareness among managers and their capacity to process such information would seem to be naturally desirable given that managers have a significant impact on the consumption of and condition of natural capital. Accordingly, "The key to pollution prevention success is influencing management knowledge and attitudes toward both technological change and environmental concern." Although this is starting to change, it is sad that the majority of Chinese managers and business students lack the appropriate formal training to increase their environmental understanding given their overall impact on the environment and the growing public interest in the environment. Managers need fundamental psychological and practical knowledge of a wide range of topics in order to comprehend the relationship between decision alternatives and environmental outcomes: (1) Understanding of the present circumstances (local environment and condition of international relations); (2) The importance of natural capital to business operations. These include the detrimental effects of degraded resources and operational risks; (3) personal consequences of a degraded environment (such as personal health risks); (4) the variety of options available to address a problem or achieve a goal (such as technological options); (5) causal relationships between the various decision alternatives and actions in the outcome set; and (6) relative overlap between desired outcomes (ie, instances where environmental performance and economic performance are compatible).

## **4. PROMETHEE METHOD**

The PROMETHEE method of each criterion takes. In this way, every criterion Can be evaluated on different grounds Operate. For example, better conclusions can be drawn. PROMETHEE I identifies incomparable and neglected

alternatives by creating an Area Ranking, PROMETHEE Complete for alternatives Provides ranking. The MCDA process, using the PROMETHEE technique, generally follows the following sequence: (i) selecting DMs weighing the criteria, evaluating the effectiveness of alternatives against the criteria, selecting common values and related negligence and optional values for each criterion ion, using PROMETHEE where necessary, sensitivity analysis Making and final decision making. The primary difference between the PROMETHEE method and other MCDA techniques is the use of common criterion functions. The PROMETHEE method is well known This is the outreach-based approach to Decision making for decision-makers and Provides support for the resolution. issues through a valuable outreach relationship. This relationship is based on the pairing sequences Between alternatives and PROMETHEE mode Defines a custom framework. PROMETHEE The system is very much in the process of making complex decisions Is useful, especially Human in real-world MADM problems Subjective judgment of consciousness and experts. PROMETHEE alternatives are comparable. Positive And between negative outgoing flows Sort of alternatives by the balance in Hand flow are used. Taking into account the PROMETHEE Criterion Performance Uncertainty in values; However, it is very difficult for users to select common criteria functions for each criterion and the associated limits, resulting in additional uncertainty. Therefore, To overcome this, they are based on reliability Proposed the approach, which is PROMETHEE The firmness of the solution obtained from Helping the decision maker to explore the character. The PROMETHEE family was first created in 1982 in Quebec, Canada France at a conference, including PROMETHEE I for alternative rankings and PROMETHEE while the PROMETHEE VE, PROMETHEE for the problems of the segment, is the PROMETHEE VEO for alternatives. Of the many criteria currently in place, PROMETHEE methods are the most important. The number of practitioners who use these methods for problems that determine multiple criteria in practice, and the number of returnees who are developing each year. See notes) and conference presentations using one or more PROMETHEE methods. Selection Function of each criterion: In PROM ETHEE The Selection The function of each criterion is often the Nature of the criteria and the decision maker is determined. predefined There are six types of exam processes, most of which include the following criteria: standard scale, semi-scale, linear priority criterion, Level scale, linear The area of. The Prometheus method is the portfolio complexity Most widely used for applications One of the outlined methods. Relatively few publications Portfolio selection methods are directly based Although found to contain this type of in which it is analyzed and its irreversibility. The present article. At PROMETHEE, we encounter More than seven alternatives, and more than seven are Sometimes too large to cover criteria Evaluation tables. At that point, the decision will be made PROMETHEE to help solve problems Becomes a black box. In this situation, if a wood structure is adopted, it can be seen as an extension of PROMETHEE.

**TABLE 1.** Managerial behaviour and effectiveness

	<b>Whole Mission</b>	<b>Mission Planning</b>	<b>Low Level</b>	<b>Airdrop</b>	<b>Air Refueling</b>	<b>Infil/Exfil</b>
<b>Situational awareness</b>	76	48	47	59	28	65
<b>Tactics employment</b>	78	27	6	54	81	55
<b>Time management</b>	83	41	36	66	51	64
<b>Function allocation</b>	75	22	61	55	55	60
<b>Communication</b>	8	14	9	32	37	30
Max	83	48	61	66	81	65
Min	8	14	6	32	28	30
<b>Max-Min</b>	75	34	55	34	53	35
	75	26	55	12	53	10

Table 1 shows the Managerial Behaviour and Effectiveness Situational awareness, Tactics employment, Time management, Function allocation, Communication and Whole Mission, Mission Planning, Low Level, Airdrop, Air Refueling, Infil/Exfil.

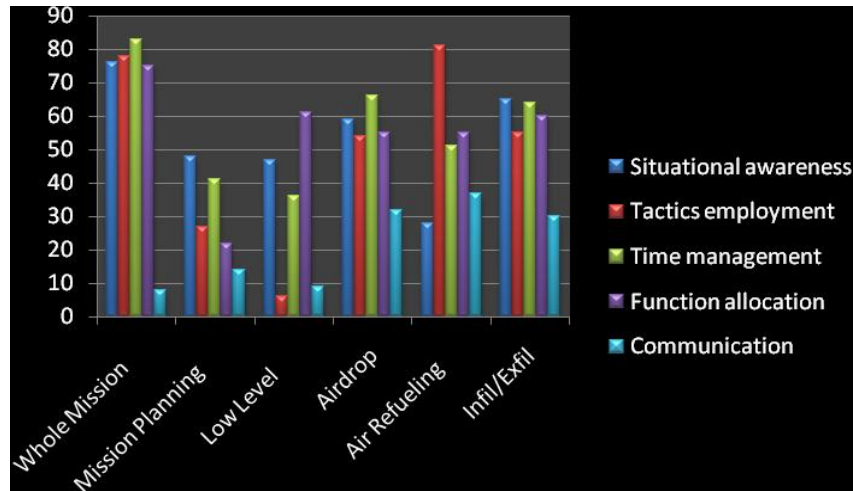


FIGURE 1. Managerial Behaviour and Effectiveness

Figure 1 shows the Managerial Behaviour and Effectiveness Situational awareness, Tactics employment, Time management, Function allocation, Communication and Whole Mission, Mission Planning, Low Level, Airdrop, Air Refueling, Infil/Exfil.

TABLE 2. Normalized Matrix

Normalized Matrix						
	Whole Mission	Mission Planning	Low Level	Airdrop	Air Refueling	Infil/Exfil
Situational awareness	0.906667	0.533333	0.52	0.68	0.266667	0.76
Tactics employment	0.933333	0.253333	-0.02667	0.613333	0.973333	0.626667
Time management	1	0.44	0.373333	0.773333	0.573333	0.746667
Function allocation	0.893333	0.186667	0.706667	0.626667	0.626667	0.693333
Communication	0	0.08	0.013333	0.32	0.386667	0.293333

Table 2 shows the Normalized matrix of Managerial Behaviour and Effectiveness or PROMETHEE the Normalization are shown in the above tabulation. Table 2 shows the default matrix of Prometheus for the Managerial Behaviour and Effectiveness in shown in the table above.

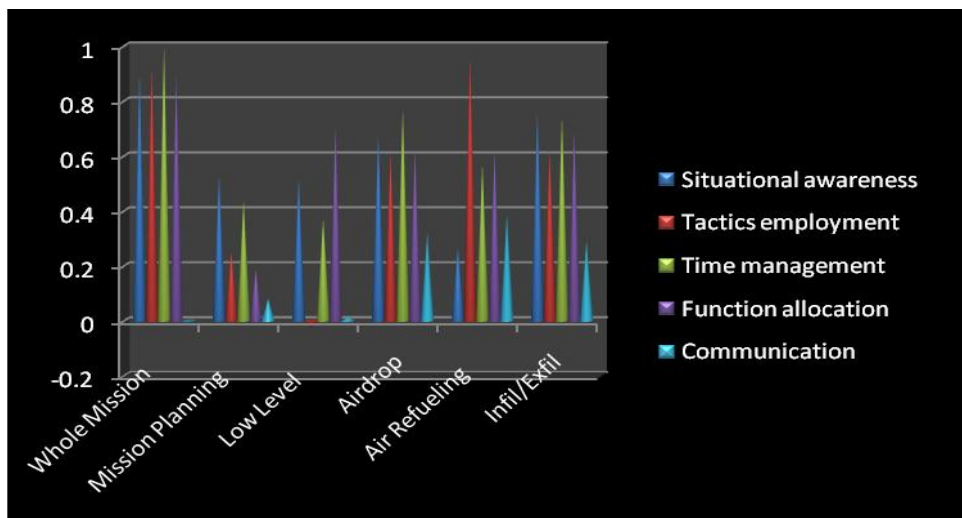


FIGURE 2. Normalized Matrix

Figure 2 shows the Normalized matrix of Managerial Behaviour and Effectiveness for PROMETHEE Situational awareness, Tactics employment, Time management, Function allocation, Communication and Whole Mission, Mission Planning, Low Level, Airdrop, Air Refueling, Infil/Exfil is also Normal matrix value.

**TABLE 3.** Pair wise comparison

Pair wise Comparison						
	Whole Mission	Mission Planning	Low Level	Airdrop	Air Refueling	Infil/Exfil
D12	-0.02667	0.28	0.546667	0.066667	-0.70667	0.133333
D13	-0.09333	0.093333	0.146667	-0.09333	-0.30667	0.013333
D14	0.013333	0.346667	-0.18667	0.053333	-0.36	0.066667
D15	0.906667	0.453333	0.506667	0.36	-0.12	0.466667
D21	0.026667	-0.28	-0.54667	-0.06667	0.706667	-0.13333
D23	-0.06667	-0.18667	-0.4	-0.16	0.4	-0.12
D24	0.04	0.066667	-0.73333	-0.01333	0.346667	-0.06667
D25	0.933333	0.173333	-0.04	0.293333	0.586667	0.333333
D31	0.093333	-0.09333	-0.14667	0.093333	0.306667	-0.01333
D32	0.066667	0.186667	0.4	0.16	-0.4	0.12
D34	0.106667	0.253333	-0.33333	0.146667	-0.05333	0.053333
D35	1	0.36	0.36	0.453333	0.186667	0.453333
D41	-0.01333	-0.34667	0.186667	-0.05333	0.36	-0.06667
D42	-0.04	-0.06667	0.733333	0.013333	-0.34667	0.066667
D43	-0.10667	-0.25333	0.333333	-0.14667	0.053333	-0.05333
D45	0.893333	0.106667	0.693333	0.306667	0.24	0.4
D51	-0.90667	-0.45333	-0.50667	-0.36	0.12	-0.46667
D52	-0.93333	-0.17333	0.04	-0.29333	-0.58667	-0.33333
D53	-1	-0.36	-0.36	-0.45333	-0.18667	-0.45333
D54	-0.89333	-0.10667	-0.69333	-0.30667	-0.24	-0.4

Table 3 shows the Pair Wise Comparison of table 2 the Situational awareness, Tactics employment, Time management, Function allocation, Communication each row with other row on the tabulation.

**TABLE 4.** Preference Value

Preference Value							
	0.2336	0.1652	0.3355	0.1021	0.0424	0.1212	
D12	0	0.065408	0.127701	0.015573	0	0.031147	0.23982933
D13	0	0.021803	0.034261	0	0	0.003115	0.05917867
D14	0.003115	0.080981	0	0.012459	0	0.015573	0.112128
D15	0.211797	0.105899	0.118357	0.084096	0	0.109013	0.62916267
D21	0.006229	0	0	0	0.165077	0	0.17130667
D23	0	0	0	0	0.09344	0	0.09344
D24	0.009344	0.015573	0	0	0.080981	0	0.10589867
D25	0.218027	0.040491	0	0.068523	0.137045	0.077867	0.541952
D31	0.021803	0	0	0.021803	0.071637	0	0.11524267
D32	0.015573	0.043605	0.09344	0.037376	0	0.028032	0.21802667
D34	0.024917	0.059179	0	0.034261	0	0.012459	0.130816
D35	0.2336	0.084096	0.084096	0.105899	0.043605	0.105899	0.65719467
D41	0	0	0.043605	0	0.084096	0	0.12770133
D42	0	0	0.171307	0.003115	0	0.015573	0.18999467
D43	0	0	0.077867	0	0.012459	0	0.09032533
D45	0.208683	0.024917	0.161963	0.071637	0.056064	0.09344	0.616704
D51	0	0	0	0	0.028032	0	0.028032
D52	0	0	0.009344	0	0	0	0.009344
D53	0	0	0	0	0	0	0
D54	0	0	0	0	0	0	0

Table 4 shows the Performance value of the Situational awareness, Tactics employment, Time management, Function allocation, Communication When compare to all others. And the last one is the sum of the same row.

**TABLE 5.** Sum of Performance Value

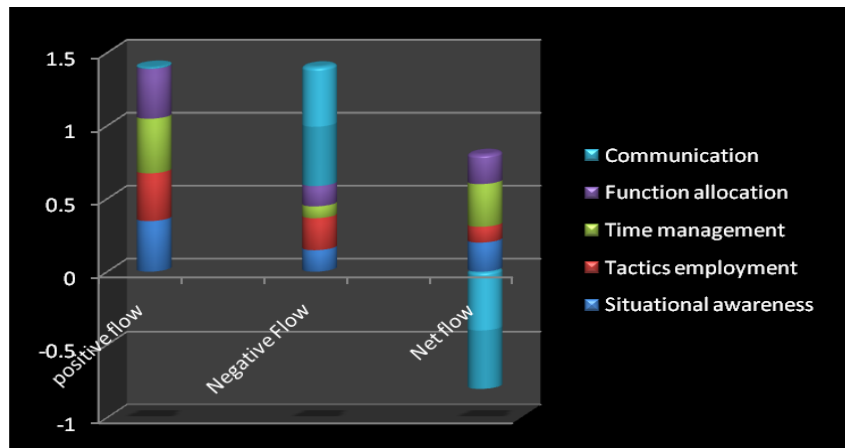
	Situational awareness	Tactics employment	Time management	Function allocation	Communication		
Situational awareness	0	0.239829	0.059179	0.112128	0.629162667	1.04029867	0.34676622
Tactics employment	0.171306667	0	0.09344	0.175075	0.541952	0.98177383	0.32725794
Time management	0.115242667	0.218027	0	0.130816	0.657194667	1.12128	0.37376
Function allocation	0.127701333	0.189995	0.090325	0	0.616704	1.02472533	0.34157511
Communication	0.028032	0.009344	0	0	0	0.037376	0.01245867
	0.442282667	0.657195	0.242944	0.418019	2.445013333		
	0.147427556	0.219065	0.080981	0.13934	0.815004444		

Table 5 shows the sum of all rows and column are applied on the last row. The sum of all row of performance value is arranged above tabulation and the diagonal value is zero.

**TABLE 6.** Positive Flow, Negative Flow, Net Flow

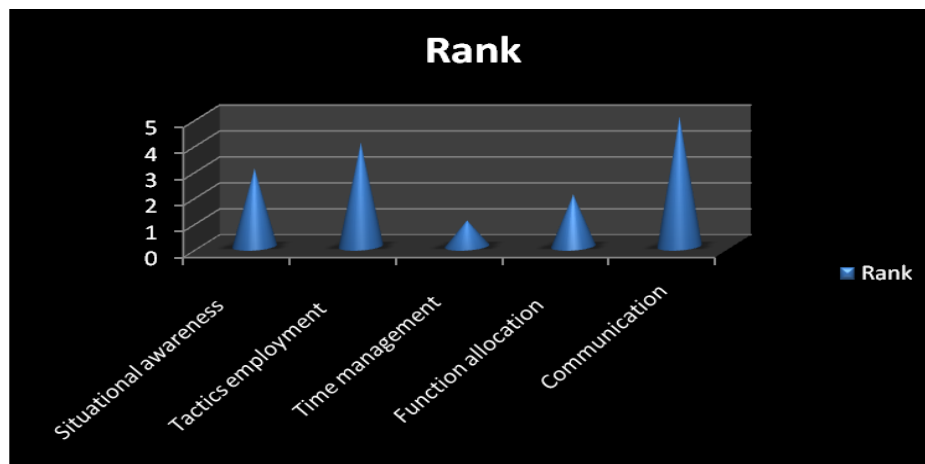
	positive flow	Negative Flow	Net flow	Rank
Situational awareness	0.346766	0.147428	0.19933867	3
Tactics employment	0.327258	0.219065	0.10819305	4
Time management	0.37376	0.080981	0.29277867	1
Function allocation	0.341575	0.13934	0.20223539	2
Communication	0.012459	0.815004	-0.8025458	5

Table 6 shows ranking Managerial Behaviour and Effectiveness for the positive flow, Negative Flow, Net flow. Situational awareness, Tactics employment, Time management, Function allocation, Communication. In the above tabulation the Time management is in the first rank and the last rank is Communication.



**FIGURE 3.** Positive Flow, Negative Flow, Net Flow

Figure 3 shows the Managerial Behaviour and Effectiveness Positive flow, Negative flow, and Net flow. The Net flow value is Time management is showing the highest Value. Communication is Showing the lowest Value.



**FIGURE 4.** Shown the Rank

Figure 4 Shows the Ranking of Managerial Behaviour and Effectiveness for using the analysis of PROMETHEE Method. Time management is got the first rank whereas is the Communication is having the Lowest rank.

**5. CONCLUSION**

Business education also gives managers more power to launch projects and express their values because the managers in the sample appeared to acquire strong environmental principles. The last point is that, while environmental education has a significant role to play, it is just one of several strategies required changing such a huge country's governing practices to be more environmentally friendly. In terms of their practical significance, the behavioral categories that emerged from the three "emic" investigations based on the current "derived etic" study may offer evidence-based actions that managers and executive leaders can use as diagnostic aids. The performance of training managers and training leaders is evaluated. Additionally, practice training programs created by HRD experts can incorporate these "evidence-based" behaviors. All current international managers must work to develop a structure that supports cross-cultural management practices due to the mounting challenges of globalization. The ideal way to advance management practices in global environments, in our opinion, is to use an intercultural management development model like the one outlined above. This study tried to determine the managerial behavior necessary to maintain a successful farm-based tourism business through operational management analysis in order to close this knowledge gap and boost the viability of farm-based tourist operations. The ideal behaviors in the management of a small business were identified using a functional approach to management processes. Functionalist techniques are expected to accurately explain the behavior of individual managers based on standardized views given the intrinsic characteristics of small tourism enterprises such as informality and high dependency on top managers. On the one hand, this procedure determines the operation's pertinent departments and functional activities. Additionally, managers' job performance was assessed in light of the operational procedure they prioritize.

**REFERENCES**

- [1]. Hamlin, Robert G., Andrea D. Ellinger, and Rona S. Beattie. "Coaching at the heart of managerial effectiveness: A cross-cultural study of managerial behaviours." *Human Resource Development International* 9, no. 3 (2006): 305-331.
- [2]. Noordegraaf, Mirko, and Rosemary Stewart. "Managerial behaviour research in private and public sectors: Distinctiveness, disputes and directions." *Journal of Management Studies* 37, no. 3 (2000): 427-443.
- [3]. Cools, Eva, and Herman Van Den Broeck. "Cognitive styles and managerial behaviour: a qualitative study." *Education+ Training* (2008).
- [4]. MacMahon, Juliet, and Eamonn Murphy. "Managerial effectiveness in small enterprises: Implications for HRD." *Journal of European Industrial Training* (1999).
- [5]. Muir, Ian, and D. Langford. "Managerial behaviour in two small construction organisations." *International Journal of Project Management* 12, no. 4 (1994): 244-253.
- [6]. YÜKSEL, ÖZNUR, and MERYEM AKOĞLAN. "Managerial behaviour and effectiveness perceptions of female managers in the hospitality industry." *Anatolia* 9, no. 1 (1998): 19-35.
- [7]. Fryxell, Gerald E., and Carlos WH Lo. "The influence of environmental knowledge and values on managerial behaviours on behalf of the environment: An empirical examination of managers in China." *Journal of business ethics* 46, no. 1 (2003): 45-69.
- [8]. Strong, Carolyn A. "Is managerial behaviour a key to effective customer orientation?." *Total Quality Management & Business Excellence* 17, no. 1 (2006): 97-115.
- [9]. Lu, Hsi-Peng. "Managerial behaviours over MIS growth stages." *Management Decision* (1995).
- [10]. Martinko, Mark J., and William L. Gardner. "Structured observation of managerial work: A replication and synthesis." *Journal of Management Studies* 27, no. 3 (1990): 329-357.
- [11]. Mufune, Pempelani. "African culture and managerial behaviour: Clarifying the connections." *South African journal of business management* 34, no. 3 (2003): 17-28.
- [12]. O'Driscoll, Michael P., Maria Humphries, and Henrik H. Larsen. "Managerial activities, competence and effectiveness: Manager and subordinate perceptions." *International Journal of Human Resource Management* 2, no. 3 (1991): 313-326.
- [13]. Berrell, Mike, Phil Wright, and Tran Thi Van Hoa. "The influence of culture on managerial behaviour." *Journal of management development* (1999).
- [14]. Willcocks, Stephen George. "Managerial effectiveness and the public sector: a health service example." *International Journal of Public Sector Management* (1992).
- [15]. Park, Duk-Byeong, Kyung-Rok Doh, and Kyung-Hee Kim. "Successful managerial behaviour for farm-based tourism: A functional approach." *Tourism Management* 45 (2014): 201-210.

- [16]. Ruiz, Carlos E., Robert G. Hamlin, and Laura Esparza Martinez. "Managerial and leadership effectiveness as perceived by managers and non-managerial employees in Mexico." *Human Resource Development International* 17, no. 3 (2014): 258-276.
- [17]. Abernethy, Margaret A., and Emidia Vagnoni. "Power, organization design and managerial behaviour." *Accounting, Organizations and Society* 29, no. 3-4 (2004): 207-225.
- [18]. Das, G. S. "Defining Managerial Behaviour: Some Indicators." *Indian Journal of Industrial Relations* (1982): 539-548.
- [19]. Willcocks, Stephen. "Managerial effectiveness in the NHS: a possible framework for considering the effectiveness of the clinical director." *Journal of Managerial Psychology* (1995).
- [20]. El-Namaki, M. S. S. "The Effectiveness and the Managerial Behaviour of Company Boards in Tanzania." *International Review of Administrative Sciences* 42, no. 3 (1976): 241-246.
- [21]. Garrison, Mary E., and Mary Winter. "The managerial behaviour of families with preschool children." *Journal of Consumer Studies & Home Economics* 10, no. 3 (1986): 247-260.
- [22]. Hamlin, Robert G., and Taran Patel. "Perceived managerial and leadership effectiveness within higher education in France." *Studies in Higher Education* 42, no. 2 (2017): 292-314.
- [23]. Hamlin, Robert G., Jenny Sawyer, and Lesley Sage. "Perceived managerial and leadership effectiveness in a non-profit organization: An exploratory and cross-sector comparative study." *Human Resource Development International* 14, no. 2 (2011): 217-234.
- [24]. Worsfold, Philip. "Leadership and managerial effectiveness in the hospitality industry." *International Journal of Hospitality Management* 8, no. 2 (1989): 145-155.
- [25]. Gupta, Seeta. "Managerial effectiveness: Conceptual framework and scale development." *Indian journal of industrial Relations* 31, no. 3 (1996): 392-409.
- [26]. Nullmeyer, Robert T., and V. Alan Spiker. "The importance of crew resource management behaviors in mission performance: Implications for training evaluation." In *Human Error in Aviation*, pp. 343-362. Routledge, 2017.