

Assessing Leadership Behaviour Using Modified Multifactor Leadership Questionnaire (MLQ) among Healthcare Managers Working at Government Health Agencies in Bangladesh

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Abstract

Background: Assessing leadership behaviour has become more important than ever in recent years to enhance the managerial and leadership qualities of health managers to improve the capacity of healthcare delivery to the people of the country. **Objective:** To assess the leadership behaviour of healthcare managers working at two largest government agencies in health sector of Bangladesh. **Materials & Methods:** This cross-sectional study was conducted among 154 medical doctors working in different management positions, between January and December of 2023. Data were collected by face-to-face interview using modified Multifactor Leadership Questionnaire (MLQ). Four leadership styles (autocratic, democratic, transformational and laissez-faire) were assessed. 15 factors were taken into consideration; each factor had 3 associated questions. Using factor analysis, leadership behaviour was classified as high, moderate and low; low value was 0–4, while medium and high values were 5–8 and 9–12 respectively. **Results:** The mean age of the respondents was (43.25±8.387) years; 35.7% belonged to 41–50 years age group. 74.7% were male and 25.3% were female. Most of our study participants exhibited moderate levels of autocratic (66.2%) and laissez-faire (50.2%) leadership behaviour in their managerial roles. In contrast, they displayed high levels of democratic (96.8%) and transformational (93.5%) leadership behaviour. Through factor analysis, autocratic leadership behaviour was found at moderate levels among healthcare managers, while high levels of democratic and transformational and low levels of laissez-faire leadership behaviour were adopted by them. **Conclusion:** Healthcare managers must have clear understanding of various leadership styles to lead their organization towards highest level of quality health service. The results of this study may lead to development of necessary leadership education and training programmes for healthcare professionals of our country.

Keywords: Leadership behaviour, leadership style, healthcare managers, public health sector

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Introduction

Leadership may be defined as an individual's actions that guide a group of people towards a common objective. Effective leaders delegate tasks appropriately, allowing team members to take on challenges and grow in their roles.¹ A good leader should be passionate, active, able to inspire others, solution-focused, and able to get people to work together.² His primary responsibility is to inspire followers to achieve a shared objective.³

The significance of enhancing managerial and leadership abilities for health managers has increased due to the swift changes and advancements in the health sector. Management and leadership are linked ideas, but they are not the same thing. Management's main jobs are to organize, lead, control, coordinate, fund, come up with new ideas, and speak for the organization/institution.⁴ The qualities and attributes that set some people apart as

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effective leaders are known as leadership behaviour.

According to the World Health Organization (WHO), health services receive just approximately 3% of the gross domestic product (GDP) in Bangladesh. Our government's allocation towards healthcare accounts for merely 34% of the overall health expenditure, while the other 66% is covered by out-of-pocket payments. The primary obstacle lies in the lack of dynamic leaders who are capable of formulating and implementing policies to improve the entire healthcare system. That is why leaders must have the potential to transform the health system, resulting in improved health outcomes.⁵

Healthcare managers/leaders are those with expertise in managing and directing healthcare organizations and initiatives. The function of a healthcare manager encompasses aspiring health care professionals, facilitating their access to resources, and assisting them in clarifying their career objectives. Healthcare leaders assume diverse positions in our country including hospital directors, deputy directors, assistant directors, program managers, deputy program managers and many more. The main duties of healthcare managers include establishing organizational priorities and quality objectives, supervising operations and budgets, managing staff development, and providing guidance on an organization's strategic orientation for changing healthcare environment. A good healthcare manager/leader demonstrate proficiency in communication, relationship cultivation, business analysis, and change management. As demand of healthcare in our country is high and resources are limited, it is high time for aspiring healthcare leaders to tone their skills. Healthcare managers' leadership behaviors have a trickle-down effect on patient care, manpower management, operational excellence and the organization's overall performance. Analyzing their leadership style provides

insights to improve those aspects. It also supports better hiring and making decisions in healthcare. That is why leadership in healthcare has become more important in recent years than ever before. Autocratic, democratic, transformational and laissez faire leadership styles are very common and popular across the globe. If any new ideas come up through the study, they can be used to make these styles of leadership even better and help organizations perform even better.⁶

Materials & methods

A total of 154 medical doctors working in different managerial positions as employed by the Directorate General of Health Services (DGHS) and Directorate General of Medical Education (DGME) of the People's Republic of Bangladesh participated in this descriptive type of cross-sectional study. They were selected through convenient sampling. This study was conducted between January and December of 2023. Those two organizations were selected for this study as because the largest number of physicians are employed in various managerial roles through those two government agencies. Our study population comprised of medical doctors who were working for more than one year in those particular managerial positions. After ethical approval and maintaining all necessary consent related formalities, data was collected from the respondents through face to face interview. The Multifactor Leadership Questionnaire (MLQ), as first introduced by Avolio and Bass⁷, was used for our data collection. It was slightly modified for this study, which was consisting of fifteen factors, and then utilized to determine the leadership behaviour of healthcare managers working at government health agencies of the country. The questionnaire was provided in both Bangla (Bengali) and English versions. At first, factors were determined according to the leadership styles (factor 1 to factor 15). Each factor had three

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questions. Scores were made by calculating response of each factor that underline particular leadership behaviour. The frequency of observed leadership behaviours in this study was rated by using a 5-point rating system. The following are the anchors that were utilized to assess the MLQ factors: 0 means not at all, 1 means once in a while, 2 means sometimes, 3 means fairly often, and 4 means frequently, if not always. The modified MLQ

questionnaire was used to quantify different dimensions of the leaders' behavioural styles. Four leadership styles were assessed, divided into 15 factors. Each factor had 3 associated questions, which was classified as high, moderate and low. The mean value represents a low value if it falls within the range of 0 to 4, a medium value if it falls between 5 and 8, and a high value if it falls between 9 and 12. (Table-I).

Table-I: Scores relating to the intensity of leadership behaviour

Level	Score Range
High	9–12
Moderate	5–8
Low	0–4

The leadership behaviour questionnaire's reliability was verified by Cronbach's alpha. Cronbach's alpha tests shows questions reliability measurement of each leadership style. As for all leadership styles the high Cronbach's alpha scores indicate

that the research questions accurately assessed each specific type of leadership behaviour. This means the questions were relevant and effective at measuring each leadership style (Table-II).

Table-II: Statistical reliability (Cronbach's alpha) of all leadership behaviour

Leadership Behaviour	Cronbach's alpha
Autocratic leadership	0.714
Democratic leadership	0.719
Transformational leadership	0.763
Laissez-faire leadership	0.810

Data were cleaned, compiled, edited and analyzed following the objectives and variables of the study using Statistical Package for Social Sciences (SPSS) version 26.0. Data was expressed as frequency and percentage as well as mean \pm SD to describe the sociodemographic characteristics and

Results

Among 154 respondents, the mean age of the respondents was (43.25 \pm 8.387) years; 35.7% belonged to 41–50 years age group. Among them, 74.7% were male and 25.3% were female. Most of the respondents

determining the leadership behaviour patterns of the study samples.

The study was approved by the Institutional Review Board of the National Institute of Preventive and Social Medicine (NIPSOM), Dhaka, Bangladesh (NIPSOM/IRB/2023/06).

96.8% were married at some point and 3.2% were unmarried. 71.4% of the respondents lived in nuclear families and 56.5% respondents had 1–3 dependent family members. In educational

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qualifications, 40.9% were graduated and 59.1% were postgraduates. Relating to designations, most of the respondents were working as Assistant Directors (27.9%) and most of them (29.9%) had 6–10 years working experience in that field. 40.9% of the respondents had leaders among their other family members in their respective professions and 72.7% reported that they had some forms of previous leadership roles as students and in early career (Table-III). Most of our study participants exhibited moderate levels of autocratic (66.2%) and laissez-faire (50.2%) leadership behaviour in their managerial roles. In contrast, they displayed high levels of democratic (96.8%) and transformational (93.5%) leadership

behaviours. (Table-IV) The results indicate that our healthcare managers tend to use more democratic and transformational leadership and less frequently relied on autocratic or laissez-faire approaches. Similarly, through factor analysis, we found that autocratic leadership behaviour was moderate among healthcare managers, as most of the responsible factors fell within moderate score range (5–8). High levels of democratic and transformational leadership behaviour were reported, as all of the factors fell within high score range (9–12). However, adopting laissez-faire leadership behaviour showed a low level, as all of the factors fell within low score range (0–4). (Table-V).

Table 3: Sociodemographic characteristics of the respondents (n=154)

Variables	Category	Frequency	Percentage
Age group (in years)	≤30 years	11	7.1
	31–40 years	54	35.1
	41–50 years	55	35.7
	51–60 years	34	22.1
	Mean±SD	43.25±8.38 years	
Gender	Male	115	74.7
	Female	39	25.3
Marital status	Married	147	95.5
	Unmarried	5	3.2
	Divorced	1	0.6
	Widow/Widower	1	0.6
Family type	Nuclear	110	71.4
	Joint	42	27.3
	Extended	2	1.3
	None	11	7.1
Dependent family members	1–3	87	56.5
	4–6	56	36.4
	MBBS	63	40.9
Highest level of education	BDS	3	1.9
	FCPS	7	4.5
	MD/MS	5	3.2
	MPhil	6	3.9
	MPH	60	39.0
	Diploma	4	2.6
	Others (masters, PhD fellowship)	6	3.9
Designation	Director	9	5.8

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	Deputy Director	13	8.4
	Assistant Director	43	27.9
	Research Officer	5	3.2
	Program Manager	10	6.5
	Deputy Program Manager	33	21.4
	Medical Officer	30	19.5
	Others	11	7.1
Working experience	≤5 years	33	21.4
	6 –10 years	46	29.9
	11–15 years	27	17.5
	16–20 years	28	18.2
	21–25 years	20	13.0
Leaders in family members	Yes	63	40.9
	No	91	59.1
Experience in leadership	Yes	112	72.7
	No	42	27.3

Table 4: Distribution of respondents regarding particular leadership behaviour response (n=154)

Leadership behavior	Score value	Frequency	Percentage
Autocratic	High	45	29.2
	Moderate	102	66.2
	Low	7	4.5
Democratic	High	149	96.8
	Moderate	5	3.2
	Low	0	0
Transformational	High	144	93.5
	Moderate	10	6.5
	Low	0	0
Laissez-faire	High	2	1.3
	Moderate	78	50.6
	Low	74	48.1

Table 5: Factors analysis of different leadership behaviour

Leadership type	Factor number	Factors	Mode	Score Mean ±SD
Autocratic	Factor 8	Unilateral and top-down communication	7.00	6.63±2.55
	Factor 9	Quick decision making	5.00	5.63±2.20
	Factor 10	Strict authoritarian and individual control	8.00	6.58±2.66
	Factor 11	Trust issues	4.00	4.91±2.09
Democratic	Factor 6	Management by exception	9.00	9.23±1.75
	Factor 5	Contingent reward	9.00	9.13±2.09
	Factor 12	Monitoring and response	12.00	10.12±1.62

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	Factor 13	Enthusiasm and encouragement	13.00	10.63±1.52
Transformational	Factor 1	Idealized influence	11.00	10.18±1.65
	Factor 2	Inspirational Motivation	11.00	9.52±1.68
	Factor 3	Intellectual stimulation	9.00	9.42±1.85
	Factor 4	Individual consideration	9.00	9.14±1.93
Laissez-faire	Factor 15	Low productivity	4.00	3.98±1.93
	Factor 14	Less control by manager	4.00	4.20±2.69
	Factor 7	Laissez faire leadership	4.00	5.78±2.70

Discussion

Leading a team is both an art and a science, requiring a blend of strategic thinking, empathy, and effective communication; therefore, leadership behaviour of the healthcare managers is crucial for bringing success in project management and implementation. In this study, among 154 respondents, the mean age of the respondents was (43.25±8.387) years; 35.7% belonged to 41–50 years age group. Among them, 74.7% were male and 25.3% were female. In educational qualifications, 40.9% were graduated and 59.1% were postgraduates. Relating to designations, most of the respondents were working as Assistant Directors (27.9%). 29.9% of the respondents had 6–10 years working experience in that field. The results of several studies done on nurse managers are in congruence with our study findings amid geographical and structural differences in management. However, the proportion of male and female was found diametrically opposite, as because females are predominant in nursing profession.⁸⁻¹⁰

In this study, autocratic leadership was moderately adopted by the healthcare

managers. A study on autocratic leadership style revealed that using original and creative ideas to solve health sector problems are prohibited by the autocratic leadership style. However, an autocratic approach may occasionally be a useful strategy for success in the workplace. It does not cause institutions to fail entirely.⁹ Finally, laissez-faire leadership, which reveals a leadership style characterized by a hands-off approach where leaders may allow established work methods to persist. However, our healthcare managers showed low levels of adoption of that style. Similarly several studies reported that nurse administrators (leaders) were consistent in their evaluations as mostly transformational, and once in a while as laissez-faire leaders.⁸⁻¹²

Our study had some limitations. Firstly, the convenient sample (154 respondents only) with unequal gender distribution makes findings less representative. Secondly, only inclusion of government employees becomes less representative as a huge number of healthcare managers work at private health sectors in the country.

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Thirdly, in this study, we evaluated the self-perception that managers had of their own leadership style, which may be biased through a culture/tendency to self-praise. Finally, a cross-sectional design of such study fails to identify the causation. Therefore, further research are warranted with larger samples including healthcare managers from both government and private sectors.

Conclusion

The way a leader leads has a big impact on the performance and operation of the organization. This research examined several leadership behaviours, including autocratic, democratic, transformational and laissez-faire leadership. Every style has its own characteristics. Healthcare managers must have clear understanding of various leadership styles to lead their organization towards highest level of quality health service. Healthcare administrators must have the ability to create, implement, and cultivate followership as well. The results of this study may lead to development of necessary leadership education and training programmes for healthcare professionals of our country.

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