ORIGINAL ARTICLE

Gender Variation in Leadership Behavior Traits among Healthcare Managers in Government Health Sectors in Bangladesh

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ABSTRACT

Assessment of leadership behavior 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. A descriptive type of cross-sectional study was conducted among 154 medical doctors working in different management positions, between January and December of 2023, to observe gender related variation in their leadership behavior traits. Data was 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 behavior was classified as high, moderate and low; low value was 0–4, while medium and high values were 5–8 and 9–12, respectively. 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 (male-female ratio was nearly 3:1). 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 behavior. Regarding gender difference, there was an association between gender and autocratic and democratic leadership behavior traits ($p<0.05$). However, no association was observed between gender and transformational and laissez faire leadership behavior traits ($p>0.05$). Male managers possessed moderate autocratic ($\varphi=0.245$) and laissez-faire ($\varphi=0.073$) leadership behaviour traits and high democratic ($\varphi=0.315$) and transformational ($\varphi=0.819$) leadership behaviour traits, as compared to their female counterparts.

Keywords: Leadership behavior, leadership traits, gender variation, healthcare managers, public health sector

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INTRODUCTION

Leadership is a multifaceted phenomenon that has been studied extensively across various disciplines, including psychology, sociology, healthcare and business. An area of particular interest has been the influence of gender on leadership styles. Research indicates that various leadership traits and behaviors can differ between men and women, resulting in distinct leadership styles influenced by socialization, cultural expectations, and individual experiences.[1-3]

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Understanding these gender variations is critical for fostering effective leadership in diverse organizational settings.[4,5] Numerous studies support the idea that gender influences leadership style. For example, studies revealed that while men and women are equally capable leaders, women more frequently exhibit democratic or participative leadership styles. Women in leadership roles tend to stress collaboration and team-building, thereby fostering a sense of belonging among their subordinates.[6,7] Apart from that research also highlighted that female leaders often utilize a more inclusive approach in decision-making, which not only encourages dialogue but also enhances team creativity and problem-solving. This participative style can be particularly advantageous in dynamic work environments where innovation is crucial.[8]

However, the application of these differing styles does not occur in a vacuum. The compatibility of a leader's style with the organizational culture, as well as the expectations of the employees they lead, significantly influences the effectiveness of a leadership approach.[9] For instance, in traditionally male-dominated fields such as business, healthcare or technology sectors in developing countries like Bangladesh, women leaders may face challenges in being accepted if they adopt a more nurturing or collaborative approach.[10] Understanding the nuances behind gender and leadership encourages organizations to create more equitable systems that allow individuals to lead authentically. Future leadership initiatives should focus not only on the development of skills but also on recognizing the value of diverse perspectives, ultimately paving the way for more dynamic and innovative leadership in the modern workplace.[2,4]

In healthcare sector, recognizing the differences in leadership traits between male and female is crucial for healthcare organizations aiming to cultivate diverse leadership teams that combine the strengths of both genders.[9] By creating inclusive environments that harness a range of leadership styles, healthcare organizations can improve both employee engagement and patient outcomes, leveraging the unique strengths that each leader brings to the table.[9,11] As the healthcare landscape continues to evolve, embracing this diversity will be essential for meeting the complex challenges of modern healthcare delivery. Therefore, taking all those into our considerations, we proposed this study to observe gender related variation in their leadership behavior traits in government healthcare sector of Bangladesh.

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 Bass & Avolio,[12] was used for our data collection. It is widely used and validated for the purpose.[13] However, it was slightly modified for this study, which was consisting of fifteen factors, and then utilized to determine the leadership behavior 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 questions. Scores were made by calculating response of each factor that underline particular leadership behavior. The frequency of observed leadership behavior 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' behavioral 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. The leadership behavior questionnaire's reliability was verified by Cronbach's alpha (α). Cronbach's alpha tests shows questions reliability measurement of each leadership style, as high α scores indicate that the research questions accurately assessed each specific trait of leadership behavior (Table 1).

Table 1: Statistical reliability of all leadership behavior

Leadership Behavior	Cronbach's alpha (α)
Autocratic leadership	0.714
Democratic leadership	0.719
Transformational leadership	0.763
Laissez-faire leadership	0.810

Data was cleaned, compiled, edited and analyzed using Statistical Package for Social Sciences (SPSS) version 26.0 for Windows. Data was expressed as frequency and percentage as well as mean±SD to describe the sociodemographic characteristics and determine the leadership behaviour traits of the study participants. Chi-square (χ^2) test was applied for gender comparison. Phi (φ) correlation coefficient test was also done. A p-value <0.05 was considered statistically significant.

RESULTS

Table 2 shows that 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. Most of the respondents (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 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 3 shows that the most of our study participants exhibited moderate levels of autocratic (66.2%) and laissez-faire (50.2%) leadership behavior in their managerial roles. In contrast, they displayed high levels of democratic (96.8%) and transformational (93.5%) leadership behaviors. Table 4 shows that there was an association between gender and autocratic and democratic leadership behavior traits ($p<0.05$). However, no association was observed between gender and transformational and laissez faire leadership behavior traits ($p>0.05$). Male managers possessed moderate autocratic ($\varphi=0.245$) and laissez-faire ($\varphi=0.073$) leadership behavior traits and high democratic ($\varphi=0.315$) and transformational ($\varphi=0.819$) leadership behavior traits than that of female managers.

Table 2: Sociodemographic characteristics of the participants (N=154)

Variables	Category	Frequency	Percentage
Age group (in years)	≤30	11	7.1
	31–40	54	35.1
	41–50	55	35.7
	51–60	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
Dependent family members	None	11	7.1
	1–3	87	56.5
	4–6	56	36.4
Highest level of education	MBBS	63	40.9
	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

Variables	Category	Frequency	Percentage
Designation	Director	9	5.8
	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 (in years)	≤5	33	21.4
	6 –10	46	29.9
	11–15	27	17.5
	16–20	28	18.2
	21–25	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 3: Distribution of respondents regarding particular leadership behavior 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 4: Gender distribution of leadership behavior traits among the participants (N=154)

Variables	Score value	Male (n=115)	Female (n=39)	Test Statistics
Autocratic	High	37 (82.2%)	8 (17.8%)	χ^2=9.225, df=2, p<0.05 φ=0.245
	Moderate	76 (74.5%)	26 (25.5%)	
	Low	2 (28.6%)	5 (71.4%)	
Democratic	High	115 (77.2%)	34 (22.8%)	χ^2=15.238, df=1, p<0.05 φ=0.315
	Moderate	-	5 (100.0%)	
	Low	-	-	
Transforma-tional	High	109 (75.7%)	35 (24.3%)	χ^2=1.218 df=1, p>0.05 φ=0.819
	Moderate	6 (60.0%)	4 (40.0%)	
	Low	-	-	
Laissez-faire	High	2 (100.0%)	-	χ^2=0.830 df=2, p>0.05 φ=0.073
	Moderate	59 (75.6%)	19 (24.4%)	
	Low	54 (73.0%)	20 (27.0%)	

Chi-square test was applied to reach p-value.

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.[4] In the healthcare sector, the difference in leadership traits between male and female leaders can shape not only the dynamics within teams but also the quality of patient care provided.[1] Female leaders are often characterized by their collaborative, empathetic, and participative styles, which are particularly effective in fostering a supportive and communicative environment. Male leaders, while often decisive and results-oriented, may risk overlooking the relational aspects that contribute to team cohesion and employee satisfaction.[2,6-8]

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.[14-17]

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.[4,9,18] Finally, laissez-faire leadership, which reveals a leadership style characterized by a hands-off approach where leaders may allow established work methods to persist.[4,5,9] 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.[4,14-18]

Healthcare managers leading different organizations in Bangladesh need to have a thorough understanding of these various leadership approaches to guide their organizations toward providing the highest quality of health services.[11] Additionally, healthcare administrators should possess the skills to create, implement, and nurture followership (targeting junior yet promising healthcare professionals).[2,4,9,18]

Gender variation in leadership styles is a reflection of deep-rooted social norms and cultural expectations. While men and women may approach leadership differently – often rooted in traditional portrayals of masculinity and femininity – both styles possess inherent strengths and weaknesses.[6-8,19-22] Organizations benefit from embracing diverse leadership styles as they can optimize team performance, foster a culture of inclusivity, and adapt more effectively to changing environments.[4,18,22]

Our study has some limitations. Firstly, the convenient sample (154 respondents only) with unequal gender distribution tends to make our 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. 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 manner in which a leader leads greatly influences the performance and functioning of an organization. This research explored several leadership styles, including autocratic, democratic, transformational, and laissez-faire leadership. Each style possesses distinct characteristics. Recognizing the gender related differences does not imply that one leadership style is superior to another. Instead, it highlights the idea that leadership is not a universal solution; the traits associated with gender can influence and sometimes restrict how leaders are perceived and how they approach their leadership. Gender-sensitive approaches in leadership education and training promote equality, respect, and inclusion, creating a learning environment that encourages diverse leadership pathways; hence, our study findings are expected to help development of gender-sensitive leadership education and training programs for healthcare professionals of the country.

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final submission: R Islam, MNH Refat, ASM Nurunnabi, S Aktar, GN Tasmia, AS Sojon, K Ahamed, MR Islam.

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