

Leadership styles of minority women administrators in US medical schools

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Abstract

Purpose – Black and Hispanic or Latinx women remain significantly underrepresented in leadership roles in academic medicine. This study examined whether statistically significant differences exist between these groups in their use of transformational, transactional, and passive or avoidant leadership styles. The aim was to expand understanding of leadership dynamics within minority women administrators and inform more inclusive leadership development practices.

Design/methodology/approach – Using a quantitative quasi-experimental design, 131 women administrators who self-identified as Black or Hispanic or Latinx completed the Multifactor Leadership Questionnaire Form 5X. Participants were recruited through convenience and snowball sampling. Independent samples *t*-tests were conducted to compare leadership style scores across the two groups.

Findings – Significant differences emerged across all three leadership styles. Hispanic or Latinx administrators reported higher transformational, transactional, and passive or avoidant leadership scores than Black administrators, with effect sizes ranging from small to large. Additional variation within the Hispanic or Latinx subgroup was also observed, particularly in transformational leadership.

Originality/value – This study contributes new evidence about intra-group leadership differences among minority women in academic medicine, a demographic often studied as a single category. By identifying distinct leadership patterns between Black and Hispanic or Latinx women, the research challenges assumptions of homogeneity and underscores the need for leadership development and mentoring programs that recognize the diverse experiences of women of color in academic medicine.

Keywords Leadership styles, transformational leadership, Minority women, Academic medicine, Diversity, Healthcare leadership

Paper type Research article

Introduction

In recent years, increased attention has been given to the representation of minority women in leadership positions, particularly in academic medicine. The Association of American Medical Colleges (AAMC) highlights that while 41% of medical school faculty are women, only a small fraction serve in leadership roles, such as deans (16%) or department chairs (15%) (Girod, Fassiotto, Grewal, Ku, & Sriram, 2016; AAMC, 2020). This disparity is even more pronounced for minority women, who represent a significant portion of medical school students and residents yet hold a minimal percentage of leadership roles. Leadership styles in healthcare administration have become an essential focus for bridging these gaps. Transformational, transactional, and passive/avoidant leadership styles, as outlined by Bass and Avolio (1997), provide a theoretical framework for understanding the effectiveness of different leadership approaches among minority women in academic medicine. The Multifactor Leadership Questionnaire (MLQ) Form 5X is the accepted research tool to assess these leadership styles.

Literature review

The review examined transformational, transactional, and passive/avoidant leadership styles, a leadership framework that has been widely utilized in assessing leadership in healthcare, underscoring the need for leaders who are adaptable to the nuances of their roles and the cultural backgrounds of their teams. The research highlighted the lack of studies specifically addressing minority women in leadership roles in academic medicine, an area with substantial



gender and racial disparities (Kaplan *et al.*, 2018; Poole & Brownlee, 2020). Prior studies indicated that transformational leadership may align with the leadership styles of women, particularly in settings requiring empathy and collaboration (Silva & Mendis, 2017). Yet, few empirical studies explore this alignment within the context of minority women, underscoring a gap in the literature that this study seeks to address.

Purpose

Findings could inform the development of inclusive mentoring programs that recognize diverse leadership preferences, fostering environments where minority women leaders can thrive in academic medicine. Key research questions included examining the differences between Black and Hispanic/Latinx women administrators' use of transformational, transactional, and passive/avoidant leadership. By addressing these questions, the study adds depth to our understanding of the leadership landscape in academic medicine and opens the door for improved leadership development initiatives focused on diversity and inclusion (Brown, Jones, & Robinson, 2019; Larson, Murphy, & Walker, 2019).

Methodology/Design.

This study employed a quasi-experimental quantitative design to examine the leadership styles of minority women administrators in academic medicine, focusing specifically on Black and Hispanic/Latinx women. The research sought to determine if statistically significant differences exist between these groups in terms of transformational, transactional, and passive/avoidant leadership styles.

Setting/population/sampling

Participants were recruited using convenience and snowball sampling techniques. The final sample consisted of 131 women who self-identified as Black or Hispanic/Latinx and held administrative roles at U.S. medical schools. Data collection occurred over a two-month period through an online survey platform, which ensured both confidentiality and voluntary participation (Vogt, 2007; Creswell, 2009). The MLQ is well-regarded in leadership studies for its ability to capture leadership styles across a continuum, with a high degree of validity and reliability, making it suitable for examining the nuances of leadership styles in this demographic.

Instrument

The Multifactor Leadership Questionnaire (MLQ) Form 5X was used as the primary instrument for data collection. This 45-item questionnaire is based on the full-range leadership model, categorizing leadership behaviors into transformational, transactional, and passive/avoidant styles, thereby offering a robust framework for assessing leadership among minority women in academic settings (Bass & Avolio, 1997). Descriptive statistics were utilized in the initial analysis to summarize the data, followed by independent samples *t*-tests to compare mean scores across the three leadership styles between Black and Hispanic/Latinx administrators. The study's hypotheses focused on exploring potential differences in leadership style preferences, with a null hypothesis positing no significant differences and alternative hypotheses anticipating distinct variations in transformational, transactional, or passive/avoidant leadership (Neuman, 2006).

Validity and reliability

The MLQ Form 5X is considered a valid and reliable feedback assessment instrument. Researchers demonstrated the MLQ Form 5X represents the characteristics of the full-range model of leadership and its underlying theory. Furthermore, studies on the MLQ produced a

reliability coefficient ranging from 0.74 to 0.94 and found validation with Cronbach’s alphas ranging from 0.91 to 0.94 (Carrara *et al.*, 2018).

Results and discussion

This research provided valuable insights into the ways in which leadership styles may differ within specific minority groups in academic medicine. This study analyzed the leadership styles of Black and Hispanic/Latinx women administrators in academic medicine to identify potential differences in transformational, transactional, and passive/avoidant leadership approaches.

Demographics

The sample comprised 131 participants who held various academic leadership positions, including program directors, department chairs, and associate deans. See Table 1. Participants were evenly divided between Black (50.4%) and Hispanic/Latinx (49.6%) administrators.

Regarding race/ethnicity relative to their most frequent current or previous academic roles, 13.7% (*n* = 18) of the sample identified as Black women who were or had been Program Directors compared to 12.2% (*n* = 16) of the sample who identified as Hispanic/Latinx women who were or had been Program Directors. Department Chair was the second most frequent role, and 9.9% (*n* = 13) of the sample identified as Black women who were or had been Department Chairs compared to 10.7% (*n* = 14) of the sample who identified as Hispanic/Latinx women who were or had been Department Chairs. Associate Dean was the third most frequent role, and 8.4% (*n* = 11) of the sample identified as Black women who were or had been Associate Deans compared to 10.7% (*n* = 14) of the sample who identified as Hispanic/Latinx women who were or had been Associate Deans. See Table 2.

Data collection was conducted using the Multifactor Leadership Questionnaire (MLQ) Form 5X, which categorizes leadership styles according to the full-range leadership model (Bass & Avolio, 1997). The MLQ scores allowed for an independent samples *t*-test analysis to determine if significant differences existed between the leadership styles of Black and Hispanic/Latinx women. See Table 3.

Research questions

Research Question 1 asked, “To what extent is there a statistically significant difference in transformational leadership style between Hispanic/Latinx and Black women administrators in academic medicine?” There was a statistically significant extent of difference between Hispanic/Latinx and Black women administrators in academic medicine in transformational

Table 1. Current academic role at US Medical School

Current or previous role	<i>n</i>	%
Assistant Dean	16	12.2
Associate Dean	25	19.1
Associate Department Chair	3	2.3
Department Chair	27	20.6
Division Dean	8	6.1
Other (please specify)*	2	1.5
Program Coordinator	16	12.2
Program Director	34	26.0
Total	131	100.0

Note(s): Other includes Lead Instructor and Assistant Clerkship Director

Source(s): Author’s own work

Table 2. Administrative role at US Medical School by racial/ethnic self-identity

		Racial/Ethnic self-identity		
		Black woman	Hispanic/Latinx woman	Total
Assistant Dean	Count	5	11	16
	% of total	3.8%	8.4%	12.2%
Associate Dean	Count	11	14	25
	% of total	8.4%	10.7%	19.1%
Associate Department Chair	Count	2	1	3
	% of total	1.5%	0.8%	2.3%
Department Chair	Count	13	14	27
	% of total	9.9%	10.7%	20.6%
Division Dean	Count	6	2	8
	% of total	4.6%	1.5%	6.1%
Other (please specify)	Count	1	1	2
	% of total	0.8%	0.8%	1.5%
Program Coordinator	Count	10	6	16
	% of total	7.6%	4.6%	12.2%
Program Director	Count	18	16	34
	% of total	13.7%	12.2%	26.0%
Total	Count	66	65	131
	% of total	50.4%	49.6%	100.0%

Note(s): Other includes Lead Instructor and Assistant Clerkship Director

Source(s): Author's own work

Table 3. Group means and *t*-test results

	Racial/Ethnic self-identity	<i>N</i>	<i>M</i>	<i>SD</i>	<i>SEM</i>	<i>df</i>	<i>t</i>	<i>p</i>
Transformational Leadership	Black Woman	66	3.01	0.18	0.02	129	−2.32	0.022*
	Hispanic/Latinx Woman	65	3.10	0.23	0.03			
Transactional Leadership	Black Woman	66	1.74	0.28	0.03	118.40 ^a	−5.86	<0.001***
	Hispanic/Latinx Woman	65	2.07	0.38	0.05			
Passive/Avoidant Leadership	Black Woman	66	0.54	0.29	0.04	129	−4.40	<0.001***
	Hispanic/Latinx Woman	65	0.76	0.29	0.04			

Note(s): *** $p < 0.001$, * $p < 0.05$, two-tailed. A = Equal variances not assumed

Source(s): Author's own work

leadership style, $t(129) = -2.32$, $p = 0.022$, two-tailed, equal variances assumed. Specifically, Hispanic/Latinx women ($M = 3.10$, $SD = 0.23$) were more transformational than Black women ($M = 3.01$, $SD = 0.23$). Cohen's $d = 0.44$, observed power = 0.70. This is a small effect size. See Figure 1.

Research Question 2 asked, "To what extent is there a statistically significant difference between Hispanic/Latinx and Black women administrators in academic medicine in transactional leadership style?" There was a statistically significant extent of difference between Hispanic/Latinx and Black women administrators in academic medicine in transactional leadership style, $t(118.40) = -5.86$, $p < 0.001$, two-tailed, equal variances not assumed. Specifically, Hispanic/Latinx women ($M = 2.07$, $SD = 0.38$) were more

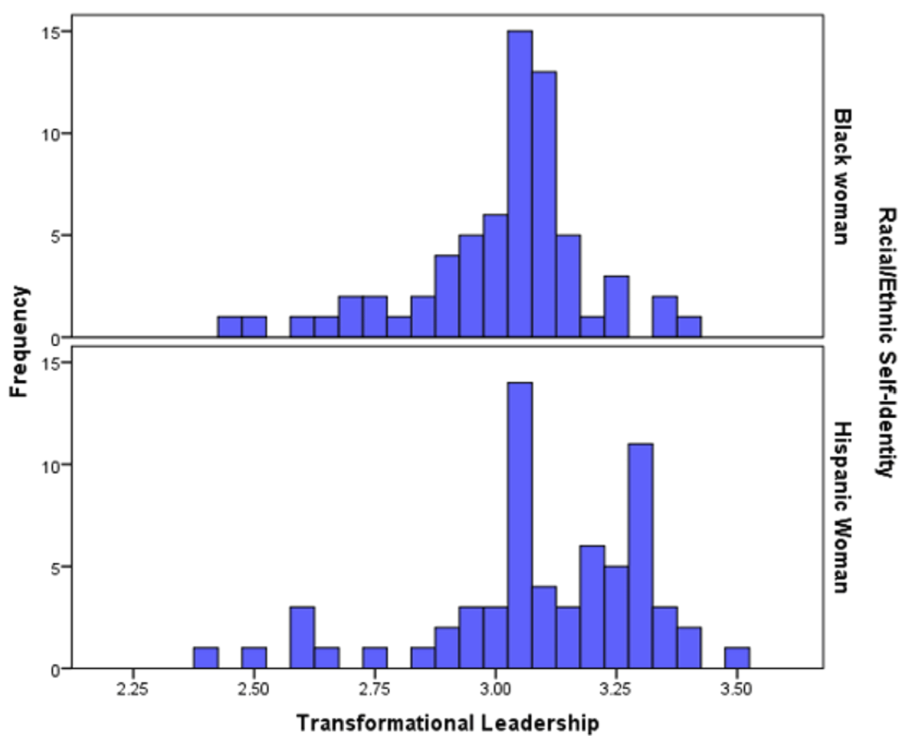


Figure 1. Transformational leadership by racial/ethnic self-identity. Source: Author’s own work

transactional than Black women ($M = 1.74$, $SD = 0.28$). Cohen’s $d = 0.99$, observed power = 1.00. This is a large effect size. See [Figure 2](#).

Research Question 3 asked, “To what extent is there a statistically significant difference between Hispanic and Black women administrators in academic medicine in passive/avoidant leadership style?” There was a statistically significant difference between Hispanic and Black women administrators in academic medicine in passive/avoidant leadership style, $t(129) = -4.40$, $p < 0.001$, two-tailed, equal variances assumed. Specifically, Hispanic women ($M = 0.76$, $SD = 0.29$) were more passive/avoidant than Black women ($M = 0.54$, $SD = 0.29$). Cohen’s $d = 0.76$, observed power = 0.99. This is a medium effect size. See [Figure 3](#).

Results

Transformational leadership: Hispanic/Latinx women demonstrated significantly higher transformational leadership scores compared to Black women, with a small effect size. The data further revealed a bimodal distribution among Hispanic/Latinx participants, indicating a variation in transformational leadership traits within this group.

Transactional leadership: Hispanic/Latinx participants scored higher in transactional leadership than Black participants, with results showing a large effect size. Transactional leadership, which is often associated with contingent rewards and structured exchanges, was more prevalent among Hispanic/Latinx respondents.

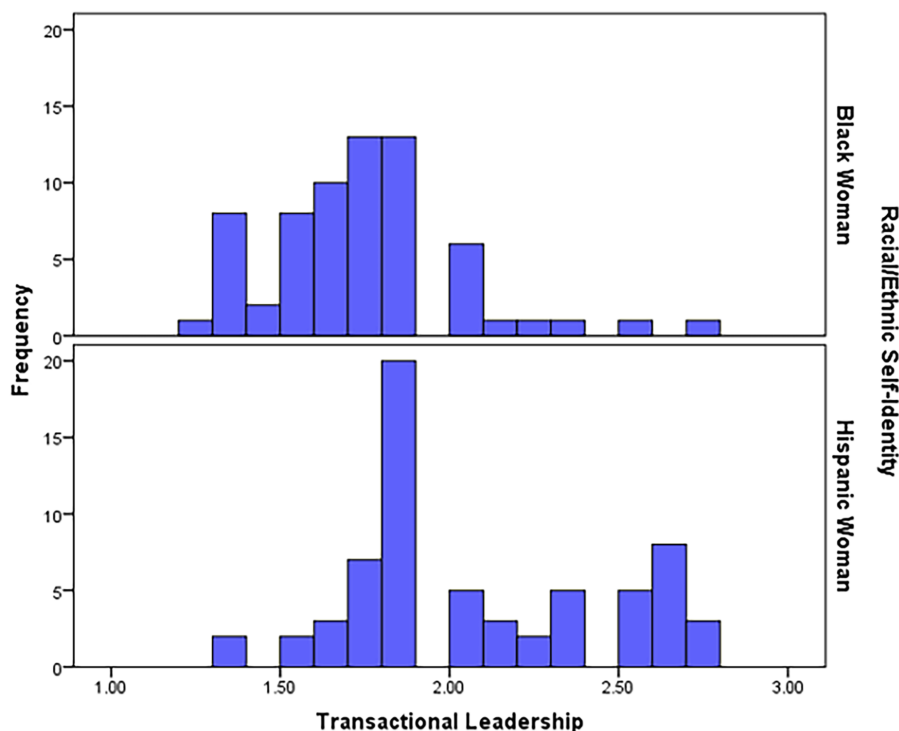


Figure 2. Transactional leadership by racial/ethnic self-identity. Source: Author's own work

Passive/Avoidant leadership: Significant differences were observed in passive/avoidant leadership scores, with Hispanic/Latinx women scoring higher than Black women. This result reflected a medium effect size, suggesting a greater tendency toward passive/avoidant behaviors among Hispanic/Latinx administrators. See [Table 4](#).

Recommendations for practice

Implications for leadership development

These findings underscore the importance of tailored leadership development programs in academic medicine that recognize and support diverse leadership styles among minority women. For instance, mentoring and professional development initiatives can integrate transformational leadership training, particularly for Hispanic/Latinx administrators, to further enhance their leadership trajectory and organizational impact ([Brown et al., 2019](#); [Sanner-Stiehr & Kueny, 2017](#)).

Recommendations for future research

Future studies could benefit from broader sampling and the inclusion of qualitative methodologies to gain a more nuanced understanding of the factors influencing leadership approaches among minority women. Additional research could also examine how organizational culture, personal experiences, and social dynamics interact to shape these leadership styles within academic medicine.

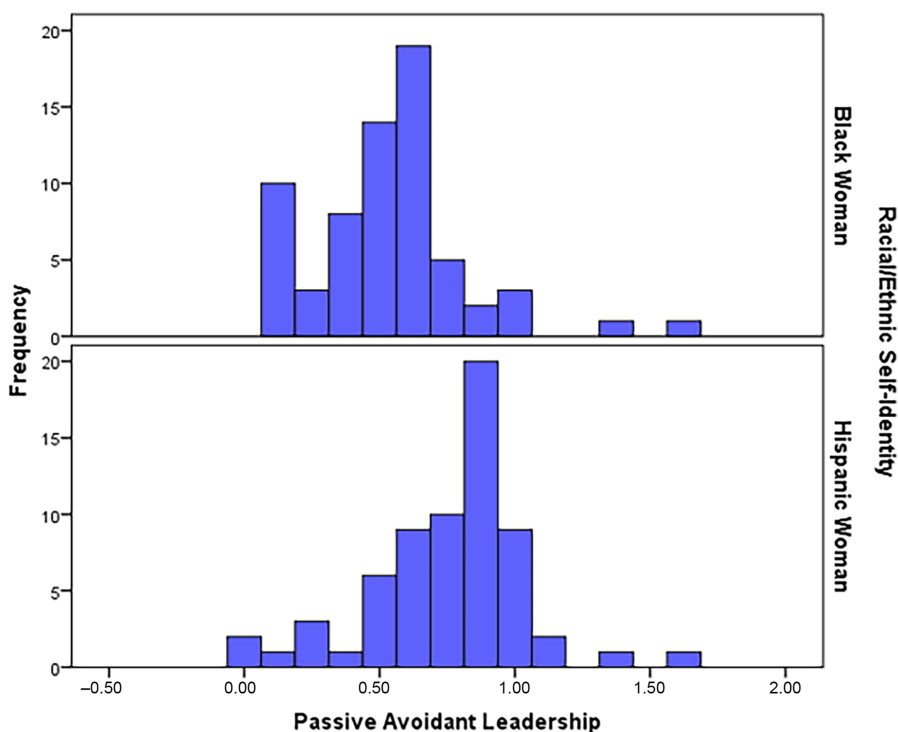


Figure 3. Passive/avoidant leadership by racial/ethnic self-identity. Source: Author’s own work

Table 4. Hypothesis summary and outcomes

Hypothesis	Significance	Effect size	Outcome
H ₀₁ : There is no statistically significant difference between Hispanic and Black women administrators in academic medicine in transformational leadership style	$p = 0.022$	$d = 0.44$ (Small)	Null Rejected
H ₀₂ : There is no statistically significant difference between Hispanic and Black women administrators in academic medicine in transactional leadership style	$p < 0.001$	$d = 0.99$ (Large)	Null Rejected
H ₀₃ : There is no statistically significant difference between Hispanic and Black women administrators in academic medicine in passive/avoidant leadership style	$p < 0.001$	$d = 0.76$ (Medium)	Null Rejected
Source(s): Author’s own work			

Conclusion

Key findings from this study reveal that while Black and Hispanic/Latinx women exhibit more transformational leadership tendencies than men as a group, statistically significant differences exist between these two groups within academic medicine. Specifically, Hispanic/Latinx women perceive themselves as slightly more transformational, significantly more transactional, and moderately more passive/avoidant in their leadership styles compared to Black women. Additionally, the study highlights potential subgroup variations in transformational leadership among Hispanic/Latinx women administrators in academic medicine.

This research extends the full range of leadership theory by exploring transformational, transactional, and passive/avoidant leadership styles within a historically underrepresented demographic. These findings challenge long-standing assumptions that women, as a collective, share similar leadership characteristics. Moreover, the results offer critical insights into potential intra-group differences among Hispanic/Latinx women administrators, fostering further discussion on diversity and equity.

Understanding the nuanced leadership styles of Black and Hispanic/Latinx women in academic medicine underscores the importance of diversity and equity training tailored to the unique experiences and needs of these groups. To increase the representation of minority women in administrative roles, medical schools must embrace leadership training that reflects and values ethnic diversity.

The implications of this study are profound. Women are not a monolithic group, and significant differences exist both between and within ethnic subgroups. By recognizing these distinctions, academic medicine—and other industries—can move toward a more inclusive and equitable culture that not only values diversity but also promotes organizational transformation.

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