ARTICLES

Exploring the Concept of Leadership from the Perspective of Physical Therapists in Canada

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ABSTRACT

Purpose: To explore the concept of leadership from the perspective of physical therapists in Canada. ***Methods:*** A quantitative, cross-sectional nationwide study was performed using a Web-based survey distributed to all members of the Canadian Physiotherapy Association (CPA) with a registered e-mail address ($n = 6{,}156$). Frequency distributions and percentages were obtained for all leadership characteristics, and chi-square tests were performed, with significance set at $p < 0.05$. ***Results:*** A total of 1,875 members responded, for a 30% response rate. Communication, professionalism, and credibility were rated as extremely important leadership characteristics by the majority of respondents across all three settings (workplace, health care system, and society); practising in the private sector contributed significantly to the perceived importance of business acumen ($p < 0.001$). Overall, 79.6% of respondents self-declared as leaders; male gender, primary work facility in private practice or educational institution, and supervision of students were factors associated with self-declaration as a leader. ***Conclusions:*** The top three characteristics that physical therapists perceive as important differ from those reported among other health care professions. Further research is required to understand whether the presence of multiple health care professionals in an acute-care setting facilitates leadership opportunities or whether physical therapists feel overshadowed. Future studies should also investigate whether individuals practising outside the private sector recognize the business aspects of their workplace.

Key Words: Canada; delivery of health care; leadership.

RÉSUMÉ

Objectif : Explorer le concept de leadership du point de vue des physiothérapeutes au Canada. ***Méthode :*** Une étude quantitative transversale nationale a été réalisée à l'aide d'un sondage par Internet distribué à tous les membres de l'Association canadienne de physiothérapie (ACP) qui possèdent une adresse de courriel inscrite à l'Association ($n = 6156$). La répartition de la fréquence et les pourcentages ont été obtenus pour toutes les caractéristiques de leadership de l'étude, et des tests du Khi-carré ont été réalisés avec un seuil de signification fixé à $<0{,}5$. ***Résultats :*** Au total, 1875 membres ont répondu, soit un taux de réponse de 30 %. La communication, le professionnalisme et la crédibilité ont été classés comme des caractéristiques de leadership extrêmement importantes dans tous les milieux (lieu de travail, système de santé et société en général); la pratique dans le secteur privé a grandement contribué à l'importance perçue du concept de « sens des affaires » ($p < 0{,}001$). Dans l'ensemble, 79,6 % des répondants ont dit se considérer comme des dirigeants (leaders). Les facteurs suivants ont été associés à cette déclaration : le fait d'être de sexe masculin, de travailler principalement en pratique privée ou dans un établissement d'enseignement et d'exercer un travail de supervision auprès d'étudiants. ***Conclusions :*** Les trois premières caractéristiques perçues par les physiothérapeutes comme étant importantes diffèrent de celles dont on fait état dans d'autres professions du milieu de la santé. D'autres recherches seront nécessaires pour comprendre si la présence de plusieurs professionnels de la santé dans des établissements de soins de courte durée facilite les possibilités de leadership ou si les physiothérapeutes sentent que les autres professionnels leur portent ombrage. D'autres études devraient aussi tenter de déterminer si les physiothérapeutes qui pratiquent ailleurs que dans le secteur privé sont conscients du côté plus entrepreneurial de leur milieu de travail.

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The push to improve quality of care while controlling costs, combined with health care reforms such as the *Excellent Care for All Act* in Ontario, underscores the importance of effective leadership across all levels of the health care system. Canadian organizations are looking to leaders in administrative and managerial positions to effectively implement structural changes in the hospital sector. These changes have fostered a shift from focusing on the health care provider to focusing on the client or patient, which has created opportunities for leadership, independent of professional designation, for individuals who have the skills and abilities to excel in these roles. Health care organizations throughout the world are increasingly examining the need for both formal leadership training[1] and informal leadership roles and practices distributed throughout the health system to both promote and advance innovative health care practices.[2]

Recent research on leadership has identified a set of characteristics required to deal with complex systems, rapid change, and expansion of knowledge in health care, information technology, and business.[3] In the literature, three leadership characteristics are consistently associated with effective leadership in multiple health care fields: emotional intelligence (EI), vision, and business acumen. Akerjodet and Severinsson[4] found that nurse leaders with high EI are better able to deal with daily stress while creating a positive work environment, enhancing organizational outcomes, and retaining staff. For leaders in both nursing[5] and pharmacy,[6] vision was identified as key to leadership success in today's health care environment. Regardless of health profession, leadership roles require not only clinical knowledge but also business acumen,[2] which facilitates effective communication between clinicians at the bedside and administrators at the organizational level. Buchler[7] further articulates the importance of business acumen, arguing that incorporating business management into leadership training for surgeons is vital to managing and influencing the development of and changes in health care delivery. The significance of identifying such leadership characteristics was demonstrated through a survey of senior nurse executives, who noted that nurse leaders who cannot handle their newly acquired broader management tasks will inevitably be replaced by others who can.[5]

The literature on leadership in physical therapy is relatively limited: to date, only a single study has addressed this profession, surveying American physical therapy managers on which leadership, administrative, management, and professionalism characteristics are needed by physical therapy graduates.[8] The top-ranked characteristics included communication, delegation and supervision, health care industry scanning, and knowledge of reimbursement sources.[8] No study to date has focused on what leadership characteristics physical therapists possess or on which characteristics they believe are required, both in their practice and in administrative roles.

The purpose of our study, therefore, was to explore the concept of leadership from the perspective of physical therapists in Canada. Respondents rated the importance of leadership characteristics across different levels of health care: their workplace, the health care system, and society, as part of a survey administered to Canadian Physiotherapy Association (CPA) members across Canada. Our objectives in this study were to (1) describe the leadership characteristics that physical therapists in Canada perceive as extremely important in the workplace, in the health care system, and in society; (2) identify the proportion of physical therapists in Canada who perceive themselves as leaders; and (3) identify differences in demographic profile (gender, highest level of education, practice facility, location of practice facility, and supervisory role) between those who perceive themselves as leaders and those who do not.

Given the increasing number of leadership roles available throughout the health care system, from the ground level to administration,[9] it is important to understand physical therapists' perceptions of leadership at all levels of health care delivery. Results from the present study will help to identify Canadian physical therapists' views of leadership and guide both future research and leadership-development initiatives in Canada. Furthermore, by distinguishing among the workplace, the health care system, and society, we were able to elicit physical therapists' perspectives on the areas of the health care system that offer various leadership opportunities. By extending our focus beyond the workplace, we added an additional dimension of information that will help establish a literature base for leadership in physical therapy.

METHODS

Study design

A quantitative, cross-sectional nationwide study was performed using a Web-based survey administered via e-mail. Data were collected during a 5-week period between January and March 2011. The study was approved by the Ethics Review Board at the University of Toronto.

Eligibility criteria and recruitment

All CPA members who provided an e-mail address were eligible for inclusion in the study.

To ensure the privacy of CPA members, e-mails were distributed by a CPA administrator. Eligible participants were e-mailed an invitation to participate in the study; members of CPA's Leadership Division were sent an additional copy of the invitation through the Leadership Division e-blast. The invitation included a brief overview of the nature and purpose of the study along with the link to access the questionnaire; the message stated that completing the questionnaire would imply consent. E-mail reminders were sent out after 2 weeks to encourage participation in the study.

We developed the questionnaire using a survey tool designed to collect demographic information from physical therapists and using information obtained through a literature review focused on leadership characteristics described in business and health care settings. The questionnaire was piloted with faculty members of the Physical Therapy Department, University of Toronto, to ensure that the questions were clear and well suited to the study objectives.

The 24-item questionnaire had two sections. The first (items 1–8) collected personal and workplace demographics, using a combination of nominal, ordinal, and ratio scales. The second (items 9–24) listed 15 key leadership personality characteristics consistently identified as important in business and health care settings, as reported in the literature; those characteristics most frequently identified in the health care literature were included, to facilitate comparison across professions. Participants were asked to rate each characteristic's perceived importance to successful leadership across three different settings—the workplace, the health care system, and society—using a 5-point ordinal Likert-type scale (1 = not at all important, 5 = extremely important). The final question asked participants whether or not they perceived themselves as leaders.

Data collection

The survey was delivered using a modified Dillman method,[10] It was available to participants 24 hours a day during the 5-week data-collection period, and took approximately 10–15 minutes to complete.

Statistical analysis

All responses were downloaded in spreadsheet format from SurveyMonkey (www.surveymonkey.com) and imported into the Statistical Package for the Social Sciences (SPSS), version 18.0 (SPSS Inc., Chicago, IL). The questionnaire items, including missing data, were coded numerically.

To address our first objective, we obtained frequency distributions and percentages for all characteristics within the three settings (workplace, health care system, and society). Data were double-checked by the investigators (LD, GN) involved in the data-entry process. Within each setting, percentages were sorted in descending order, from most chosen to least chosen characteristic. As a matter of interest, we performed chi-square tests on the percentage of respondents in private practice versus those in other facilities who identified business acumen as *very important* or *extremely important*. For this analysis only, all facilities other than private practice were pooled into the category *other*; the ratings categories *not at all important*, *not very important*, and *neutral* were pooled as *not important*, while *very important* and *extremely important* were pooled as *important*. This pooling procedure was used only for this specific analysis, as the distribution of responses was such that the pooled categories were determined to show no statistically significant differences. To determine whether work facility or workplace setting influenced the perceived importance of business acumen, vision, or emotional intelligence, the significance level was set at $p < 0.05$, under the hypothesis that no association existed. Statistical significance was determined using chi-square analyses, which compared observed values to the value expected under the null hypothesis (no association between the variables in question).

To address our second objective, we obtained frequency distributions and percentages for the leadership variable. To address our third objective, the data were cleaned by obtaining frequencies and evaluating normality for all variables involved in this analysis. Normality was confirmed through descriptive statistics, histograms, and values for skewness and kurtosis. Low-frequency variables were pooled into new categories. Since the data were either ordinal or categorical, chi-square tests were performed, with the significance level set at $p < 0.05$. Leadership declaration status was compared to the demographic variables (gender, supervisory role, location and type of work facility, and highest degree of education attained).

RESULTS

Of the 6,156 CPA members who were sent the online questionnaire, 1,875 responded, for a response rate of 30%; 1,511 respondents (80.6%) completed the questionnaire.

Perceived importance of leadership characteristics in the workplace, in the health care system, and in society

The importance of leadership characteristics across the three settings as perceived by physical therapists is summarized in Table 1. Communication, professionalism, and credibility were rated as extremely important by the majority of respondents across all three settings; the percentage of respondents decreased across settings, being highest in the workplace and lowest in the society setting. Communication was rated as extremely important in the workplace by 75.1% of respondents, in the health care system by 68.1%, and in society by 50.9%. Similarly, professionalism was rated as extremely important in the workplace by 64.0% of the respondents, in the health care system by 60.7%, and in society by 40.6%. The same trend applied to credibility, which was rated as important by 58.9% for the workplace, by 54.2% for the health care system, and by 37.2% for society.

On the other hand, the profile of characteristics chosen as extremely important by the lowest percentage of respondents differed across the three settings. In the workplace, the characteristic rated as extremely important by the smallest proportion of respondents was social dominance (20.2%); in the health care system, the least popular characteristic was extroversion (16.5%); and in the society setting, the characteristic rated as extremely

Table 1 Order of Characteristics Rated as Extremely Important by Physical Therapists across the Three Settings

Workplace		Health care system		Society	
Characteristic	% physical therapists perceiving as "extremely important"	Characteristic	% physical therapists perceiving as "extremely important"	Characteristic	% physical therapists perceiving as "extremely important"
Communication	75.1	Communication	68.1	Communication	50.9
Professionalism	64.0	Professionalism	60.7	Professionalism	40.6
Credibility	58.9	Credibility	54.2	Credibility	37.2
Active management	48.9	Vision	50.8	Vision	33.6
Ability to motivate	48.7	Active management	44.4	Self-regulation	29.6
Self-regulation	46.2	Contingent reward	43.7	Social skills	29.3
Contingent reward	43.3	Business acumen	37.7	Contingent reward	27.5
Social skills	43.1	Self-regulation	37.1	Ability to motivate	24.8
Empathy	39.5	Ability to motivate	32.1	Active management	24.7
Ability to delegate	36.5	Ability to delegate	30.9	Empathy	24.6
Vision	34.5	Social skills	30.1	Self-awareness	17.9
Self-awareness	25.2	Empathy	26.4	Social dominance	16.4
Extroversion	22.3	Social dominance	20.8	Business acumen	16.0
Business acumen	22.0	Self-awareness	18.3	Extroversion	15.9
Social dominance	20.2	Extroversion	16.5	Ability to delegate	13.8

important by the smallest proportion of respondents was the ability to delegate (13.8%). Extroversion, business acumen, and social dominance were among the lowest-rated characteristics for the workplace setting; in the health care system, the three lowest-rated characteristics were social dominance, self-awareness, and extroversion; and the three lowest-rated characteristics in society were business acumen, extroversion, and ability to delegate. Extroversion was one of the least frequently chosen characteristics across all three settings.

The characteristic of interest, business acumen, was rated for the workplace setting by a total of 1,486 respondents, of whom 38.4% reported working in private practice. A significant association was found between importance rating for business acumen in the workplace and respondent facility type ($\chi^2 = 12.44$, $df = 1$, $p < 0.001$; see Figure 1): the number of respondents from private practice who rated business acumen as important in the workplace (447) was greater than expected (417.7), while the number of respondents from other facilities who rated this characteristic as important in the workplace (640) was smaller than expected (669.3). No significant association was found between importance rating for business acumen in the health care system or in society and respondent facility type ($\chi^2 = 0.65$, $df = 1$, $p = 0.42$; $\chi^2 = 0.48$, $df = 1$, $p = 0.48$, respectively).

Self-declaration of leadership status among physical therapists in Canada

Of 1,875 physical therapists who completed the survey, 1,511 responded to the question "Do you perceive yourself to be a leader?" Of these, 79.6% self-declared as leaders while 20.4% did not.

Demographic profile of self-declared leaders and self-declared non-leaders

Normality tests for self-declared leadership status, gender, supervisory status, location, facility, and educational attainment variables showed normal distribution of the data.

Leadership status and gender

Of the 1,511 respondents who answered the leadership question, 15.9% were male and 84.1% female. A significant association was found between self-declared leadership status and gender ($\chi^2 = 12.32$, $df = 1$, $p = 0.00$; see Table 2): 88% of 241 male respondents self-declared as leaders, a greater number (212) than expected (191.9), while only 78% of 1,270 female respondents self-declared as leaders, a smaller number (991) than expected (1011.1).

Leadership status and supervisory role

Of the 1,511 respondents, 44.9% reported not having a supervisory role, while 55.1% reported having such a role. A significant association was found between self-declared leadership status and supervisory status ($\chi^2 = 8.41$, $df = 1$, $p < 0.001$; see Table 2). Among supervisors ($n = 832$), 82.3% self-declared as leaders, a greater number (685) than expected (662.4). Among non-supervisors ($n = 679$), 76.3% self-declared as leaders; this number (518) was smaller than expected (540.6).

Leadership status and location of facility

Of the 1,511 respondents, 20.1% reported working in a rural area, 71.3% in an urban area, and 8.6% in a hyper-urban area. No significant association was found between self-declared leadership status and facility location ($\chi^2 = 5.47$, $df = 2$, $p = 0.06$; see Table 2).

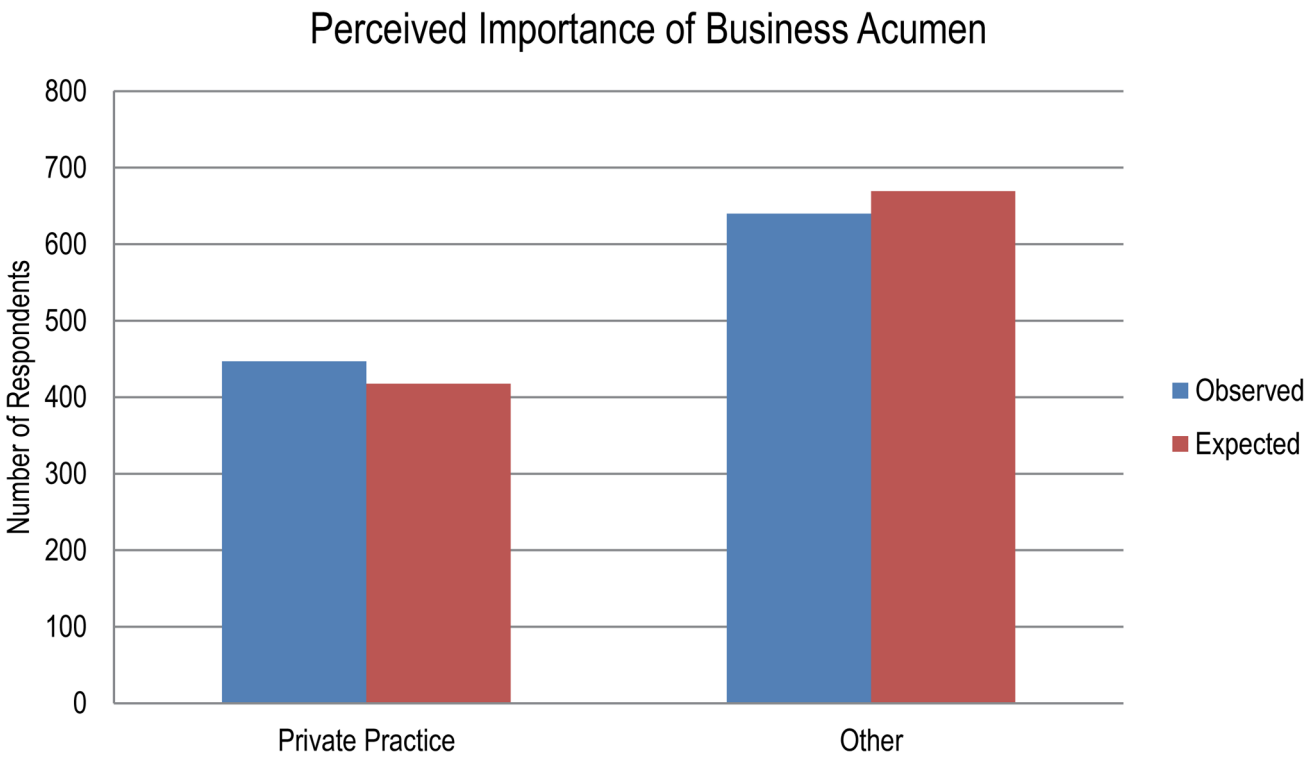

Figure 1 Observed versus expected counts of physical therapists who perceive business acumen as an important characteristic in the workplace setting. There was a significant association between the importance rating of business acumen in the workplace setting and respondents' workplace facility ($\chi^2 = 12.44$, $df = 1$, $p < 0.001$).

Leadership status and work facility

Of the 1,511 respondents, 38.8% reported working in private practice, 22.7% in a general hospital, 11.4% in other types of facilities, 8.8% in a rehabilitation hospital, 6.5% in a Community Care Access Centre (CCAC), 6.0% in an educational institution, and 5.9% in a long-term care facility. A significant association was found between self-declared leadership status and facility type ($\chi^2 = 12.50$, $df = 6$, $p = 0.05$; see Table 2): more physical therapists from private practice (476) and educational institutions (78) self-declared as leaders than expected (466.6 and 71.7, respectively), whereas fewer physical therapists from general hospitals (272), rehabilitation hospitals (102), long-term care facilities (65), and CCACs (69) self-declared as leaders than expected (273.1, 105.9, 70.9, and 78.0, respectively). The majority of self-declared leaders were respondents from private practice and general hospitals (see Figure 2).

Leadership status and highest educational attainment

Of the 1,511 respondents, 3.8% held a certificate; 57.0% held a bachelor's, 27.3% a master's, 4.2% a doctoral, and 7.7% some other degree. No significant association was found between self-declared leadership status and highest educational attainment ($\chi^2 = 1.55$, $df = 4$, $p = 0.82$; see Table 2 and Figure 3).

DISCUSSION

Our study is the first to explore perceptions of leadership among physical therapists in Canada and to describe the demographic profile of self-declared leaders. With a total membership of 11,734, CPA is the largest national registry of Canadian physical therapists; of the 6,156 members who have registered an e-mail address with CPA, over 30% responded to our Web-based survey to help build a literature base addressing the topic of leadership in the profession. The findings of this novel study were that (1) Canadian physical therapists perceive communication, professionalism, and credibility as the most important leadership characteristics, regardless of setting (workplace, health system, society); (2) the top three characteristics perceived as important differ from those reported for other health care professions; (3) practising in the private sector was a significant contributing factor in the perceived importance of business acumen; (4) 80% of respondents self-identified as leaders; and (5) being male, working primarily in private practice or in an educational institution, and supervising students were factors associated with self-declaration as a leader.

Communication, professionalism, and credibility were consistently identified as the top three "extremely important" leadership characteristics across all settings. The proportion of respondents rating these characteristics as

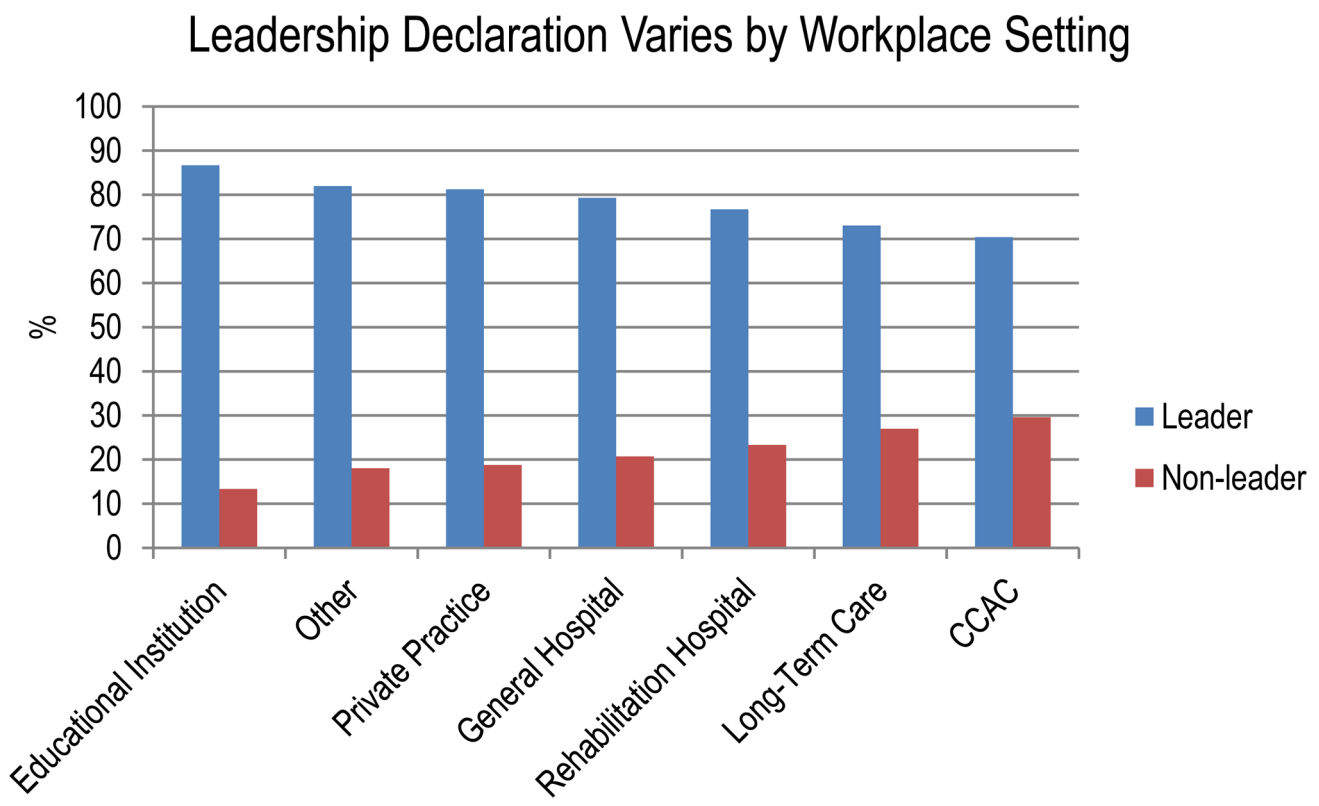

Figure 2 Self-declaration of leadership status among physical therapists in Canada according to type of work facility ($\chi^2 = 12.50$, $df = 6$, $p = 0.05$).

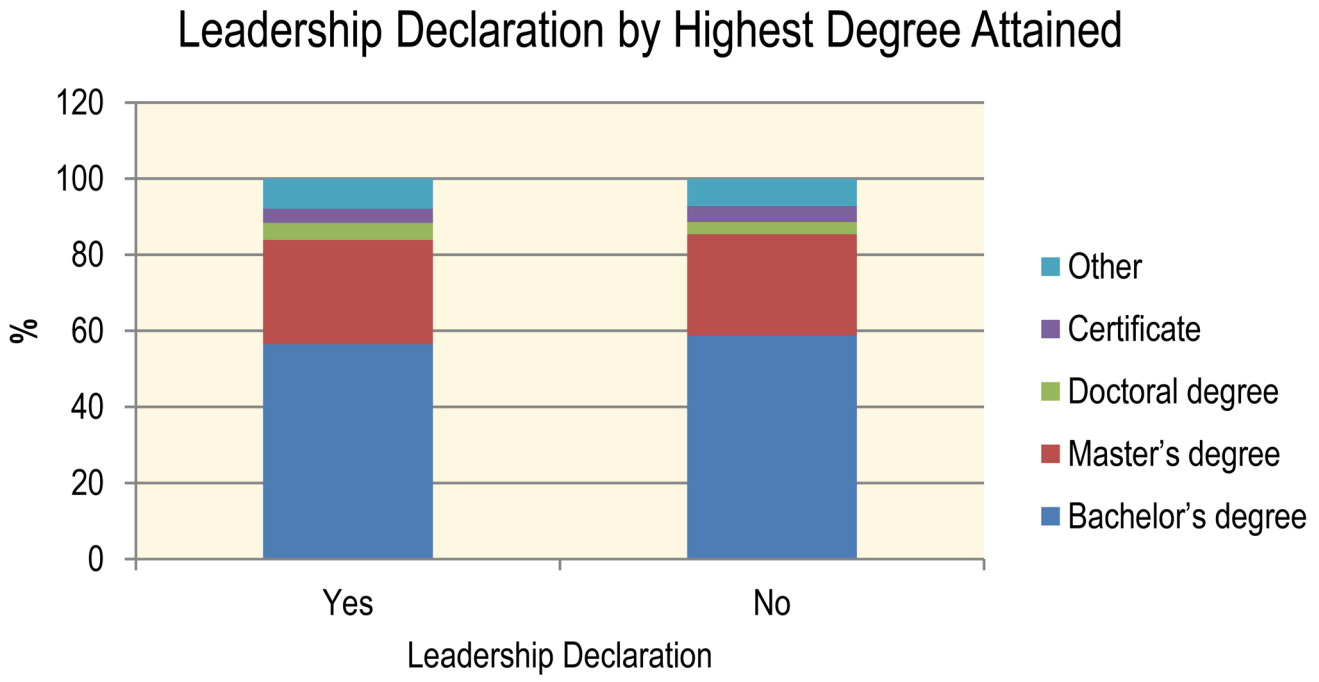

Figure 3 Self-declared leadership status among physical therapists in Canada by highest educational attainment ($\chi^2 = 1.55$, $df = 4$, $p = 0.82$).

Table 2 Comparison of Demographic Characteristics of Physical Therapists Who Self-Declared as Leaders and Those Who Did Not

Variables	Group; observed count (valid %)		χ^2	*p*-value
	Self-declared leaders ($n = 1,203$)	Self-declared non-leaders ($n = 308$)		
Sex				
Male	212 (88)	29 (12)	$\chi^2_1 = 12.32$	<0.001
Female	991 (78)	279 (22)		
Supervisory role				
Supervisor	685 (82.3)	147 (17.7)	$\chi^2_1 = 8.41$	<0.001
Non-supervisor	518 (76.3)	161 (23.7)		
Work facility				
General hospital	272 (79.3)	71 (20.7)	$\chi^2_6 = 12.50$	0.050
Rehabilitation hospital	102 (76.7)	31 (23.3)		
Long-term care	65 (73)	24 (27)		
CCAC	69 (70.4)	29 (26.9)		
Private practice	476 (81.2)	110 (18.8)		
Educational institution	78 (86.7)	12 (13.3)		
Other	141 (82)	31 (18)		
Facility location*				
Rural	232 (76.3)	72 (23.7)	$\chi^2_2 = 5.47$	0.060
Urban	859 (79.8)	218 (20.2)		
Hyper-urban	112 (86.2)	18 (13.8)		
Highest educational degree				
Certificate	44 (77.2)	13 (22.8)	$\chi^2_4 = 1.55$	0.820
Bachelor's degree	680 (79)	181 (21)		
Master's degree	330 (80.1)	82 (19.9)		
Doctoral degree	54 (84.4)	10 (15.6)		
Other	95 (81.2)	22 (18.8)		

*These terms were intentionally left to respondents' interpretation in the survey, in order to determine whether perception of characteristics demonstrated a relationship with perception of facility location.
CCAC = Community Care Access Centre.

extremely important decreased as the setting became farther removed from the immediate workplace—75.1% of respondents identified communication as extremely important in the workplace, 68.1% in the health care system, and 50.9% in society—which suggests that physical therapists perceive a difference in the characteristic profile of leaders across these three settings. These differences should be further explored to better understand the shift in perceptions across different environments.

Another trend that emerged was the difference among facility types in the perceived importance of business acumen: respondents working in private-practice facilities were significantly more likely than those in other facility types to identify business acumen as important. A hospital is a large-scale business, and therefore an understanding of the management, infrastructure, and economics of practice is required to optimize programme delivery. The discrepancy between physical therapists practising in the private sector and those working in public-sector facilities raises questions about their perceptions of hospitals and institutions. Do clinicians in public facilities recognize the business aspects of their practice? How do clinicians practising in the public sector perceive business acumen? This contrast in the perceived importance of business acumen also has implications for physical therapy education, highlighting the potential importance of business education in entry-level programmes to ensure that students recognize the business aspects of their practice environment, whether publicly or privately funded, and how business acumen relates to their practice.

Of those who responded to the leadership question, 79.6% (1202/1510) self-declared as leaders. Within the health system, frontline clinicians—regardless of profession—are responsible for excellence of care, patient outcomes, and evidence-informed practice;[11] given this shared accountability, it is not surprising that 79.6% of respondents identified themselves as leaders.

Our final objective was to describe the demographic profile of self-declared physical therapy leaders (see Table 2). Private practice was identified by the largest proportion of self-declared leaders (39.6%) as their primary work facility, followed by general hospital (22.6%), and rehabilitation hospital (8.5%). There was a significant difference by facility type in the perceived importance of business acumen: more respondents working in private-practice facilities than in any other facility type perceived this characteristic as important. Furthermore, the top three characteristics identified by physical therapists, although consistent across settings, differ from those identified by physicians, nurses, and pharmacists in the literature on leadership among these professions, which consistently identifies emotional intelligence,[4,12] vision,[6,13] and business acumen[7] as essential to the success of a leader. It is important to note that identical characteristic profiles are not necessarily ideal; each profession is unique, and current research suggests that there is a trend toward leadership that is shared, distributed, and adaptive.[2] By contributing their unique leadership characteristic profile, physical therapists bring an alternative perspective that can enhance the effectiveness of administrative teams.

When we compared the demographic profile of our respondents to that of Canadian physical therapists as provided by the Canadian Institute for Health Information (CIHI), it became evident that certain groups were more likely than others to respond. Only 1.7% of Canadian physical therapists are employed at educational institutions; in our study, however, 6.0% of respondents reported ''educational institution'' as their primary place of employment. It may be that professionals working in these facilities are particularly committed to research and education. By contrast, approximately 32% of Canadian physical therapists, but only 23% of study respondents, are employed in a general hospital, which may indicate that physical therapists working in acute-care settings often feel they have fewer leadership opportunities because of the large number of staff, and therefore perceive themselves as having less autonomy and less potential for leadership and advancement. Perhaps the most interesting finding is the higher response rate of therapists practising in rural settings (20% of respondents but only 7% of registered Canadian physical therapists practise in this setting). Following the same logic applied to acute-care therapists, we can hypothesize that therapists practising in rural settings have more autonomy in practice, which may facilitate the development of leadership qualities because the range of patient presentations and exposure to various pathologies require strong skills in clinical reasoning and patient management.

The limitations of our study relate to the study design and bias associated with Web-based surveys. The low response rate may indicate limited access to the survey. We compared the demographic profile of the total respondent sample to the most recent demographic profile of all registered Canadian physical therapists, as reported by CIHI in 2009,[14] to evaluate whether our study sample is reflective of Canadian physical therapists in general. In our study, 84% of respondents were female and 16% were male (vs. 78% and 22%, respectively, in the CIHI report). If our hyper-urban and urban categories are considered as comparable to CIHI's urban category, 80% of study respondents practised in urban areas and 20% in rural areas; the CIHI reports 92% of physical therapists working in urban settings and 8% in either a rural or a remote setting.[14] Finally, 40% of study respondents and 40% of practising physical therapists, as reported by CIHI, worked in private practice.[14] These similarities indicate that our respondents represent an accurate demographic sampling of this population. We cannot comment on the geographical accuracy of our data with respect to provincial and territorial divisions, as we chose not to collect this information to preserve respondents' anonymity.

Finally, it is important to note that application of our results is limited by the low effective response rate. CPA's membership represents only 68% of the 17,272 registered Canadian physical therapists, according to CIHI's 2009 report,[9] and our response rate—30% of those CPA members with a registered e-mail address—translates into just 11% of the total population of registered Canadian physical therapists. We were unable to capture the perceptions of physical therapists who are not members of CPA or of CPA members without a valid e-mail address. This low response rate limits our ability to ground our study results in the current leadership literature and compare our findings with those of studies in other health care professions.

CONCLUSION

Our study is the first to investigate perceptions of leadership characteristics among physical therapists in Canada and represents the evolution of our profession with respect to autonomy and health care leadership. The fields of medicine and nursing, in which the majority of health care leadership research has taken place, now have a large base of leadership literature. By initiating leadership research within the physical therapy profession, this study lays a foundation for future research in this area.

Future research should investigate how physical therapists demonstrate the characteristics of communication, professionalism, and credibility, which were consistently rated as extremely important across all three settings (workplace, health system, and society). Establishing the link between perceptions and actions will be a critical component both in understanding the translation of our perceptions into action and in informing leadership development. Our study also establishes a platform for

future studies to investigate the personal criteria that lead physical therapists to self-declare as leaders.

Future comparative research can work to distinguish these self-perceptions from physical therapists' views of others as leaders, helping to inform leadership development by identifying what characteristics are required of a successful leader in the field of physical therapy and in the broader health care system. Such research will also emphasize how personal perceptions influence our ability to lead on a larger scale by comparing these perceptions to established leadership research among other professions. Based on the demographics of our respondents, another avenue of research could investigate how physical therapists perceive the influence of their primary work location on their development as leaders. Does the presence of multiple health care professionals in an acute-care setting facilitate professional growth and leadership opportunities? Does the presence of multiple health care professionals lead physical therapists to feel overshadowed? Do physical therapists practising in rural or remote areas feel that their increased sense of autonomy contributes to development of leadership characteristics? Do individuals practising outside the private setting recognize the business aspects of their workplace? The answers to these questions will inform leadership development from a comprehensive perspective that seamlessly incorporates the physical therapy profession into the established literature on leadership in the health professions. It is well understood that physical therapists are younger, on average, than their physician, nursing, and pharmacist peers;[14] as a relatively young profession, physical therapists have the potential to achieve leadership positions throughout the health care system if we can establish a strong base of research evidence to support effective leadership-development programmes.

The health care system requires even those who do not identify as leaders to engage in leadership.[2] Turnball James explains that on a fundamental level, people need to think of themselves as leaders not because they are personally exceptional but because they can see what needs doing and can work alongside others to do it.[2] The literature supports the assertion that health care cannot be led by professional managers alone,[15,16] highlighting the need for leadership research not only to establish the characteristics and attitudes of a successful leader but to shift the perceptions of all professionals and clinicians involved in the delivery of health care.

KEY MESSAGES

What is already known on this topic

There is no current literature addressing leadership or leadership characteristics among Canadian physical therapists. It is widely accepted among other health professions that emotional intelligence, vision, and business acumen are required for successful leadership in health care.

What this study adds

This study offers Canadian physical therapists' perspectives on 15 leadership characteristics and describes the demographic characteristics of self-declared leaders in physical therapy. Establishing the foundation for leadership research for the physical therapy profession, the study allows comparison and contrast between our leadership perspectives and those of our colleagues in other health professions. Most importantly, our findings provide insight into physical therapists' perceptions on the topic of leadership and highlight directions for future research in this area.

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