

# **Female Executives in Healthcare Management in the context of the Upper Echelon Theory**

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*In this article, we present a summary of the upper echelons theory (UET) and some results of recent business research on this topic concerning the healthcare sector. UET for top management teams could predict organizational outcomes such as strategic choices and performance levels. In turbulent environments, a challenge for upper echelons is to develop new management processes. A strategic performance level such as organizational survival could benefit from team heterogeneity. Missing from the body of knowledge related to UET was a match between theory, measurement, and statistical analysis essential on multiple levels. We suggest ways of filling this void.*

## **INTRODUCTION**

The central premise of Upper Echelons Theory (UET) is that executives' experiences, values, and personalities significantly influence their interpretations of the situations they face and, in turn, affect their decision-making process (Hambrick, 2007). Upper echelons research is multileveled and involves individuals, teams, organizations, and their environments. Research in upper echelons theory lacks multilevel theories and proper method because most related studies we examined focused on a single industry, did not have precise definitions of variables used, did not use multiple data sources resulting in skewed results, and interpreted results independently.

We argue that matching UET theory, measurement, and statistical analysis are essential in research, producing useful tools for management to understand better how to predict organizational outcomes such as decisive decision-making and performance levels. In the present turbulent environments of healthcare management worldwide, a challenge for applying upper echelons to develop new management processes becomes highly coveted. In this article, we present a summary of various organizational theories leading to the upper echelon theory, and some results of recent business research on this topic concerning the healthcare sector management in the Province of Ontario, Canada.

## **Background – Organizational Theories**

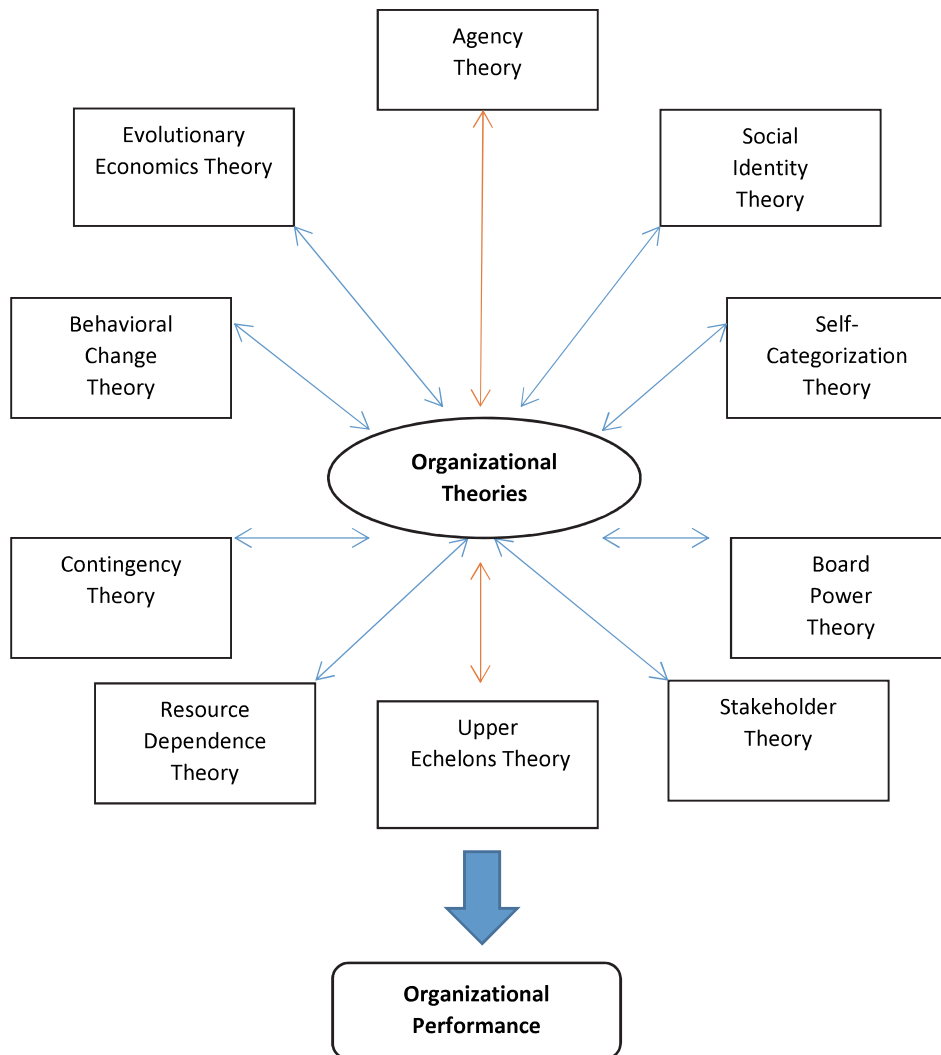
In this section, we describe briefly the most common organizational theories leading to the UET.

## What Theory Reveals

Operational effectiveness analysis is at the center of organizational theories research.

Theories such as agency theory, social identity theory, behavioral changes theories, and evolutionary economics theory, have examined board's diversity, composition, dynamics, structure, and management roles within organizations. Furthermore, contingency, resource dependence, stewardship, and board power theories have traditionally used different types of organizational theoretical frameworks. The theories mentioned above have a relational component that is driven by an individual's experience and socialization. In Figure 1, we summarize with an integrating perspective of the above theories that complements UET.

**FIGURE 1**  
**THEORETICAL RESEARCH FRAMEWORK COMPLEMENTING UET**



## Theories Complementing UET

Agency theory explains an executive's self-interests that are extrinsically motivated and may not align with an organization (Boivie, Graffin, & Pollock, 2012). In contrast, stewardship theory assumes an executive to be acting in the best interest of the overall organization intrinsically subduing their interests

(Sieger, Zellweger, & Aquino, 2013). Resource dependence theory describes the collaboration between board and CEO related to information and resources shared of an environment (Boyd, Haynes, & Zona, 2011). Access to external resources is an important element of the strategic and tactical management of any company. However, the publication of *The External Control of Organizations: A Resource Dependence Perspective* (Pfeffer & Salancik, 1978) (a theory of consequences) formalized the importance of external resources (Reitz, 1979).

Resource dependence theory affects the optimal divisional structure of organizations, recruitment of board members and employees, production strategies, contract structure, external organizational links, and many other aspects of organizational strategy. A summary of the basic arguments of resource dependence theory follow (Davis & Adam, 2010):

- Organizations depend on resources, which ultimately originate from an organization's environment.
- The environment contains other organizations.
- The resources one organization needs often depend on other organizations.
- Resources are a basis of power.
- Legally independent organizations can depend on each other.
- Power and resource dependence are linked directly:
  - Organization A's power over organization B is equal to organization B's dependence on organization A's resources.
- Power is thus relational, situational, and potentially mutual.

Insights of agency theory, stewardship theory, and resource dependency theory add an explanatory power from multiple perspectives regarding board and CEO tenure and succession (Boyd, Haynes, & Zona, 2011). A dilemma happens when agents are motivated to act in their own best interests that may conflict with their principals' interests, resulting in a potential ethical issue (Eisenhardt, 1989). However, access to a community of corporate governance for scholarly research are common limitations exploring behavioral patterns in a boardroom (Kaczmarek, 2017).

Group biases influence on behaviors of board members integrates social identity theory with self-categorization theory. As originally formulated by Tajfel and Turner in 1979, social identity theory introduced the concept of a social identity as a way of explaining intergroup conflictual behavior (Turner, Brown, & Tajfel, 1979). A social identity is the portion of an individual's self-concept derived from perceived membership in a relevant social group (Turner & Oakes, 1986). On the other hand, the self-categorization theory is a socio-psychological theory describing the circumstances under which an individual will perceive collections of people (including themselves) as a group, as well as the consequences of perceiving individuals in group terms (Haslam, 1997).

Some scholars have also introduced a distinction between models of behavior and theories of change applied to various industry sectors of health, education, criminology, energy, and international development would improve customer service delivery (van der Linden, 2013). The processes that emerge from actions of diverse agents with bounded rationality may learn from experiences and interactions; those differences contribute to change (Gigerenzer & Selten, 2002). The subject draws more recently on evolutionary game theory based on the non-equilibrium economics principle of circular and cumulative causation developed by Charles (Friedman, 1998).

Additional behavioral determinants are environmental, personal, and behavioral characteristics. William Richard Scott explained contingency theory for an organization is to allow for adjustments related to changes in the environment (Pennings, 1975). Two earlier research programs attempting to pinpoint effective leadership behavior influenced the contingency approach to leadership. During the 1950s, researchers at Ohio State University administered extensive questionnaires measuring a range of possible leader behaviors in various organizational contexts. The questionnaires identified multiple sets of leadership behaviors. However, two types of behaviors appeared to be especially typical of effective leaders that included consideration and initiating structure. Those behaviors were:

- (1) Consideration leader behaviors that include building good rapport and interpersonal relationships and showing support and concern for subordinates and.
- (2) Initiating structure leader behaviors that provided structure (e.g., role assignment, planning, scheduling) to ensure task completion and goal attainment (Seyranian, 2009).

A board is a governing body of an organization that may choose membership (McNamara, 2001). According to Harvard's Ana Dutra, boards tend to progress from good-to-great along a four-phase continuum:

- 1) Foundational,
- 2) Developed,
- 3) Advanced, and
- 4) Strategic.

Essential to creating a high-performance board is agreement and alignment, at the outset, on where the board stands in its continuum and where it needs to be" (Dutra, (2012).

## **UPPER ECHELONS THEORY**

In this section, we summarize the main characteristics of Upper Echelons Theory (UET) and explore various aspects of UET as it relates to women having a critical role on corporate boards. We also present some results of recent business research on this topic concerning the healthcare sector in the Province of Ontario, Canada.

### **UET – An Overview**

Research involving UET provided business executives with an approach for the improvement of corporate efficiency. However, mixed and inconclusive results from research did not provide supporting evidence for UET that was persistent in the interpretation of unexpected findings from data and the loss of valuable information for organizations. Causal factors of UET altered the fundamental scope of application. As an example, sampling multiple industries and hierarchies as singular entities led to results that assumed the need of considering other variables or theories.

Strategic decision-making requires interactive relationships of individuals to enhance the exchange of information and risk-taking at a cognitive level. The difficulty in studying this phenomenon is limited access and openness of individuals that could introduce research bias leading to unreliable results. Hambrick encouraged researchers to examine the 'black box' or psychological behaviors of upper echelons in strategic decision-making (Gerstner, König, Enders, & Hambrick, 2013).

### **UET – Research Results**

Upper echelons research is multileveled and involves individuals, teams, organizations, and their environment. However, UET research lacked multilevel theory and proper methods resulting in studies that focused on a single industry, did not use multiple data sources skewing results, did not have clear definitions of variables used, and interpreted results independently. Consequently, a match between theory, measurement, and statistical analysis essential in research on multiple levels, was absent.

Empirical evidence in research has yet to provide results that are usable. The link between cognitive and demographic diversity may be plausible in complementing each other. Hambrick and Mason suggested that UET for top management teams could predict organizational outcomes such as strategic choices and performance levels. In turbulent environments, a challenge for upper echelons is to develop new management processes. Strategic performance levels, such as those focusing on organizational survival, could benefit from team heterogeneity (Hambrick & Mason, 1984).

Upper echelon characteristics are independent variables as causes of strategic choices leading to organizational performance. The basis of UET propositions is that dependent variables are strategic choices for performance levels. Gender as an independent variable removes research bias when applied to UET.

## UET's DEPENDENT VARIABLES

Hambrick and Mason developed 21 propositions characterizing UET's dependent variables that correlated with the independent variables related to age, functional track, peripheral function experience, career experience, formal education, socio-economic background, financial position, and group heterogeneity (Hambrick & Mason, 1984).

### Age-Related Propositions

- Firms with younger managers will incline to pursue risky strategies than firms with more mature managers; those firms indicate further that specific forms of risk include unrelated diversification, product innovation, and fiscal leverage.
- Firms with younger managers will experience greater growth and variability in profitability from industry average than firms with more mature managers.

### Functional Track Propositions

- The degree of output-function experience of top managers will positively associate with growth.
- A positive association exists between the degree of *output-function* experience of top managers and the extent to which the firm emphasizes outputs in its strategy; specifically, indicators of an output emphasis include product innovation, related diversification, advertising, and forward integration.
- A positive association exists between the degree of throughput-function experience of top managers and the extent to which the firm emphasizes throughput in its strategy, which includes indicators of output like automation, plant and equipment, and backward integration.
- In stable, commodity-like industries, throughput-function experience will positively associate with profitability.
- In turbulent, differentiable industries, output-function experience will positively associate with profitability.

### Peripheral-Function Experience Propositions

Hayes and Abernathy suggested adding (Hayes & Abernathy, 1980):

- The degree of peripheral-function experience of top managers will positively relate to the degree of unrelated diversification in the firm. Core **business functions** are critical, and closely related to a firm's strategy. Routine administrative and maintenance tasks are not a part of core activities and therefore considered as **peripheral functions**.
- The extent of peripheral-function experience of top managers will positively relate to administrative complexity, which includes formal planning systems, coordination devices, budgeting, and incentive compensation schemes.

### Career Experience Proposition Hypotheses

- Years of inside service by top managers will negatively relate to strategic choices involving new terrains like product innovation or unrelated diversification.
- For an organization in a stable environment, years of inside service will positively associate with profitability and growth.
- For an organization facing a severe environmental discontinuity, years of inside service will negatively associate with profitability and growth.

### Formal Education Propositions

Kimberly and Evanisko suggest that (Kimberly & Evanisko, 1981):

- The amount, but not the type, of formal education of a management team, will positively associate with innovation.

- There is no relationship between the amount of formal management education of top managers and the average performance (concerning profitability or growth) of their firms. However, firms whose managers have had little formal management education will show greater variation from industry performance averages than firms whose managers who have education in management.
- Firms whose top managers have had advanced formal management education will be more complex administratively than firms whose managers have had less training.

### **Socio-Economic Background Propositions**

Furthermore, Collins and More concluded that some emerging entrepreneurs pursue aggressive, often flamboyant strategies, presumably to achieve recognition and esteem (Collins & Moore, 1970).

- Firms whose top managers come disproportionately from lower socioeconomic groups will tend to pursue strategies of acquisition and unrelated diversification.
- Furthermore, such firms will experience greater growth and profit variability than will firms whose top managers come from higher socioeconomic groups.

### **Financial Position Propositions**

Masson suggests that the basis for managerial motivation is the income derived from the firm (Masson, 1971).

- Corporate profitability is not related to the percent of shares owned by top managers but positively related to the percent of the total income that top managers derive from the firm through salaries, options, dividends, and other benefits.

### **Group Heterogeneity Propositions**

Hambrick and Mason continue their arguments by stating that, “Any variable that influences an individual’s strategic choice, [...] also influences strategic choice through its effects on conflict and the generation of alternatives” (Hambrick & Mason, 1984).

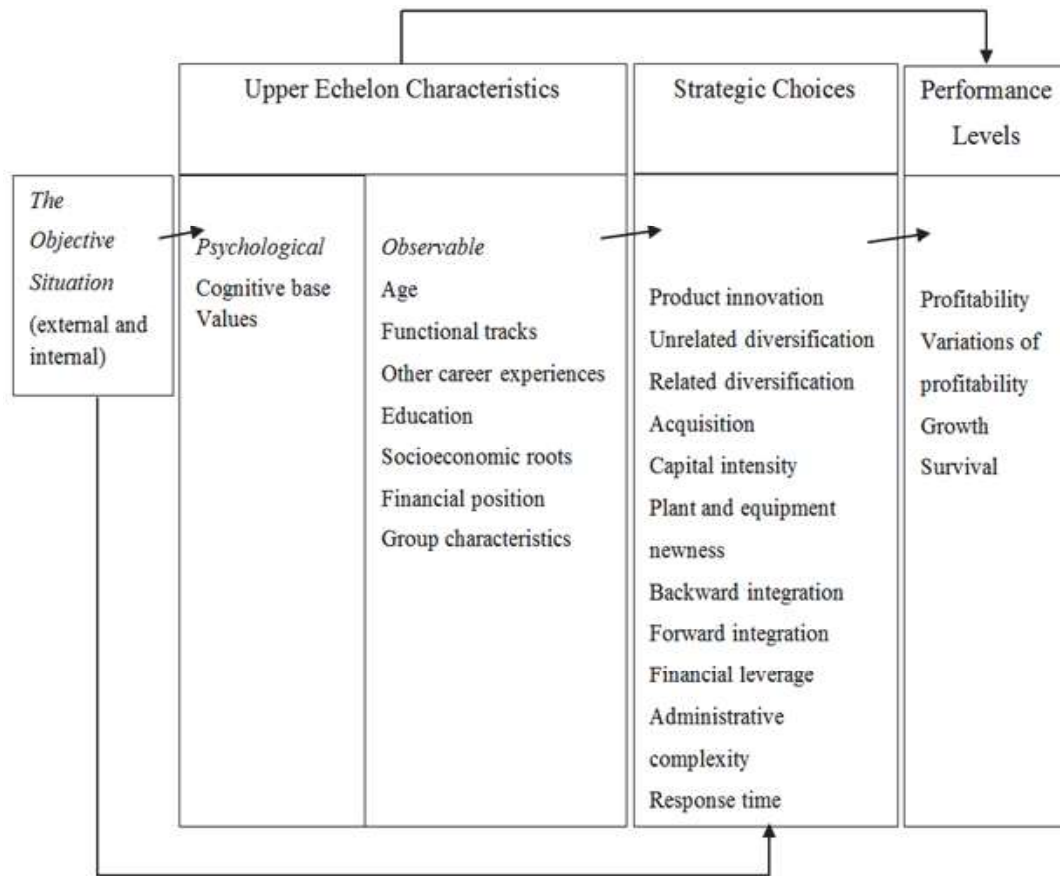
- Homogeneous top management teams will make strategic decisions more quickly than will heterogeneous teams.
- In stable environments, team homogeneity will positively associate with profitability.
- In turbulent, especially discontinuous environments, team heterogeneity will positively associate with profitability.

In summary, three distinct propositions were related to group heterogeneity:

- a. **Homogenous** top management teams will make strategic decisions more quickly than will **heterogeneous** teams.
- b. In stable environments, **team homogeneity** will positively associate with profitability.
- c. In turbulent, especially discontinuous environments, **team heterogeneity** will positively associate with profitability.

Organizational survival, a strategic performance level, is a challenge for upper echelons to develop new management processes. Figure 2 illustrates the upper echelons theory perspective.

**FIGURE 2**  
**THE UPPER ECHELONS THEORY PERSPECTIVE**



**UET’s DEPENDENT VARIABLES**

In Ontario’s current (2017) healthcare environment, boards are predominantly male, and hospital performance shows minimal efficiencies. Although several efficiency initiatives are occurring in hospitals such as lean processes, greening, hiring freeze, salary freeze, pay-for-performance, waste-management, and wait-times management, these initiatives focus on reducing spending and differentiating hospitals based on the patient’s experience (Roberts & Frankl, 2015).

*Lean Processes*

An organization’s competitive advantage through efficient and effective operations is the adoption of lean processes to identifying and eliminating non-value added waste in disorganizations as well as loss of profits and motivation. Identified wastes are overproduction, waiting, transporting, inappropriate processing, unnecessary inventory, unnecessary/excess motion, defects and including underutilization of employees (Verrier, Rose, & Caillaud, 2016).

*Greening*

Similar to lean processing, greening is to eliminating manufacturing wastes greenhouse gases, eutrophication, excessive resource usage, excessive power usage, pollution, rubbish, excessive water usage, and poor health and safety (Verrier, Rose, & Caillaud, 2016).

*Hiring Freeze*

A hiring freeze is a tool used to reduce a workforce in a sufficient and timely manner (Evans & Hatch, 2014).

*Salary Freeze*

The cutting of personnel costs, an operational expenditure, is to slow down the rate of salary increase (Raudla, Savi, & Randma-Liiv, 2015).

*Pay-For-Performance*

The need to improve outcomes and quality of healthcare led to the introduction for pay-for-performance (P4) schemes for healthcare providers to meet predefined targets to increase patient experiences (McDonald, Boaden, Roland, et al., 2015).

*Waste-Management*

Innovations that lead to waste management includes landfill, composting, recycling and advanced treatment methods as sustainable waste management systems (Zaman, 2015).

*Wait-Times Management*

An effort to improve patient experience is to reduce waiting times to see a physician, obtain laboratory tests, emergency room, and surgical procedures (Ginter, (2018).

Gender diversity of 2,138 hospital board members comprises of 59% males to 40% females with 1% in vacancies or an average of 11 males to 7 females, with a board size of 18 across **Local Health Integration Networks (LHINs)** (Roberts & Frankl, 2015). Figure 3 depicts the results of gender diversity of hospital boards across LHINs.

**FIGURE 3  
GENDER DIVERSITY OF HOSPITAL BOARDS ACROSS LHINs**

LHIN	Region	Males		Females		Vacancies	Total Board Positions	Avg. #		Avg. # Board Size
								Male	Female	
1	Erie St. Clair Local Health Integration Network	59	61%	37	39%	0%	96	12	7	19
2	South West Local Health Integration Network	174	56%	135	43%	2	311	9	7	16
3	Waterloo Wellington Local Health Integration Network	73	63%	42	37%	0%	115	12	7	19
4	Hamilton Niagara Haldimand Brant Local Health Integration Network	82	59%	57	41%	0%	139	10	7	18
5	Central West Local Health Integration Network	22	65%	12	35%	0%	34	11	6	17
6	Mississauga Halton Local Health Integration Network	39	66%	20	34%	0%	59	13	7	20
7	Toronto Central Local Health Integration Network	121	68%	58	32%	0%	179	17	8	26
8	Central Local Health Integration Network	84	68%	40	32%	0%	124	14	7	21
9	Central East Local Health Integration Network	88	62%	52	36%	3	143	11	7	18
10	South East Local Health Integration Network	65	65%	35	35%	0%	100	11	6	17
11	Champlain Local Health Integration Network	158	59%	112	41%	0%	270	10	7	17
12	North Simcoe Muskoka Local Health Integration Network	55	61%	35	39%	0%	90	11	7	18
13	North East Local Health Integration Network	169	54%	141	45%	3	313	8	7	15
14	North West Local Health Integration Network	76	46%	85	52%	4	165	6	7	14
SUM		1265	59%	861	40%	12	2138			
AVERAGE		90		62		3	153	11	7	18

The healthcare leadership of the future is in crisis. New paradigms are influencing the recognition of changes to board composition and diversity.



## HOSPITAL BOARD INFLUENCE AND ACCOUNTABILITY

Board accountability, mandated by the Canadian government, is changing the landscape of hospital services with an emphasis on customer service. The expected performance of hospitals is to provide quality healthcare that is equitable and affordable.

The Ontario Ministry of Health and Long-Term Care (MOHLTC) requires transparency of public hospitals. Transparency enables the public to access pertinent information from annual reports, strategic plans, financial statements, wait times, and other to choose where to receive patient care.

Nevertheless, boards are transitory, and hospital system characteristics are historical. Candidates that meet board qualifications with required knowledge and skills could change the effectiveness of hospital performance. The Public Hospitals Act regulated the hospital boards in Canada; it comprises best practices for hospital governance including board composition.

In 2004, the MOHLTC funded report, *Hospital Governance Accountability in Ontario*, commissioned by the Ontario Health Association (OHA), assessed hospital governance across the province. The results show that the competency levels in technology and legal skills are underrepresented by 70% and 50% of respondents respectively. Respondents had firm-specific knowledge either as insiders or as support specialists with specific expertise in areas such as finance or legal. Diversity is a near-universal value in the corporate world, but the upper tiers of management remain stubbornly homogeneous.

UET rationalizes the assimilation of females on male-dominant boards because of the benefits of differing perspectives and additional associations (Roberts & Frankl, 2015).

### Hospital Board Diversity

Women have been on the frontline of healthcare for more than 375 years in Canada since the official founding of the Hotel-Dieu de Québec hospital in 1637. The Hôtel-Dieu de Québec, located in Quebec City, Quebec, Canada, is the first and oldest hospital in Canada, and the first in North America, north of Mexico. The *Augustines de la miséricorde de Jésus* (Augustinian Hospital Sisters of the Mercy of Jesus) order of nuns run the hospital. However, decision-making was by the priesthood. Historically hospital boards were predominantly male (The Augustinian Sisters, 2008).

In 2017, males dominate the running of hospital boards in Ontario, despite the dominant presence of females in daily hospital operations, at the frontline of patient care, and on senior management teams in hospitals located in Toronto. Although a lack of female corporate directors in Canada exists, women are managing to break the gender barrier of all-male boards of directors.

Ibrahim, Angelidis, and Howard (2011) suggested in their empirical study of a board of directors with or without healthcare background that the composition of hospital boards with members having a healthcare background are less likely interested in strategic issues. However, expertise in financial fiduciary, legal, and regulatory requirements are not gender-based, rather they represent the necessary skills for effective decision-making in current hospital board environments.

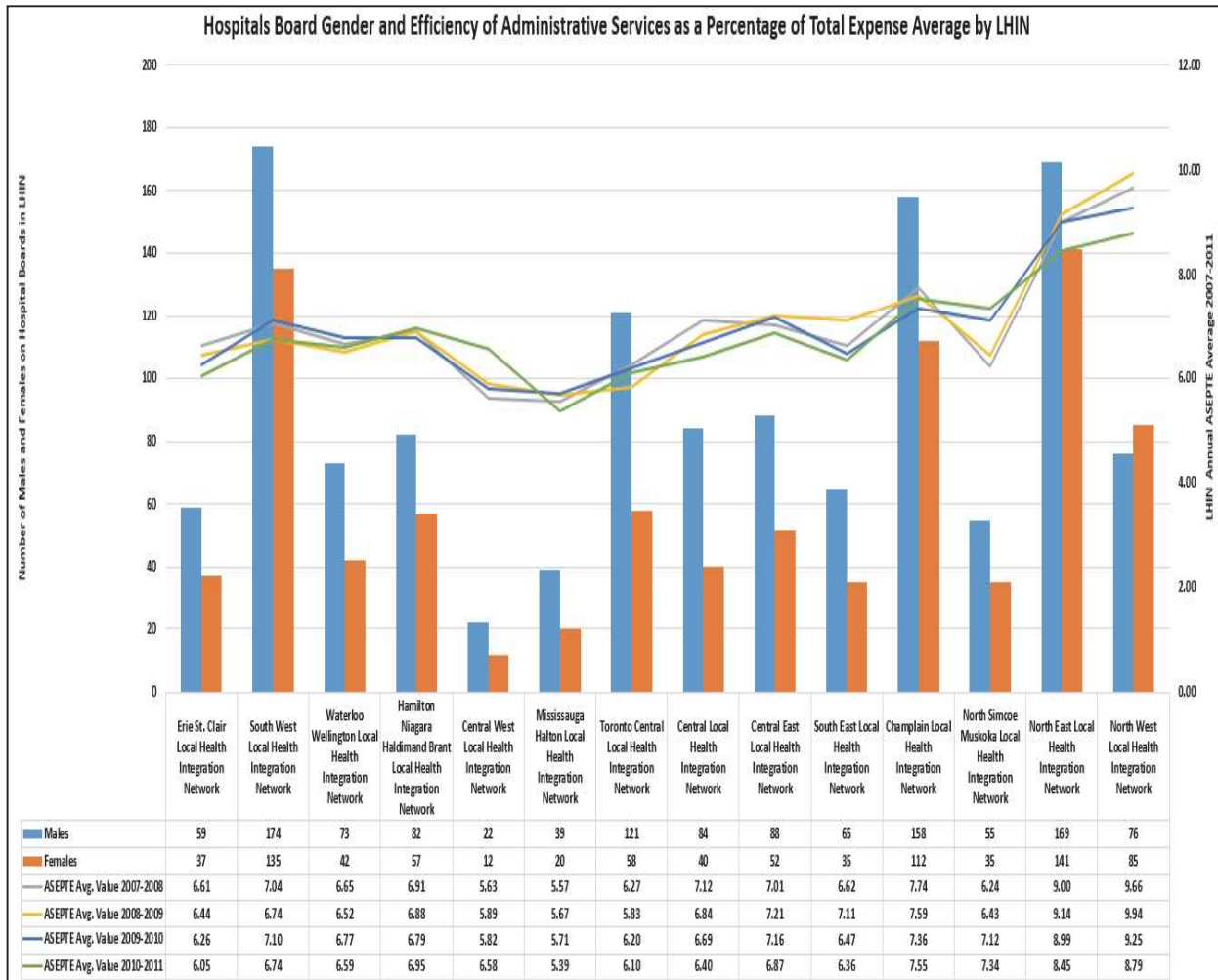
Although board composition has remained stagnant, board members' development needs to focus on diversifying its members' expertise and skills. Specifically, having board members with various perspectives on complex environmental challenges enable greater participation in their strategic decision-making process (Ford-Eickhoff, Plowman, & McDaniel, 2011).

As a sideline, we note that according to the January 2017 S&P 500 companies list, women held 26 (5.2%) of CEO positions in those companies (Catalyst, 2017).

## ORGANIZATIONAL PERFORMANCE – AN OVERVIEW

The genders of 126 hospital boards, 1,265 males, and 861 females, show a significant, positive relationship with the efficiency health system performance indicator. Efficiency is a quality measure of healthcare that indicates hospital effectiveness in maximizing the greatest outcome using fewer resources. The efficiency indicator of interest is the administrative services as a percentage of total expense (ASEPTE) for finance and human resources (Roberts & Frankl, 2015). Figure 4 illustrates hospital board gender and ASEPTE average values 2007-2011 by LHIN.

**FIGURE 4**  
**HOSPITAL BOARD GENDER AND ASEPTE AVERAGE VALUES 2007-2011 BY LHIN**



We used the variable gender to identify group heterogeneity of hospital boards grouped by the Local Health Integrated Networks (LHINs) and the efficiency indicator ASEPTE to show regional organizational performance.

According to Roberts and Frankl (2015) of the 126 acute care Ontario hospitals, 22 or 18% are positively trending in ASEPTE average values and proximity to each other. The hospitals are in highly populated communities. In addition, several hospitals are major hubs that offer various services in areas of general/teaching, 100-200 beds, cancer care, and rehabilitation. Other services include diagnostic and therapeutic care and specialized care. Loss of any service would be significant and could have a major impact on patient care in Ontario.

Some patients are traveling more than two hours to receive care from out of town rather than at their community hospitals.

For the 82% of hospitals that are improving their trending negatively ASEPTE values, capacity to reach their annual targets is an indicator that change is slow and may take years or not at all. The MOHLTC has the opportunity to address the shortcomings by reassessing its strategic-based measurement goals with the LHINs. Last, learning from Mississauga Halton LHIN of what they are doing right could be a model to follow (Roberts & Frankl, 2015).

## **Implications of Board Diversity**

A consistent message in support of board diversity is in the expectation of its stronger financial performance and the ability to attract and retain top talent, innovation, insight, and efficiencies with improved board effectiveness. However, some women continue to experience the need for legitimacy in dominant male boards. Opposing leadership styles of change by females and of conquest by males introduces conflict. Board environments demand courageous conversations to enable transparency that some men or women are not comfortable.

Integrating long-term vision of the organization is an essential trait to master. Women may choose not to conform, resist peer pressure, and seek to improve their version of a directorship. The implications could develop into either further conflict or, hopefully, meaningful change.

## **CURRENT STATUS**

A significant relationship exists between female hospital boards and the efficiency indicator ASEPTTE. Our research study provided a new perspective on a plethora of available data on hospital performance. The research questions were:

1. Does upper echelons theory add to gender homogeneity of hospital boards and influence performance?
2. Does upper echelons theory add to the association of gender and performance?

The research hypotheses were:

H<sub>0</sub> – Gender diversity does not influence performance.

H<sub>1</sub> – Male dominance in upper echelons has a negative influence on performance.

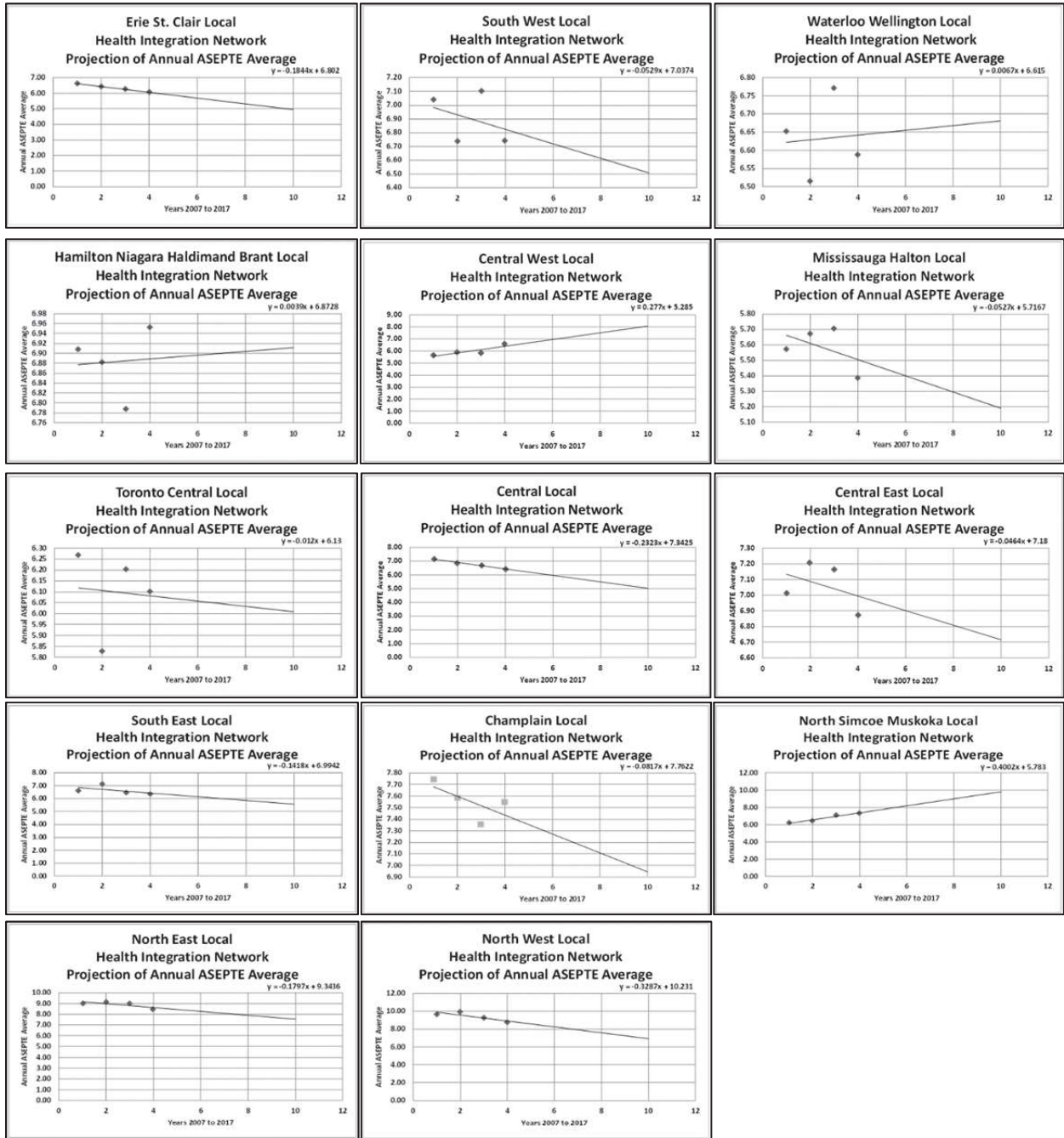
H<sub>2</sub> – Females in upper echelons has a positive influence on performance.

## **RESEARCH RESULTS**

The use of moving averages was to create a predictive model based on the performance of the LHINs' ASEPTTE. A significant linear relationship existed between females and ASEPTTE values such that a lower level of ASEPTTE values resulted in higher hospital performance. The probability value was  $p < 0.05$  and the R square,  $r^2$ , value of 39.9% of the variance in the number of females was the ASEPTTE values for 2010-2011 (Roberts & Frankl, 2015).

A predictive model of hospital performance based on ASEPTTE values, show time analysis trends projection to 2017, has varying levels of efficiency across the Local Health Integration Networks (LHINs) (Roberts & Frankl, 2015). Figure 5 depicts a time series analysis ASEPTTE averages values 2007-2011. Varying levels of efficiency existed across 14 LHINs. The charts show a projection of moving averages. A negative trend line suggested reducing costs and efficient processes such as Erie St. Clair and Central LHINs. A positive trend line suggested increasing costs and inefficient processes such as North Simcoe Muskoka LHIN. The charts were the predictive model of LHIN performance to 2017 based on ASEPTTE average values 2007-2011 as demonstrated in Figure 5 (Roberts & Frankl, 2015).

**FIGURE 5**  
**TIME SERIES ANALYSIS OF ASEPTE AVERAGES 2007-2017**



**RECOMMENDATIONS**

The critical resource is women who have specialized knowledge and skills that have the capabilities to break gender barriers (Dunn, 2012). The percentage of females on hospital boards ranged from a lower limit of 32% in Toronto Central and Central LHINs to an upper limit of 45% in North East LHIN (Roberts & Frankl, 2015). The use of the predictive model, a time series analysis of ASEPTE average

values, can provide the Ontario healthcare system a snapshot of the future performance of the hospitals (Roberts & Frankl, 2015).

Other benefits to the healthcare system and organizations as it relates to succession planning and talent management to purposefully bring gender diversity to hospital boards in Ontario (Roberts & Frankl, 2015). Further, to engage a dialogue in response to the negligible change in hospital performance of 2007 to 2011 that could affect organizational survival in a changing healthcare environment (Roberts & Frankl, 2015). Finally, to stimulate the research community to further develop upper echelons theory (Roberts & Frankl, 2015).

## **FUTURE WORK**

Yamak, Nielsen, and Escribá-Esteve (2014) identified research guidelines for future research based on industrial environments influences (Yamak, Nielsen, & Escribá-Esteve, 2014).

- Influences of the industry environment
- Direct effects of the industry environment

### **Research Guideline 1:**

Future research should explore the co-evolution of various dynamic aspects of the industry environment and TMT composition over time.

- Mediating effects of TMTs and industry environment.

### **Research Guideline 2:**

Future research should explore the impact of the mediating mechanisms by which industry environment provokes internal pressures that lead to changes in TMT composition and processes.

- Moderating effects of the industry environment.
- Industry moderating effects on the relationship between TMT composition and organizational outcomes.

### **Research Guideline 3:**

Future research should develop fine-grained theoretical propositions as to how different types of TMT composition interact differently with various dynamic aspects of the industry environment.

- Industry moderating effects on the relationship between TMT decision-making process and organizational outcomes.

### **Research Guideline 4:**

Future research should explore the moderating effect of industry environmental characteristics on the relationship between TMT composition and processes.

- The role of the institutional environment.
- Institutional direct effects on TMT composition.
- Institutional effects on TMT processes.

### **Research Guideline 5:**

Future research should investigate how dynamic and transformational characteristics of the institutional environment shape TMT compositions, cognitions, and processes.

- Institutional effects on TMT outcomes.

### **Research Guideline 6:**

Future research should explore the impact of transnational institutions (UN Global Impact, OECD, etc.) on TMT composition, processes, and outcomes.

- Upward influences of TMTs on the institutional environment is to use theory and methods of the social network.

### **Research Guideline 7:**

Future research should explore the social and political mechanisms that TMTs may use to influence the institutional environment.

- Moderating effects of the institutional environment.

### **Research Guideline 8:**

Future research should explore the institutional creation of meaning in upper echelons research.

## **CONCLUSION**

We have reviewed in this article a group of the most current organizational leadership theories and argued that the upper echelon theory has a prominent place in this group. Moreover, applying the Upper Echelon Theory as an analysis tool for organizational performance in the healthcare sector of the Province of Ontario, Canada, we concluded that the role of women in the constitution of boards of directors resulted in evident performance enhancements.

We also argued that the mere “presence” of so many organizational theories indicates that we have just scratched the surface of striving to explain the effect of upper management on company strategic decision-making. We consider this as an opportunity for further research on this topic, hoping to lead us to a more comprehensive understanding of the role of leadership in organizational performance.

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