

MANAGERIAL FIT, GENDER (IN)CONGRUITY, AND PERFORMANCE:  
EVIDENCE FROM US NURSING HOMES

A Thesis

by

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## ABSTRACT

Managerial fit focuses on the congruence between managers' values, preferences, and goals with their organizational environments. While a wealth of literature finds evidence that managerial characteristics play an important role in organizational performance, there are still characteristics which are underexplored. An important omission from this literature, and the focus of the study, is the impact of gender as a dimension of managerial fit. The sex of the manager is a salient dimension in how subordinates perceive managerial strategies and organizational missions. By using US Nursing Home data, I explore gender differences in two key managerial functions—power sharing and environmental management. Literature from several fields finds differences between men and women in certain behavioral traits and I explore if and how these traits map onto gendered differences in management and their implications for organizational performance. The results suggest that male managers must adopt strategies congruent with the feminine disposition of the organization in order to be successful. Male managers who emphasize power sharing find positive effects on performance while male managers who emphasize environmental management harm performance.

## CONTRIBUTORS AND FUNDING SOURCES

All theses and dissertations must include a contributors and funding sources section.

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## 1. INTRODUCTION

Managerial fit, or the congruence between a manager and their organization, has received recent attention in public administration research (Petrovsky, James and Boyne 2015; Rutherford 2015; Van der Wal 2011). An expansive literature on managers in local, subnational, and national organizations demonstrates that managers' characteristics matter for organizational goals, strategy, and performance (Boyne and Meier 2009; Boyne et al. 2011; Hill 2005; O'Toole and Meier 2003). For better or for worse, managers bring certain skills and priorities to the table when making strategic decisions within the framework of their organization. While the aforementioned studies highlight the consequential nature in how certain individual characteristics mesh with the organization, there is still much to learn about additional characteristics and their organizational fit. In this article, I explore how the sex of the manager can be either a congruent or incongruent fit with the gendered structure of the organization.

Existing literature explores gender differences between men and women. This literature finds that managerial strategies carry distributional consequences for performance depending on the sex of the manager (Eagly 2007; Jacobson, Palus & Bowling 2010; Meier, O'Toole & Goerdel 2006; Nielsen 2015). An important shortcoming of this work is that these studies overwhelmingly focus on organizations which are underrepresented by women in management and throughout the organization. Certain fields are more representative of women than others and with that comes the possibility of different relationships between gender, management, and organizational performance. Yet, organizations which favor women are largely underexplored within public administration (see Stivers 2000). I consider the implications of gender differences in management when the traditional paradigm of organizational roles are reversed. That is, what

are the gendered implications for organizational performance when women are common in management, personnel, and clientele as opposed to tokens, disadvantaged, or minority groups?

I start with the assumption that gender is a salient dimension in how one manages an organization—with certain organizations favoring leadership styles stereotypically associated with a particular sex. On average, men and women differ in behavioral traits (e.g. Clearfield and Nelson 2006; Smith and Lloyd 1978) which may shape important components of their administrative behavior and managerial strategies. I theorize that when organizations are largely representative of a particular gender in terms of its composition in management, personnel, and clientele, the strategies stereotypically associated with that gender are the standard fit. These gendered organizations produce distinct differences between a majority group and a disempowered group (e.g. Kanter 1975), where the majority group is perceived as the status quo and ideal managerial archetype. With this ideal fit comes certain expectations regarding the way gender norms manifest themselves in managerial strategies (e.g. Bass, Avolio & Atwater 1996; Eagly, Karau & Johnson 1992; Newport 2001; Nielsen 2015; Powell, Butterfield & Parent 2002; Schein 2001; Vinkenburt et al. 2011; Wajcman 1996; Williams & Schein 2001). In female dominated professions, traditional adjectives used to describe female strategies such as participative and collaborative take on a much more prominent role and are considered the *sine qua non* of good management. The inverse is also true. That is, in male dominated organizations, being directive, self-interested, or aggressive are much more common. As a result, organizations may favor a type of gendered managerial strategies while inhibiting the effectiveness of strategies associated with the other sex. In organizations where women are the congruent link between management and personnel, men are faced with a similar constraint as women in male-dominated fields. That is, they must modify their strategies to be congruent within the

organizational culture and mission. My findings speak to this conclusion. In order to be successful, men must manage with the gender congruity, or fit, of the organization. Men derive greater gains by emulating strategies stereotypically associated with feminine traits and downplaying strategies associated with masculine traits.

In this thesis, I explore how gender congruity matters for organizational performance by exploring over 700 US nursing home managers and their decisions in managing organizations. The nursing profession is well represented by women at multiple levels of the organization which should constrain the behavior of men when engaging in activities stereotypically associated with masculinity. I focus my theoretical and empirical attention on two areas of management which map onto gendered differences—power sharing and environmental management. In exploring these two validated measures of internal and external management, I find that male managers face an important tradeoff. Male managers can either focus on power sharing and benefit performance or emphasize environmental management and harm performance. These findings raises important implications for the theory of managerial fit and demonstrates that gender is an important determinant in managerial effectiveness for certain organizations.

## 2. LITERATURE REVIEW

### 2.1 Managerial Fit

Recent attention has been given to the theoretical relationship between a top managers' background, their fit with the organization, and performance (Petrovsky, James & Boyne 2015), yet little empirical work in public administration has explored these ideas of managerial fit or congruence (Rutherford 2017; Van der Wal 2011). In the private sector literature, however, managerial fit has received much greater attention. Managerial fit generally explores the person-environment (PE) fit. This line of research explores the degree of overlap or congruence between a manager's capabilities, values, and skills and his or her environment (Chatman 1989; Kristof-Brown, Zimmerman & Johnson 2005). However, scholars have argued that within this idea of PE fit, several domains of congruence exist — person-group (PG), person-supervisor (PS), person-job (PJ), and person-organization (PO) (Kristof-Brown, Zimmerman & Johnson 2005).

PG fit focuses on the relationship between manager and the entire group of individuals with whom the manager works with (Judge and Ferris 1992; Riordan 2000). Similarly, PS fit concerns the relationship between an individual subordinate and manager or supervisor and one or more subordinates (Adkins, Russell and Werbel 1994; Van Vianen 2000). PJ fit is less dependent on cooperation and focuses on the pairing of an individual employee's skill and the tasks required to perform a job (Edwards 1991). The final form of fit, PO fit, is the focus of this study and examines the degree of congruence between an individual and the entire organization's values, preferences, and goals (Tom 1971). Regardless of how one studies fit, managerial fit is typically associated with positive performance implications when individuals match the context and needs of an organization (O'Reilly, Chatman and Caldwell 1991).

The concept of PO fit is multifaceted since the compatibility between an individual and his or her organization can be measured multiple ways. There is no single way to capture things such as values, priorities, and goals. However, in the following sections, I explore the concept of managerial sex and gender, where important distinctions exist between values, preferences, and goals. In defining these gender differences, I present the argument that the construct of gender can be analyzed as a specific case of PO fit.

## **2.2 Gender and Management**

Gender gaps in management are a controversial issue in public administration. Given the historical images of leadership positions dominated by men (Stivers 2002), some scholars argue that bureaucracy socializes managers to disfavor female characteristics (Ferguson 1985) which pressures women to mimic what male managers do in order to succeed (Eagly 2007; Nielsen 2015). In this sense, individuals with common characteristics likely become managers, and men and women are indistinguishable in any meaningful way. Distinctions between male and female managers effectively blur when they achieve status as leaders (Bass 1990) and exhibit little to no difference in managerial style given this self-selection process (Dobbins and Platz 1986). At the street-level however, representative bureaucracy theory finds that the presence of female bureaucrats leads to policy outcomes that benefit female clients (Keiser et al. 2002; Song 2017). Limited research finds these representation effects occur in the presence of female managers (Wilkins and Keiser 2004).

Importantly for the case of PO fit, gender differences have been noted across managerial styles (Bass, Avolio & Atwater 1996; Eagly, Karau & Johnson 1992; Newport 2001; Nielsen 2015; Powell, Butterfield & Parent 2002; Schein 2001; Vinkenbunrg et al. 2011; Wajcman 1996;

Williams & Schein 2001). Women may make decisions differently than men given their previous life experiences and propensity towards women's issues (Dolan 2000; Guy 1992; Nielsen 2015). Nielsen's (2015) study of six organizational contexts in Denmark finds differences between male and female managers regarding competitiveness, empathy, and systematizing. I argue that these behavioral traits map well onto key managerial functions that are pertinent across organizations and have distributional consequences regarding the gender of the manager. These differences motivate the examination of two key functions of management—managing the internal processes of the organization and managing the organizational environment.

### **2.3 Managing the Environment**

Organizations are open systems which operate in complex environments. Given the task difficulty and environmental demands that many organizations face, managers must take action in exploiting or buffering the environment in order to generate positive outcomes (O'Toole and Meier 1999, 2011). In managing the external environment, managers perform a variety of functions and engage in boundary work such as protecting the organization's autonomy, building support, securing resources, developing partnerships, engaging in external politics, and overcoming obstacles (Meier and O'Toole 2003; Rainey and Steinbauer 1999).

Managing the environment requires the development and execution of joint programs and rules with external actors and stakeholders (Agranoff and McCuire 2003). Efforts to manage in the organizational environment have been found to benefit organizations, regardless of ownership. A number of studies find that environmental management is positively associated with organizational performance in the public sector (for example, Agranoff & McGuire, 2003; Akkerman & Torenvlied, 2011; Bardach, 1998; Hite, Williams, & Baugh, 2005; Meier and

O'Toole 2003; Torenvlied et al. 2013). Additional studies have found these activities to benefit the survival rate, economic output, and innovation of private sector firms (Powell & Smith-Doerr, 1994; Zaheer, McEvily & Perrone, 1998). Nonprofit research also finds that it allows for a greater transmission of information, problem solving, and better service delivery (Isett et al. 2011) while political networking increases advocacy effectiveness and community networking increases organizational effectiveness (Johansen and LeRoux 2013). Indeed, the ubiquity of networking and tending to the organizational environment across sector and context demonstrates the importance of establishing strong mechanisms which can help buffer or exploit the environment. Not unlike the aforementioned studies, nursing homes also must deal with issues external to the environment (Amirkhanyan et al. 2018; Castle, Ferguson, and Hughes 2009).

## **2.4 Gender Differences in Environmental Management**

While a vast research agenda explores how managers deal with their environment, very little work explores how gender may mediate the link between strategy and performance. Scholars have long discussed the “glass ceiling” that women face in advancing within organizations and the ways in which they may behave differently than men when in positions of organizational leadership (Bartol & Butterfield 1976; Dobbins and Platz 1986; Kanter 1977; Petty and Lee 1975). Tending to the networked environment is likely one area where this matters. Powell (1993) argues that while both men and women gain from these activities, gendered differences exist regarding *who* may comprise that network and what the benefits are. Managers, particularly men have relied on strategies that create informal connections that develop and maintain links for organizational success (Bacharach and Lawler 1980). In most

contexts, women are less likely to have held upper management positions and as a result may lack the depth in their personal network to gather local and community-level support and satisfy demands or needs. Regarding organizational networks, Meier, O'Toole & Goerdel (2006) find that women generally derive no benefit from managing in the network, while men are able to use the network to improve organizational performance. Not all research suggests that women face limitations when it comes to managing the external environment. Some find that women act as transformational leaders and find success in building and operating within informal networks (Brass 1985; Rosener 1990).

## **2.5 Internal Management, Power Sharing, and Collaboration**

Internal management focuses on the POSDCORB elements of traditional public administration.<sup>1</sup> Managers are often limited in their ability to influence what goes on inside their organizations given constraints by law, regulation, and political principals. As such, managers employ incentives that induce certain behavior from street-level bureaucrats (Lipsky 1980; Ricucci, 2005). One way of accomplishing this is through power sharing. As part of the management traditions of Argyris (1957) and McGregor (1960), power sharing is a participatory form of managing personnel which emphasizes personal empowerment and positive relations between management and subordinate. Organizations which share decision-making with personnel can improve performance (Brewer and Selden 2000; Moynihan and Pandey 2005). Additionally, management styles which are perceptive of employee aspirations may be an effective way to achieve program improvement (Boyne 2003). These participatory forms of internal management have been found to improve employee job satisfaction, efficiency,

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<sup>1</sup> POSDCORD stands for planning, organizing, staffing, directing, coordinating, reporting, and budgeting.

innovation, and knowledge-sharing (Dearden et al. 1999; Kim 2002). In the nursing home context, power sharing has been found to improve performance (Amirkhanyan et al. 2017).

## **2.6 Gender and Internal Management**

Gendered differences in internal management find that men achieve better performance when focusing on internal management than women. Using Texas public school data, Meier, O'Toole & Goerdel (2006) find that increases in contact between female superintendents and principals is associated with decreases in performance. Similarly, using state legislative data, Jacobson, Palus & Bowling (2010) find that women spend less time on internal management, as measured by time spent on regular activities, than men. These results suggest that the operationalization of internal management may matter quite a bit. The previous studies do not gauge managerial efforts on any explicitly collaborative or power sharing strategies.

Additional literature points to ways in which power sharing favors women. Eagly, Johannesen-Schmidt & Van Engen (2003) find that women are more likely to be transformational leaders while men are more likely to be transactional or laissez-faire leaders. In contrast to leadership based on individual gain and prestige to the manager, transformational leaders direct and inspire employee efforts by raising awareness of the importance of certain tasks, performance goals, and values. By doing so, managers seek to encourage their subordinates to act in the greater interest of the organization and increase public employee motivation (Paarlberg and Perry 2007). Managers are actively seeking out information from subordinates in order to determine the effectiveness of current practices.

Women have also been found to be more successful in certain aspects of internal management such as resolving conflict (Harlan and Weiss 1982). Evidence from political science

finds that female politicians are largely better at negotiating than men (Volden, Wiseman & Wittmer 2014). These findings suggest that the stereotypical depiction of female managers as “collaborative” aids female managers in communicating and building ties with lower-level employees. While internal management can consist of a variety of tasks, the dimensions of collaboration, sharing power, and personnel feedback seems to be an area where gender differences emerge.

Both the internal and external management literature seem to offer two conflicting conclusions regarding the interface between gender and performance. On the one hand, women struggle more with these tasks given the dominance of men in most leadership positions and ergo, derive less benefits from engaging in these tasks than men do. But on the other hand, certain components of these management dimensions benefit from stereotypical feminine traits such as collaboration and interpersonal communication. In the next section, I consider the contextual nature of management by developing a theory of congruity for gendered organizations by focusing on organizations where women are adequately represented in management and throughout the organization.

## **2.7 Managing in a Gendered Field: Conditions for Managerial Fit**

Organizations tend towards homogeneity (DiMaggio and Powell 1983) and with this comes expectations regarding who we see working in organizations, who is authoritative in organizations, and ultimately what strategies emerge as the standard in managing performance in organizations. As a result, individuals can be disadvantaged in organizations which tend to hold managers from a certain gender, race, or background as more favorable and efficacious than managers from a minority or disadvantaged group (Kanter 1976). With certain groups emerging

as the norm in management positions, the presence of those from minority groups become heightened *within* their own organization. The manager's decision-making process is more visible and likely subject to scrutiny from the other personnel and organizational actors (Kanter 1977). Kanter (1977) argues that those in majority management positions become more aware of both their similarities and their differences with individuals from the minority group.

While the gender and management literature tends to primarily focus on gender gaps from the perspective of organizations where women are under-represented, Stivers (2000) indicates that there are organizations which favor female characteristics. Certain organizational structures may be more receptive to the presence of women and their ways of managing. That is, the flip side of the traditional gender-management paradigm should also hold. When images of leadership and organizational processes are receptive towards women and feminine characteristics, the fit between a manager and the organization (e.g. Tom 1971) are contingent upon certain gendered characteristics.

Since women are more likely to focus on transformational leadership (Bass, Avolio & Atwater 1996; Vinkenburg et al. 2011) and emphasize participative rather than directive management as compared to men (Eagly, Karau & Johnson, 1992), these behaviors should be commonplace and effective in organizations with a greater female presence. Burke and Collins (2001) find that females are more likely to use interactive management styles which lead to more effective coaching, development, and communication in the organization. These strategies go against men's stereotypically directive and self-centered strategies (e.g. Wajcman 1996). When men are perceived as atypical managers, I expect their status in management to be heightened (e.g. Kanter 1976, 1977). This makes the effect of men in management positions more pronounced given women's "different personal qualities and life experiences than men, and

(they) therefore approach organizational leadership distinctively” (Stivers 2002, 76). If male managers pursue actions not accepted by subordinates and others amongst the rank and file, gendered differences are heightened and gender incongruity is present. This likely has negative implications for performance.

The root of the incongruity stems from male managers exhibiting characteristics which do not necessarily align with internal and collaborative strategies. Male leaders are associated with “agentic” qualities such as confidence, aggressiveness, and self-direction (Newport 2001; Williams & Best 1990) rather than internally oriented communal qualities which are associated with feminine traits (Powell, Butterfield & Parent 2002; Schein 2001). Maintaining certain environmental ties requires ambition from the manager (Akkerman and Torenvlied 2011) and can favor men in two ways. First, managers may aggressively pursue environmental management to leverage their capacity to control shocks and disturbances to an organization’s core processes (Meier and O’Toole 2003). The confidence and aggressiveness of an agentic manager may be necessary to exploit resources for organizational success. In this sense, male agentic behavior is validated in the environment and provides greater performance (e.g. Jacobson, Palus & Bowling 2010; Meier, O’Toole & Goerdel 2006). Second, while the organization itself may be gendered, important actors and stakeholders in the environment may be comprised primarily of men. Existing research from nursing homes finds that men seek to create “islands of masculinity” to address their lack of interest in attending to predominately feminine personnel (Egeland & Brown 1988). Male managers who devote more time managing out in the environment may be trying to cope with, or avoid, gendered mismatches within the organization.

## 2.8 Hypotheses

Within gendered organizations, strategies are perceived by subordinates as being congruent or incongruent. If we are to understand that tradeoffs exist between managing downward (power sharing) or managing outward (environmental management), the actions managers pursue carries important performance implications. For male managers to be successful in female dominated organizations, they must mimic women and shift managerial focus away from the environment and towards power sharing. This mimicry is a logical extension of what is normally the case; women mimicking men (e.g. Eagly 2007; Nielsen 2015). Work on the incongruity between managers and gender roles has found that women can be perceived negatively when exerting authority over men (Carli 2001; Eagly & Karau 2002). However, this effect can be mitigated when female managers are more attentive to the perspectives and needs of male subordinates. The same can be said for male managers. Evidence from the nursing home context finds that male nurses largely do not socialize with females in the organization (Williams 1989). If male managers express similar feelings as male nurses towards their subordinates, there may be larger problems with internal management in the facility. If male managers dismiss any grievances or feedback from personnel, they are distancing themselves from the accepted strategies of power sharing. By adopting a gender congruent, collaborative strategy of power sharing, male managers can close the distance between themselves and the traditional female power structure within the organization while mitigating any perceived differences in management (Kanter 1976, 1977). As a result, men can expect greater returns on performance because they are able to be more directive and effective in managing the personnel within the organization.<sup>2</sup> By extension, this also means that male managers spend less time on

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<sup>2</sup> Since my discussion primarily concerns the behavior of men under organizational constraints, I do not propose any formal hypotheses for women.

their “island of masculinity”. When male managers focus on the organizational environment, an incongruity between management and organizational mission forms which negatively impacts performance. Formally:

**Hypothesis 1:** Male managers who expend more effort power sharing in gendered organizations will have greater performance relative to those who do not focus on power sharing.

**Hypothesis 2:** Male managers who expend more effort managing the environment in gendered organizations will have lower performance relative to those who do not focus on managing the environment.

In short, these two strategies imply a tradeoff or “balancing act” between managing the core internal functions of the organization and the organizational environment (see O’Toole and Meier 2011). Based on the gendered expectations in how managers emphasize these two components of management, this study is a specific case of PO fit. The theory suggests a dichotomy between an internally oriented managerial fit or an externally oriented managerial misfit.

## **2.9 The Nursing Home Context**

Nursing homes provide an ideal context for studying gendered management. Florence Nightingale’s influential design and implementation of nursing as a profession in the 19<sup>th</sup> century perpetuated nursing as a feminine industry (Nightingale 1969). Those consequences are still largely felt today. According to 2015 figures, there were approximately 3,176,295 female nurses in the United States compared to 335,611 male nurses (The Kaiser Family Foundation 2015a). Moreover, 2014 data shows that the gender distribution of nursing home residents is also gendered with 922,480 women compared to 483,740 men (The Kaiser Family Foundation 2015b). Finally, women, particularly daughters, tend to be the family member most proactive in

visiting nursing home patients (Pinquart & Sorensen 2011). This representation is particularly important considering that women are important stakeholders. All of these factors combined make for a gendered context across multiple levels of the organization and raises an interesting context for studying the effectiveness of male managers in an otherwise female dominant profession.

Elderly care is regularly described as a “high touch, low tech” profession, where a premium is placed upon quality care that is largely intimate, dependent, and personal. In delivering quality nursing care, consistent leadership from administrators and the utilization of group processes have been found to be important organizational attributes that translate into good performance (Rantz et al. 2004). By its very essence, elderly care is a context that values interpersonal styles of leadership which focus on others’ morale and welfare (e.g. Bales 1950; Hemphill & Coons 1957; Likert 1961). As Eagly & Johnson (1990) demonstrate, these skills tend to favor women. Since managers are largely communicating with female nurses, female patients, and female family members, their use of power sharing and open communication is an essential component of delivering quality care. By holding the organizational context constant, I can assess if men are constrained in their strategic choices. In general, managers of an opposite sex from the majority of their subordinates have been perceived as less effective (Eagly, Karau & Makhijani 1995). And since men are 1) from the opposite sex of the majority in the organization and 2) stereotypically exhibit different qualities, those who fail to *manage with a woman’s touch* are not a managerial fit for the organization and may ultimately create deleterious consequences.

### 3. DATA AND METHODS

#### **3.1 Sample**

I use a hybrid dataset that combines archival measures of performance and perceptual measures of managerial strategy. The archival data comes from Nursing Home Compare (NHC), a national dataset from the Centers for Medicare and Medicaid Services (CMS) which contains state agencies' records and evaluations of all certified skilled nursing facilities in the United States. The latest facility inspection contains information on record as of January 2016 (i.e., with inspections conducted 9-15 months prior to January 2016) with an earlier inspection period as of January 2014 (i.e., 9-15 months before 1/14). These data include facility characteristics such as ownership, size, occupancy, staffing, and the number of health deficiencies identified during a given inspection. Second, data from the 2013 Nursing Home Administrator Survey targeted a random sample of 1,000 nonprofit, 1,000 for-profit, and all operating governmental nursing home (N=903) managers (Identifying Citation 2013). In three waves, a total of 725 survey responses were received with a 25% response rate. After the removal of six duplicate surveys, there was a final sample of 717 facilities. Third, I use data from the Area Health Resource File (AHRF) of the US Bureau of Health Professions which includes data on county-level demographic information.

#### **3.2 Dependent Variable: Service Quality**

I use the total number of health deficiencies as an archival measure of performance that captures regulatory deficiencies identified during a standard nursing home inspection, or as a result of a verified complaint. Theoretically, the measure can range from 0-180, the maximum number of violations. In the observed sample, this measure ranges from 0 to a modest 33 citations with a mean of 5.71. Research in health and nursing home care regularly use

deficiencies as a reliable and comprehensive measure of nursing home quality (Amirkhanyan et al. 2017; Amirkhanyan, Meier, and O'Toole 2017; Harrington et al., 1998; Mullan and Harrington 2001; O'Neill et al. 2003). Health deficiencies can be related to quality of care, resident behavior and facility practices, resident assessment, resident rights, physical environment, dietary services, pharmacy services, and administration and regulation. Since requirements vary by scope and focus, it is difficult for nursing home administrators to comprehensively teach their staff every nuance of the regulation structure. The measure is a count of regulatory violations where lower scores represent higher nursing home quality.

### **3.3 Independent Variables: Gender and Management**

The main variable of interest in the analysis is the sex of the manager. I operationalize sex as a dummy variable, where a value of 1 is female. In the sample, 45% of the survey respondents are women which provides leverage in assessing the impact of gender on managerial strategies.<sup>3</sup> While there may be more men than women in management, the rest of the organization does not necessarily have these same characteristics.<sup>4</sup>

To capture *Environmental Management*, I use Amirkhanyan et al.'s (2017) measure for *Managing External Influences*. This index uses several survey items from the [Identifying Reference] Nursing Home Administrator survey which ask respondents, "To what extent do you agree or disagree with the following statements?" 1) My role is to respond to various events and disturbances in the external environment of our nursing home. 2) I always try to limit the influence of external events on the staff and nurses. 3) I strive to control those factors outside the

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<sup>3</sup> I additionally check for any imbalances across sector. Regardless of for-profit (48%), nonprofit (44%), or public (42%) ownership, there is near gender parity in the gender distribution of women.

<sup>4</sup> In fact, as the hypotheses suggest, the presence of a male manager may be incongruent with the goals and strategies of the organization if they do not adopt certain strategies. As a larger point, I am not concerned with the presence of a male managers, but rather the content of how he manages the organization.

nursing home that could have an effect on my organization. 4) Our nursing home emphasizes the importance of learning from the experience of others. I use factor analysis to create a single scale.<sup>5</sup> This measure is useful in that it captures a single dimension of environmentally oriented management activities. Since there are a number of reasons for a manager to tend to the environment, this parsimonious measure captures the formal and informal networks which organizations use to buffer, exploit, and cope potential challenges.

To capture strategies for *Internal Management*, I again rely on perceptual data from the Nursing Home Administrator survey and replicate a validated measure of *Power Sharing* (Amirkhanyan et al. 2017). Administrators were asked, “To what extent do you agree or disagree with the following statements?” 1) I involve nursing and other non-managerial staff in my nursing homes decision-making process. 2) Residents families’ feedback and outcomes are taken into consideration when revising policies. 3) Non-manager feedback is taken into consideration when revising policies. These three items are also factor analyzed.<sup>6</sup> Since research across multiple disciplines finds women to be more collaborative and consensual than men (Duerst-Lahti 2002; Eagly 2007; Jeydel and Taylor 2003; Volden, Wiseman & Wittmer 2013), this measure has validity in capturing characteristics disposed towards collaborative notions of femininity

### **3.4 Control Variables**

I control for several variables that may affect the quality of the nursing home administrator. To account for this variation, I control for how long the survey respondent has

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<sup>5</sup> This measure is identical to the one used in Amirkhanyan et al. (2017). The Cronbach’s alpha is .74 and a single factor is retained with an eigenvalue of 1.98.

<sup>6</sup> Following Amirkhanyan et al. (2017), I use mean imputation on all three measures to maximize the sample size. This scale has a Cronbach’s alpha of .59 and a single factor with an eigenvalue of 1.82.

been a nursing home administrator (in years) as well as if they have a master's degree.<sup>7</sup> I expect these dimensions of quality to be negatively associated with the number of deficiencies. In other words, better performance. Additionally, I control for organizational size and service demands with the logged number of beds, population density, percent poverty, percent Medicaid residents, and the percentage of white residents. These measures account for the composition of the organization's clientele. I additionally control for the total number of nursing hours per resident day as a measure of organizational capacity and the Herfindahl index of market competition- which captures the concentration of bed share within a nursing home's market. I expect these two measures to be associated with better performance. Finally, I include two dummy variables if the facility is a public or nonprofit nursing home. For-profit nursing homes are the omitted category. Existing research finds that public and nonprofit facilities outperform for-profit nursing homes (Amirkhanyan, Kim, and Lambright 2008).

### **3.5 Estimation**

Since deficiencies is a count variable, it is most appropriate to estimate the model with a Poisson regression. A log-likelihood ratio test reveals that there is over-dispersion in the number of deficiencies, necessitating the use of the negative binomial as the preferred estimator.

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<sup>7</sup> In the sample, men have an average of 15 years as nursing home administrators compared to 12 years for women. A t-test shows this difference to be statistically insignificant. 41% of male respondents have a master's degree compared to 32% of women. This is a statistically significant difference.

## 4. RESULTS

### 4.1 Difference of Means Tests

I begin by exploring how men and women compare on the two managerial indices-sharing power and environmental management. Table 2 reports two difference of means tests. For the power sharing scale, female managers have a mean score of .07 while male managers have a mean score of -.05. This is statistically significant at the .05 level with a one tailed test.<sup>8</sup> For the environmental management scale, male managers have a mean score of .03 and female managers have a mean score of -.04. This difference, however, is not statistically significant. Nonetheless, these two simple t-tests provide evidence that the relationship between gender and managerial priorities is in the theoretically expected direction. These results provide face validity in an underlying gendered difference.

**Table 1: Gender Differences in Management Strategies**

Management Strategy	Male	Female	P value
Power Sharing	-.06	.07	< .05
Environmental Management	.03	-.04	.13

Note: Difference of Means; Statistical significance based on one-tailed test.

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<sup>8</sup> I use a one tailed test since the theoretical discussion above suggests a directional relationship between gender and managerial strategies.

## 4.2 Unconditional Model

Table 3 presents the results from the negative binomial regressions.<sup>9</sup> The first column in Table 3 presents the unconditional effects of gender, power sharing, and environmental management on the total number of deficiencies for the 2015 inspection period. The model finds that women manage facilities with higher deficiencies, however this effect is not statistically significant. Similar to previous work, I find that environmental management is associated with more deficiencies while power sharing is associated with fewer deficiencies (Amirkhanyan et al. 2017).

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<sup>9</sup>To account for unobserved heterogeneity at the state-level, I estimated all of the models with state fixed effects to similar substantive conclusions.

**Table 2: Effects of Gender and Strategy on Performance**

VARIABLES	1	2	3
Female	0.03 (0.45)	0.03 (0.45)	0.03 (0.44)
Power Sharing	-0.11 (-3.43)	-0.10 (-2.32)	-0.11 (-3.41)
Environmental Mgmt.	0.06 (1.74)	0.06 (1.75)	0.08 (2.00)
Female X Power Sharing	-	-0.02 (-0.31)	-
Female X Environmental	-	-	-0.06 (-1.02)
Years as Administrator	-0.00 (-1.38)	-0.00 (-1.38)	-0.00 (-1.37)
Master's Degree	0.12 (1.87)	0.12 (1.88)	0.12 (1.87)
Number of Beds (logged)	0.02 (0.39)	0.02 (0.37)	0.02 (0.36)
Total Nursing Home Hours	0.01 (0.41)	0.01 (0.42)	0.01 (0.35)
Years Since Certification	0.00 (0.13)	0.00 (0.13)	0.00 (0.12)
Market Competition	0.11 (1.00)	0.11 (0.97)	0.10 (0.94)
Population Density	-0.03 (-2.06)	-0.03 (-2.06)	-0.03 (-2.04)
Percent Elderly	-0.00 (-0.48)	-0.00 (-0.47)	-0.00 (-0.50)
Percent Poverty	-0.01 (-0.89)	-0.01 (-0.91)	-0.01 (-0.87)
Percent Medicaid	-0.00 (-0.35)	-0.00 (-0.33)	-0.00 (-0.31)
Percent White	-0.00 (-1.40)	-0.00 (-1.42)	-0.00 (-1.37)
Public Sector	-0.15 (-1.80)	-0.15 (-1.78)	-0.15 (-1.79)
Nonprofit Sector	-0.13 (-1.61)	-0.13 (-1.60)	-0.13 (-1.57)
Deficiencies (13)	0.04 (7.29)	0.04 (7.27)	0.04 (7.27)
Constant	1.79 (4.71)	1.80 (4.72)	1.80 (4.73)
Observations	665	665	665
$\chi^2$	89.95	90.06	90.63

Notes: Negative Binomial Regression; DV- Number of Deficiencies (15); Z-statistics in parentheses

### 4.3 Conditional Models

In columns 2 and 3, I introduce the conditional effects between gender and managerial strategies. In column 2, I find support for hypothesis 1. Men who focus more on collaborative strategies actually have less deficiencies than those who do not. Given the multiplicative term in the model, the coefficient for power sharing is interpreted as the effect of power sharing when female = 0. In other words, this is the effect of power sharing for men. I find that this effect is positive and statistically significant. In substantive terms, men who prioritize power sharing relative to those who do not have nearly 3 less deficiencies, on average. This effect accounts for nearly a standard deviation decrease.<sup>10</sup> The marginal effects plot is presented in Figure 1. For environmental management, I find the opposite pattern. Men who devote more time managing the environment actually have higher deficiencies. This result provides support for hypothesis 2. The marginal effects plot in Figure 2 demonstrates that men who devote a great deal of time managing the environment relative to those who do not, have nearly 3 more deficiencies during an inspection period. Statistically this amounts to nearly a standard deviation increase.<sup>11</sup>

### 4.4 Effect of Control Variables

Across all models, the effect of the control variables are consistent—with most of them failing to reach traditional levels of statistical significance. I find support across all specifications that population density is associated with lower deficiencies. In line with previous literature, I also find that the public and nonprofit sectors have lower deficiencies relative to the private sector (Amirkhanyan, Kim & Lambright 2008). Not surprisingly, the past period's deficiencies is positively associated with the current period's number of deficiencies.

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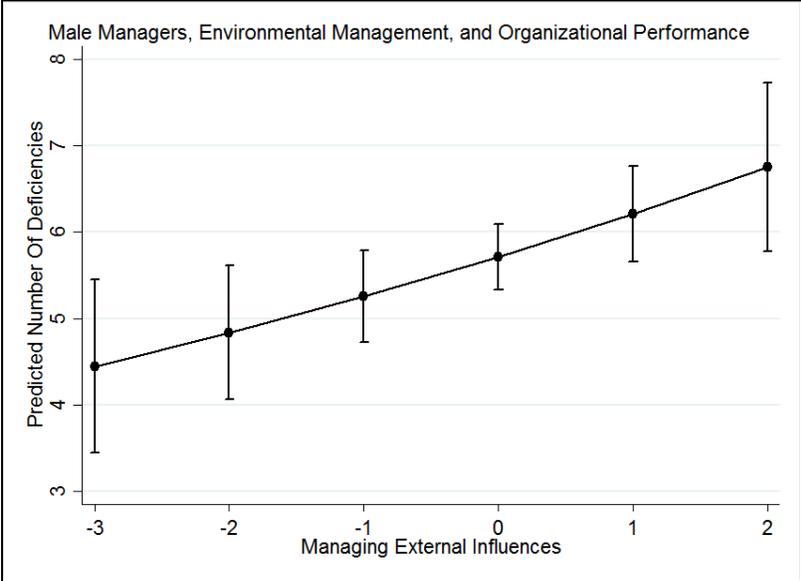
<sup>10</sup> For the observations within the sample, a standard deviation is 4.69.

<sup>11</sup> The marginal effects for female managers were similar in the case of power sharing. However, the effect for environmental management is flat and insignificant across the range of the data for women. This result may suggest that these strategies and their impact have been largely abandoned by female-led organizations.

**Figure 1: The Impact of Power Sharing on Male Managers' Performance**



**Figure 2: The Impact of Environmental Management on Male Managers' Performance**



#### **4.5 Robustness Check**

As a robustness check, I partition the sample by sector to explore if there are any cross-sectoral differences between these management styles, gender, and performance. Since differences in ownership are associated with diverging performance objectives, clientele, resources, and quality, the relationship between strategy and performance may be a function of ownership rather than the gendered managerial fit and the feminine organizational context. Table 4 interrogates this question and largely finds no cross-sectoral differences. Indeed, across all three sectors the direction is in the hypothesized direction for 5 of the 6 multiplicative terms. The one exception is environmental management in for-profit nursing homes. The coefficient is negative, however, both the coefficient and z-score are extremely small. In short, these findings provide evidence that the nursing home context itself is gendered and that managerial fit displays similar effects across all organizations, regardless of ownership.

**Table 3: Sectoral Differences in Managerial Strategy, Gender, and Performance**

	<u>Public</u>		<u>Nonprofit</u>		<u>For-Profit</u>	
Female	0.10 (.93)	0.10 (0.91)	-0.08 (-0.86)	-0.08 (-0.84)	0.08 (0.77)	0.07 (0.72)
Power Sharing	-.10 (-1.82)	-0.11 (-1.60)	-.01 (-0.35)	-0.04 (-0.47)	-0.16 (-2.90)	-0.09 (-1.35)
Environmental Mgmt.	0.19 (2.90)	0.11 (2.12)	.04 (0.59)	0.02 (0.55)	-.00 (-0.14)	0.00 (0.04)
Female X Power Sharing	-	.04 (0.36)	-	0.04 (0.40)	-	-0.14 (-1.43)
Female X Environmental	-0.18 (-1.63)	-	-.04 (-0.34)	-	0.02 (0.18)	-
Controls?	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.03 (1.85)	0.93 (1.68)	1.62 (1.94)	1.62 (1.94)	2.51 (3.20)	2.54 (3.20)
Observations	222	222	243	243	200	200
$\chi^2$	32.70	29.29	52.78	52.02	42.87	43.53

Notes: Negative Binomial Regression; DV- Number of Deficiencies (15); Z-statistics in parentheses

## 5. CONCLUSION

My findings contribute to our understanding of gender and public management, managerial strategies, and performance. Using US nursing home data, I find gender incongruity is an important area of performance management. Not unlike previous studies of managerial fit, I find that the values and strategies pursued by managers shapes organizational performance (Boyne and Dahya 2002; Hambrick and Mason 1984; Hill 2005; Lewis 2007). Men which emphasize managerial strategies such as power sharing are perceived as legitimate within a largely feminine organizational context. Since notions of collaboration and power sharing are predominately associated with women, men which are perceptive of how these traits are congruent with the structure of the organization are able to mitigate any perceived gender differences and successfully tend to performance goals. In this sense, men have greater marginal gains by acting in a more congruent manner. Male managers who aggressively manage outward and focus on environmental conditions take away from the preferred strategies for power sharing and create an incongruent interface between male management and the feminine organization. These results provide evidence that men who mimic the organizational norms of collaboration are congruent managers who are more efficacious than men who may not be as receptive of feedback from their female subordinates.

Nursing was historically constructed as a segregated labor market. In the 19<sup>th</sup> century, Florence Nightingale established nursing as a feminine occupation and argued that women entering nursing were doing a task which came naturally to them (Nightingale 1969). However, the role of administration and guidance was largely left to men (Evans 1997). In nursing's development over the years, much of the feminine attributes of nursing are still intact; there are still a sizable number of facilities which are managed by men, but also women are largely

present and active in the managerial process. Contrary to some authors' depiction of men being able to effectively override the feminine disposition of the organizational context (e.g. Evans 1997; Williams 1989), I find evidence of isomorphic pressures which constrain or incentivize men to exhibit more feminine traits in order to achieve organizational goals. Whether these managerial strategies are preferred by construction or by innate gender differences between men and women is outside the purview of this research. Nonetheless, organizational contexts can be gendered towards women and this carries implications for how men make decisions. Importantly, male managers placed in an opportunity structure absent the presence of male nurses and other personnel modify their behavior to gain good relations with other power-holders in the system (e.g. Kanter 1976, 1977). By adapting strategies which are congruent with the organizational mission (e.g. Wilson 1989), male managers can be effective and increase their credibility.

Due to data limitations, I cannot investigate how different compositions of the nursing home staff influence gender and managerial strategies. Perhaps it is the case that facilities which have a large proportion of male nurses actually enable male managers to act differently than in facilities which are still largely feminine. While my theory and the evidence suggest that the distribution of nurses is overwhelmingly biased towards women, certain organizations may have greater representation amongst men. It would be interesting to observe gendered strategies in organizations which flip the sex ratio. Are managerial strategies constrained in nursing homes that exceed a certain critical mass of male personnel? I encourage scholars to examine gender and strategy content while accounting for the gender distribution of frontline staff in areas with applicable data. Additionally, I am unable to draw any dynamic inferences regarding what male managers do in the long-run of the organization. For instance, male managers may alter their strategies over time in order to be more congruent with the organization. Since I can only

observe managers at one point in time, we do not know if or how these managers make necessary changes for organizational success. Nonetheless, my findings indicate that incongruities do exist. If managers are adaptive remains to be seen.

If my theory is correct, it raises important implications for gender and management. The findings suggest that frontline personnel perceive their superiors as more than just a man or a woman. If this were the case, performance would suffer even when men adopted congruent strategies. Indeed, there appears to be no symbolism or bias associated with sex, rather managerial content and decision-making seem to be much more important. My results suggest that men are able to be effective managers in gendered organizations by adopting a congruent managerial fit more appropriate given the “high touch, low tech” delivery of the nursing home context. This emphasis on personalized care and the intimate delivery of services requires diligent attention to power sharing and receptivity towards internal organizational dynamics. Any gender gaps in management are effectively mitigated when male managers recognize that *managing with a woman’s touch* can be the difference between a congruent fit for organizational success and an incongruent fit for organizational peril.

## REFERENCES

- Adkins, Cheryl L., Craig J. Russell, and James D. Werbel. 1994. "Judgments of fit in the selection process: The role of work value congruence." *Personnel Psychology* 47(3): 605-623.
- Agranoff, Robert, and Michael McGuire. 2003. "Inside the matrix: Integrating the paradigms of intergovernmental and network management." *International Journal of Public Administration* 26(12): 1401-1422.
- Akkerman, Agnes, and René Torenvlied. 2011. "Managing the environment: Effects of network ambition on agency performance." *Public Management Review* 13(1): 159-174.
- Amirkhanyan, Anna A. Kenneth J. Meier, and Laurence J. O'Toole. 2017. "Managing in the Regulatory Thicket: Regulation Legitimacy and Expertise" *Public Administration Review* 77(3): 381-394.
- Amirkhanyan, Anna A., Hyun Joon Kim, and Kristina T. Lambright. 2013. "The performance puzzle: Understanding the factors influencing alternative dimensions and views of performance." *Journal of Public Administration Research and Theory* 24 (1): 1-34.
- Amirkhanyan, Anna A., Kenneth J. Meier, Laurence J. O'Toole, Jr., Mueen A. Dakhwe, Shawn Janzen. 2017. "Management and performance in US nursing homes." *Journal of Public Administration Research and Theory* <https://doi.org/10.1093/jopart/mux003>.
- Argyris, Chris. 1957. *Personality and organization; the conflict between system and the individual*. Harper.

- Bacharach, Samuel B., and Edward J. Lawler. 1980. *Power and politics in organizations*. Jossey-Bass Inc Pub.
- Bardach, Eugene. 1998. *Getting Agencies to Work Together: The Practice and Theory of Managerial Craftsmanship*. Brookings Institution Press.
- Bartol, Kathryn M., and D. Anthony Butterfield. 1976 "Sex effects in evaluating leaders." *Journal of Applied Psychology* 61(4): 446.
- Bass, Bernard M, Bruce J. Avolio, and Leanne Atwater. 1996. "The transformational and transactional leadership of men and women." *Applied Psychology* 45 (1):5-34.
- Bass, Bernard M. 1990. "From transactional to transformational leadership: Learning to share the vision." *Organizational dynamics* 18 (3): 19-31.
- Boyne, George A., and Kenneth J. Meier. 2008. "Environmental Change, Human Resources and Organizational Turnaround." *Journal of Management Studies* 46:835-863.
- Boyne, George A., Oliver James, Peter John, and Nicolai Petrovsky. 2011 "Top management turnover and organizational performance: A test of a contingency model." *Public Administration Review* 71(4): 572-581.
- Brass, Daniel J. 1985. "Men's and women's networks: A study of interaction patterns and influence in an organization." *Academy of Management journal* 28(2): 327-343.
- Carli, Linda L. 2001. "Gender and social influence." *Journal of Social Issues* 57(4): 725-741.

- Chatman, Jennifer A. 1989. "Improving interactional organizational research: A model of person-organization fit." *Academy of management Review* 14(3): 333-349.
- Clearfield, Melissa W., and Naree M. Nelson. 2006. "Sex differences in mothers' speech and play behavior with 6-, 9-, and 14-month-old infants." *Sex Roles* 54(1): 127-137.
- DiMaggio, Paul, and Walter W. Powell. 1983. "The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields." *American Sociological Review* 48(2): 147-160.
- Dobbins, Gregory H., and Stephanie J. Platz. 1986. "Sex differences in leadership: how real are they?." *Academy of Management review* 11(1): 118-127.
- Duerst-Lahti, Georgia. 2002. "Knowing Congress as a Gendered Institution." In *Women Transforming Congress*. University of Oklahoma Press.
- Eagly, Alice H, Mary C Johannesen-Schmidt, and Marloes L Van Engen. 2003. "Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men." *Psychological Bulletin* 129 (4):569-591.
- Eagly, Alice H. 2007. "Female leadership advantage and disadvantage: Resolving the contradictions." *Psychology of women quarterly* 31 (1):1-12.
- Eagly, Alice H., and Steven J. Karau. 2002. "Role congruity theory of prejudice toward female leaders." *Psychological review* 109(3): 573.

- Edwards, Jeffrey R. 1991. *Person-job fit: A conceptual integration, literature review, and methodological critique*. John Wiley & Sons.
- Egeland, James W., and Julia S. Brown. 1988. "Sex role stereotyping and role strain of male registered nurses." *Research in nursing & health* 11(4): 257-267.
- Favero, Nathan, and Justin B. Bullock. 2015. "How (not) to solve the problem: An evaluation of scholarly responses to common source bias." *Journal of Public Administration Research and Theory* 25(1): 285-308.
- Ferguson, Kathy E. 1985. *The feminist case against bureaucracy*. Vol. 104: Temple University Press.
- Guy, Mary E., and Lois Lovelace Duke. 1992. "Personal and social background as determinants of position." *Women and Men of the States: Public Administrators at the State Level*.
- Hackman, Michael Z., Marylyn J. Hills, Alison H. Furniss, and Tracey J. Paterson. 1992. "Perceptions of gender-role characteristics and transformational and transactional leadership behaviours." *Perceptual and Motor Skills* 75(1): 311-319.
- Hill, Gregory C. 2005. "The effects of managerial succession on organizational performance." *Journal of Public Administration Research and Theory* 15(4): 585-597.
- Hite, Julie M., Ellen J. Williams, and Steven C. Baugh. 2005. "Multiple networks of public school administrators: An analysis of network content and structure." *International Journal of Leadership in Education* 8(2): 91-122.

- Isett, Kimberley R., Ines A. Mergel, Kelly LeRoux, Pamela A. Mischen, and R. Karl Rethemeyer. 2011. "Networks in public administration scholarship: Understanding where we are and where we need to go." *Journal of Public Administration Research and Theory* 21, no. suppl\_1: i157-i173.
- Jacobson, Willow S, Christine Kelleher Palus, and Cynthia J Bowling. 2010. "A woman's touch? Gendered management and performance in state administration." *Journal of Public Administration Research and Theory* 20 (2):477-504.
- Jeydel, Alana, and Andrew J. Taylor. 2003. "Are women legislators less effective? Evidence from the US House in the 103rd-105th Congress." *Political Research Quarterly* 56(1): 19-27.
- Johansen, Morgen, and Kelly LeRoux. 2013. "Managerial networking in nonprofit organizations: The impact of networking on organizational and advocacy effectiveness." *Public Administration Review* 73(2): 355-363.
- Judge, Timothy A., and Gerald R. Ferris. 1992. "The elusive criterion of fit in human resources staffing decisions." *People and Strategy* 15(4): 47.
- Kanter, Rosabeth Moss. 1976. "The impact of hierarchical structures on the work behavior of women and men." *Social Problems* 23(4): 415-430.
- Kanter, Rosabeth Moss. 1977. "Some effects of proportions on group life: Skewed sex ratios and responses to token women." *American journal of Sociology*, 82(5): 965-990.

- Kristof-Brown, Amy L., Ryan D. Zimmerman, and Erin C. Johnson. 2005. "Consequences of Individuals' Fit at Work: A Meta-Analysis of Person—Job, Person—Organization, Person—Group, and Person—Supervisor Fit." *Personnel psychology* 58(2): 281-342.
- Lipsky, Michael. 2010. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*. Russell Sage Foundation.
- McGregor, Douglas. 1960. *The Human Side of Enterprise*. McGraw-Hill.
- Meier, Kenneth J, Laurence J O'Toole, and Holly T Goerdel. 2006. "Management activity and program performance: Gender as management capital." *Public Administration Review* 66 (1):24-36.
- Meier, Kenneth J., and Laurence J. O'Toole. 2013. "Subjective organizational performance and measurement error: Common source bias and spurious relationships." *Journal of Public Administration Research and Theory* 23(2): 429-456.
- Meier, Kenneth J., and Laurence J. O'Toole. 2003. "Public management and educational performance: The impact of managerial networking." *Public Administration Review* 63(6): 689-699.
- Newport, Frank. 2001. "Americans see women as emotional and affectionate, men as more aggressive: Gender specific stereotypes persist in recent Gallup poll." *Gallup*.
- Nielsen, Vibeke Lehmann. 2015. "Personal attributes and institutions: Gender and the behavior of public employees. Why gender matters to not only “Gendered Policy Areas”." *Journal of Public Administration Research and Theory* 25 (4):1005-1029.

- Nightingale, Florence. 1992. *Notes on nursing: What it is, and what it is not*. Lippincott Williams & Wilkins.
- O'Neill, Ciaran, Charlene Harrington, Martin Kitchener, and Debra Saliba. 2003. "Quality of care in nursing homes: An analysis of relationships among profit, quality, and ownership." *Medical care* 41(12): 1318-1330.
- O'Farrell, Brigid, and Sharon L. Harlan. 1982. "Craftworkers and clerks: The effect of male co-worker hostility on women's satisfaction with non-traditional jobs." *Social Problems* 29(3): 252-265.
- O'Reilly, Charles A., Jennifer Chatman, and David F. Caldwell. 1991. "People and organizational culture: A profile comparison approach to assessing person-organization fit." *Academy of management journal* 34(3): 487-516.
- O'Toole Jr, Laurence J., and Kenneth J. Meier. 2003. "Plus ça change: Public management, personnel stability, and organizational performance." *Journal of Public Administration Research and Theory*: 43-64.
- O'Toole, Jr. Laurence, and Kenneth J Meier. 2011. *Public management: Organizations, governance, and performance*: Cambridge University Press.
- O'Toole, Laurence J. 1997. "Treating networks seriously: Practical and research-based agendas in public administration." *Public Administration Review* 57(1): 45-52.
- O'Toole, Laurence J. 2015. "Networks and networking: the public administrative agendas." *Public Administration Review* 75(3): 361-371.

- Paarlberg, Laurie E., and James L. Perry. 2007. "Values management: Aligning employee values and organization goals." *The American Review of Public Administration* 37(4): 387-408.
- Petrovsky, Nicolai, Oliver James, and George A. Boyne. 2015. "New leaders' managerial background and the performance of public organizations: The theory of publicness fit." *Journal of Public Administration Research and Theory* 25(1): 217-236.
- Petty, Mickey M., and Gordon K. Lee. 1975. "Moderating effects of sex of supervisor and subordinate on relationships between supervisory behavior and subordinate satisfaction." *Journal of Applied Psychology* 60(5): 624.
- Pinquart, Martin, and Silvia Sörensen. 2011. "Spouses, adult children, and children-in-law as caregivers of older adults: a meta-analytic comparison." 26(1): 1-14.
- Powell, Gary N., D. Anthony Butterfield, and Jane D. Parent. 2002. "Gender and managerial stereotypes: have the times changed?." *Journal of management* 28(2): 177-193.
- Powell, Walter W., and Laurel Smith-Doerr. 1994. "Networks and economic life." *The Handbook of Economic Sociology* 368-380.
- Rantz, Marilyn J., Lanis Hicks, Victoria Grando, Gregory F. Petroski, Richard W. Madsen, David R. Mehr, Vicki Conn et al. 2004. "Nursing home quality, cost, staffing, and staff mix." *The Gerontologist* 44(1): 24-38.
- Riccucci, Norma. 2005. *How management matters: Street-level bureaucrats and welfare reform*. Georgetown University Press.

- Riordan, Christine M. 2000. "Relational demography within groups: Past developments, contradictions, and new directions." In *Research in personnel and human resources management*. 131-173. Emerald Group Publishing Limited.
- Rosener, Judy B. 1990. "Ways women lead." *Harvard business review* 68(6): 119-125.
- Ross, Shirley M., and Lynn R. Offermann. 1997. "Transformational leaders: Measurement of personality attributes and work group performance." *Personality and Social Psychology Bulletin* 23(10): 1078-1086.
- Rutherford, Amanda. 2017. "The Role of Managerial Fit in Determining Organizational Performance: An Empirical Assessment of Presidents in US Higher Education." *The American Review of Public Administration* 47(7): 764-778.
- Schein, Virginia E. 2001. "A global look at psychological barriers to women's progress in management." *Journal of Social issues* 57(4): 675-688.
- Smith, Caroline, and Barbara Lloyd. 1978. "Maternal behavior and perceived sex of infant: Revisited." *Child development* 49(4): 1263-1265.
- Stivers, Camilla. 2002. *Gender images in public administration: Legitimacy and the administrative state*: Sage Publications.
- Tom, Victor R. 1971. "The role of personality and organizational images in the recruiting process." *Organizational Behavior and Human Performance* 6(5): 573-592.
- Torenvlied, René, Agnes Akkerman, Kenneth J. Meier, and Laurence J. O'Toole. 2013. "The

- multiple dimensions of managerial networking." *The American Review of Public Administration* 43 (3): 251-272.
- Van der Wal, Zeger. 2011. "The content and context of organizational ethics." *Public Administration* 89(2): 644-660.
- Vianen, Annelies Em. 2000. "Person—Organization Fit: The Match Between Newcomers' and Recruiters' Preferences for Organizational Cultures." *Personnel psychology* 53(1): 113-149.
- Volden, Craig, Alan E. Wiseman, and Dana E. Wittmer. 2013. "When are women more effective lawmakers than men?." *American Journal of Political Science* 57(2): 326-341.
- Wajcman, Judy. 1996. "Desperately seeking differences: Is management style gendered?" *British Journal of Industrial Relations* 34 (3):333-349.
- Williams, Christine L. 1989. *Gender differences at work: Women and men in non-traditional occupations*. Univ of California Press.
- Williams, John E., and Deborah L. Best. 1990. *Measuring sex stereotypes: A multinational study, Rev. Ed.* Sage Publications.
- Wilson, James Q. 1989. "Bureaucracy: What government agencies do and why they do it." *Basic Books*.
- Zaheer, Akbar, Bill McEvily, and Vincenzo Perrone. 1998. "Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance." *Organization*

*Science* 9(2): 141-159.

Zhu, Ling, Scott E. Robinson, and René Torenvlied. 2015. "A Bayesian approach to measurement bias in networking studies." *The American Review of Public Administration* 45(5): 542-564.

Zhu, Ling. 2017. "Voices from the Frontline: Network Participation and Local Support for National Policy Reforms." *Journal of Public Administration Research and Theory* 27(2): 284-300.