

# A Systematic Review of the Gender Pay Gap and Factors That Predict It

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## Abstract

This study conducts a systematic review of 98 peer-reviewed journal articles that empirically investigate the presence of the gender pay gap along with factors that espouse it in organizations. The purposes of this study are threefold. First, it aims to explore trends in recurring themes that surface as factors that engender the gender pay gap in the workforce. Second, based on identified themes, the review summarizes and compares the gender pay gap by sector. Finally, the study presents a discussion on how the public sector fairs out in closing the gender pay gap and factors that predict it.

## Keywords

public sector, the gender pay gap, equal employment opportunity, workplace authority, access to hiring and promotion, gender representaion

## Introduction

Gender research has largely evolved from normative to empirical investigation over the past few decades. Public administration research also became more focused on understanding gender and race difference in workplace opportunities. The study of disparities in access to workplace opportunities is important because it has social, economic, and physiological implications as it

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pertains to access to such opportunities (Huffman & Cohen, 2004; Jaffee, 1989; R. A. Smith, 2002; Wright, Baxter, & Birkelund, 1995). Economic reward is the most frequently measured aspect of rewards related to workplace opportunities. Besides, what makes workplace disparity (particularly disparity in economic rewards derived from lack of access to opportunities) important is that not all disparities can be explained by differences in human capital and skill competencies. The effect of non-competency and non-work-related traits (e.g., gender, race, or ethnicity) on access to workplace opportunities creates advantages to some, while denying these advantages to others who are equally, or more, qualified. As a measure to address such discriminatory practices in the workforce in the United States, Title IV of the Civil Rights Act of 1964 was instated and has since been implemented through Equal Employment Opportunity Commission (EEOC) federal level agency. Title IV of the Civil Rights Act provides protection against employment discrimination based on race, gender, religion, or country of origin (42 SEC. 2000e-2).

For many years, researchers have been trying to identify forms of workplace discrimination, particularly gender- and race-based discrimination practices in the United States and across the globe. These studies have mostly investigated single types of discrimination, such as the pay gap, access to promotion, access to authority and others. Very few studies have taken the challenge of conducting a meta-analysis of past studies that estimate the effect of gender-based discrimination on women in the workforce. Particularly, three peer-reviewed journal articles (see Jarrell & Stanley, 2004; Stanley & Jarrell, 1998; Weichselbaumer & Winter-Ebmer, 2005) conducted meta-analyses of the gender pay gap in the workforce. However, none have carried out a systematic review of exiting literature on the pay gap and factors that induce it. This study addresses the gap in literature by reviewing past studies to identify recurring themes that are associated with the gender pay gap. Besides, with an emphasis on the public sector this study provides a comparison of how different sectors perform on closing the pay gap.

The purpose of this study is, first, to identify and summarize drivers of the pay gap as identified in previous studies. Second, we investigate how the public sector compares with the private and multi-sector environments in the provision of equal opportunity to its workforce. Finally, we identify and discuss areas that the public sector has progressed in closing the pay gap and others where it has lagged behind.

The study has four main sections: The section "Data and Method" presents a rationale for data and methodology used in the study. The section "Recurring Theme on Drivers of the Pay Gap" presents a general summary on recurring themes from the systematic review of past studies that investigate the gender pay gap in the workforce. The section "Sector Comparison by Theme" presents

a comparison of public sector, private sector and multi-sector organizations as it pertains to the gender pay gap and factors that predict it. This section also aims to investigate whether the trends observed in the themes are consistent or different across the three sectors. By doing so, we intend to identify whether fundamental sector value differences espouse different outcomes on gender equity in their workforce. The section “Discussion” presents an in-depth discussion on where the public sector stands in establishing pay equity and closing gaps on factors that espouse it. This systematic review therefore addresses the following three research questions:

**Research Question 1:** What recurring themes explain the gender pay gap in the workforce?

**Research Question 2:** Based on identified recurring themes, are there sector differences in the gender pay gap and factors that engender it?

**Research Question 3:** Based on trends that explain the gender pay gap across sectors, how does the public sector fair out compared to other sectors in terms of providing equal opportunities to women in the workforce?

## Data and Method

This section discusses systematic review as a research tool and the rational for using systematic review in this study. Following that, a discussion is presented on article selection, inclusion criteria, as well as methodology employed to review articles included in the study.

### *Systematic Review*

Systematic review is a research tool that helps collect, summarize, and synthesize findings from past studies in a meaningful way. Petticrew and Roberts (2006) argue that this research tool has become increasingly relevant in the social sciences to synthesize evidence from past studies “to answer questions about etiology (causes of problems) or about people’s experiences” (p. xiii-xiv). It is particularly helpful to form a conclusion about a subject matter based on findings from past studies, which could have otherwise been difficult to manage. In the same line of argument, Glass, McGaw, and Smith (1981) present that such research tools help utilize findings from past studies to understand trends and predict cumulative findings on the position of a subject matter of interest. Petticrew and Roberts also argue that

The systematic review by contrast adopts a particular methodology in an endeavor to limit bias, with the overall aim of producing a scientific summary

of the evidence in any area. In this respect, reviews are simply another research method, and in many respects they are very similar to a survey—though in this case they involve a survey of the literature, not of people. (p. 10)

Therefore, systematic review as a research tool helps to synthesize independently conducted research on a phenomenon that is carried out over a long period of time. This helps identify trends, similarities, or differences of findings on the subject of investigation, and helps identify major gaps in research. Unlike a systematic review, a meta-analysis/meta-regression method conducts statistical estimation based on findings from prior studies. A systematic review may or may not conduct a statistical analysis (Petticrew & Roberts, 2006). The decision to conduct a statistical analysis in a systematic review type of study depends on whether studies that are included in the review share similar statistical estimation that can be combined and analyzed in a meaningful way.

Although a systematic review with statistical analysis can be very helpful to collectively estimate findings from prior studies, our study is only limited to present a systematic review of the literature and findings in the absence of a statistical estimation. This is because studies included in this systematic review lack common parameters that can be collectively analyzed. This is not surprising given that the gender pay gap research is conducted in different sectors and by multiple disciplines each having its own research protocols and norms.

## *Method*

*Rationale for using systematic review as a research tool.* This study adopts systematic review as a research tool to first inform our audience on drivers of the gender pay gap in the workforce. Second, the review compares and contrasts how the public sector performs in closing the gender pay gap compared with private and multi-sector contexts (multi-sector studies are those that are conducted using population survey data with no specific sector focus). This study can inform policy makers and public sector agency managers who are engaged in the effort to create equal employment opportunity to its workforce on where public and nonprofit institutions stand in closing the gender pay gap. Finally, based on findings of this study, the conclusion provides direction on future areas of research on gender pay equity in the public sector.

## *Inclusion Criteria*

Article selection in this study is based on three criteria. First, following the common practice in meta-analysis and systematic review type studies, we

only include published peer-reviewed journal articles from recognized journal outlets. Including only published peer-reviewed journal articles that have gone through a rigorous review process is an assurance of the quality of these articles. This is particularly important in a systematic review because the overall reliability and validity of the review will partly depend on the quality of studies included in the review. Second, only studies with empirical analysis (using quantitative, qualitative, or mixed methods) are included for review. Third, the review only includes studies that identify the gender pay gap as an outcome of institutional processes.

### *Article Selection*

The main search phrases used to select articles for inclusion in the systematic review are “pay gap” and “wage gap.” Major public administration and labor relations journals were searched through JSTOR, EBSCOhost, Science Direct, ProQuest, Wiley, and SAGE search engines. However, the selection of the pay gap studies is screened to include only studies that investigate the gender pay gap or the intersection of gender and race pay gap in the workforce.

A total of 250 articles were initially identified as studies that directly or indirectly investigate the gender pay gap. However, after reviewing all articles using the three selection criteria, only 98 articles were selected for inclusion. Most of the selected studies were conducted in the context of the United States and some were comparative studies that looked across European countries. Other studies compared the gender pay gap among advanced countries including articles based on the United States and other industrial countries. Some articles directly or indirectly estimated the gender pay gap in the private sector (21 articles), public sector (22 articles), nonprofit sector (two articles). Great majority of the studies were based on population and other forms of census data in the context of multi-sector environments (53 articles). Finally, three articles that conducted meta-analysis were also included in the review.

### *Review Method*

Following selection, each article is thoroughly examined and summarized in an excel spreadsheet using 12 categories: study title, year of publication, country/region, sector, study population, data source, methods, variables of interest, research question/hypothesis, theoretical framework, study finding, and study conclusion. Based on the main theme associated with the gender pay gap that each article investigates, the article is grouped and analyzed together with similar articles. This grouping also enables us to compare and summarize studies that address similar themes, and allows us to identify

emerging themes of factors explaining the gender pay gap in the workforce. The four identified recurring themes that explain the gender pay gap in this systematic review are direct estimation of the gender pay gap, disparity in access to workplace authority as a predictor of the gender pay gap, access to hiring and promotion as a predictor of the gender pay gap, and institutional gender representation as a predictor of the gender pay gap.

### *Gender Equity in the Public Sector*

*Equity, representation, and accountability.* The public and nonprofit sectors tend to provide equitable environments for their respective workforces (Kaufman, 2002). The public and nonprofit sectors also have core values that clearly separate their functions from those of the for-profit sector. While private sector values are based on efficiency and effectiveness, and are driven by profit making, the public sector however is established on additional values of fairness, justice, and equity (Frederickson, 2010). Balcik, Iravani, and Smilowitz (2010) argue “public sector is mainly characterized by nonmonetary performance requirements, multiple constituencies, and public scrutiny on decisions” (p. 1). In addition Wise (1990) argues,

A concern for social equity in civil service system is appropriate on at least three grounds. First, government jobs offer material rewards that affect individual living standards. Second, certain intrinsic rewards are unique to public sector employment. Third, participation in the public bureaucracy provides an opportunity for substantive political representation. (p. 567)

Wise’s argument presents an additional perspective to why the public sector should engage in providing equitable opportunity to its workforce, based not only on material and intrinsic reward for employees but also on grounds of bureaucratic representation as an important role of the public sector workforce. While fairness and equity value arguments provide explanation to why the public sector workforce should enforce and also engage in providing equal employment opportunity, representation argument brings in the importance of diversity in the workforce to induce passive and active representation of society by public sector workforce.

Finally, Llorens, Wegner, and Kellough (2008) also contend that expectation on the public sector to provide equitable environment for its workforce is derived from the notion that “Government has an obligation, it is argued, to serve as a model employer and provide an appropriate example for the private sector” (p. 397). Therefore, the public sector should be accountable to the standards it sets for itself and others.

*Establishing equity in the public sector.* Past studies have focused on differences and similarities in the treatment of women and minorities in the workforce. Some argue that the public sector has been associated with providing an equitable environment for women and minorities because of differences from the private sector in its established institutional procedures (Kaufman, 2002). In other words, expectation of equal treatment of women and minorities within the public sector is partly derived from public service values that yield a sector responsive to issues of representation and fairness including gender equity (Frederickson, 2010; Reskin, McBrier, & Kmec, 1999; Riggs, 1970; Tomaskovic-Devey and Skaggs 1999; Wise, 1990). Others also argue that the very nature of institutional procedures in the public sector including entrance qualification exams, job grades, and performance appraisal procedures create a system established on objectivity rather than subjectivity in evaluation of employee performance (Byron, 2010; Diprete, 1989; Dobbin, Sutton, Meyer, & Scott, 1993). However, others also argue that subjective performance appraisal procedures provide grounds for discrimination in the workforce (Landau, 1995; Powell & Butterfield, 1994).

### *Recurring Themes on Drivers of the Pay Gap*

This section of the systematic review addresses the first research question identified in this study: “What recurring themes explain the gender pay gap in the workforce?” It includes a list of persistently recurring themes associated with the gender pay gap in the workforce. Included studies directly or indirectly examine whether gender is a significant predictor of the pay gap in the labor market. Most studies included in this review conduct an empirical analysis of the pay gap directly while others identify factors that serve as moderators of the pay gap. The systematic review identifies four recurring themes related to the gender pay gap in the workforce. The first group of studies directly estimates the extent of the pay gap in the workforce. The second group of studies investigate disparities in access to workplace authority as a driver of the pay gap. The third group of studies investigate access to hiring and promotion practices as moderators of the pay gap. The fourth group of studies investigate the relationship between gender representation (agency, occupation, and position segregation) and the pay gap in the workforce.

### *Access to Workplace Authority*

Workplace authority is one of the most recurring themes that drive the gender pay gap in organizations. Like access to hiring and promotion, access to

workplace authority is also an important aspect of an individual's development in the workforce. Disparity in access to workplace authority is a condition where individuals who are equally qualified are denied access to authority opportunities based on non-work-related attributes including race, gender, and/or other factors. Huffman and Cohen (2004) argue, "Authority is a highly valued attribute of jobs because it is status conferring and shapes how financial rewards are allocated to workers" (p. 121). Gender-based workplace authority disparity can infer two important disparities in the workforce. First, it infers that women are systematically denied access to positions with authority in the workforce. Second, even when women are granted positions of authority, compared with their male counterparts, the level of authority they exercise may significantly differ, hence also implying that the economic return from their job can be lower than their male counterparts. Gender differences in access to workplace authority essentially addresses the issue of women's limited access to legitimate workplace autonomy over an organization's operation and personnel functions (Alkadry & Tower, 2011, 2014; Baxter & Wright, 2000; Kluegel, 1978; R. A. Smith, 2002; Wolf & Fligstein, 1979a; Wright et al., 1995; Zeng, 2011).

### *Access to Hiring and Promotion*

Powell and Butterfield (1994) argue that workplace promotion decision is an important point in an individual's career because promotion decisions by management consist of "subjective appraisals" (p. 69). Studies included in this group primarily look at ways in which women are being discriminated during hiring and promotion process in organizations that explains the pay gap. Most promotion studies in the review look at how the hiring and promotion processes directly or indirectly affect the pay gap, while others discuss the effect of hiring and promotion disparities through glass ceiling, leaky pipeline, and sticky floors conceptual frameworks. A common theme across all studies in this group is that subjective appraisals that determine hiring and promotion decisions create a condition where women and minorities are being systematically denied of career opportunities that could potentially result in better economic and other benefits. The following section presents a discussion on conceptual frameworks that fall under gender-based disparity in access to hiring and promotion.

**Glass ceiling.** The glass ceiling phenomenon is one of the ways that discrimination in access to promotion is manifested in the workforce. Promotion in the context of the glass ceiling concept addresses lack of equal opportunity presented to men and women in advancing into higher management positions.



The U.S. Department of Labor (1991) defines the glass ceiling as “those artificial barriers based on attitudinal or organizational bias that prevent qualified individuals from advancing upward in their organizations” (p. 1). A common definition of the glass ceiling phenomenon is the presence of invisible barriers, which impede women’s and minorities’ upward mobility in organizations (Baxter & Wright, 2000; Bullard & Wright, 1993; Cotter, Hermsen, Ovadia, & Vannema, 2001). An important aspect of this phenomenon is also that it is manifested at higher levels of organizational hierarchies, it intensifies over individuals’ course of career and cannot be explained by factors related to lack of job competency skills (Cotter et al., 2001; Zeng, 2011). Zeng (2011) specifically identifies that in addition to preventing women and minorities from getting equal employment opportunities, this phenomenon also establishes inequalities at job-related outcomes such as income and occupational status. Hence, studies that were included in this review explored aspects of the glass ceiling effect in organizations but, most importantly economic implication of lack of access to management positions for women in the workforce.

*Leaky pipeline and sticky floors.* Besides the glass ceiling effect, which is associated with gender and race differences in access to management positions in the workforce, studies included in this review also identified other conceptual frameworks that help explain gender differences in access to hiring and promotion. The first concept is the leaky pipelines concept. Zeng (2011) argues that women and minorities face disadvantages at different stages of their career trajectory and “leak out” before reaching management positions. This particular concept of workplace inequality prompts researchers to investigate where “leaks” happen and what factors produce these leaks (Zeng, 2011). Similarly, the “sticky floor” concept explains the concentration of women and minorities in lower echelon position in organizations. Sticky floor explains systematic ways in which women are denied of opportunities to advance from lower elchlon position in their organizations and a large pay gap exists between each echelon of the wage distributions (Cotter et al., 2001). Arulampalam (2007) and Xiu and Gunderson (2014) also make an important argument by stating that the concentration of women in lower paying jobs result in depressed wages for women. Studies that investigate the above concepts argue that women are automatically excluded from opportunities for growth when they are systematically concentrated in lower echelon positions or when they are denied promotion opportunities that lead to management positions. The barriers to accessing management positions result in lower economic returns for women, hence widening the pay gap between men and women. As a result, access to hiring and promotion becomes an ancillary factor impacting women’s wage.

## **Gender Representation**

This group of studies discusses how gender representation in organizations directly or indirectly results in inducing the gender pay gap. Studies that identify representation as a driver of gender-based segregation in organizations identify position, occupation, and agency segregation as driving factors of gender-based inequality in the workforce. Position segregation relates to conditions where women are disproportionately concentrated in lower echelon positions in organizations (Alkadry & Tower, 2014). Second, agency segregation explains that women are concentrated in certain types of agencies (mostly redistributive agencies), while men are concentrated in distributive and policy influencing agencies (Newman, 1994). Occupational segregation, however, refers to the condition where women are concentrated in certain types of occupations such as education and social services whereas men are typically concentrated in Science, Technology, Engineering and Math education (STEM) field and finance occupations. What is important particularly for this study is that these forms of disproportionate gender representation in agencies, positions, or occupations induce the gender pay gap. This group of studies, therefore, identify whether representation by agency, occupation, or position induce based the gender pay gap in the workforce.

## **Sector Comparison by Theme**

This section addresses the second research question proposed earlier: “Based on identified recurring themes, are there sector differences in the gender pay gap and factors that engender it?” To answer this question, we summarize, compare, and report on findings from studies included in the systematic review. The discussion in this section is organized based on studies that directly estimate the gender pay gap along with identified recurring themes. Grouping of studies included in the review follows a particular strategy: First, studies that investigate pay and pay-related factors within the private sector are grouped under the category of private sector studies. Second, studies conducted within the public and nonprofit sector contexts are grouped together under public sector studies. Third, studies that are conducted using census data and/or other population survey data are grouped under multi-sector studies.

## **The Gender Pay Gap Studies**

This group of studies made the effort to estimate the gender pay gap in the workforce. This systematic review identifies three past articles that conducted

a similar investigation employing a meta-analysis of past studies that estimate the pay gap in the workforce. These are (a) Stanley and Jarrell (1998), (b) Jarrell and Stanley (2004), and (c) Weichselbaumer and Winter-Ebmer (2005). Although these three studies were conducted at different times, they all report that the gender pay gap is persistent but continues to decline steadily (Jarrell & Stanley, 2004; Stanley & Jarrell, 1998; Weichselbaumer & Winter-Ebmer, 2005). Weichselbaumer and Winter-Ebmer (2005) particularly report that “the steady decline in wage gap is due to better labor market endowments of females” (p. 479). The review also identifies and reviews additional articles that estimate the gender pay gap after the above three meta-analysis studies were published (post 2005, see Table 1). This helps to identify whether trends in the gender pay gap remains the same or has changed in either direction. Most studies (eight studies) that estimate the pay gap were conducted within multi-sector context using population survey data. Others also directly estimate the pay gap in the public sector (one study) and the private sector contexts (one study).

Studies included in this review report that although steadily declining, the pay gap is still persistent across all sectors. Some also report that human capital is a significant predictor of the pay gap (see Alkadry & Tower, 2006; Jarrell & Stanley, 2004; Stanley & Jarrell, 1998; Weinberger, 2011). Alkadry and Tower (2006) particularly report that gender and human capital explain 90.4% of the pay gap in their study population. Other studies that compare the pay gap in the public and nonprofit sectors with the private sector report that the gap is magnified in the private sector than in public and nonprofit sectors (Etienne & Narcy, 2010; Miller, 2009).

### *Workplace Authority Studies*

This group of studies investigate whether gender predicts access to workplace authority in organizations and as a result induces the gender pay gap. A total of 14 past studies were reviewed under this category. Of the reviewed studies, ten are conducted in multi-sector context, two are conducted in private sector context, and another two are conducted in the public sector context. All studies in this group overwhelmingly confirmed that gender predicts access to workplace authority in organizations. This group of studies also report that gender is a significant predictor of the pay gap with access to workplace authority serving as a moderating factor. Studies conducted within the public sector context find that there is significant gender difference in access workplace authority and as a result the gender pay gap (Alkadry & Tower, 2011; Lewis, 1986a). Moreover, these studies report that gender composition of an organization along with an organization's Internal Labor

**Table 1.** The Pay Gap Studies.

Study	Sector	Study theme	Conclusion
Alkadry and Tower (2006)	Public sector	The study examines gender pay gap in the public sector.	The study concludes that there is a significant gender wage gap in the study population. It also reports that gender and human capital variables predicted 90.4% of the variance in wage.
Arulampalam, Alison, and Bryan (2007)	Multi-sector	The study examines gender-based wage gap in the private and public sectors and across different countries.	The study reports significant gender wage gap in the study population.
Etienne and Narcy (2010)	Nonprofit and for-profit sectors (multi-sector)	The study investigates the pay gap within the study population across different distributions.	The study reports that the gender pay gap is more persistent in the for-profit sector than the nonprofit sector. It also suggests that it may be because of less occupational segregation in the nonprofit sector.
Jarrell and Stanley (2004)	Multi-sector	The study conducts a meta-analysis study to estimate the gender pay gap in the workforce based on 104 prior studies that estimate the wage gap.	The study concludes that although the gender pay gap is declining it is still persistent.
Miller (2009)	A comparison of public and private sectors	The study compares the gender pay gap between public and private sectors.	The study finds evidence of sticky floor in the public sector but not in the private sector. In the private sector, it reports that glass ceiling is more persistent at the very top of organizational hierarchies.

*(continued)*

**Table 1. (continued)**

Study	Sector	Study theme	Conclusion
Shih (2006)	Private sector	The study investigates how gender and race may have different implication on work experience in the study population.	The study finds that race and gender were predictors of wage gap and career trajectory.
Stanley and Jarrell (1998)	Multi-sector	The study conducts a meta-regression of 41 prior studies that estimate the wage gap in the workforce.	The study reports that wage differential has reduced considerably but is still persistent.
Xiu and Gunderson (2014)	Multi-sector	The study investigates variations in the male– female wage gap among various pay distributions.	The study reports the presence of glass ceiling and sticky floor effects.
Weinberger (2011)	Multi-sector	The study examines the presence of glass ceiling in the study population.	Although women in the study population were persistent in pursuing traditionally male-labeled positions, the study reports that glass ceiling was still persistent.
Weichselbaumer and Winter-Ebmer (2005)	Multi-sector	The study uses meta-analysis as a research tool to estimate gender pay gap from 263 prior studies that estimate the gender pay gap on the workforce.	The study concludes that raw gender pay differential has steadily declined across the globe but the pay gap is still persistent. The authors also predict that the improvement comes from increased women's participation in traditionally male-dominated occupations.

Management (ILM) policies and worker's attitude determine gender differences in access to workplace authority (Huffman, 1995; Jaffee, 1989; Wolf & Fligstein, 1979a; 1979b). Studies that explore the gender gap in authority

across countries find that the gender gap in access to workplace authority varied by countries (Baxter & Wright, 2000).

Finally, a common trend across most studies in this group is that studies conducted within the last decade or two report that variations in human capital do not significantly explain the existing gender gap in access to workplace authority in organizations (see Table 2). However, earlier studies did find that variations in human capital and self-selection explain part of the gap but not all (Lewis, 1986). A number of studies also find that family formation and the intersection of gender and race strongly predict access to workplace authority and as a result the pay gap (Bygren & Gähler, 2012; Elliott & Smith, 2004; Lewis, 1986).

### *Hiring and Promotion Studies*

This group of studies investigate gender differences in access to hiring and promotion in organizations. The literature on access to hiring and promotion shows that access to hiring and promotion are important factors that directly induce the gender pay gap. A total of 37 articles were reviewed: 11 studies conducted within the public sector, eight studies within the private sector, and 18 studies were conducted within multi-sector context.

Unlike studies reviewed under the gender gap in access to workplace authority, studies that fall under this category show clear sector differences in instituting the gender pay gap (see Table 3). Studies in this group particularly report that access to promotion at higher levels of organizational hierarchy was less persistent in the public sector than in the private and multi-sector contexts (Dolan, 2004; Lewis, 1986b; Peterson & Saporta, 2004; Powell & Butterfield, 1994). However, few studies conducted in the public sector and studies that compared public and private sectors showed evidence of sticky floors in the public sector indicating the lack of equal opportunity for women to advance in their organizations (Arulampalam, Alison, & Bryan, 2007; Miller, 2009; Peterson & Saporta, 2004; Xiu & Gunderson, 2014).

Most studies conducted in the public sector context generally report that gender is not a predictor of access to promotion; in fact, a study by Lewis (1986, 1997) reports that White women have access to equal or better performance rating and therefore better chances of promotion than men in the workforce. On the contrary, some studies report that gender is a significant predictor of access to promotion and the condition worsens when working women form family and have children (Guthrie & Roth, 1999; Naff, 1994; Peterson & Saporta, 2004). Guthrie and Roth (1999) also report that institutional environment and organizational structure both predict access to promotion for women working in the public sector.

**Table 2.** Access to Workplace Authority Studies.

Study	Sector	Study theme	Study conclusion
Alkadry and Tower (2011)	Public sector	The study investigates whether men and women in the same position have comparable levels of workplace authority.	The study concludes that there are significant differences in workplace authority profile between men and women in the study population. Gender gap in authority profile was also a significant factor that predicts the wage gap.
Bygren and Gähler (2012)	Multi-sector	The study examines whether there are any changes in gender gap in supervisory authority from 1968 to 2000.	The study reports that there are gender-specific age profiles in access to authority. The study also attributes family formation as a cause for work and age profiles in access to authority.
Elliott and Smith (2004)	Multi-sector	The study investigates the extent to which workplace power prevailed among women and minority groups.	The study confirms that there are gender and race differences in authority. It also reports that Black women were among the most disadvantaged in the system.
Huffman (1995)	Multi-sector	The study predicts the relationship between supply side, occupational segregation factors, and other organizational characteristics as predictors of workplace authority.	The study finds that occupational segregation predicts access to workplace supervisory authority. It also finds large gender gap in access to authority. The study concludes that gender differences in workplace authority in the study cannot be explained by supply side factors.

*(continued)*

**Table 2. (continued)**

Study	Sector	Study theme	Study conclusion
Huffman and Cohen (2004)	Multi-sector	The study examines gender differences in workplace authority.	The study reports that probability of men and women obtaining authority declined with increase in women's representation in the organizations.
Jacobs (1992)	Multi-sector	The study examines whether gender (women's) representation in management between the years 1970 and 1988 was real or it was assigned position without meaningful managerial authority.	The study reports that although the gender gap in wage narrowed, the gender gap in access to legitimate workplace authority is prevalent.
Jaffee (1989)	Private sector	The study investigates determinant factors of workplace autonomy (including gender and gender composition of an organization).	The study reports that gender differences in workplace authority persisted even when the study took account of human capital factors.
Kraus and Yonay (2000)	Multi-sector	The study compares authority profile of men and women in female-dominated, mixed, and male-dominated occupations.	The study concludes that the gender gap in authority is more significant in female-dominated agencies.
Lewis (1986a)	Public sector	The study examines if women and minorities are as likely to supervise (be in an authority position) compared to men and non-minorities in the federal workforce.	The study reports that women and minorities are not as likely to be in positions of authority as male and non-minority workers in the federal government.

*(continued)*



**Table 2. (continued)**

Study	Sector	Study theme	Study conclusion
McGuire and Reskin (1993)	Multi-sector	The study investigates whether gender and race predict access to and rewards of authority.	The study reports that Black women were the most disadvantaged in access to workplace authority.
Rosenfield, Buren, and Kalleberg (1998)	Multi-sector	The study examines gender differences in job authority among nine advanced industrialized countries.	The study reports that gender differences in workplace authority were prevalent across all countries in the study. However the magnitude of gender differences varied among countries.
Smith (2012)	Multi-sector	The study explores how the intersection of race and gender produce inequality including, authority and wage inequalities in the workforce.	The study reports that disparity is persistent at higher and lower organizational echelons in the study population.
Wolf and Fligstein (1979a)	Private sector	The study examines to what extent gender gap in authority can be explained by human capital factors, workplace policy, and worker attitude.	The study reports that gender differences in workplace authority existed in the study population. It also suggests that although human capital factors were important determinants of gender differences in authority, employee policy and attitude played much more important roles.
Wolf and Fligstein (1979b)	Multi-sector	The study investigates workplace stratification as a factor contributing to gender differences in authority.	The study reports that at all levels in organizational hierarchy, workplace authority was significantly different between men and women.

Studies conducted in private and multi-level sector contexts, on the contrary, overwhelmingly report that access to promotion is a significant source of gender-based discrimination, and as a result, induces the gender pay gap. These studies also report that race, organizational factors, gender composition of recruiting committees, and performance rating procedures contribute to the gender gap in access to promotion (see Table 3). A number of studies (mostly conducted in the private sector) also confirm the presence of glass ceiling, where women face invisible barriers that prevent them from accessing promotion into management positions (Bjerk, 2008; Cook & Glass, 2014; Gobillion et al., 2015; Gorman & Kmec, 2009). A private sector study by Bertrand and Hallock (2001) reports that gender does not predict access to promotion, however, it also reports there is a significant gender pay gap (45%) at management level.

### ***Representation Studies***

This group of studies present a discussion on how gender representation in organizations including position, occupation, and agency segregation impact the opportunity landscape for women in the workforce. Most studies reviewed in this section also explored gender-based remuneration gap related to patterns of gender representation in organizations. The review included a total of 37 peer-reviewed journal articles with ten articles conducted in the public sector, ten articles conducted in the private sector, and 17 articles conducted in multi-sector contexts.

The review shows that the public sector has improved conditions for women compared with other sectors. However, almost all studies report that gender-based segregation is persistent across all sectors (see Table 4). Most studies also report that the intersection of gender and race is a significant predictor of segregation and the pay gap in the workforce. Studies conducted in the public sector report that occupational and agency segregation is slowly decreasing through the years and is less prevalent at higher levels of the organizational hierarchies (Lewis, 1988, 1998; Sneed, 2007). However, although unexplained gender differences in wage is shrinking among federal civil service workforce, Lewis (1998) reports that women and minorities still earned less than non-minority men. Others report that agency characteristics and gender representation of key management personnel have little implication on women's representation in the public sector workforce (Cronwell and Kellough, 1994; Pynes, 2000). A study by Lewis and Soo Oh (2009) reports that occupational segregation explains part of the pay gap, nevertheless, they also report that women's transition to traditionally male-dominated agencies has not helped close the pay gap.

**Table 3.** Hiring and Promotion Studies.

Study	Sector	Study theme	Study conclusion
Albrecht, Björklund, and Vroman (2003)	Multi-sector	The study investigates the presence of glass ceiling and the pay gap related to glass ceiling in the study population.	The study finds that glass ceiling is present at high organizational hierarchies. It also reports that occupation segregation adds to the persistent glass ceiling effect in the study population.
Arulampalam, Alison, and Bryan (2007)	Multi-sector	The study investigates the presence of sticky floor and glass ceiling effects in the study population.	The study reports that in general, women earned less than men. It also reports that the wage gap was wider at top and sometimes also at the bottom of the organizational hierarchy.
Bain and Cummings (2000)	Multi-sector	The study investigates the rate at which women in academia reach full professorship.	The study concludes that there is significant gender differences in opportunity for promotion into full professorship in academia.
Baldwin (1996)	Public sector	The study investigates gender differences in promotion within the U.S. Military.	The study reports that in general, gender differences in access to promotion in the military are not significant. However, it also finds that inequality in access to promotion is evident in the U.S. Navy and is more persistent at management level.
Bagues and Esteve-Volart (2010)	Multi-sector	The study investigates whether gender composition of recruiting committees in an organization influence hiring and promotion decision outcomes.	The study finds that female candidates are less likely to be hired when majority of recruiting committee gender composition is female. The study assumes this is because female majority committees overestimate the qualification of male candidates.
Baxter and Wright (2000)	Multi-sector	The study investigates whether gender gap in access to management position was persistent across three developed countries.	The study reports that the glass ceiling was present in the study population. It also reports that there is no systematic glass ceiling in the United States.
Bertrand and Hallock (2001)	Private sector	The study explores if there are traces of women cracking the glass ceiling and if the gender pay gap manifests at top management positions.	The study reports that there is significant gender pay gap (45%) in the study population. It also reports that the glass-ceiling effect was not significant within the study population.

*(continued)*

**Table 3. (continued)**

Study	Sector	Study theme	Study conclusion
Bjerk (2008)	Multi-sector	The study investigates whether there is equal opportunity for men and women in hiring and promotion decisions.	The study concludes that there is significant underrepresentation of women and minorities at higher levels of the organizational hierarchy.
Budig (2002)	Multi-sector	The study investigates if there are male advantages in female dominated agencies.	The study reports that there are no systematic advantages to men in the study.
Bullard and Wright (1993)	Public sector	The study investigates the presence of glass ceiling in U.S. state agencies.	The study reports that although the glass ceiling is present in state agencies, women have progressed in attaining management positions especially in some types of agencies and newly established agencies.
Cook and Glass (2014)	Private sector	The study explores "the glass cliff" concept and follows up on what happens to women once they are promoted to management positions.	The study reports that organizational factors are important predictors of gender and race differences in access to promotion.
Cotter, Hermsen, Ovadia, and Vannema (2001)	Multi-sector	The study examines whether the glass ceiling is present in the study population.	The study reports evidences of glass ceiling. It also reports that patterns in glass ceiling were not similar for women and minority men.
Davies-Netzley (1998)	Private sector	This study investigates gender differences on perception of factors that determine individual access to promotion.	The study finds that there are gender differences on perception of access to promotion.
Dolan (2004)	Public sector	The study explores the extent to which women's promotion into SES position in public agencies was real.	The study finds that male and female members of SES did not experience gender differences in workplace responsibilities.
Fain (2011)	Private sector	The study explores how long it takes for women to hold management positions from the time an organization is established.	The study reports that it takes organizations longer to change gender composition at management level than it does at lower levels.

*(continued)*

**Table 3. (continued)**

Study	Sector	Study theme	Study conclusion
Gayle, Golan, and Miller (2012)	Private sector	The study investigates patterns of career mobility among executives in the private sector.	The study concludes that when controlling for executive rank and background, women earned higher than men and had higher chances of being promoted quicker than men.
Gobillon, Meurs, and Roux (2015)	Multi-sector	The study investigates patterns in gender differences in access to jobs.	The study concludes that gender differences in promotion increases at higher levels of organizational hierarchies.
Gorman and Kmec (2009)	Private sector	The study investigates promotion disadvantages for women at higher positions.	The study confirms that gender was a significant predictor of promotion into higher positions.
Guthrie and Roth (1999)	Multi-sector	The study explores the extent to which women had comparable promotion opportunity in the study population.	The study concludes that institutional characteristics and an organization's internal labor structure are significant predictors of the probability that an organization will have a female CEO.
Landau (1995)	Private sector	The study explores the relationship between race and gender on performance rating leading to promotion.	The study concludes that there are significant gender differences in performance rating.
Lewis (1986)	Public sector	The study investigates whether men and women have similar promotion probability in the federal government.	The study reports that men and women have similar promotion probabilities in the federal government.
Lewis (1997)	Public sector	The study explores gender and race differences in performance rating.	In contrary to other studies, this study concludes that especially White women earned higher performance ratings than White men in the same position.
Mani (1999)	Public sector	The study addresses the effects of veterans' preference policies on women's status in the workforce.	The study concludes that veterans' preference policies had little impact on women's status in organizations.

*(continued)*

**Table 3. (continued)**

Study	Sector	Study theme	Study conclusion
Morgan (1998)	Multi-sector	The study examines whether observed gender pay gap was as a result of the glass ceiling effect or cohort effect.	The study reports that cohort effect had more effect on observed gender differences in pay in the study population than glass ceiling effect.
Naff (1994)	Public sector	The study investigates factors that predict successful upward mobility for women in the study population.	The study finds that work experience and education only partially explain the existing gender differences in probability to promotion.
Oritz and Roscigno (2009)	Multi-sector	The study investigates discriminatory practices toward minority women.	The study reports that race and social class explain discriminatory firing actions in the study population. It also reports that promotion discrimination is mostly based on race (black women were the most disadvantaged of all groups).
Olson and Becker (1983)	Multi-sector	The study examines the extent of gender difference in the incidences of returns to promotion.	The study reports that although there are significant gender differences in pay, there is no evidence of gender differences on returns to promotion.
Peterson and Saporta (2004)	Public sector	The study traces career trajectory including pay of individuals in the public sector.	The study concludes that there is evidence of gender differences in workplace treatment (promotion, wage) at initial level but the differences changed at higher- level positions.
Powell and Butterfield (1994)	Public sector	The study investigates the direct and indirect influence of gender on promotion to top management position (SES position).	The study reports that there is no indication of gender differences in access to promotion.
Pynes (2000)	Public sector (nonprofit sector)	The study investigates whether there are gender differences in access to management positions in the nonprofit sector.	The study reports that there are significant gender differences in access to management positions (women made up only 16% of the CEO population).

*(continued)*

**Table 3. (continued)**

Study	Sector	Study theme	Study conclusion
Shih (2006)	Private sector	The study investigates gender and race differences in access to promotion in the Silicon Valley.	The study reports that beyond gender and race, social interaction and networking had significant effect on an individual's career trajectory.
R. A. Smith (2012)	Multi-sector	The study investigates ways in which gender, race, and ethnicity interact to produce inequality in the workforce.	The study reports that relative inequality was significant at lower and higher echelons of organizational hierarchies.
Weinberger (2011)	Multi-sector	The study investigates the presence of glass ceiling in the study population.	The study reports the presence of glass ceiling effect that slows the progress of women into management positions.
Williams (1992)	Multi-sector	The study investigates the presence of gender differences in access to hiring and promotion.	The study concludes that men did not face discrimination in predominantly female occupations. In the contrary it finds that men experience advantages in female dominated occupations, hence confirming the presence of the "glass-escalator" phenomenon.
Xiu and Gunderson (2014)	Multi-sector	The study investigates if the pay gap varies across different pay distributions.	The study reports evidences of the sticky floor effect in China and minimal traces of the glass ceiling effect.
Yamagata, Yeh, Stewman, and Dodge (1997)	Public sector	The study investigates traces of gender segregation and the glass ceiling in the study population.	The study reports that the glass ceiling is more persistent when women stay in the same organization for a long time. It also reports that women have better chances of access to promotion when they change work.
Zeng (2011)	Multi-sector	The study investigates gender and race differences in access to management positions with authority.	The study confirms the presence of the glass-ceiling effect and that gender differences in access to promotion was mostly concentrated at lower and mid-levels of the organizational hierarchies.

Note. SES = socioeconomic status.

**Table 4.** Gender Representation Studies.

Study	Sector	Study theme	Study conclusion
Adams and Funk (2012)	Private sector	The study investigates whether there are gender differences in values and risk attitudes among top level managers.	The study finds significant gender differences in values and risk attitudes among top-level managers. The study also concludes that male managers were more interested in power and achievement than female managers.
Baron, Mittman, and Newman (1991)	Public sector	The study investigates how organizational dynamics affected gender integration in California state agencies between 1979 and 1985.	The study concludes that organizational dynamics impacts gender integration. It also finds that gender integration in organizations is influenced by external pressure and size of organizational interest groups.
Bellas (1994)	Multi-sector	The study investigates whether gender proportion of women in academia depreciates salaries.	The study reports that faculty members in predominantly female-dominated disciplines face unexplained wage penalty.
Bertrand and Hallock (2001)	Private sector	The study first examines the presence of the gender pay gap among top executives.	The study finds that women are fewer in number at management positions and there is significant pay gap between men and women at top executive positions.
Blair-Loy (1999)	Private sector	The study examines objective and subjective factors that determine women's access to management positions.	The study finds that internal labor market, geographic mobility and human capital factors determine women's access to management in finance.
Blau and Beller (1988)	Multi-sector	The study investigates wage gap and women's labor force participation over time.	The study reports that earning gap is persistent. It also finds that women's comparative returns to education and representation in male-dominated agencies contributed to the pay gap.
Blau and Kahn (1994)	Multi-sector	The study predicts the gender pay gap in the study population.	The study reports the gender pay gap and occupational gap are closing. It also reports that women's shift into traditionally male-dominated occupations helps to close the gap.

*(continued)*



**Table 4. (continued)**

Study	Sector	Study theme	Study conclusion
Blum, Fields, and Goodman (1994)	Private sector	The study investigates the relationship between organizational characteristics and percentage of women in management positions in different industries.	The study concludes that gender representation in management varies by type of organization (manufacturing vs. service industries).
Bridges and Nelson (1989)	Multi-sector	The study investigates the gender pay gap based on gender representation in organizations.	The study finds that female-dominated agencies pay relatively less. It also concludes that gender inequality in organizations to a great degree is influenced by decision-making.
Budig (2002)	Multi-sector	The study investigates whether men's advantage in pay is consistent across all types of agencies (female-dominated, male-dominated, and gender-balanced institutions in the study).	The study finds significant male advantages in wage and wage growth across all types of institutions.
Cech and Blair-Loy (2010)	Private sector	The study investigates why women are scarce in management within the study population.	The study reports human capital and organizational structure explain gender differences in management.
Cohen (2001)	Multi-sector	The study investigates the effects of labor market proportion on wage.	The study concludes that more than gender, race was a significant predictor of labor market inequality.
Connell (2006)	Public sector	The study investigates patterns of gender arrangement in the public sector.	The study reports patterns of gender-based agency segregation in the study population.
Cronwell and Kellough (1994)	Public sector	The study explores factors that drive disparities in gender and race representation in federal agencies.	The study finds that agency characteristics (agency size, rate of new hiring and union strength) had no significant impact on women and minority representation in federal agencies.
Dixon and Seron (1995)	Private sector	The study investigates whether pay decisions are influenced by differences in gender representation in organizations.	The study concludes that the pay gap is induced by social and human capital deficiencies.

*(continued)*

**Table 4. (continued)**

Study	Sector	Study theme	Study conclusion
England, Farkas, Stanek, and Dou (1988)	Multi-sector	The study predicts the presence of wage gap between of male and female employees in the study population.	The study confirms evidences of pay discrimination in female-dominated agencies.
Filer (1985)	Multi-sector	The study predicts the extent to which the pay gap is explained by working conditions at different levels of an organization.	The study reports that the pay gap is partly explained by differences in working conditions. It also reports that it contributes significantly to the ability to explain average earnings for each sex.
Gagliarducci and Paserman (2015)	Private sector	Based on labor market discrimination theories, the study investigates whether increased representation of women in management yields workplace policies that are friendly to female employees.	Contrary to labor market discrimination theories, the study reports that it finds no evidence of women's representation in management yielding more female-friendly labor policies.
Halaby (1979)	Private sector	The study predicts pay gap among men and women working in the same organization and conducting the same job.	The study finds evidence of the pay gap induced by position segregation.
Jacobs (1989)	Multi-sector	The study examines gender-based occupational segregation in organizations.	The study reports that occupational segregation was persistent from 1900 through 1970, but has declined steadily from 1970 through 1986.
Kelly and Newman (2001)	Public sector	The study examines whether agency type determines pay and gender representation in the workforce.	The study reports that gender is a stronger predictor of pay than agency type. However, it also reports that agency type does predict the gender pay gap at higher levels of organizations.
Kerr, Miller, and Reid (2002)	Public sector	The study investigates differences in gender representation within state agencies.	The study finds significant level of occupational segregation among administrators in state agencies. However, it also reports that there is little evidence of occupational segregation of professionals in state agencies.

*(continued)*

**Table 4. (continued)**

Study	Sector	Study theme	Study conclusion
Kilbourne, England, Farkas, Beron, and Weir (1994)	Multi-sector	The study predicts the gender pay gap using national individual-level panel data from 1966 to 1981.	The study reports that the gender pay gap and workplace experience are determined by human capital factors.
Lewis (1988)	Public sector	The study investigates whether the federal civil service made progress toward gender and racial equality, in employment and wage.	Although slow, the study finds that women and minorities are making progress in the federal civil service system.
Lewis (1998)	Multi-sector	The study examines trends in the gender pay gap followed by an investigation of trends in "unexplained" pay gap.	The study reports that women and minorities continue to earn substantially lower than non-minority men. However, it also finds that unexplained differences are shrinking steadily.
Lewis and Soo Oh (2009)	Public sector	The study investigates whether occupational segregation explains the gender pay gap.	The study finds that occupational segregation explains part of the gender pay gap but it also reports that women's transition into traditionally male occupations does not help close the pay gap.
Long (1976)	Multi-sector	The study examines gender and race differences in earning among federal civil service employees.	The study reports that even after taking productivity differentials into account, gender and race predict gender differences in pay and employment opportunities.
Polachek (1981)	Multi-sector	The study examines whether women's time in and out of work is related to their type of occupation.	The study reports evidences of relationship between occupation choice and women's in and out time of work.
Pynes (2000)	Nonprofit sector	The study investigates whether organizational factors such as agency budget, organization mission, and gender of key employee determine women's representation in management positions.	The study concludes that gender of key employees in management and agency budget do not predict women's representation in management positions.

*(continued)*

**Table 4. (continued)**

Study	Sector	Study theme	Study conclusion
McKay (2006)	Private sector	This study explores the impact of three organizational factors (firm nationality, product characteristics, and existing labor relations) on gender stratification in organizations.	The study concludes that regardless of firm-level factors, external factors significantly contribute to gender stratification in organizations.
Meier, Pennington, and Eller (2005)	Public sector	The study investigates the extent of active representation of racial minorities and women in EEOC district offices.	The study reports that in contrary to what is expected, active representation of racial minorities in EEOC district offices is low. The study also finds no evidence of women's active representation in EEOC district offices.
Montgomery and Wascher (1987)	Multi-sector	The study examines race- and gender-based wage inequality in service and manufacturing industries.	The study finds that gender gap in wage is larger in manufacturing industry than it is in service industries. It also reports that the intersection of gender and race has greater impact.
Okamoto and England (1999)	Multi-sector	The study investigates both supply and demand side explanation to gender-based occupational segregation in the workforce.	The study reports that there are both supply and demand side explanations to gender-based occupational segregation. In addition, it reports that women's responsibility with family caregiving intensifies occupational segregation.
Sapienza (2010)	Private sector	The study investigates factors that lead to underrepresentation of women in certain occupations.	The study reports that certain industries undermine women's skills in the workforce.
Sneed (2007)	Public sector	The study explores occupational segregation in departmental functions and its impact on wage in the public sector.	The study finds that although occupational segregation has declined in the last two decades, it is still prevalent and it induces the wage gap in the workforce.
Solberg and Laughlin (1995)	Multi-sector	The study estimates gender pay gap within the study population.	The study reports that the gender pay gap exists in the study population and occupational crowding induces it.

*(continued)*

**Table 4. (continued)**

Study	Sector	Study theme	Study conclusion
Tam (1997)	Multi-sector	The study investigates the relationship between human capital factors and occupational gender composition in the study population.	The study concludes that human capital factors along with demographics characteristics explain gender composition in the study population.

Note. EEOC = Equal Employment Opportunity Commission.

In contrary to public sector studies, those conducted in private and multi-sector contexts report that women and minorities have a harder time advancing in their career (Bertrand & Hallock, 2001; Blau & Beller, 1988; Budig, 2002; Cohen, 2001; England et al., 1988; Montgomery & Wascher, 1987). Sapienza (2010) specifically reports that the market undermines women's skills. Others also report that increased women's representation in management positions has not helped yield ILM policies that are better friendly to female employees (Gagliarducci & Paserman, 2015). Hence, implying that women, particularly women with family responsibilities, have harder times striving in the workforce (Blair-Loy, 1999; Cech & Blair-Loy, 2010).

Studies conducted in multi-sector context also report that female-dominated agencies pay less compared to male-dominated agencies (Bridges & Nelson, 1989). Some also report that although occupational crowding explains a big portion of the pay gap (Solberg & Laughlin, 1995), it has been declining steadily in the last few decades (Blau & Kahn, 1994; Jacobs, 1989). Studies that conduct a comparison of specialized industries in the private sector report that, gender gap in representation and wage vary from one specialized service to another. Montgomery and Wascher (1987) particularly report that gender gap in representation, and as a result wage, is more prevalent in manufacturing industries than in service industries.

## Discussion

This systematic review investigates the gender pay gap and factors that are associated with the gap across different sectors. The study is also particularly interested in identifying how the public sector fairs out in closing this gap. The review shows mixed results on the performance of the public sector in closing the gender pay gap and factors that drive it. Hence in response to the the third research question (Based on trends that explain the gender pay gap across sectors, how does the public sector fair out compared to other sectors

in terms of providing equal opportunity to women in the workforce?), this systematic review reports mixed results. It is also important to take note of the fact that lack of adequate research in the public sector context on certain areas that explain the gender pay gap makes it difficult to confidently make a reliable conclusion on the performance of the public sector. Particularly, there is a lack of adequate empirical research on issues of gender gap in workplace authority in the public sector. Because of the mixed results on how the public sector fairs out in closing the gender pay gap, the discussion is categorized based on each of the identified themes.

### *The Gender Pay Gap*

This study finds that the gender pay gap is persistent across all sectors. However, studies that compare the pay gap by sector also report that the pay gap in the public sector is more subtle than it is in other sectors (see Table 1). Besides, other studies report that women in the public sector appear to enjoy a premium, which others do not (Smith, 1976). Studies conducted across all sectors also report that the gender gap in human capital explains majority of the pay gap and that women are oftentimes punished for time away from work (Alkadry & Tower, 2006; Choudhury, 1993; Kilbourne, England, Farkas, Beron, & Weir, 1994; Light & Ureta, 1995; O'Neill, 1985). An interesting finding from this review is that although occupational segregation explains part of the gender pay gap, women who cross into traditionally male-dominated occupations are not able to overcome the pay gap.

### *Access to Workplace Authority*

This systematic review finds that access to workplace authority is a consistent issue across all sectors and that gender, ILM policies, and gender composition of management are all strong and significant predictors of access to workplace authority. However, it is important to acknowledge that there are very few studies conducted within the public sector and private sector contexts. Hence, it is challenging to make a reliable conclusion on the state of the gender gap in access to workplace authority particularly in the public and private sectors.

### *Access to Hiring and Promotion*

Compared with other thematic factors that were identified in this review, studies reviewed under gender differences in access to hiring and promotion showed clear sector differences. Compared with others studies, those

conducted in the public sector context report that women had comparable opportunity to access to promotion into higher management positions as their male counterparts (Dolan, 2004; Lewis, 1986; Powell & Butterfield, 1994). On the other hand, other studies also report that evidences of “sticky floor” were persistent in the public sector than in other sectors.

### ***Gender Representation***

Studies reviewed under this theme find that the public sector has improved much better than other sectors in closing the gap in gender representation. However, although the public sector has performed better than other sectors in closing the gender gap in representation, representation remains responsible for the largest portion of the gender pay gap across all sectors.. Also, in contrary to theories that explain how agency characteristics and gender representation in management foster better opportunities for women, some studies conducted in the public sector context report that these factors had little to do with improved gender representation in the public sector workforce (Cronwell, 1994; Pynes, 2000).

In summary, the systematic review of past studies that investigate the gender pay gap in the workforce finds that the public sector performs comparably better than other sectors. Although the review finds that the gender pay gap is persistent across all sectors, the pay gap in the public sector is less pronounced than it is in other sectors. The review also finds that compared with other sectors, the public sector is progressing toward equity in access to hiring and promotion as well as representation of women in its workforce.

### **Conclusion**

This study has provided a systematic review of past studies on the gender pay gap in the workforce with specific interest in exploring the position of the pay gap and factors that facilitate it in the public sector. The review attempts to answer three questions. The first question deals with identifying recurring themes that explain the gender pay gap in the workforce. The second question addresses comparison of sector performance based on themes that were identified. Third, the review summarizes how the public sector fairs out in closing the gender pay gap and factors that engender it in the workforce. The study traces three recurring themes that surfaced as predictors of the gender pay gap in the workforce. These are disparity in access to workplace authority, disparity in access to hiring and promotion, and gender representation. Confirming findings from past studies, this study also finds that the public

sector performs relatively better in most aspects of the gender pay gap and factors that espouse it. Perhaps public sector values of fairness, equity, and justice along with the drive for bureaucratic representation and established institutional procedures help reduce individual and institutional actions that typically espouse the pay gap in the workforce.

Although this review has taken up the challenge to synthesize and integrate results and conclusions from past studies on trends in the gender pay gap and factors that facilitate it, it is not without limitations. First, there is a difficulty in finding a comparable number of peer-reviewed journal articles that investigate the gender pay gap and factors that induce it across all sectors. We find that there are very few peer-reviewed journal articles published that explore the gender gap in access to workplace authority in private and public sector contexts. Our review also finds that some thematic factors that are associated with the pay gap, such as access to hiring and promotion, are studied more than others. Also, a common limitation in conducting a systematic review type of study is the need to depend on findings and rigor of prior studies. Although this study has addressed this limitation by only including past peer-reviewed published journal articles, we also acknowledge that the validity and reliability of our study is partly determined by the validity of studies included in the systematic review.

Finally, we propose that future research in public administration should investigate why certain factors, such as sticky floors, appear to be persistent in the public sector compared with other sectors. In addition, we propose an investigation of the gender pay gap across different levels of government. The wages at these levels of government vary substantially from one level to the other. It would be interesting to see how wage and gender interact, and whether the gender pay gap widens or narrows as we move from one level of government to another.

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