

The Role of Perceived Person-Job Fit in Salary Increase and Promotion Decisions

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### Abstract

Current research provides evidence that a gender gap in wage exists in most fields, with woman earning only up to 92% of what men earn annually (Mulhere, 2018). When being considered for a promotion, women are also significantly less likely than men to be selected for a high-level position regardless of whether the role is male- or female-dominated. There are several theories for why this phenomenon exists. The theory focused on in this paper is perceived person-job fit. Two studies are conducted to compare male and female employees in three different fields (sales, engineering, and nursing) to see which is more likely to receive a higher annual raise as well as a promotion. The “paper people” method is used in both studies. In Study 1, participants are asked to provide a rating for the person they are reviewing, select a raise amount, and decide on a promotional opportunity. It is expected that similar genders will give higher ratings and pay increases to themselves, and men will be promoted more frequently than women across industries overall. In Study 2, descriptive language is changed in the job and promotion descriptions to emphasize stereotypically feminine traits. It is expected that the descriptive language will influence the direction of the ratings, resulting in women being rated higher, given higher raises, and given a promotion more frequently than men across all industries regardless of rater gender.

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### *Literature Review*

Women have played an important role in the workforce since as early as 1861 (Ziparo, 2017). During the Civil War, employment was sought out by women to supplement household income while men fought. At that time, women were viewed as an important, cost-effective asset to the government because they were willing to work for significantly less pay than what was given to men. This rise in women workers did not end with the Civil War; in 1947, almost 28% of the workforce at the end of World War II was comprised of women (O'Neill, 1992). This increased to 45% in 1988 and has remained stable at 47% as of 2017 (U.S. Census Bureau, 2017).

With this rise of female workers entering the labor force, gender differences in the workplace are noticeable. Many gender-related topics have been investigated, including sexual discrimination issues, ratios of men to women in the workplace, and wage gaps. For example, sexual harassment may seem like an issue that can equally impact both men and women; however, a survey of 2,999 people (1,692 women and 1,307 men) found that 41% of women and 32% of men aged 18-60 self-reported experiencing sexual harassment to some degree in the workplace over their lifetimes, and women were 46% more likely to experience sexual harassment during their lifetimes than were men (Das, 2009). This significant gender difference reflects just how much gender plays a role in the workplace, and this gender difference is further illustrated by the ratios of men to women in the workplace.

With 47% of the workforce comprised of female workers, one might expect women to be evenly distributed across industries. However, many science, technology, engineering, and math (STEM) fields are heavily saturated with men. According to the U.S. Department of Labor

(2016), only 15.1% of engineering professionals are women. In contrast, 91% of nursing professionals are women (U.S. Census Bureau, 2017). Sales professionals are currently 42.6% women (U.S. Census Bureau, 2017). It is apparent that some industries are more evenly distributed across genders than others, and there is a large amount of variation from the most masculine industry to least masculine industry.

A dominant theory about why this gendered difference exists across industries is that stereotypically male career paths are better suited for men, and stereotypically female career paths are better suited for women (McKay & Tate, 2001). This could explain the large difference between the number of men in nursing and the number of women in engineering, as well as the relatively equal ratio of men to women in sales. If certain jobs are better suited for certain genders, one would expect that difference in skillset would be compensated according to the stereotypical gender for the role. Female nurses would be compensated more than men because they are better suited for nursing, male engineers would be compensated more than women because they are better suited for engineering, and sales professionals would be compensated equally based on skill without gender as a factor since men and women are equally suited for sales. Unfortunately, this is not what reality reflects.

Wage gaps between men and women are a very relevant concern when it comes to gender equality in the workplace. It is generally understood that women earn approximately 92% of what men earn (Mulhere, 2018). STEM positions are male-dominated, with women earning approximately 82% of what men earn annually in STEM-related fields (Rao & Lunau, 2017). A study conducted by Kahn and Griesinger (1989) illustrated how women who obtain STEM positions may have more earnings to gain than men. This study looked at Census data and found that women have a higher jump in wages between non-STEM positions and STEM positions

than men do. However, men still earn over 8% more than women earn in STEM positions (Oh & Lewis, 2011). Although the wage gap is smaller in STEM roles than it is in non-STEM roles, the gap still exists. This seems to indicate a higher skillset is considered when salary is determined for STEM roles; however, it does not explain why men earn more overall. In comparison, entry-level businesswomen earn about 80% of what entry-level businessmen earn annually (Bayern, 2018). Following the previous argument about stereotypically male and female roles, one would expect to see a female-dominated profession such as nursing supports higher female earnings over male earnings. However, one study found that male nurse executives earn significantly more than female nurse executives, even after controlling for years of experience (Rozier, 1996). A more recent study also found that male staff nurses earn at least 10% more than female staff nurses, indicating this is a problem across varying levels of organizations and not just an issue with upper management roles (Wilson, Butler, Butler, & Johnson, 2018). This also seems to indicate something other than stereotypical roles is driving the gap in female employment and pay equality.

The gender differences do not stop at earnings. There is evidence to support a promotion gap between men and women as well (Lazear & Rosen, 1990). In Fortune 500 companies, for example, women hold less than 10% of the upper management positions but hold over 70% of the staff management positions (Lyness & Heilman, 2006). More specifically, in business management positions, men are 79% more likely to be selected for a promotion than women are (Olson & Becker, 1983). Similarly, male nurses are also significantly more likely to be promoted to nurse manager positions over women who are, in many cases, more qualified than the male applicants (U.S. Census Bureau, 2011). In industries such as engineering that are more heavily saturated with men, not only are women promoted less frequently, but they also express

significantly less interest in engineering careers despite being at least equally qualified for the role (Iskander, Gore Jr., Furse, & Bergerson, 2013). Overall, women seem to be less likely to receive a promotion despite being as equally qualified as men who do receive the promotion.

Research is ongoing in the area of gendered promotion gaps, but a dominant theory about why this happens is related to the concept of tokenism. Tokenism is best defined as someone being selected because they have a quality that stands out from the rest of the group, typically in terms of race or gender (Kanter, 1977). One aspect of tokenism is that the differences between people are exaggerated. According to this theory, a male candidate for a nursing promotion would be expected to stand out more than a female candidate because not only are there fewer men in nurse management positions than there are women, but some aspects of a nursing position that are stereotypically male dominant (such as physical strength) may also be exaggerated in a male candidate. A woman could be equally strong, but because she is viewed as the “norm”, it is less noticeable. If this holds true, then why are women selected less than men in promotional opportunities in male-dominated fields?

A recent study took the concept of tokenism a step further and looked at why promotional decisions are made in favor of men despite the dominant gender in the field they are employed. Guldiken, Mallon, Fainshmidt, Judge, & Clark (2019) looked at promotion committee member gender composition and how that plays a role in the gender of candidate chosen. They found that one woman in leadership decreases the chances of more women being promoted unless a woman is on the deciding committee. A single woman in leadership carries a token status, thus satisfying the need for that token to be present. With that in mind, they also found situations where there are zero women in leadership provide a statistically significant chance that the first woman will be promoted. Furthermore, having two or more women in leadership also provides a significantly

higher chance of more women being promoted in comparison to having just one woman in leadership. In this study, the token status helped women get a start in leadership, but that was as far as it went. It seems tokenism plays a role in the promotion gap; however, this does not seem to fully explain the existence of it.

Another possible explanation for why women are selected less often than men for promotional opportunities in situations when tokenism theoretically should be benefitting women is gender bias. A literature review on gendered issues in management development looked at different reasons why women might be selected less frequently and found layers of gendered socialization may be contributing to this issue (Hite & McDonald, 1995). Women experience gender bias during school and on-the-job training when teachers call on men more frequently to answer questions. Behavior examples frequently use men as the standard (Tharenou, Latimer, & Conroy, 1994). This socialization contributes to a lack of interest from women in certain fields, such as engineering, because the example of a suitable candidate in those professions is a male. Once a woman has decided on her career path, development opportunities are dominated by men, especially in male-dominant industries, in part because of the lack of female mentors available. This leads to less women in leadership positions.

There is also evidence that men prefer other men in selection decisions and women prefer other women in selection decisions (Tharenou et al., 1994). In industries where men are the dominant gender in management, this could explain why women are chosen less frequently for not only management promotions, but also career development opportunities. Not only do women feel isolated due to lack of mentors and a high level of gender-framed training opportunities, but they also are chosen less frequently because they are not men as a result of gender bias.

Although gender bias and tokenism together offer an explanation for why wage gaps and promotion gaps exist, a more parsimonious explanation for this phenomenon is perceived person-job fit. Person-job fit can best be characterized as a perception that a person or type of people are better suited for a job over others. This is the idea that masculine traits are preferred or considered more important than feminine traits, especially when being considered for a management position (Bowen, Swim, & Jacobs, 2000). Many traits that are commonly attributed as masculine, such as assertiveness or dominance, are also commonly associated with management roles. Person-job fit, therefore, could help explain the findings Iskander et al. (2013) discussed in their paper about lack of female interest in engineering and STEM careers. Perhaps the stereotypical concept of an ideal engineer is so masculine that many women view that career path as an unattainable goal as a female. It could also explain why so many men are selected over women for management and upper management roles in general.

Management roles, especially in male-dominated industries, may have masculine connotations attached to them, allowing men to be selected for management positions more frequently than women because it seems like a better fit. Additionally, women tend to be evaluated more harshly than men on performance evaluations related to masculine tasks, indicating a higher standard is held for women to meet in order to receive recognition and promotional consideration when masculine tasks are a facet of the job (Swim, Borgida, Maruyama, & Myers, 1989). A meta-analysis conducted on leadership evaluations also found that male-dominated careers have a more pronounced demonstration of this bias than careers that are more balanced between the genders (Eagly, Makhijani, & Klonsky, 1992). These studies seem to support the idea that women may not be considered suitable for leadership roles across fields because of the male-dominated characteristics that these roles value, thus allowing a

perceived lack of person-job fit to prevent women from being promoted. Additionally, performance evaluations on masculine tasks may be rated more harshly for women than they would be for men, suggesting not only a higher standard for women to meet for promotion, but also a potential for smaller performance-based pay increases. This could explain the difference in pay for women in staff-level roles as well as the lack of female presence in upper-management.

Although there is a large body of research supporting the notion that a gendered wage gap exists across industries, as well as the existence of a gendered promotion gap, there is also a gap in knowledge about why these decisions are made. Current research has broadly explored Fortune 500 companies but does not directly compare male-dominated fields to female-dominated fields in terms of promotion and pay increase decisions. This is an important comparison because if masculine qualities are more valuable in masculine roles, one would expect to see a significant difference between promotion and raise decisions for men in male-dominated professions when compared to women in male-dominated professions. Likewise, one would expect to see a similar trend towards feminine qualities and women in female-dominated professions. If this is the case, the promotion and wage gap could potentially be reduced by emphasizing masculine and feminine qualities equally in higher level positions.

In this study, I am going to examine the rate of a salary increase and promotion opportunity for equally qualified males and females in three different fields: one male-dominated, one female-dominated, and one neutral. As mentioned previously, only 15.1% of engineering professionals are women, allowing this to serve as a male-dominated field (U.S. Department of Labor, 2016). Since over 91% of the nursing workforce is female, nursing will serve as the female-dominated field (U.S. Census Bureau, 2017). Additionally, the sales

workforce is nearly evenly distributed amongst genders, with 47% of employees being female, so I am including this as the neutral group for comparison (U.S. Census Bureau, 2017).

### *Methods*

Ideal study participants will be working adults ranging in age 28-50 with at least three years of real-world work experience. Race, gender, industry, and socioeconomic status information will be collected from the participants at the completion of the study and will be examined for potential confounds once data collection is completed. I will find participants using MTurk. Two studies will be conducted for this research. In Study 1, participants will be evenly distributed into two groups. Group 1 will be evaluating male candidates in three different industries. Group 2 will be evaluating female candidates in the same three industries as group 1. In Study 2, participants will be evenly distributed into four groups. Group 1 will be evaluating male candidates across three different industries with neutral job and performance descriptions. Group 2 will be evaluating male candidates across three different industries with feminine job and performance descriptions. Group 3 will be evaluating female candidates across three different industries with neutral job and performance descriptions. Group 4 will be evaluating female candidates across three different industries with feminine job and performance descriptions.

This study will employ a “paper person” design. Although there is some debate about the validity of “paper people” in comparison to videotaped interviews, recent studies have supported the “paper person” design and have concluded that not only is it a valid method, but it can reduce noise in the data as well as provide a larger effect size in the results (Murphy, Herr, Lockhart, & Maguire, 1986; Woehr & Lance, 1991). Therefore, this will be the best possible method to

present the information to participants while still maintaining a high level of validity. Two studies will be conducted for this research, and participants will not be used more than once.

### *Study 1*

Study 1 will use a 2 (male candidate vs. female candidate) X 3 (engineering vs. nursing vs. sales) between-subjects design. In study 1, participants (referred to as raters going forward) will be randomly assigned to one of two groups, with an even distribution of men and women in each group. Group 1 will receive one of three possible “paper people” candidates, all male in gender. The three male “paper people” are a sales associate, an engineer, and a nurse. Group 2 will receive one of three possible “paper people” candidates, all female in gender. The three female candidates are a sales associate, an engineer, and a nurse. All six “paper people” candidates include a brief description of the candidate’s profile, including on-the-job performance, attendance, current salary, workplace attitude, strengths and weaknesses at work. All six “paper people” candidates will also provide a detailed description of the job requirements for the current position the candidate is in. This serves to provide the background information needed to determine a pay increase.

All six “paper people” candidates will be rated by the raters on a trichotomous Likert scale (0=does not meet expectations, 1=meets expectations, 2=exceeds expectations) regarding the overall performance of the candidate being reviewed. A trichotomous Likert scale was chosen for the performance rating based on a study that found scales with more than two options do not necessarily add to the reliability and validity of the results when two options is sufficient (Matell & Jacoby, 1971). The study suggested using as few options as possible to maintain statistical validity, thus three options were chosen for this rating to align well with other measures in the study. Raters will read questions such as “This employee demonstrates the

expected level of attendance needed for their current job role” and will be asked to provide a rating indicating the candidate meets the expectation, does not meet the expectation, or exceeds the expectation. Each rater will only receive one candidate profile and will not rate more than one candidate total.

Once that section is completed, the raters will then be asked to give the employee a raise based on what they feel the candidate deserves with the options of 3%, 4% or 5%. A benchmark will be provided for the raise percentages to further the rater’s understanding of why the candidate “deserves” a specific raise amount. 3% indicates most job requirements are met. 4% indicates all job requirements are met. 5% indicates all job requirements are met and some are exceeded. Finally, the rater will be given a description of the job requirements for a promotion and asked if they will promote the candidate. It is important to note that all six “paper people” candidates will have identical employee information and promotion information, with only the job type (sales, engineering, or nursing) and gender changing between variable levels. Gender will be indicated by the employee name.

### *Study 1 Hypothesis*

In Study 1, I hope to provide evidence that a gendered difference in pay increases and promotion opportunities exists across industries. Based on the existing literature, I predict the following: similar genders will give higher pay increases to themselves, and men overall will be promoted more frequently than women across industries. More specifically, men will receive higher pay increases than women in engineering, and this effect will be more pronounced when men rate other men. Women will receive higher pay increases than men in nursing and sales, especially when being rated by other women. In terms of promotions, I expect men to be promoted more frequently than women overall, with a significant difference between men and

women in engineering positions. I expect women to be promoted more frequently than men in nursing, but not significantly. I also expect to see a relatively even distribution of promotions between men and women in sales.

### *Study 2*

Study 2 is very similar to Study 1, with a small change: instead of six “paper people” candidates, there will be twelve. Study 2 will use a 2 (male candidate vs. female candidate) X 2 (neutral description vs. feminine description) X 3 (engineering vs. nursing vs. sales) between-subjects design. Study 2 will still use the same three industries (engineering, nursing, and sales) and will still look at different raise and promotion decisions provided to male and female candidates for each industry. However, Study 2 will look also examine how the perception of person-job fit impacts that decision-making process. This will be looked at by changing the language in six of the “paper people” descriptions to emphasize stereotypically feminine attributes in the job description and promotion description. To examine this, raters will be randomly assigned into four groups with an even distribution in each group between men and women. Group 1 raters will be provided a male employee profile with gender-neutral language in the job description and promotion description from either the engineering, nursing, or sales category. Raters in group 1 will be asked to rate this employee, decide on a raise amount, and decide on a promotion opportunity in the same way raters were asked to do in study 1. Group 2, however, will be provided a male employee profile with stereotypically feminine characteristics provided in the job descriptions and promotion descriptions from either the engineering, nursing, or sales category. For example, a job description for engineering may emphasize the need for attention to detail and communication. All other information on the profile will be identical to group 1, and the rater in group 2 will still be required to provide ratings for the candidate, as well

as decide a raise amount and whether the candidate deserves a promotion. Group 3 will be female candidates with the neutral job and promotion descriptions and will have the same set up as group 1. Group 4 will be female candidates with the feminine trait descriptions and have the same set up as group 2. Each rater will only be provided with one candidate to review, and data will be collected until an equal number of ratings has been received for each industry in each group.

### *Study 2 Hypothesis*

In study 2, I expect the change in language of the job descriptions and promotion descriptions will change the direction of the results in all three industries for women. I predict that women will be given a higher raise than men in all three industries when the stereotypically feminine traits are presented in the job descriptions. I also predict that women will be given a promotion more frequently than men when the stereotypically feminine traits are presented in the promotion descriptions. This effect for both promotions and raises will be more significant for women when the rater is female; however, I expect that male raters will also promote females and give females raises across industries more frequently than in study 1.

### *Analysis*

Study 1 data will be analyzed using a 2-way MANOVA analysis. In this study, there are two dependent variables: the percentage of raise given to each candidate and the frequency of promotion awarded. Likewise, there are two independent variables: the gender of the candidate and the industry the candidate works in. The 2-way MANOVA will allow me to evaluate the potential influence candidate gender and candidate industry have on the percentage of raise awarded and the frequency of promotion. I expect to see an interaction between candidate

gender, candidate industry, raise award and promotion frequency. Although there may be some correlation between the raise amount and the frequency of promotion, I do not expect there to be multicollinearity because I expect women will be awarded a moderate amount for raises but will not be awarded a promotion at the same frequency.

Study 2 will be very similar. I will use a 2-way MANCOVA analysis since I will be looking for a potential moderation of the results by the feminine traits highlighted in the job and promotion descriptions. My dependent variables will still be the raise amount and promotion frequency. My independent variables will also still be candidate gender and candidate industry. My expectation is that the feminine traits in the descriptions will moderate the interaction of candidate gender and candidate industry to the degree that it will flip the direction of the results; women will receive a higher raise amount and will be promoted at a higher frequency across industries, whereas men will have lower raise amounts and a lower frequency across industries.

### *Conclusion*

Based on prior research done, there is evidence that person-job fit may be assumed when stereotypically male or female characteristics are salient in the evaluators mind (Bowen et al., 2000). In study 1, I hope to provide additional evidence that gender of the evaluator and of the employee influences whether someone gets promoted, as well as the amount of pay increase someone receives. In study 2, I hope to take this a step further to illustrate how changing the perception of what the job requires can influence the outcomes of promotion decisions and pay increases further.

This research is highly relevant for a few reasons. Not only are gender wage gaps still an issue in nearly all career paths, but gender promotion gaps also exist. Although gender wage

gaps have been heavily researched, there is still little evidence to support a reason for why these gaps occur unevenly between male-dominated and female-dominated roles. In addition to that, there is very little research or evidence to support why females are promoted less frequently than males across different career paths. Although tokenism may explain why these decisions are made, it seems like a better explanation may be found in stereotypes around person-job fit. This study hopes to get closer to that answer by providing a little more evidence in one direction or the other.

## References

- Bayern, M. (2018). Women are 21% less likely to be promoted than male coworkers. *Techrepublic.com*, Retrieved from <https://www.techrepublic.com/article/women-are-21-less-likely-to-be-promoted-than-male-coworkers/>
- Bowen, C.C., Swim, J.K., Jacobs, R.R. (2000). Evaluating gender biases on actual job performance of real people: a meta-analysis. *Journal of Applied Social Psychology*, 30(10), 2194-2215.
- Cohen, P.N. & Huffman, M.L. (2007). Working for the woman? Female managers and the gender wage gap. *American Sociological Review*, 72, 681-704.
- Das, A. (2009). Sexual harassment at work in the United States. *Archives of Sexual Behavior*, 38, 909-921. doi: 10.1007/s10508-008-9354-9.
- Eagly, A.H., Makhijani, M.G., & Klonsky, B.G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111, 3-22.
- Ehrlinger, J., Plant, E.A., Hartwig, M.K., Vossen, J.J., Columb, C.J., & Brewer, L.E. (2018). Do gender differences in perceived prototypical computer scientists and engineers contribute to gender gaps in computer science and engineering? *Sex Roles*, 78, 40-51. doi: 10.1007/s11199-017-0763-x.
- Guldiken, O., Mallon, M.R., Fainshmidt, S., Judge, W.Q., & Clark, C.E. (2019). Beyond tokenism: how strategic leaders influence more meaningful gender diversity on boards of directors. *Journal of Strategic Management*, 40, 2024-2046.

Hite, L.M. & McDonald, K.S. (1995). Gender issues in management development: implications and research agenda. *Journal of Management Development*, 14(4), 5-15.

Iskander, E.T., Gore Jr., P.A., Furse, C., & Bergerson, A. (2013). Gender differences in expressed interests in engineering-related fields ACT 30-year data analysis identified trends and suggested avenues to reverse trends. *Journal of Career Assessment*, 21(4), 599-613. doi: 10.1177/1069072712475290.

Kahn, S. & Griesinger, H. (1989). Female mobility and the returns to seniority: should EEO policy be concerned with promotion? *American Economic Review*, 79(2).

Kanter, R.M. (1977). *Women and men of the corporation*. New York: Basic Books.

Lazear, E.P. & Rosen, S. (1990). Male-female wage differentials in job ladders. *Journal of Labor Economics*, 8(1).

Lyness, K.S. & Heilman, M.E. (2006). When fit is fundamental: performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, 91(4), 777-785. doi: 10.1037/0021-9010.91.4.777.

Matell, M.S. & Jacoby, J. (1971). Is there an optimal number of alternatives for Likert scale items? Study 1: Reliability and validity. *Education and Psychological Measurement*, 31, 657-674.

McKay, S. & Tate, U. (2001). Student attitudes regarding gender bias in performance evaluations of salespeople. *Journal of Business and Psychology*, 16(2).

Mulhere, K. (2018). Women need one more degree than men to earn the same average salary.

*Money.com*, Retrieved from <http://money.com/money/5176517/gender-pay-gap-college-degrees/>

Murphy, K.R., Herr, B.M., Lockhart, M.C., & Maguire, E. (1986). Evaluating the performance of paper people. *Journal of Applied Psychology*, 71(4), 654-661.

Oh, S.S., & Lewis, G.B. (2011). Stemming inequality? Employment and pay of female and minority scientists and engineers. *The Social Science Journal*, 48, 397-403.

Olson, C.A. & Becker, B.E. (1983). Sex discrimination in the promotion process. *Industrial and Labor Relations Review*, 36(4).

O'Neill, J. (1992). A flexible work force: opportunities for women. *Journal of Labor Research*, 13(1).

Rao, A. & Lunau, K. (2017). You can't close the gender gap in science and tech without equal pay. *Vice.com*, Retrieved from [https://www.vice.com/en\\_us/article/4xeevp/stem-science-technology-women-pay-gap-equal-pay-day](https://www.vice.com/en_us/article/4xeevp/stem-science-technology-women-pay-gap-equal-pay-day)

Rozier, C.K. (1996). Nurse executive characteristics: gender differences. *Nursing Management*, 27(12), 33-38.

Swim, J.K., Borgida, E., Maruyama, G., & Myers, D.G. (1989). Joan McKay vs John McKay: Do gender stereotypes bias evaluations? *Psychological Bulletin*, 105, 409-429.

U.S. Census Bureau. (2017). *2000 Census and 2017 American community survey 1/year estimates*. Washington, DC: U.S. Government Printing Office.

- U.S. Census Bureau. (2011, February). *Men in nursing occupations: American community survey highlight report*. Retrieved from [https://www.census.gov/content/dam/Census/library/working-papers/2013/acs/2013\\_Landivar\\_02.pdf](https://www.census.gov/content/dam/Census/library/working-papers/2013/acs/2013_Landivar_02.pdf)
- U.S. Department of Labor, Bureau of Labor Statistics (2016). *Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity*. Current Population Survey, 2015 Edition. Retrieved from <http://www.bls.gov/cps/tables.htm#annual>.
- Wilson, B.L., Butler, M.J., Butler, R.J., & Johnson, W.G. (2018). Nursing gender pay differentials in the new millennium. *Journal of Nursing Scholarship*, 50(1), 102-108. doi: 10.1111/jnu.12356.
- Woehr, D.J. & Lance, C.E. (1991). Paper people versus direct observation: an empirical examination of laboratory methodologies. *Journal of Organizational Behavior*, 12(5), 387-397.
- Ziparo, J. (2017). This grand experiment: when women entered the federal workforce in civil war-era. *Industrial Relations*, 74(1).