



# Office Housework, Burnout, and Promotion: Does Gender Matter?

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## Abstract

In *The New York Times*, Grant and Sandberg (2015) made the case that women perform more office housework and experience more burnout, yet receive fewer career benefits, from performing office housework than do men. However, this claim has not been formally tested. Based on gender role theory, conservation of resources theory, and shifting standards, we test the relationships between gender, office housework, burnout, and promotion. Results revealed that women performed more office housework overall than did men. More specifically, women engaged in more social maintenance OHW, while men engaged in more object maintenance OHW. Contrary to the popular press claim, results showed no significant relationship between office housework and burnout. Moreover, office housework did not mediate the relationship between gender and burnout. In addition, gender moderated the relationship between office housework and promotion such that the relationship was statistically significant for men, but not statistically significant for women. This study contributes to the literature by introducing office housework as a specific form of organizational citizenship behavior and empirically investigating the popular press claim related to office housework.

**Keywords** Office housework · Gender · Burnout · Health · Promotion · Career success · Organizational citizenship behavior · Gender role theory · Conservation of resources theory

## Introduction

Although women have made significant strides in recent decades with regard to career advancement, they continue to lag behind men with regard to indicators of objective career success such as organizational rank (Allen, French, & Poteet, 2016). One reason for this pervasive discrepancy may be the different types of tasks assigned to men and women. For example, men tend to be assigned challenging in-role tasks that lead to positive performance evaluations and positive career success outcomes (De Pater, Van Vianen, & Bechtoldt, 2010), whereas women tend to be assigned trivial extra-role tasks that

are less likely to yield positive performance evaluations and successful career outcomes (Porter, 2007). Consequently, women are likely to be disadvantaged with regard to career success as research shows that women are paid 21.7% less (Hegewisch & Hartmann, 2014) and promoted 15% less (Yee et al., 2016) than are men.

In *The Washington Post*, Williams (2014) explained that women are expected to perform “office housework” in the workplace. She defined office housework (OHW) as “the administrative tasks, menial jobs and undervalued assignments women are disproportionately given at their jobs” (Williams, 2014). She also described OHW as time- and energy-consuming activities that are viewed as trivial and unimportant in the workplace (Williams, 2014). In the following year, in a highly publicized op-ed published in *The New York Times*, Grant and Sandberg (2015) addressed this issue and made the case that women tend to perform more office housework in the workplace than do men. They defined office housework (OHW) as “administrative tasks that help but don’t pay off” (Grant & Sandberg, 2015). Per this article, examples of OHW include organizing office parties, bringing food for others, and taking notes for others in meetings. Building on this, Grant and Sandberg (2015) claimed that due to the time and energy expenditure, OHW contributes to burnout.

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Moreover, while performing OHW, people may miss opportunities to participate in activities that are more directly related to career success indicators such as job promotions (Grant & Sandberg, 2015; Williams, 2014).

As advanced by Williams (2014) and Grant and Sandberg (2015), OHW is not likely to be evenly distributed in the workplace. According to gender stereotypes, women are expected to be communal and perform more prosocial behaviors than are men (Allen & Rush, 1998; Eagly, 2009). Therefore, women are expected to perform and to be assigned OHW more frequently than are men (Grant & Sandberg, 2015; Williams, 2014). Although these claims seem plausible, OHW has not been formally investigated as a construct in the organizational literature despite the popularity of the concept among the public. Therefore, in this study, we investigated OHW, and specifically, examined gender differences in OHW and whether men and women do, in fact, show different burnout and career outcomes that relate to OHW.

Our research contributes to the literature in several ways. First, we advance the study of OHW through providing a formal definition and operationalization of the construct. Although OHW has been a topic of popular conversation, formal investigation of the construct is lacking. This is important as the results have potential implications for increasing our understanding of factors associated with career success differences across gender. In addition, our research contributes to the organizational citizenship behavior (OCB) literature. Specifically, we view OHW as a form of OCB, but one that expands current OCB conceptualizations. Current conceptualizations of OCB do not reflect behaviors that contribute to the organization but are more menial in nature such as those associated with OHW. Our research brings to the fore the notion that OCB can consist of low value behaviors, thereby providing a more nuanced conceptualization of OCB.

### Office housework

OHW has yet to be defined in the scholarly literature. In developing our definition we first reviewed the popular press literature that has described OHW (Babcock, Recalde, & Vesterlund, 2018; Botti, 2018; Feintzeig, 2019; Grant & Sandberg, 2015; Korducki, 2019; Salam, 2018; Torres, 2018; Tulshyan, 2018; Williams, 2014; Williams & Multhaup, 2018) to identify the key elements included in each description. Based on our review, the elements associated with OHW were administrative work, nonrevenue-generating, important, time-consuming, undervalued, menial, and less desirable. From there we distilled what we thought were the non-essential as well as the essential elements of OHW. We excluded nonrevenue-generating as OHW could indirectly help generate revenue. Also, we excluded important and time-consuming given that OHW is not always important and not always time-consuming. In addition, we excluded

undervalued as OHW could be of value in some situations. Similarly, we eliminated less desirable as part of the definition given some aspects of OHW may be desirable for some people. Lastly, we excluded OHW that was likely to be in one's formal job description. For example, although popular press articles argued that mentoring junior colleagues is one type of OHW, it may be an official task for supervisors. Moreover, mentoring has been associated with organizational rewards (e.g., Allen, Lentz, & Day, 2006). Therefore, we retained the key elements of OHW thought to pertain to a wide variety of jobs, workers, and organizational contexts and define OHW as *menial administrative tasks that keep an office running*.

What constitutes OCB is often murky, and the same may be true for OHW. However, we believe OHW is consistent with the fundamental definition of OCB as, "performance that supports the social and psychological environment in which task performance takes place" (Organ, 1997, p. 95). We also suggest that OHW is unique from existing dimensions of OCB (e.g., Organ, 1988; Smith, Organ, & Near, 1983; Williams & Anderson, 1991). Researchers have proposed different theoretical frameworks of OCB. For example, Smith et al. (1983) proposed altruism and compliance as two dimensions of OCB. Organ (1988) expanded the construct to encompass five dimensions: sportsmanship, civic virtue, courtesy, altruism, and conscientiousness. Others have proposed conceptualizing the construct on the basis of the target of the behavior (Williams & Anderson, 1991): OCB directed toward individuals (OCB-I) and OCB directed toward the organization (OCB-O). While OHW may share conceptual space with existing OCB dimensions such as helping, the menial aspect of OHW is not reflected in existing dimensions of OCB. As such OHW does not carry the same value as do traditional forms of OCB. For example, helping employees who have been absent is ostensibly a more high value behavior to the organization than is cleaning up communal spaces and organizing office gatherings, although both contribute to the office environment. Given the distinctive characteristics of OHW, we believe it extends the current OCB construct space and merits investigation.

### Gender differences in office housework

According to gender role theory, people tend to believe that certain careers, emotions, and behaviors are more suitable for one gender than for another gender (Eagly, 2009). These ascribed gender roles form the basis for gender stereotypes in society. Gender stereotypes consist of descriptive stereotypes (i.e., one gender is assumed to have certain characteristics) and prescriptive stereotypes (i.e., one gender should behave in certain ways; Heilman, 2001). As for gender descriptive stereotypes, women are assumed to be friendly, kind, and communal, while men are assumed to be dominant, assertive, and confident (e.g., Eagly, 2009). Gender prescriptive

stereotypes include the notion that women should stay home and be the caretakers of their family, whereas men should work outside the home and provide financial resources.

As part of their communal nature, women are expected to show more prosocial behaviors than are men (Allen & Rush, 1998; Eagly, 2009). As such women may be expected to be responsible for care-related work more so than men within the workplace. Accordingly, because OHW resembles prosocial behaviors and care work, it is more likely to be considered as women's work and performed by women; thus, we hypothesize that women perform more OHW than men.

**Hypothesis 1.** Women perform more office housework than do men.

### Office housework and burnout

In addition to gender differences in OHW performance, OHW is expected to relate to burnout. Specifically, conservation of resources theory states that individuals possess limited resources such as time and energy and that they strive to conserve the limited resources that they have (Hobfoll, 2001). Accordingly, when people lose significant resources, they become stressed, anxious, and eventually experience significant burnout (Lee & Ashforth, 1996; Wright & Bonett, 1997). Similar to other behaviors, OHW is expected to require time and energy resources (Grant & Sandberg, 2015; Williams, 2014), and, thus, when people perform OHW, they use their time and energy. However, workers already spend significant resources for their in-role performance and other task-related OCB (e.g. Beal, Trougakos, Weiss, & Dalal, 2013; Lanaj, Johnson, & Wang, 2016), so performing OHW could exacerbate resource depletion among employees; therefore, OHW is likely to predict burnout.

**Hypothesis 2.** Office housework positively relates to burnout.

Further, based on gender role theory, women are expected to show more prosocial behaviors than are men (Allen & Rush, 1998; Eagly, 2009). Again, OHW resembles prosocial behaviors and care work, and it is more likely to be considered as women's work and performed by women. Therefore, women are more likely to spend time and energy resources toward OHW and experience more burnout relative to men. Perhaps due to this, a meta-analytic study revealed that women experience more burnout than do men (Purvanova and Muros, 2010, b). However, while women may experience greater burnout and perform more OHW, it is unclear whether a higher level of burnout among women *results from* a higher level of OHW. Given this uncertainty, we test the mediation effect of OHW on the relationship between gender and burnout.

**Research Question 1.** Does office housework mediate the relationship between gender and burnout?

### Office housework and career outcomes

In addition to its implications for burnout, OHW may have implications for one's career outcomes. Gender role beliefs and stereotypes lead to different standards for men and women (i.e., shifting standards; Biernat, 2003). Women are expected to be more communal and they are likely to be judged based on a higher standard of prosocial behaviors than their male counterparts (e.g., Allen & Rush, 1998; Eagly, 2009), which is likely to yield negative consequences for women. More specifically, given that women have a higher standard, it is, thus, harder to meet the standard. Further, if women fail to meet the standard, it is considered a violation of social norms, which leads to negative repercussions (Cialdini & Trost, 1998). Additionally, even when women meet the standard, they are not necessarily favorably judged or rewarded, but rather they simply avoid negative outcomes as these behaviors were expected all along in line with prescribed social norms. In contrast, men are likely to be judged based on a lower standard of prosocial behaviors, which is, thus, easier to meet. Consequently, they receive more positive outcomes and rewards from meeting the social standard as engaging in these behaviors are less expected for men, and, thus, can be viewed as going "above and beyond." In the context of OHW, gender role beliefs and stereotypes result in expectations that women should perform more OHW than men given their stereotyped communal nature. Further, due to this expectation, women would not necessarily achieve positive career outcomes from performing OHW. On the other hand, men would receive positive career outcomes from performing OHW as they have a lower threshold for the amount of OHW that they are expected to perform and are, accordingly, more able to meet, as well as go above and beyond, their prescribed expectation as informed by social norms.

Although no studies have tested this argument directly measuring OHW, some findings in the OCB literature are consistent with this argument. For example, Heilman and Chen (2005) revealed that men received higher performance evaluations and more reward recommendations than did women with the similar levels of altruistic behaviors. Also, when women did not perform altruistic behaviors, they were rated more negatively than were men who did not perform altruistic behaviors. The findings suggest that showing altruistic behaviors tends to lead to positive outcomes among men but not among women, while not showing altruistic behaviors tends to result in negative outcomes among women but not among men. In addition, Allen (2006) found that when men and women performed similar levels of OCB-O, men were more favored in receiving promotions than were women. The findings seem to buttress the argument that engaging in the same level of prosocial behavior does not necessarily produce the same career outcomes across genders. In fact, the same level of prosocial behavior has shown to bring greater positive career outcomes for men than for women. Based

on the theoretical and empirical evidence, we hypothesize that gender moderates the relationship between OHW and promotion, such that the relationship is stronger among men than among women. Promotion was chosen as our measure of career outcomes in line with past research using this variable (Campion, Cheraskin, & Stevens, 1994) and because it provides more objective career achievement information than other variables such as recognition.

**Hypothesis 3.** Gender moderates the relationship between office housework and promotion, such that the relationship is stronger among men than among women.

Prior to testing the proposed hypotheses and research question, we had to create and validate an OHW scale, as no existing OHW scales exist. Then, with the validated scale, we collected three-time point survey data and examined the proposed hypotheses and research question. We used three waves of data to decrease spurious mood effects between the study variables (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

## Method: Pilot study

In this pilot study, we developed and provided validity support for our OHW scale.

## Participants and procedures

We recruited participants using the Mechanical Turk (MTurk) platform. We followed the recommended practices in using online panel data proposed by Porter, Outlaw, Gale, and Cho (2019), including, but not limited to participant recruitment, study design, and ensuring data quality. To participate in the study, participants had to be between 18 and 65 years old, work and live in the United States, work more than 30 h per week, and work with others. After participants completed the survey, \$1 was given as compensation.

A total of 938 participants took the survey. However, 15 participants were excluded for not satisfying the eligibility requirements, and 2 participants were excluded for taking the survey twice. Also, extremely quick responses were removed. Following Huang, Curran, Keeney, Poposki, and DeShon's (2012) recommendation, we considered taking less than 2 s for each item as an extremely quick response and eliminated 34 extremely quick responses. Therefore, a total of 815 responses were used for data analyses. Among 815 participants, the average age was 36.84 years ( $SD = 10.71$ ), 44.9% were men, 75.4% were White, and 59.9% earned a Bachelor's degree or a higher degree. Also, the average number of work hours per week was 40.86 ( $SD = 5.75$ ) and participants worked in various industries such as construction (0.4%), telecommunications (5.2%), computer and electronics manufacturing (7.0%), and publishing (13.6%).

## Scale development and validation

We generated a list of 14 initial OHW items based on our definition of OHW and examples of OHW provided in popular press articles. During the item generation process, we aimed to avoid gender-bias in our scale by including traditionally men-oriented items as well as traditionally women-oriented items. Then, we examined the content validity of the items by receiving feedback from 22 subject matter experts (SMEs). Selected SMEs were professors and advanced Ph.D. students in the areas of industrial and organizational psychology or organizational behavior. In the instructions, we provided the definition of OHW and asked SMEs to indicate whether or not each item fit the definition. Among 14 items, 10 items were identified as content valid by more than 80% of SMEs, and we included the 10 items in data collection (see Table 1). Also, to ensure that the OHW behaviors are not part of one's official duties, we provided specific directions for participants (i.e., "How often do you engage in the following behaviors, even though they are not part of your official duties?"). All items were measured with a 5-point frequency scale (1 = never to 5 = very frequently).

To further examine whether the new scale of OHW was valid and reliable, we conducted cross-validation testing and reliability analyses. First, with regard to cross-validation, we randomly divided the sample ( $N = 815$ ) into two groups ( $N = 407$ ;  $N = 408$ ). With the first group ( $N = 407$ ), we performed an exploratory factor analysis (EFA), and with the second group, we performed a confirmatory factor analysis (CFA). In EFA, a direct oblimin rotation and a maximum likelihood extraction were selected and all specific EFA results are provided in Table 1. EFA results showed that a two-factor solution wherein 7 items loaded onto factor 1 and 3 items loaded onto factor 2 fit the data well,  $\chi^2(26) = 72.070$ ,  $p < .01$ , CFI = .969, TLI = .946, RMSEA = .066, SRMR = .030. The two factor model seemed to include a social maintenance OHW factor (factor 1) and an object maintenance OHW factor (factor 2). Examples of items from factor 1 include "I organize office parties and gatherings" and "I cover office phone calls for others," while example items from factor 2 were "I fix broken office machines, furniture, or electrical equipment" and "I move heavy or large objects for the office." All factor loadings were higher than a minimum cutoff value for a factor loading, .35 (Costello & Osborne, 2005). Then, we checked reliability. The overall Cronbach's alpha was .83. Cronbach's alpha for the social maintenance OHW factor (factor 1) and the object maintenance OHW factor (factor 2) were .82 and .87, respectively.

Based on EFA results, we performed a two-factor CFA with the second group ( $N = 408$ ). CFA results showed that a two-factor model marginally fit the data; however, the TLI value was lower than the conventional cutoff value (.90) and the RMSEA value was higher than the conventional cutoff



**Table 1** *Items and Factor Loadings*

Number	Items		
		Factor 1	Factor 2
1	I organize office parties and gatherings.	.63	.20
2	I cover office phone calls for others.	.57	.38
3	I bring food for others to the office.	.72	.26
4	I clean up communal spaces or facilities (e.g., office fridge, kitchen, recycling bins).	.58	.45
5	I make copies for others for meetings.	.61	.39
6	I buy cards for coworkers to sign for celebrations or condolence.	.70	.21
7	I comfort colleagues when there is bad news.	.60	.29
8	I fix broken office machines, furniture, or electrical equipment.	.30	.84
9	I move heavy or large objects for the office.	.24	.78
10	I set up new office machines, furniture, or electrical equipment.	.34	.83

value (.08),  $\chi^2(34) = 170.128, p < .01$ , CFI = .917, TLI = .890, RMSEA = .099, SRMR = .059. Modification indices suggested including an error correlation between item 2 (“I covered office phone calls for others”) and item 5 (“I made copies for others for meetings”). Although including an error correlation is not ideal, we concluded it would be best to include both items and the error correlation rather than deleting either item for several reasons. First, the two items are conceptually measuring different aspects of OHW and removing one item or both items could result in construct deficiency problems. In further support for retention of the items, both items show good standardized factor loadings that exceed .35. In addition, deleting either item would decrease the Cronbach’s alpha value, denoting decreased reliability of the measure. Finally, and most importantly, the two items share a common characteristic in comparisons to the other items. Namely, people would primarily perform these two OHW behaviors at work, while the other types of OHW behaviors could be performed not just at work but also in other locations. This common characteristic between the two OHW behaviors might be reflected as an error correlation between the variables, as suggested in the modification indices. Based on these reasons, we included the error correlation between item 2 and item 5, and obtained improved model fit,  $\chi^2(33) = 112.095, p < .01$ , CFI = .952, TLI = .934, RMSEA = .077, SRMR = .054. All factor loadings were higher than a minimum cutoff value for a factor loading, .35 (Costello & Osborne, 2005).

Lastly, we checked convergent validity based on the entire sample ( $N = 815$ ). Specifically, because OHW is a form of OCB, we expected a positive relationship between OHW and existing measures of OCB. We measured OCB using Settoon and Mossholder’s (2002) scale and found that OHW and OCB were moderately related in the expected direction ( $r = .49, p < .01$ ). This finding indicates OHW is a related but separate construct from other assessments of OCB. To further ensure that OCB and OHW are distinct factors, we performed one-factor and two-factor CFA models including OCB and OHW items. A two-factor model showed better model fit than did a one-factor model [ $\Delta\chi^2(1) = 966.981, p < .01$ ,  $\Delta CFI = .088, \Delta TLI = .095, \Delta RMSEA = .017, \Delta SRMR = .020$ ]. We also expected OHW to relate to job satisfaction. We measured job satisfaction using Cammann, Fichman, Jenkins, and Klesh’s (1979) scale. Results showed that OHW and job satisfaction were positively related ( $r = .26, p < .01$ ). Overall, the results provide initial psychometric support for our measure of OHW.

## Method: Main study

### Participants and procedures

Data collection was initiated with the intention of conducting two studies related to organizational

citizenship behaviors. Participants were informed that the purpose of the data collection was to understand employee organizational citizenship behaviors and their predictors and outcomes in the workplace. We recruited participants using Qualtrics online panels (Roulin & Krings, 2016). Qualtrics online panels recruited participants who satisfied the eligibility criteria used in the pilot study. We followed the recommended practices in using online panel data proposed by Porter et al. (2019), including, but not limited to participant recruitment, study design, and ensuring data quality. Three waves of data were collected in order to reduce common method biases between variables and spurious mood effects (Podsakoff et al., 2003). In the first survey, participants' demographic information including gender was asked. One week after, participants who took the first survey were invited to participate in the second survey. The second survey included a measure of OHW and OCB. Again, one week after, participants who took the first and the second surveys were invited to participate in the third survey. The third survey contained measures of burnout and promotion. Whenever participants took a survey, they received compensation. Various compensation options were available (e.g., cash, vouchers, airline miles) and participants were asked to choose their preferred compensation option.

At Time 1, 1070 participants completed the survey. Out of 1070 participants, 2 were excluded for not satisfying the eligibility requirements, and 6 were excluded for taking the survey extremely fast, based on Huang et al.'s (2012) 2 s per item rule. Hence, the final sample size at Time 1 was 1062. Among 1062 participants, the average age was 46.70 years ( $SD = 11.46$ ), 47.2% were men, 84.7% were White, and 69.9% earned a Bachelor's degree or a higher degree. Also, the average number of work hours per week was 42.23 ( $SD = 6.47$ ) and participants worked in various industries such as agriculture/forestry/

fishing (0.2%), retail (4.7%), finance/banking/insurance (8.5%), and education (15%).

At Time 2, 700 participants returned and completed the second survey. The average time interval was 9.84 days ( $SD = 3.81$ ). Out of 700 participants, 35 took the survey twice, which resulted in the removal of 70 responses. Then, we removed 2 responses for not taking the first survey but joining the second survey. Lastly, 13 responses were deleted for taking the survey extremely fast, following Huang et al.'s (2012) 2 s per item rule. Hence, the final sample size at Time 2 was 615. Among 615 participants, the average age was 47.93 years ( $SD = 11.05$ ), 50.7% were men, 84.2% were White, and 70% earned a Bachelor's degree or a higher degree. Also, the average number of work hours per week was 42.42 ( $SD = 6.62$ ) and participants worked in various industries such as agriculture/forestry/fishing (0.2%), retail (4.2%), finance/banking/insurance (9.6%), and education (14.0%). Although participants who took the second survey were not significantly different from the participants at Time 1 in gender, ethnicity, and education, the participants at Time 2 were slightly older than the participants at Time 1 ( $t = -2.18, p < .05$ ).

At Time 3, 452 participants completed the last survey. The average time interval was 9.48 days ( $SD = 2.72$ ). Among 452 participants, 27 participants' responses were excluded for not taking the first or the second survey but joining the last survey. Also, 8 participants took the survey extremely fast (Huang et al., 2012) and the responses were removed. The final sample size at Time 3 was 417 responses. Among 417 participants, the average age was 48.27 years ( $SD = 11.11$ ), 51.9% were men, 85.6% were White, and 68.3% earned a Bachelor's degree or a higher degree. Also, the average number of work hours per week was 42.18 ( $SD = 6.02$ ) and participants worked in various industries such as agriculture/forestry/fishing (0.2%), retail (4.6%), finance/banking/insurance (9.4%), and education (13.9%). Participants at Time 3 were not significantly different from participants at Time 2 in gender, ethnicity, and education; however, participants at Time 3 were

**Table 2** Means, Standard Deviations, and Intercorrelations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Gender (0 = Men, 1 = Women)	0.53	0.50							
2. Office Housework (Total)	1.70	0.68	.08*						
3. Office Housework (Social maintenance)	1.79	0.77	.16**	.96**					
4. Office Housework (Object maintenance)	1.50	0.77	-.12**	.73**	.50**				
5. Organizational Citizenship Behavior (OCB)	3.50	0.69	.18**	.39**	.41**	.20**			
6. Burnout	2.67	0.63	.07	-.07	-.08	-.02	-.17**		
7. Promotion	1.75	2.23	-.05	.08	.07	.06	.15**	-.23**	
8. Tenure	5.03	1.15	-.07*	.06	.05	.06	-.02	-.04	.32**

**Table 3** Measurement invariance of Office Housework across Gender

Total Sample	$\chi^2$	<i>df</i>	CFI	RMSEA	$\Delta \chi^2$	$\Delta df$	$\Delta$ CFI	$\Delta$ RMSEA
Configural	227.598	66	0.936	0.089				
Metric	240.973	74	0.934	0.086	13.375	8	0.002	0.003
Scalar	246.370	82	0.935	0.081	5.397	8	0.001	0.005

slightly older than the participants at Time 2 ( $t = -2.42$ ,  $p < .05$ ).

## Measures

*Time 1: Gender.* Participants' gender was asked at Time 1. Men were coded as 0 and women were coded as 1.

*Time 2: Office Housework (OHW).* We used the newly developed OHW scale from the pilot study. We performed CFA. Similar to the pilot study, a two-factor model marginally fit the data, yet the RMSEA value was higher than the conventional cutoff value (.08),  $\chi^2(34) = 192.100$ ,  $p < .01$ , CFI = .937, TLI = .917, RMSEA = .087, SRMR = .046. Again, based on the modification indices, we included an error correlation between item 2 ("I covered office phone calls for others") and item 5 ("I made copies for others for meetings"), and we obtained good model fit,  $\chi^2(33) = 164.331$ ,  $p < .01$ , CFI = .948, TLI = .929, RMSEA = .080, SRMR = .045. The overall Cronbach's alpha was .86 and Cronbach's alpha values for the social maintenance OHW factor (factor 1) and the object maintenance OHW factor (factor 2) were .84 and .85, respectively.

*Time 2: Organizational Citizenship Behavior (OCB).* OCB was assessed with the 14-item scale developed by Settoon and Mossholder (2002). A sample item was "I listen to coworkers when they have to get something off their chest." Participants answered the items on a 5-point agreement scale (1 = *never* to 5 = *very frequently*). Cronbach's alpha was .95.

*Time 3: Burnout.* Burnout was measured using the 16-item subscale of the Oldenburg Burnout Inventory (OLBI; Demerouti, Mostert, & Bakker, 2010). A sample item is "After work, I tend to need more time than in the past in order to relax and feel better." Participants answered the items on a 5-point agreement scale (1 = *strongly disagree* to 5 = *strongly agree*). Cronbach's alpha was .89.

*Time 3: Promotion.* Promotion was considered as an objective career-related reward. Similar to previous research (e.g., Allen, 2006), we used the following item, "How many promotions have you received while at your present company (A promotion should be defined as a significant increase in responsibility or annual salary, or a change in organizational rank)?"

## Results

### Descriptive statistics

Table 2 shows means, standard deviations, and intercorrelations.

### Measurement invariance of office housework across gender

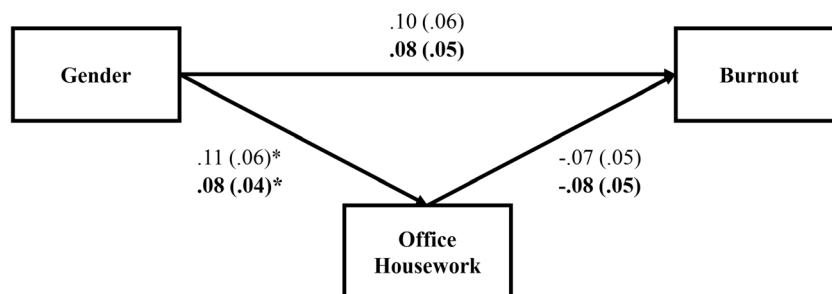
Before testing for gender differences in OHW, we tested for measurement invariance of OHW across gender to see whether gender mean scores were comparable (Vandenberg & Lance, 2000). Sequentially, configural, metric, and scalar invariances were tested. Model fit was evaluated based on CFI and RMSEA values. In configural invariance testing, CFI higher than .90 and RMSEA lower than .10 indicate acceptable model fit (Hu & Bentler, 1999). In metric and scalar invariance testing, a CFI difference lower than .010 and a RMSEA difference lower than .015 indicate good model fit (Chen, 2007).

Specific results are presented in Table 3. With regard to configural invariance testing, results showed that configural invariance held. Therefore, we proceeded with metric invariance testing. Results revealed that metric invariance held. Next, we tested scalar invariance and found that scalar invariance held. With the evidence of scalar invariance, we compared the mean scores of OHW between men and women. Results showed that women ( $M = 1.76$ ) performed more OHW overall than did men ( $M = 1.65$ ;  $t = -2.02$ ,  $d = .16$ ,  $p < .05$ ), supporting Hypothesis 1. Also, women ( $M = 1.91$ ) significantly performed more social maintenance OHW than did men ( $M = 1.67$ ;  $t = -3.92$ ,  $d = .32$ ,  $p < .01$ ), while men ( $M = 1.59$ ) significantly performed more object maintenance OHW than did women ( $M = 1.40$ ;  $t = 3.09$ ,  $d = .25$ ,  $p < .01$ ).

### Mediation

To test Hypothesis 2 and Research Question 1, we conducted mediation models using Mplus 7.4. Specifically, as social maintenance OHW and object maintenance OHW are significantly related under one higher order factor, we performed a mediation model using overall OHW to provide general results. However, we also performed two additional mediation

**Fig. 1** A mediation model for overall office housework (*Note.* all bolded values are standardized coefficients)



models based on social maintenance OHW and based on object maintenance OHW.

The mediation model using overall OHW showed perfect model fit as model was just-identified (full model). Specific results are graphically presented in Fig. 1. Results revealed that overall OHW did not predict burnout ( $B = -.070$ ,  $\beta = -.076$ ,  $p = .13$ ), failing to support Hypothesis 2. Also, we tested the mediation effect of overall OHW on the relationship between gender and burnout. The mediation effect of overall OHW was not significant (unstandardized =  $-.008$ , standardized =  $-.006$ ,  $p = .22$ ).<sup>1</sup>

The two additional mediation models based on social maintenance OHW and object maintenance OHW were just-identified and showed perfect model fit. Specific results for social maintenance OHW and object maintenance OHW are presented in Figs. 2 and 3, respectively. Results showed that social maintenance OHW did not predict burnout ( $B = -.078$ ,  $\beta = -.095$ ,  $p = .06$ ), and the mediation effect of social maintenance OHW was not significant (unstandardized =  $-.019$ , standardized =  $-.015$ ,  $p = .09$ ). For object maintenance OHW, results found that object maintenance OHW did not predict burnout ( $B = -.007$ ,  $\beta = -.008$ ,  $p = .87$ ), and the mediation effect of object maintenance OHW was not significant (unstandardized =  $.001$ , standardized =  $.001$ ,  $p = .87$ ).

## Moderation

To test Hypothesis 3, we conducted path analyses using Mplus 7.4. Again, as social maintenance OHW and object maintenance OHW are significantly related under one higher order factor, we performed a path analysis using overall OHW to provide general results. Also, we performed two additional path analyses: one with only the social maintenance OHW and one with only the object maintenance OHW.

The path analysis model with overall OHW was just-identified and showed perfect model fit. Specific results are provided in Table 4. Results showed that overall OHW positively related to promotion ( $B = .597$ ,  $\beta = .180$ ,  $p < .01$ ). Also,

<sup>1</sup> We also tested the effect of burnout at Time 2 on OHW at Time 3, performing a separate mediation model. Results showed that burnout at Time 2 did not significantly predict OHW at Time 3 ( $B = -.099$ ,  $\beta = -.050$ ,  $p = .31$ ). Also, the mediation effect of burnout was not significant (unstandardized =  $-.008$ , standardized =  $-.004$ ,  $p = .38$ ).

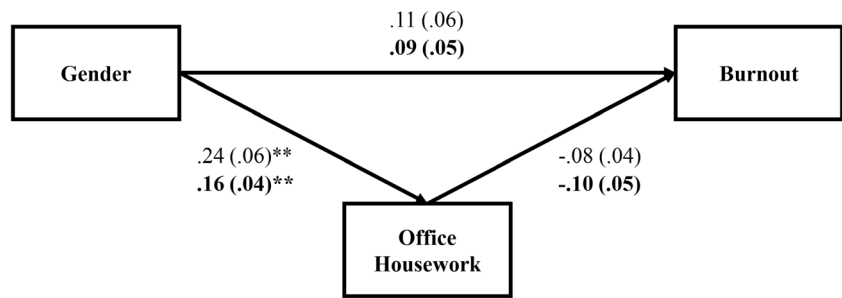
the interaction term between overall OHW and gender was significant ( $B = -.690$ ,  $\beta = -.305$ ,  $p < .05$ ), supporting Hypothesis 3. A simple slope analysis demonstrated that the relationship between OHW and promotion was significant for men (simple slope =  $.60$ ,  $SE = .22$ ,  $p < .01$ ), but not for women (simple slope =  $-.09$ ,  $SE = .24$ ,  $p = .69$ ). The difference between the slopes was also significant ( $-.69$ ,  $SE = .33$ ,  $p < .05$ ). An interaction graph is presented in Fig. 4.

Additionally, we performed path analyses for social maintenance OHW and object maintenance OHW. Both models were just-identified and showed perfect fit. Specific results are presented in Table 4. Results demonstrated that social maintenance OHW positively predicted promotion ( $B = .618$ ,  $\beta = .209$ ,  $p < .01$ ), and the interaction term between social maintenance OHW and gender was significant ( $B = -.699$ ,  $\beta = -.342$ ,  $p < .05$ ). A simple slope analysis revealed that the positive effect of social maintenance OHW on promotion was significant for men (simple slope =  $.62$ ,  $SE = .21$ ,  $p < .01$ ), but not for women (simple slope =  $-.08$ ,  $SE = .20$ ,  $p = .69$ ). The difference between the slopes was also significant ( $-.70$ ,  $SE = .29$ ,  $p < .05$ ). An interaction graph is presented in Fig. 5. For object maintenance OHW we found that object maintenance OHW did not predict promotion ( $B = .188$ ,  $\beta = .064$ ,  $p = .21$ ), and the interaction term between object maintenance OHW and gender was not significant ( $B = -.155$ ,  $\beta = -.076$ ,  $p = .46$ ).<sup>2</sup>

<sup>2</sup> Based on a suggestion from a Reviewer, we conducted an additional set of analyses in which we controlled for tenure and performed the moderation analyses again as supplemental analyses. First, we performed the moderation analysis for overall OHW. The model was just-identified with perfect model fit. We found that overall OHW positively related to promotion ( $B = .448$ ,  $\beta = .135$ ,  $p < .05$ ), consistent with the results in the main analysis. However, the interaction term between overall OHW and gender was no longer significant ( $B = -.496$ ,  $\beta = -.219$ ,  $p = .11$ ), differing from the results in the main analysis. Additionally, we performed the moderation analyses for social maintenance OHW and object maintenance OHW. Both models were just-identified and showed perfect model fit. Results demonstrated that social maintenance OHW positively predicted promotion ( $B = .495$ ,  $\beta = .167$ ,  $p < .05$ ), yet the interaction term between social maintenance OHW and gender was no longer significant ( $B = -.545$ ,  $\beta = -.267$ ,  $p = .051$ ). With regard to object maintenance OHW we found that object maintenance OHW did not predict promotion ( $B = .117$ ,  $\beta = .040$ ,  $p = .42$ ), and the interaction term between object maintenance OHW and gender was not significant ( $B = -.096$ ,  $\beta = -.047$ ,  $p = .63$ ), which was in line with findings that did not include tenure as a control variable.



**Fig. 2** A mediation model for social maintenance office housework (Note. all bolded values are standardized coefficients)



**Discussion**

The primary purpose of the current research was to develop and conduct an initial investigation of the construct of OHW. Popular press articles argued that women engage in more OHW and experience more burnout, yet receive fewer career benefits, from performing OHW than do men; however, the arguments had not been formally tested until now. Overall, our results indicate mixed support for these popular press assertions.

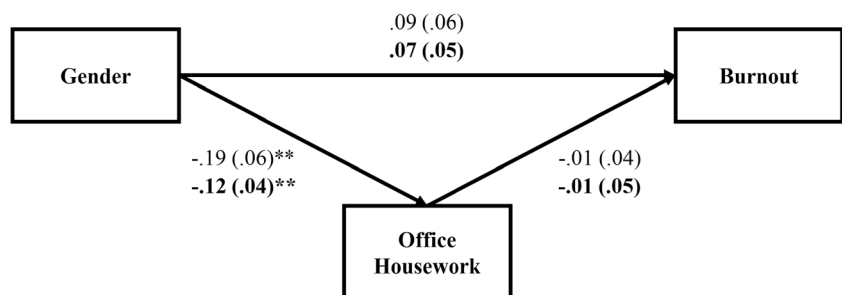
First, Grant and Sandberg (2015) claim that women perform more OHW than do men and we strengthened the claim using gender role theory. Results showed that women performed more OHW overall than did men, though the mean difference was relatively small in magnitude. More specifically, results revealed that women engaged in more social maintenance OHW, while men engaged in more object maintenance OHW. In other words, women are more likely than are men to perform tasks such as organizing office parties and gatherings, comforting colleagues when there is bad news, and buying cards for celebrations and/or condolences, but men are more likely than are women to engage in tasks such as fixing broken office equipment and moving heavy or large objects.

Second, Grant and Sandberg (2015) assert that performing OHW leads to burnout and we buttressed the argument using conservation of resources theory (Hobfoll, 2001). Contrary to the assertion, results showed that OHW did not significantly predict burnout. Also, we found that both social maintenance OHW and object maintenance OHW did not significantly predict burnout. We speculate that even though OHW expends limited resources, employees might consider OHW as a break

from work given its low intensity. As a consequence, the negative effects of OHW might be canceled out and the relationship between OHW and burnout might be shown as non-significant. However, this is a conjecture and we recommend future researchers further investigate the relationship and the mechanism between OHW and burnout. Note that the findings were unexpected as OCB is often related to burnout (e.g., Somech & Drach-Zahavy, 2013). It seems to insinuate that OCB and OHW affect employee burnout via different mechanisms. Given the unexpected results, we encourage future researchers to examine the relationships between OCB, OHW, and burnout to elucidate the relationships. Moreover, results showed that OHW did not mediate the relationship between gender and burnout. Although women generally experience more burnout than do men (Purvanova and Muros, 2010), it appears that performing OHW is not the reason why, and that other mediators, such as engage in more emotional labor (Cottingham, Erickson, & Diefendorff, 2015), might better explain the relationship between gender and burnout.

Third, Grant and Sandberg (2015) argue that OHW behaviors do not pay off for employees. Contrary to this notion, our analyses showed a positive relationship between OHW and promotion. Thus, there is no evidence that OHW is harmful to career outcomes. This is consistent with the broader OCB literature, which demonstrates a positive relationship between OCB and career outcomes (e.g., Allen, 2006). However, results demonstrated that benefits accrued for engagement in OHW might be limited to men as the moderation results showed a positive relationship between OHW and promotion for men but not for women. These findings support the idea of gender stereotypes and different standards for men and women, and coincide with previous research that has shown that

**Fig. 3** A mediation model for object maintenance office housework (Note. all bolded values are standardized coefficients)



**Table 4** Moderating Effect of Gender on the Relationship between Office Housework and Promotion

Variable	Unstandardized coefficients		Standardized coefficients	
	Estimate	S.E.	Estimate	S.E.
Overall office housework				
Gender	.92	.59	.21	.13
Office housework	.60	**	.22	.18
Gender X Office housework	-.69	*	.33	-.31
$R^2$				.020
$\Delta R^2$				.011
Social maintenance office housework				
Gender	.95	.56	.21	.13
Office housework	.62	**	.21	.18
Gender X Office housework	-.70	*	.29	-.34
$R^2$				.022
$\Delta R^2$				.013
Object maintenance office housework				
Gender	.12	.46	.03	.10
Office housework	.19	.15	.06	.15
Gender X Office housework	-.16	.21	-.08	.10
$R^2$				.006
$\Delta R^2$				.001

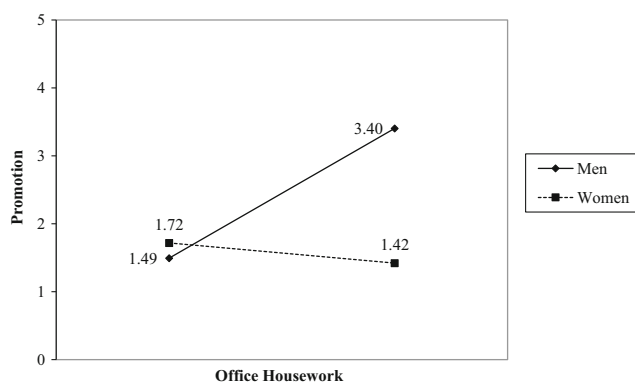
Note. \* $p < .05$ ; \*\* $p < .01$

men are more likely to benefit from engagement in citizenship behaviors than are women (Allen, 2006; Heilman & Chen, 2005).

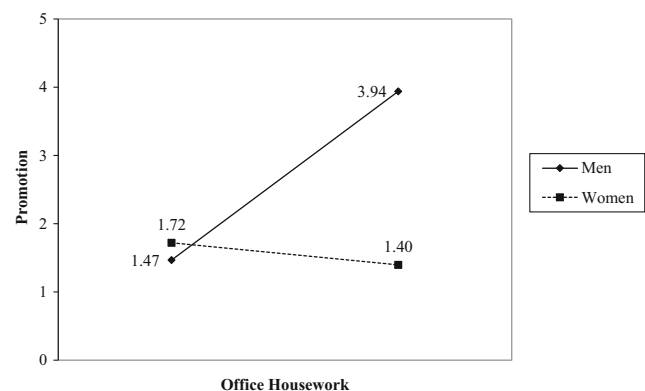
### Theoretical implications

There are several theoretical implications. First, we expand the construct space associated with OCB. Our findings suggest that OHW is related to, but distinct from existing forms of OCB. Specifically, we found that the relationship between OHW and OCB was moderate ( $r = .49, p < .01$ ), demonstrating that the two constructs are related but not identical. Moreover,

OHW was not significantly related to burnout, while overall OCB is often significantly associated with burnout (e.g., Somech & Drach-Zahavy, 2013), displaying further differentiation of the two constructs related to their correlates. Taken together, these findings provide support that OHW is related to but distinct from OCB, providing an important theoretical implication for the OCB literature. In the OCB literature, current conceptualizations of OCB fail to distinguish low value behaviors from high value behaviors, and theoretical and empirical understanding about the different effects of low and high value OCB are limited. With the current findings, our study suggests that low value OCB (i.e., OHW) and high value OCB should be conceptually distinguished as they are



**Fig. 4** Moderation effect of gender on the relationship between overall office housework and promotion



**Fig. 5** Moderation effect of gender on the relationship between social maintenance office housework and promotion

related but distinct constructs. We contend that this distinction is meaningful, further advances conceptualizations of OCB, enriches the literature, and warrants further study.

Furthermore, our findings give support to gender role theory in the context of OHW, as women generally displayed OHW behaviors at a higher rate than did men. The finding that OHW was not significantly linked to burnout has implications for conservation of resources theory. In this study, although people who performed OHW spent resources to do so, they reported that they did not necessarily experience more burnout. This finding seems to be in contrast to the proposition of conservation of resources theory that people who spend limited resources are likely to experience burnout and other negative health outcomes (Hobfoll, 2001). As stated previously, it is possible that OHW replenishes one's energy levels as it is a low strain activity that occurs in lieu of more strenuous work activities, thereby canceling out the negative effect of OHW from spending limited resources. Future researchers should consider examining the processes by which OHW influences burnout, and how these processes support or oppose the ideas put forth by conservation of resources theory.

### Practical implications

This study also offers practical implications. We found that women generally performed more OHW than did men. Specifically, women engaged in more social maintenance OHW than did men, while men engaged in more object maintenance OHW than did women. Supervisors need to be aware of this unequal work distribution of OHW between men and women, and try to ensure that office tasks that can be considered as "housework" are evenly distributed across gender. For example, bringing in the office birthday cake or dealing with broken office machines could be rotated across all employees. Moreover, our finding that gender moderates the relationship between OHW and promotion is of practical importance to practitioners who seek to create or maintain a fair and equitable culture. In a culture of this kind, women and men should be equally rewarded for comparable behaviors, but our findings suggest that men may receive increased rewards for displaying OHW behaviors compared to their women counterparts. If true, then this could open organizations up for litigation or lead to perceptions of unfair working environments that could lead to job dissatisfaction and increased turnover (Cohen-Charash & Spector, 2001). We recommend HR practitioners be cognizant of this potentially unequal career compensation between men and women and provide equal career compensation for equal performance of OHW regardless of the gender characteristics of employees.

### Limitations and future research

Some limitations are present in this study. First, all participants worked and lived in the United States, and the majority of participants were white and well-educated. Therefore, the generalizability of the findings is limited. We encourage future researchers to replicate the findings using diverse samples. Second, in this study, a career outcome was operationalized as promotion with a single-item scale; however, there are multiple types of career outcomes. In order to solidify the findings, we recommend future researchers use different operational definitions of career outcomes (such as turnover and pay). In addition, people might have different opportunities for promotion and it might attenuate the relationship between OHW and promotion. We recommend future researchers further explore whether having different opportunities for promotion serves as a moderator of the relationship between OHW and promotion. Third, our findings were based on 'snapshot' data, though the relevant variables were collected at different time points to reduce common method biases and spurious mood effects (Podsakoff et al., 2003). In order to fully understand how the performance of OHW accumulates across time and how it relates to burnout and career outcomes, longitudinal research that tracks OHW and burnout and career outcomes over an extended period of time is needed.

Fourth, our study was limited to the examination of the frequency of OHW performance. Thus, it is unclear whether people performed OHW of their own accord or if they were asked to perform these tasks by others. Understanding this distinction is potentially important because it is likely to affect employee burnout given the different level of decision latitude over performing these tasks (Karasek, 1979). For example, if someone is bringing food for others voluntarily, that individual may think of the behavior as a good deed and, thus, the behavior lowers burnout. However, if someone is asked to bring food for others, it may be perceived as an illegitimate task (Semmer, Tschann, Meier, Facchin, & Jacobshagen, 2010) and add to burnout. Investigating the motivations behind why people perform OHW would broaden our understanding of OHW and possibly elucidate the relationship between OHW and burnout. We urge future researchers to collect the information and investigate how decision latitude over OHW affects the relationship between OHW and burnout. Also, in general, it is plausible that some OHW behaviors such as bringing food for others are more likely to be performed voluntarily than are other OHW behaviors such as making copies for others. Thus, some OHW behaviors are likely to be shown with more intrinsic motivation, more approach motivation, and less pressure, while other OHW behaviors are likely to be performed with more extrinsic motivation, more avoidance motivation, and more pressure (Elliot, 1999; Ryan & Deci, 2000). We encourage future researchers to investigate what specific OHW behaviors are more likely to be performed

voluntarily and involuntarily and in turn, how these different OHW behaviors differently relate to outcomes such as intrinsic motivation and perceived pressure. Furthermore, the motivations behind performing OHW may also differ between men and women. For example, women may feel more pressure to perform OHW and in turn, initiate OHW more than men due to gender role expectations. However, it is also possible that women find more intrinsic rewards in performing these tasks and, thus, initiate OHW behaviors regardless of external pressures or perceived gender norms. We recommend future researchers examine gender differences in OHW motivations as well as how gender norms and stereotypes play a role in the gender differences.

Organizational culture and norms may play an important role in employee OHW performance. For example, if organizational culture is hierarchical, OHW may be assigned rather than voluntarily performed through discussion. In particular, if the culture is masculine as well as hierarchical, OHW may be assigned to women and in turn women would perform more OHW than men. Additionally, in organizations that have strong traditional gender norms, women may be more expected and pressured to perform OHW and in turn, they may perform more OHW than men. Researchers should investigate the effects of organizational culture and norms on individuals' OHW performance. Lastly, we recommend researchers consider task significance as a potential buffer for burnout from OHW in that task significance can provide work meaningfulness (Hackman & Oldham, 1976; Zalesny & Ford, 1990) and it can prevent people from experiencing burnout (e.g., Blanco-Donoso, Garrosa, Moreno-Jiménez, de Almeida, & Villela-Bueno, 2017).

## Conclusion

Popular press articles claim that women perform more office housework and that they experience more burnout, yet receive fewer career benefits, from performing office housework than do men. However, the claims were not empirically studied until now. This study defines office housework as a specific type of organizational citizenship behavior and examines the popular press claims with empirical data. This study sheds light on gender differences in office housework and the relationships between office housework, burnout, and promotion in consideration of gender.

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