Does It Matter *Where* You're Helpful? Organizational Citizenship Behavior from Work and Home

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Abstract

Organizational citizenship behaviors (OCBs) are commonly studied in the organizational and occupational health literature, yet, current OCB measures inherently assume individuals are performing these behaviors while physically at work. However, recent technological advances have afforded employees greater flexibility to engage in work-related behaviors at home, begging the question of whether OCBs are also being performed from home and their distinction from traditional OCBs. We provide evidence that OCBs performed while physically at work (OCB-W; i.e., traditional OCBs) are conceptually and empirically distinct from OCBs performed while physically at home (OCB-H). In Study 1 ($N = 292$), we examine construct validity evidence for OCB-H with regard to its distinction from OCB-W and its unique nomological network. In Study 2, we further examine the distinction between OCB-H and OCB-W at the between- and within-person level using an experience sampling approach in a sample of 162 workers. Utilizing results from multilevel confirmatory factor analysis, we show that between-person variance in OCB-H is considerably higher than for OCB-W, and that although OCB-H and OCBW-H are strongly correlated at the between-person level, they are independent of one another within-person. We also examine these two forms of OCB as parallel mediators of the relation between work engagement-work interfering with family (WIF). Results suggest OCB-H and OCB-W are indeed distinct in the strength of their relationships to work engagement and WIF between- and within-persons.

Keywords

Organizational citizenship behavior; work engagement; work interference with family; work-family conflict

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Introduction

Organizational citizenship behaviors (OCBs) are actions that are generally prosocial in nature (Organ, 1997), such as helping a supervisor without being asked, helping a co-worker with a heavy workload, or taking time to listen to a co-worker's (personal or work) problem. OCBs have been a major focus in the organizational literature for decades, stemming from the notion that organizations depend on their employees to exhibit characteristics including helpfulness, general goodwill, altruism, and suggestions for improvement (Katz, 1964; Smith, Organ, & Near, 1983). Since its inception, the OCB literature has largely focused on the target of the behavior (Williams & Anderson, 1991), motives for OCBs (Kim, Van Dyne, Kamdar, & Johnson, 2013; Lin, Savani, & Ilies, 2019), and its construct space (Hoffman, Blair, Meriac, & Woehr, 2007; Organ, 1997). All the while, research on OCBs has assumed these behaviors are performed while physically at work. Yet, the growing literature on communication technology in relation to work have afforded employees much greater flexibility to perform work-related behavior while at home (Boswell & Olson-Buchanan, 2007; Dettmers, Vahle-Hinz, Bamberg, Friedrich, & Keller, 2016), highlighting the need for research to examine differences related to *where* work-related behaviors, such as OCBs, are performed.

In the present paper, we extend the conceptualization of OCBs by exploring the notion that these behaviors can be performed either while physically at work or while physically at home, and that this distinction makes a critical difference in the construct space of OCBs regarding its correlates, predictors, outcomes, and the degree of variability at both the between- and within-person level. Specifically, we distinguish between OCBs that are performed while employees are physically at *work* (OCB *from* work, or OCB-W; the traditional conceptualization of OCB, such as helping a co-worker while physically at work) versus OCBs that are performed while the employee is physically at *home* (OCB *from* home, or OCB-H, such as helping a co-worker while physically at home). In Study 1, we provide evidence of construct validity for OCB-H and its distinction from OCB-W, as well as its distinction from related constructs such as work-family conflict and workaholism. In Study 2, we examine between- and within-person differences of OCB-H and OCB-W. Using experience sampling methodology, we test the utility of daily OCB-W compared with daily OCB-H as mediators in the relationship between daily work engagement and daily work-family conflict, two constructs that likely relate to both OCB-H and OCB-W and may highlight one of the many relationships in which the distinction between these two forms of OCB is critical.

The present research makes at least three major contributions to the literature. First, we clarify the construct space of OCB regarding where these work-related behaviors are performed. Given that OCBs have been linked with performance evaluation decisions (Whiting, Podsakoff, & Pierce, 2008) and are often perceived by employees to be a part of their job description (Turnipseed & Wilson, 2009), the potential finding of OCB-H as a distinct construct has important organizational implications. Second, we provide evidence of validity for a measure of OCB-H across two studies, including both a general measure and a day-level measure. Finally, in Study 2 we utilize experience sampling methodology to demonstrate the nuances of OCB-H and OCB-W at both the between- and within-person

level in the context of variables that should relate to both forms of OCB but in unique, meaningful ways. We selected the work engagement-OCB-WIF relationship given that all three constructs have shown substantial between- and within-person variability, that this relationship has been observed in at least three separate samples (Halbesleben, Harvey, & Bolino, 2009), and in particular, that the construct of WIF reflects conflict between the work and nonwork domains, which may be especially useful for capturing differences between OCB-W and OCB-H. As past research suggests that OCBs have substantial within-person fluctuation (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Koopman, Lanaj, & Scott, 2016; Spence, Brown, Keeping, & Lian, 2014), we extend this research by examining whether the same is true of OCB-H.

Study 1

The goal of Study 1 was to follow best practices for establishing evidence of construct validity for our OCB-H measure regarding its distinction from OCB-W as well as other related constructs. We provide initial evidence of construct validity for a previously developed measure of OCB (the OCB Checklist; Fox, Spector, Goh, Bruursema, & Kessler, 2012) adapted to capture that the behavior was performed at home (OCB-H). Given that the original measure was developed to capture OCB-W, the focus of our research is on establishing evidence of validity for our OCB-H measure, including evaluating the partial correlation of OCB-H with each hypothesized construct while controlling for OCB-W.

While we theorize that OCB-H and OCB-W are distinct constructs, we expect the two will be strongly related, given that they involve the same behaviors that only differ in terms of where the behaviors are physically performed. To establish additional evidence of construct validity, we will examine the relationship between our OCB-H measure and an OCB-W measure (the OCB-Checklist adapted to specify the behaviors were performed at work; Fox et al., 2012), which are identical with the exception of the item stem depicting where the behavior was performed. To provide additional evidence of construct validity, we examine the relationship between our OCB-H measure with another commonly used OCB-W measure developed by Lee and Allen (2002; referred to as OCB-LA).

Hypothesis 1: OCB-H will be positively correlated with OCB-W

We also sought to demonstrate initial evidence of the nomological network of OCB-H. Regarding personality, meta-analytic evidence suggests OCB is related to conscientiousness ($\rho = .18$), agreeableness ($\rho = .14$), and neuroticism ($\rho = .12$) (Chiaburu, Oh, Berry, Li, & Gardner 2011). Past research has argued that these traits are related to citizenship given the associations between conscientiousness and responsible behavior, agreeableness and interpersonal sensitivity, and the absence of neuroticism with positive emotions (Chiaburu et al., 2011). Given the prosocial nature of OCBs, regardless of where they are performed, we anticipate these findings will extend to OCB-H and will remain related when controlling for OCB-W given the relative stability of personality traits.

Hypothesis 2: OCB-H will be positively related to (2A) conscientiousness, (2B) agreeableness, and negatively related to (2C) neuroticism, and will remain significant after controlling for OCB-W

Another construct that is related to OCB is work engagement, a positive and fulfilling work-related state consisting of three components: vigor (high energy and mental resilience when working), dedication (a sense of pride, enthusiasm and significance to work), and absorption (happily engrossed in one's work) (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). While these two constructs are related, they are distinct in that work engagement involves a motivational component, whereas OCB reflects the observed behaviors (Simbula & Guglielmi, 2013). Generally, work engagement is positively related to OCB-W (Halbesleben et al., 2009; Matta, Scott, Koopman, & Conlon, 2015; Simbula & Guglielmi, 2013), which we expect to extend to OCB-H. Additionally, meta-analytic evidence suggests that work engagement predicts contextual performance (a broader conceptualization of extrarole performance that includes OCBs) beyond job satisfaction, job involvement, and organizational commitment ($R^2 = .16$) (Christian, Garza, & Slaughter, 2011). Thus, we hypothesize that OCB-H will be positively related to work engagement, and will remain significantly related when controlling for OCB-W.

> **Hypothesis 3:** OCB-H will be positively related to work engagement and will remain significant after controlling for OCB-W

Given that OCB-H involves conducting work-related behaviors in the non-work domain, we anticipate OCB-H will relate to work-family conflict (WFC). WFC refers to interrole conflict in that the work and family domains elicit pressure on each other (Carlson, Kacmar, & Williams, 2000; Greenhaus & Beutell, 1985), and can exist in two different directions, work interfering with family (WIF), and family interfering with work (FIW). Theory suggests three types of work-family conflict that are pertinent to both WIF and FIW: a) time-based conflict, b) strain-based conflict, and c) behavior-based conflict. Time-based work-family conflict occurs when something work-related requires time that interferes with time spent participating in the family domain. Strain-based work-family conflict occurs when stress in one domain interferes with the other domain (e.g., carrying over stress from work to home). Finally, behavior-based work-family conflict occurs when specific behaviors required in one role are not compatible with the behavior required in another role in the other. While these distinctions are important in many contexts, in the current study we focus on the general underlying variable of WIF as a composite of two of these types (time and strain). Although one of the seminal articles (Greenhaus & Beutell, 1985) on work-family conflict theorized three forms of both WIF and FIW, the majority of the literature has focused on time- and strain-based WFC. Furthermore, we chose to include only time- and strain-based WIF as we have taken a conservation of resources lens and are hypothesizing specific relationships based on a shortage of resources, which corresponds with time-and strain-based WIF. As behavior-based WIF reflects a different type of conflict – that of behavioral expectations, we chose to exclude this aspect of WIF as it is not reflective of a resource-lens perspective. Furthermore, this rationale and practice is common in work-family research (e.g., Cho & Allen, 2012; Keeney, Boyd, Sinha, Westring, & Ryan, 2013; Rotondo, Carlson, & Kincaid, 2002).

As OCB-H involves taking time away from the nonwork domain to perform work-related behaviors, we anticipate that OCB-H will be especially important for predicting WIF. Although OCBs are beneficial for organizations and their members, recent studies suggest

performing such behaviors at work consumes employees' resources and energy, leading to lower emotional support for their family and spouse (Lin, Ilies, Pluut, & Pan, 2017), and past research has found support for a positive relationship between OCB-W and WIF (Halbesleben et al., 2009). We expect this finding to extend to OCB-H, given that the use of communication technology for work-related purposes after work hours is associated with increased WIF (Diaz, Chiaburu, Zimmerman, & Boswell, 2012; Butts, Becker, & Boswell, 2015). Thus, we hypothesize that OCB-H will be positively related to WIF. Given the work-nonwork aspect of WIF, we expect this relationship will remain significant after controlling for OCB-W.

> **Hypothesis 4:** OCB-H will be positively related to work interfering with family and will remain significant after controlling for OCB-W

As OCB-H involves the work domain spilling over into the nonwork domain, we anticipate OCB-H will be particularly important for constructs involving the permeability of work and nonwork. As organizational expectations of after hours work predict increased after hours work (Fenner & Renn, 2010), we anticipate a negative relationship between segmentation supplies (the extent to which an employer allows employees to segment work and nonwork) and OCB-H. Additionally, an employee's own preferences for work and nonwork segmentation will likely influence the degree to which they perform OCB-H. Indeed, use of technology at home for work-related purposes is negatively associated with segmentation preferences (Park, Fritz, & Jex, 2011). Given the work-nonwork aspect of these constructs, we hypothesize that OCB-H will be negatively related with segmentation preferences and segmentation supplies, and that both relationships will remain significant after controlling for OCB-W.

> **Hypothesis 5:** OCB-H will be negatively related to (5A) segmentation preferences and (5B) segmentation supplies, and will remain significant after controlling for OCB-W

Counterproductive work behavior (CWB; discretionary behavior that is harmful to an organization) is one of the most commonly studied constructs in relation to OCB. OCB and CWB used to be considered opposite poles, as theoretical and empirical work established a negative relationship between these constructs (Dalal, 2005). However, more recent research has uncovered that the negative relationship between these two constructs may be due to measurement artifacts. In particular, measures of OCB which include antithetical items (e.g., reverse-coded CWB items) may unintentionally overlap OCB and CWB content, when in fact OCB is not the opposite of CWB (Fox et al., 2012). Furthermore, measures which utilize agreement scales may introduce acquiescence, reflecting one's general impression of their behavior rather than the actual frequency. Theoretically, scholars have noted that behavior is complex, and negative work experiences may in fact result in both OCB and CWB. A number of reasons have been proposed regarding a potentially positive relationship between OCB and CWB, including injustice and anger, moral licensing, resource depletion, and impression management (Bolino & Klotz, 2015). Thus, studies utilizing the OCB-Checklist (which utilizes a frequency response scale and lacks antithetical items) and CWB measures relying on a frequency response scale have observed a positive relationship between OCB and CWB (Bauer, Wright, Askew, & Spector, 2018; Fox et al., 2012; Spector

& Che, 2014). Given that our OCB-H measure is derived from the OCB-Checklist, and that we utilize a CWB measure with a frequency response scale, we hypothesize that OCB-H will be positively related to CWB. Furthermore, given that individuals performing OCB-H may experience some degree of frustration or dissatisfaction with having to perform work-related behaviors during nonwork time, we expect this relationship will remain significant after controlling for OCB-W.

> **Hypothesis 6:** OCB-H will be positively related to CWB, and will remain significantly related after controlling for OCB-W.

Due to the nature of OCB-H involving the performance of work tasks outside of standard working hours, we theorize that these behaviors are likely related to workaholism, a relatively stable strait that reflects the compulsion to work beyond what is reasonably expected. Employees high in workaholism are more likely to perform work-related tasks from home (van Wijhe, Peeters, Schaufeli, & Ouweneel, 2013) and prefer working over engaging in a leisure activity during non-work time (Snir & Zohar, 2008). Yet, while research has consistently shown that workaholics continue to perform work-related activities during leisure time, there is a lack of research uncovering the specific behaviors workaholics are performing during leisure time. Thus, we propose that they will likely find any possible task to continue working while at home to satisfy their compulsions, which may take the form of OCBs. In other words, engaging in OCB-H may be one way for a workaholic to continue their work even after they have physically left the workplace, by performing behaviors such as finishing additional work, continuing to work from home through meals, or finishing some work- related assignment for a co-worker. Therefore, we hypothesize that OCB-H will be positively related to workaholism, and will remain significantly related after controlling for OCB-W.

> **Hypothesis 7:** OCB-H will be positively related to workaholism and will remain significant after controlling for OCB-W

Regarding discriminant validity, we expect that OCB-H will be statistically distinct from task performance. Whereas past research suggests that OCB and task performance are related yet distinct constructs (Hoffman et al., 2007; Kamdar & Van Dyne, 2007), we anticipate this extends only to OCB-W, given that both OCB-W and task performance are conducted while physically at work. As OCB-H reflects an individual going above and beyond during nonwork time, we expect that OCB-H will be unrelated to task performance. This is in line with recent research suggesting that OCBs may have diminishing returns on task performance, particularly when they require a large amount of personal resources (Ellington, Dierdorff, & Rubin, 2014), as is the case with OCB-H. Taken together, we do not expect OCB-H and task performance to be related.

Additionally, past meta-analytic research suggests that the personality traits of extraversion and openness are more relevant for change-oriented citizenship than general OCBs (Chiaburu et al., 2011), which reflects proactive behaviors rather than prosocial behaviors. The authors suggested this was likely due to the association of these traits with a need for growth and agency (Digman, 1997), which is more consistent with change-oriented citizenship. Given that personality traits are relatively stable individual differences, we

anticipate these findings will extend to OCB-H. Thus, we do not expect OCB-H to be related to extraversion or openness.

Method

Participants and procedures.—Participants were recruited through Prolific Academic (https://prolific.ac/), an online platform connecting researchers and participants. Participants were eligible to sign up for the study if they lived in the United States and were employed full-time. 301 participants completed the study and were paid $2.00 each. Of the 301 participants that completed the survey, three participants were removed for incorrectly responding to an attention check (e.g., "please select strongly agree"), and six were removed for reporting they worked fewer than 30 hours per week, bringing our final sample to 292 participants. Participants were 35.56 years old on average ($SD = 9.64$), worked an average of 41.82 hours per week ($SD = 5.18$), and had an average job tenure of 4.59 years ($SD = 5.21$). 50.7% of the sample were male (47.9% female, 1.4% non-binary), and the majority were Caucasian (83.6%), followed by Asian/Pacific Islander (6.8%), African American (5.8%), Hispanic/Latino (5.8%), and Native American or American Indian (1.0%)[1]. The majority of participants held at least a 4-year college degree (70.6%). A little over half (57.5%) of participants reported living with their spouse/partner, 34.2% reported living with children, and 11.6% reported living with one or both parents.

Measures.

OCB-H and OCB-W.: To capture OCB-W and OCB-H, we utilized OCB items from a commonly used scale: the OCB checklist (Fox et al., 2012). All items were measured on a 5-point scale (1 = never, 5 = everyday). The OCB-W measure included all 20 items from the OCB checklist, and participants were instructed to indicate how often then engaged in each behavior while physically at work. An example item is "I volunteered for extra work assignments." The OCB-W measure presented acceptable evidence of reliability (α = 90). The OCB-H items were identical to the OCB-W items, except that the instructions requested participants indicate how often they engaged in each behavior while physically at home. Four items could not be adapted for performing from home (e.g., "I picked up a meal for others at work.") and thus were not included in our data collection.[2] The OCB-H measure presented acceptable evidence of reliability (α = 95). We also included an additional measure of OCB-W (OCB-LA), a 16-item measure developed by Lee and Allen (2002). Example items include "attend functions that are not required but that help the organizational image" and "give up time to help others who have work or nonwork problems." Items were measured on a 5-point scale (1 = never, 5 = everyday). The measure demonstrated adequate reliability (α = .91).

Personality traits.: The five personality traits were measured using the mini-IPIP (Donnellan, Oswald, Baird, & Lucas, 2006; Goldberg, 1999), which consists of four items per personality trait. Items were measured on a 5-point scale (1 = strongly disagree, 5 =

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[1]Sum is larger than 100% as participants were instructed to select all that apply

[2]In hindsight, this item may have been adapted to OCB-H, for instance, framing the item as buying or preparing food for work colleagues during off-work hours. We thank a reviewer for highlighting this and encourage future research to further develop and refine OCB-H measures.

strongly agree). All personality traits demonstrated adequate reliability: neuroticism (α = .76); agreeableness (α = .81); conscientiousness (α = .78); extraversion (α = .89); openness (α = .79).

Work engagement.: Work engagement was measured using the 9-item version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006). The UWES-9 consists of three facets (vigor, dedication, and absorption) comprised of three items each. An example item is "at my work, I feel bursting with energy" (vigor). Items were measured on a 7-point scale (1 = never, 7 = always). The measure demonstrated adequate reliability (α = .93).

WIF.: WIF was measured using the eight-item negative work-home interface (WHI) subscale of the SWING (Survey Work-Home Interaction NijmeGen; Geurts et al., 2005) on a 7-point scale (1 = never, 7 = always). Items are framed in the context of how often they are experienced, such as "You are irritable at home because your work is demanding." The WIF measure presented acceptable evidence of reliability (α range = .93).

Segmentation preferences.: Segmentation preferences were measured with the 4-item scale by Kreiner (2006), with higher scores indicating a stronger preference for segmentation. An example item is "I like to be able to leave work behind when I go home). Items were measured on a 7-point scale 1 = strongly disagree, 7 = strongly agree). The scale demonstrated adequate reliability (α = .93).

Segmentation supplies.: Segmentation supplies were measured with the 4-item scale by Kreiner (2006), with higher scores indicating greater segmentation supplies. An example item is "at my workplace, people are able to prevent work issues from creeping into their home life." Items were measured on a 7-point scale 1 = strongly disagree, 7 = strongly agree) and demonstrated adequate reliability (α = .96).

CWB.: CWB was measured using the 10-item version of the CWB-Checklist (CWB-C; Spector, Bauer, & Fox, 2010). Example items include "ignored someone at work" and "stayed home from sick and said you were sick when you weren't." Items were measured on a 5-point scale (1 = never, 5 = every day). The scale demonstrated adequate reliability (α = .83).

Workaholism.: Workaholism was measured using the 9-item compulsive tendencies subscale of the Work Addiction Risk Test (WART; Robinson, 1999). Example items include "I feel guilty when I am not working on something" and "I overly commit myself by biting off more than I can chew." Items were measured on a 4-point scale (1 = strongly disagree, 4 = strongly agree) and demonstrated adequate reliability (α = .81).

Task performance.: Task performance was measured via self-report with three items developed by Griffin and colleagues (2007). An example item is "I carry out the core parts of my job well." Items were measured on a 6-point scale (1 = strongly disagree, 6 = strongly agree). The scaled demonstrated adequate reliability (α = .90).

Analyses.—All correlations were conducted in SPSS v. 25. Mean scores were created for all measures. Descriptive statistics and bivariate correlations between study variables can be found in Table 1. To provide additional evidence of construct validity, we compared bivariate correlations as well as partial correlations of OCB-H with all variables controlling for OCB-W (see Table 2). Additionally, we utilized the *mirt* (Chalmers, 2012), *lavaan* (Rosseel, 2012), and *semPlot* (Epskamp, 2015) packages in R to provide evidence of internal structural validity.

Results

Internal structural validity.—To further examine the psychometric properties of our 16 OCB-H items, we first estimated the unidimensional item response theory (IRT) graded response model (GRM; Samejima, 1968). This IRT model proposes that item options are necessarily ordered, but that the space between options can vary, just as we would suspect this measure would function. Indeed, the model showed good global fit to the data, $M_2(56)$ = 115.76, CFI = .98, TLI = .97, RMSEA = .061 (90% CI: .045; .076), SRMSR = .060, with IRT-based marginal reliability of .89. Item fit statistics (i.e., $S - c2$; Orlando & Thissen, 2000), showed no *p*-values below the Bonferonni corrected value of .002 (see Table 3), suggesting all items behaved as expected. Figure 1 shows the test characteristic and item information curves. These curves suggest that those higher in OCB-Hs are most reliably measured by this scale, but suggest reliability is sufficient for those at least 1 *SD* below the mean of the underlying variable.

Table 3 shows the IRT item parameters. The item discrimination parameter, *a*, is conceptually similar to a factor loading, in that larger numbers indicate a stronger relation to the underlying variable. Discrimination parameters fell between 1.05 and 3.74, a reasonable range for this parameter, given recommendations that low discrimination parameters suggest poor items (Zickar, 1998), and that larger item discriminations are often observed in conceptually narrow constructs (Reise & Waller, 2009), such as OCB-H. The *b* parameters are "location" parameters that index the level of the underlying variable at which one response option becomes more attractive than the previous option. For example, for Item OCBH_1, $b1 = 0.18$, indicating that those 0.18 *SD* above the mean level of OCB-H have a 50% chance of choosing response option 2 over response option 1; similarly, $b2 = 2.92$, indicating that those 2.92 *SD* above the mean level of OCB-H have a 50% chance of choosing response option 3 over response option 2, and so on. Items with higher average thresholds $(\hat{b})$ are "extreme" items, in that one must be very high in the underlying variable to fully endorse such items, whereas it is "easy" to endorse less extreme items. It is not surprising that the majority of *b3* and *b4* parameters are 3 or larger (indicating 3 *SD* above the mean) as each scale point reflected the frequency each behavior was performed per day. Our data suggest that it is far more common for employees to perform OCBs once or twice a day, if it all, with very few performing OCBs three or more times a day. The mapping of item content onto these values seems sensible, in that the most extreme items involved picking up food, and taking phone calls/messages for a co-worker at home, whereas less extreme items involved lending a compassionate ear or giving encouragement to a coworker.

To determine whether OCB-H is indeed distinct from OCB-W, we conducted confirmatory factor analyses (CFAs) using diagonally weighted least squares estimation. First, we estimated a three-factor model in which our OCB-H measure reflected one factor and two popular measures of OCB-W reflected their own factors. This model showed good fit to the data, $\chi^2(1,271) = 2240.06$, $p < .001$, CFI = .97, TLI = .97, RMSEA = .051 (90% CI: .048; .055), SRMSR = .081, AIC = 37471, BIC = 37864. The OCB-H factor correlated similarly with the two OCB-W factors at .50 with the Spector and Fox measure and .54 with the Lee and Allen measure; the two OCB-W factors correlated .84. Next, we simplified this model such that both OCB-W measures loaded onto the same factor. This model showed equivalently good fit to the data compared to the three-factor, $\chi^2(1,273) = 2,380.16$, $p < .001$, CFI = .96, TLI = .96, RMSEA = .055 (90% CI: .051, .058), SRMSR = .083, AIC = 37675, BIC = 38060, suggesting the OCB-W measures reflected the same underlying factor; the OCB-H factor correlated .54 with the OCB-W factor. The three-factor model fit the data significantly better than the two-factor model per the chi-square difference test ($\chi^2(2, N = 292) = 207.81$, $p < .001$), suggesting the three-factor model fit slightly better than the two-factor model. Finally, we tested a single-factor model, which showed considerably poorer fit compared to the two-factor model, $\chi^2(1,274) = 3,824.75$, $p < .001$, CFI = .91, TLI = .91, RMSEA = .083 (90% CI: .080, .086), SRMSR = .128, AIC = 39531, BIC = 39912. The two-factor model fit the data significantly better than the one-factor model per the chi-square difference test ($\chi^2(1, N = 292) = 1857.60$, $p < .001$), suggesting the two-factor model fit better than the one-factor model. When comparing models, we took a collective approach, considering the chi-square difference test and goodness-of-fit indices based on past recommendations (Jöreskog & Sörbom, 1996). Our results concluded that the two-factor model fit the data better than the one-factor model, suggesting that OCB-H is distinct from OCB-W. While the three-factor model fit the data slightly better than the two-factor model, the difference in fit indices were minimal, suggesting it was appropriate to collapse the two OCB-W constructs together to form a composite OCB-W variable. Thus, all analyses in Study 1 include a combined OCB-W construct comprised of the two OCB-W measures.

Construct validity.—Our OCB-H measure was significantly correlated with OCB-W ($r = .51$, $p < .001$) suggesting a strong correlation, yet not to a level that would suggest OCB-W and OCB-H are overlapping constructs. Together, this provides evidence of construct validity for our OCB-H measure, supporting Hypothesis 1.

OCB-H was unrelated to conscientiousness ($r = -.02$, $p = .791$), positively related to agreeableness ($r = .18$, $p < .01$), and unrelated to neuroticism ($r = .08$, $p = .161$). However, OCB-H was unrelated to all three of these traits when controlling for OCB-W (conscientiousness: $r = -.07$, $p = 236$; agreeableness: $r = .05$, $p = .354$; neuroticism: $r = .10$, $p = .091$), providing partial support for Hypothesis 2. OCB-H was positively related to work engagement ($r = .27$, $p < .001$), but was unrelated when controlling for OCB-W ($r = .06$, $p = .279$), providing partial support for Hypothesis 3. OCB-H was positively related to WIF ($r = .24$, $p < .001$), and remained significantly associated when controlling for OCB-W ($r = .13$, $p < .05$), supporting Hypothesis 4[3]. OCB-H was negatively related to both segmentation preferences ($r = -.19$, $p < .01$) and segmentation supplies ($r = -.19$, $p < .01$), and OCB-H

remained significantly correlated with both segmentation preferences ($r = -.20$, $p < .01$) and segmentation supplies ($r = -.16$, $p < .01$) when controlling for OCB-W, supporting Hypothesis 5. OCB-H was positively related to CWB ($r = .29$, $p < .001$), and remained positively related when controlling for OCB-W ($r = .24$, $p < .001$), supporting Hypothesis 6. Finally, OCB-H was positively related to workaholism ($r = .18$, $p < .01$), but was unrelated after controlling for OCB-W ($r = .03$, $p = .673$), partially supporting Hypothesis 7.

Regarding discriminant validity, OCB-H was unrelated to task performance ($r = .06$, $p = .300$), and remained unrelated when controlling for OCB-W ($r = -.06$, $p = .321$), in line with our expectations. OCB-H was positively related to extraversion ($r = .17$, $p < .01$), but was not related to openness ($r = .08$, $p = .179$). OCB-H was no longer significantly related to extraversion when controlling for OCB-W ($r = .09$, $p = .113$), and remained unrelated to openness when controlling for OCB-W ($r = .02$, $p = .713$).

Study 1 Discussion

Study 1 provided initial evidence of construct validity for OCB-H. Through multiple analytic approaches including correlations, CFA, and IRT, we provided evidence that OCB-H was significantly associated with, yet distinct from, OCB-W. While our hypotheses regarding OCB-H and the personality traits of openness and agreeableness were supported, the relationships between OCB-H and extraversion, conscientiousness, and neuroticism were not. Furthermore, all personality traits were unrelated to OCB-H after controlling for OCB-W. One explanation for this may be the measure we selected, which is a short version of each personality trait. Given that each of the broad personality traits are comprised of lower-order aspects and facets (Judge et al., 2013), it could be the case that our measures did not adequately capture the full trait, explaining the unexpected relationships. Additionally, it could be that personality traits simply have a stronger relationship with OCB-W than OCB-H. More research is needed to uncover the nature of these relationships.

The positive relationship between OCB-H with both work engagement and WIF provides additional evidence of construct validity and is in line with past research (Halbesleben et al., 2009), although, the relationship became non-significant after controlling for OCB-W, counter to expectations. The negative relationships between OCB-H and both segmentation preferences and segmentation supplies provide additional insight into the nomological network of OCB-H. The fact that OCB-H remains significantly correlated with both segmentation preferences and segmentation supplies after controlling for OCB-W suggests that individuals who perform OCBs from home are likely those who prefer to integrate work and nonwork, but that organizational pressure may also be at play. The positive relationship between OCB-H and CWB is in line with past research (Bauer et al., 2018; Fox et al., 2012; Spector & Che, 2014). Additionally, the positive relationship between OCB-H and workaholism provides initial insight into potential work-related behaviors workaholics may perform during non-work time. As expected, OCB-H was not related to task performance, whereas OCB-W was positively related to task performance. This serves as evidence of both discriminant validity for OCB-H from task performance, as well as an example of different

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[3]We further examined this hypothesis at the dimension level of WIF. OCB-H had the same strength of relationship with both WIF-Time ($r = .23$, $p < .001$) and WIF-Strain ($r = .23$, $p < .001$).

nomological networks for OCB-H and OCB-W. It should be noted that we used a self-report measure of task performance which warrants the need for future research to confirm our findings with other-reports of performance. In sum, while some questions remain regarding the relationships between OCB-H and personality traits, the majority of our hypotheses were supported, together providing evidence of construct validity.

Study 2

In Study 2, we extend our findings concerning OCB-H and OCB-W through an experience sampling approach, in line with the growing body of research in occupational health psychology utilizing daily diary studies to examine within-person experiences (Allen & Martin, 2017). Thus, the current research has important implications for the field of occupational health and particularly the influence of occupational stress on both the work and family domains. Although Study 1 served to provide evidence of validity and the nomological network of OCB-H, we were unable to examine differences regarding between- and within-person fluctuations of OCB-H and OCB-W due to the cross-sectional design of our study. We view this as an important next step, given that OCB-W has significant variability both between- and within-individuals (Koopman et al., 2016; Spence, Ferris, Brown, & Heller, 2011; Spence et al., 2014). OCB-H may exhibit similar levels of variability, or, OCB-H may better reflect a between-person difference, in that employees either regularly perform these work-related behaviors at home or not at all. In Study 2, our primary goal was to compare the between- and within-person differences across OCB-W and OCB-H. We selected the work engagement-OCB-WIF relationship given that this relationship has been confirmed in at least three distinct samples (Halbesleben et al., 2009), and given that a substantial amount of research has provided evidence of day-level fluctuation of these constructs. Finally, given the work-domain nature of work engagement and the home-domain nature of WIF, we anticipated the work engagement-OCB-WIF relationship may highlight one of the many ways OCB-W and OCB-H differ. Next, we discuss these hypothesized relationships in further detail.

The Work Engagement-WIF relationship

Given that the focus of Study 2 is on the mediating effects of OCB-H and OCB-W on the relationship between work engagement and WIF, we begin by discussing the direct relationship between work engagement and WIF. The construct of *work engagement* reflects a positive state operationalized by vigor, dedication, and absorption in the conduct of work-related behavior (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Schaufeli et al., 2002). Generally, work engagement is associated with positive outcomes, including well-being (Shimazu, Schaufeli, Kamiyama, & Kawakami, 2015), job performance (Bakker & Bal, 2010), and work-family facilitation (Bakker, Shimazu, Demerouti, Shimada, & Kawakami, 2014). However, a new vein of research has posited there may be a downside to work engagement, as highly engaged employees may expend too much of their time and energy on work as opposed to their familial roles, leading to work-family interference (Halbesleben et al., 2009).

Drawing on conservation of resources theory (Hobfoll, 1989), Halbesleben and colleagues (2009) theorized that although engaged employees may complete more tasks during the workday (Salanova, Agut, & Peiro, 2005), the completion of these tasks requires effort, time, and psychological investment. This view has been supported empirically at the within-person level: on days when employees expend resources to help their organization, they have fewer resources to expend at home, taking the form of less spousal support (Lin et al., 2017). To date, theoretical justification for a positive association between work engagement and WIF has been addressed with only a handful of empirical evidence, which notably has primarily been observed at the between-person level. Using a between-person approach, Halbesleben and colleagues (2009) found that across three samples, work engagement was associated with increased WIF. Furthermore, a meta-analysis conducted by Halbesleben (2010) found a positive relationship between work engagement and WIF ($\rho = .42$).

However, the relationship between work engagement and WIF may differ at the within-person level. For instance, Derks and colleagues (2015) theorized that daily work engagement should be associated with decreased WIF due to engaged workers' ability to disconnect from work during nonwork time (Bakker, 2014; Kuhnel, Sonnentag, & Westman, 2009). To date, a handful of studies have examined daily work engagement and work-family outcomes. Derks and colleagues observed a negative correlation ($r = -.31$, $p < .01$) between daily work engagement and daily WIF (2015). Simbula and colleagues (2010) observed a non-significant relationship between daily work engagement and daily WFC ($r = .01$). Sanz-Vergel and colleagues (2010) examined day-level WIF and daily vigor (one facet of work engagement) and found the two were negatively correlated ($r = -.22$, $p < .01$). In a separate study, Sanz-Vergel and colleagues (2011) found no relationship between morning vigor and evening WIF ($r = .07$). Given the mix of findings at the daily level, we do not hypothesize a specific direction regarding the relationship of daily work engagement measured during the workday on daily WIF measured during the evening. Next, we expand upon past research on the mediating influence of OCB-W and OCB-H in this relationship.

Organizational Citizenship as an Explanatory Mechanism

The nature of employee work engagement has theoretical overlap with OCB; work engagement is associated with positive emotion (Bindl & Parker, 2010), thus employees in a state of work engagement may be more adaptive and helpful in the workplace (Eldor & Harpaz, 2016). Indeed, Eldor and Harpaz (2016) theorized and found support for work engagement leading to increased extra-role behaviors, as engaged employees were more likely to take initiative, desired sharing knowledge with coworkers, and were more open to change. Additionally, recent empirical work suggests that work engagement can lead to OCB and explains incremental variance beyond more commonly-studied job attitudes, including organizational commitment and job satisfaction (Christian et al., 2011). In sum, these findings are in line with theory suggesting that to the extent individuals invest more of themselves into work via work engagement, the more willing they should be to engage in behaviors outside of their formal boundaries, including OCB (Rich, LePine, & Crawford, 2010).

While work engagement may be beneficial for organizations and their members due to its association with prosocial work behaviors such as OCB, the enactment of OCBs may come at a cost for the individual (Bolino & Grant, 2016; Deery, Rayton, Walsh, & Kinnie, 2016) and thus their families (Lin et al., 2017). Generally, researchers have drawn on conservation of resources theory (Hobfoll, 1989) to suggest that OCBs limit the resources (i.e., time, energy) available for other activities. Several studies have found that the performance of OCBs is associated with higher levels of emotional exhaustion (Koopman et al., 2016), WFC (Deery et al., 2016), and less support provided to one's spouse (Lin et al., 2017).

To date, one paper has examined the potential mediating mechanism of OCB for explaining work engagement leading to increased WIF. Halbesleben and colleagues (2009) examined this relationship in three separate studies, even separating out the forms of WIF (time-, strain-, and behavior-based). While the authors found support for their proposed relationship across all three studies and forms of WIF, the present study aims to expand upon the findings of Halbesleben and colleague's research in a number of ways. First, Halbesleben and colleagues utilized a between-person approach, whereas the present study is examining the proposed relationships from both a between- and within-person perspective. Whereas cross-sectional studies only allow for comparisons between participants, experience sampling studies afford the ability to disentangle *both* between- and within-person differences. In fact, work engagement (Breevart & Bakker, 2017), OCB (Koopman et al., 2016), and WIF (Butts et al., 2015) have all been examined separately using experience sampling methodology, as these constructs are thought to fluctuate both between- and within- individuals. Thus, the present study seeks to examine the dynamic relationship between these constructs at the daily level. Additionally, although research by Halbesleben and colleagues (2009) suggests OCB acts as an explanatory mechanism for the positive relationship between work engagement and WIF, we propose that this link can be better understood by differentiating between OCBs that are conducted in the workplace versus those an employee performs at home. As noted above, conservation of resources theory would suggest OCBs limit time and energy for activities both *inside* and *outside* the workplace. Thus, although OCB-W may drain resources and lead to WIF, we propose that it is also important to consider OCB-H, which are likely to drive more strain-, and time-based conflict between work and family roles.

From the perspective of conservation of resources theory, theoretical and empirical work suggests OCBs represent a mediating mechanism for the positive association between work engagement and WIF (Halbesleben et al., 2009). Specifically, engaged employees expend high levels of their personal resources by performing higher-than-average OCBs, leading ultimately to the depletion of resources and thus WIF. In other words, while work engagement itself reflects a high level of involvement and investment in work, the link between work engagement and WIF may be explained by the associated behaviors (i.e., OCB) of engaged employees which deplete resources that would otherwise be available for the family domain. Thus, resources devoted to the work domain through OCB-W and OCB-H ultimately impact the available resources for the home domain, resulting in increased WIF through the process of resource drain (Edwards & Rothbard, 2000). We propose that in the context of WIF, it will be particularly important to account for *where* an employee is when they are carrying out OCBs. We believe this distinction is particularly timely as

recent advances in communication technology (e.g., e-mail, cell phones, pagers, wearable technology) have afforded employees much greater flexibility to engage in work-related behavior at home (Boswell & Olson-Buchanan, 2007; Dettmers et al., 2016), as many jobs now present the possibility for employees to work at any time from any location. This is especially relevant in the context of WIF, as the extent to which employees perform work-related tasks after working hours (often using communication technologies) has been linked to increased WIF (Butts et al., 2015; Fenner & Renn, 2010). However, there is limited research on the specific behaviors performed by employees after work hours. Given that OCBs are discretionary, yet often perceived by employees as part of their job description (Turnipseed & Wilson, 2009), we theorize that OCBs performed at home may be one conceptualization of the type of conduct alluded to in communication technology-WIF research.

A common example of an OCB is lending a compassionate ear when someone has a work problem. If this behavior is performed at work, it requires the employee to expend resources that *could not* have been expended in the family domain in real time, reflecting the process known as *resource drain* (Edwards & Rothbard, 2000). Specifically, a negative relationship is theorized between work and family resources, as those resources drained for the purpose of one domain (i.e., work) are therefore unavailable for the other domain (i.e., family). We propose that OCB-W would lead to WIF, but perhaps exhibits a weaker relationship (than OCB-H), as these behaviors are more distal to the home environment. On the other hand, an OCB such as lending a compassionate ear when someone has a work problem can also be performed after leaving the workplace. While this OCB can be performed at work, a colleague that wants to vent about a work problem may prefer to talk about it away from work, such as over the phone once both individuals are away from the work environment and other coworkers. If an employee is engaging in the behavior within high proximity to the familial environment, as opposed to spending their resources (e.g., time, energy) on their family, the employee should experience significantly more WIF. From a conservation of resources theory lens (Hobfoll, 1989), we theorize that OCB-W and OCB-H will consume *energies* resources, such as time and strain, leading to increased WIF. Notably, energies resources are defined as *volatile* resources, such that they are fleeting and thus irreplaceable (ten Brummelhuis & Bakker, 2012). For instance, the time devoted to performing OCB-H on any given day inherently means that this time is taken away from nonwork-time in the home domain.

> **Hypothesis 8A:** Daily OCB-W will mediate the relationship between daily work engagement and daily WIF.

> **Hypothesis 8B:** Daily OCB-H will mediate the relationship between daily work engagement and daily WIF.

Between- and Within-Person Fluctuations of OCB-W and OCB-H

While between- and within-person fluctuations of OCB-W have been observed in past research (Dalal et al., 2009; Koopman et al., 2016; Spence et al., 2014), given that this the first examination of day-level OCB-H, we seek to examine the degree of fluctuation in OCB-H at the between- compared with the within-person level, and ultimately compare our

hypotheses across levels. Thus, we examine the following research question in conjunction with our hypotheses:

> **Research Question 1:** Do findings differ at the between- and within-person level of analysis?

Method

Participants and procedures.—Subjects were recruited through social media efforts (e.g., Facebook, LinkedIn, Reddit). To be eligible, participants had to be working full-time in an organization with only one job, living in the United States, able to read English, be 18 years of age or older, work only one job that (a) requires them to physically leave their home for at least 6 hours a day on workdays, and (b) requires they work at least five days a week. As the focus of Study 2 includes WIF as our dependent variable, we screened participants to ensure they were currently living with a family member, as an individual who lives alone may not experience WIF. Upon completion, participants received a check for $20. Participants with perfect compliance received a $10 bonus, resulting in $30 total.

We utilized experience sampling methodology. During the initial screener we measured four control variables – age, gender, marital status, and children living at home, and additional demographic items that did not relate to eligibility. During this survey we also captured a number of variables from Study 1 to replicate our findings: personality, segmentation preference, and workaholism. Eligible participants were then contacted with details about when to expect the daily surveys (twice a day for five working days; once at the end of the workday and once before bed). Daily surveys were sent at specific times based on participants work schedule for the given week. Afternoon surveys were sent an hour before the end of each participant's workday. Participants were instructed to complete afternoon surveys before they left work for the day, so as to ensure the behavior was performed while physically at work. Evening surveys were sent around 9:00 PM; participants were instructed to complete evening surveys before they went to bed. The end of workday surveys included measures of state work engagement and OCB-W. The surveys taken before bed included measures of OCB-H and WIF. Upon finishing their final survey, participants were sent a check for $20.00 (or $30.00 for perfect compliance).

Out of 322 participants that took the initial screener, 201 were eligible, of which 163 responded and completed the daily surveys (81.1% response rate). The average number of daily surveys completed was 7.79 (out of 10). The final number of surveys completed was 1,261. Participants held a range of occupations (e.g., Professor, Vet Tech, Physical Therapist, Finance Manager, Attorney, Chef, etc.). The average age of participants was 31.34 years ($SD = 7.86$). Participants had an average tenure of 4.17 years ($SD = 3.43$) and worked 45.09 hours on average each week ($SD = 6.80$). 38.3% of participants held a supervisory role. 79% of the participants were female, and 90% identified as Caucasian. 79.6% were married and/or living with their partner. 30.2% of the sample reported living with one or more of their children, and 1.2% reported that one or both of their parents lived with them.

Study measures: Initial survey.

<u>**Personality.:**</u> The five personality traits were measured using the same scales as Study 1, with the exception that we expanded our conscientiousness measure from a 4-item measure to a 10-item measure. Items were measured on a 4-point scale (1 = strongly disagree; 4 = strongly agree). All five personality traits displayed adequate reliability (extraversion α = .86; neuroticism α = .73; conscientiousness α = .81; agreeableness α = .82; openness α = .80).

<u>**Segmentation preferences.:**</u> Segmentation preferences was measured with the same 4-item scale as Study 1 by Kriener (2006), with higher scores indicating a stronger preference for segmentation. Items were measured on a 4-point scale 1 = strongly disagree, 4 = strongly agree) and demonstrated adequate reliability (α = .90).

<u>**Workaholism.:**</u> As with Study 1, workaholism was measured using the 9-item compulsive tendencies subscale of the Work Addiction Risk Test (WART; Robinson, 1999). Items were measured on a 1–5 Likert scale (1 = strongly disagree, 5 = strongly agree). The workaholism measure presented acceptable evidence of reliability (α = .78).

Day-level measures.

<u>**Organizational Citizenship Behaviors.:**</u> To measure OCBs, we utilized the same measure from Study 1, adapted to day level measurement. Our daily OCB-W measure included all 20 items from the OCB checklist. An example item is "Today at work, I volunteered for extra work assignments." The OCB-W measure presented acceptable evidence of reliability at all time points (α range = .84 to .89). An example OCB-H item is "while at home, I volunteered for extra work assignments." Four items could not be adapted for performing from home (e.g., "Today, I picked up a meal for others at work.").[4] The OCB-H measure presented acceptable evidence of reliability at all time points (α range = .73 to .95).

<u>**Work engagement.:**</u> Work engagement was measured with the same scale as Study 1, the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006), adapted to day-level measurement. As is common with the UWES, we scored this measure using a mean-score based on all 9 items. Items were measured on a 0–6 frequency scale (0 = never; 1 = almost never; 2 = rarely; 3 = sometimes; 4 = often; 5 = very often; 6 = always) and presented acceptable evidence of reliability at all time points (α range = .91 to .94).

<u>**Daily WIF.:**</u> Day-level WIF was measured using the same eight-item negative work-home interface (WHI) subscale of the SWING (Survey Work-Home Interaction NijmeGen; Geurts et al., 2005) as in Study 1, but adapted to day-level measurement (Derks & Bakker, 2014). The items were measured on a 1–5 Likert scale (1 = strongly disagree, 5 = strongly agree). The WIF measure presented acceptable evidence of reliability at all time points (α range = .84 to .93).

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[4]In hindsight, this item may have been adapted to OCB-H, for instance, framing the item as buying or preparing food for work colleagues during off-work hours. We thank a reviewer for highlighting this and encourage future research to further develop and refine OCB-H measures.

Control variables.—Based on the nature of our outcome variable, we controlled for relevant demographic variables that may systematically impact our results: gender, age, living with a spouse/partner and living with children. Gender was coded as "0" for male and "1" for female and age was measured in years. Living with a spouse/partner (0 = not living with a spouse/partner, 1 = living with a spouse/partner) and living with children (0 = not living with children, 1 = living with children) were both measured dichotomously.

Analyses.

Preliminary analyses.: Before testing our hypotheses, we screened the data for outliers. We utilized the non-compliant responding techniques described by Christensen and colleagues (2003) for experience sampling data by screening for random responding by correlating two items that should be related if a person is responding honestly for each participant (e.g., two items from the same subscale of state work engagement should be highly correlated) (Christensen, Barrett, Bliss-Moreau, Lebo, & Kaschub). We then examined any responses suggesting potential inconsistency in depth. We checked for any set responses (e.g., selecting the same option for all items). If found, we then removed the set of responses prior to data analyses, in line with practices recommended by Christensen and colleagues (2003). In total, only one participant was removed, resulting in a final sample size of 162 participants. After cleaning our dataset, we ran descriptive analyses. Table 4 displays descriptive statistics and correlations between all study variables. For each scale, we calculated the mean score of all items.

As our study utilizes experience sampling methodology, we incorporated best practices for analyzing this type of data. Experience sampling methodology typically involves one of three approaches: interval-contingent, signal-contingent, and event-contingent (Bolger, Davis, & Rafaeli, 2003). This study utilizes interval-contingent experience sampling methodology, as participants responded to daily surveys at prescribed times (once about an hour before they left work, and once at approximately 9:00 pm). First, we conducted a multilevel CFA using robust Huber-White standard errors and the Yuan-Bentler scaling correction to the test statistic using the *lavaan* (Rosseel, 2012) in R. This technique was utilized to test the proposed two-factor structure, examine the variability and covariance of OCB-H and OCB-W, and to examine the reliability of the measure at the between- and within-person levels. Next, using Mplus 8 (Muthén & Muthén, 1998–2017), we estimated a model with no predictors for each level 1 variable, which determines how much variance in each model can be attributed to within individuals or between individuals, and allows the calculation of the intraclass correlation coefficient (ICC) (Fisher & To, 2012) (see Table 4). All predictors were entered at level 1, which includes work engagement, OCB-W, OCB-H, and WIF. Consistent with past experience sampling research, all variables were group-mean centered. All analyses utilized multilevel modeling, in that days were nested within individuals. Maximum likelihood estimation was used for all analyses.

Hypothesis testing.: First, we tested a subset of hypotheses from Study 1 with our second dataset by examining correlations. Regarding our hypotheses relating to Study 2, all hypotheses were tested with a single model using the MLMED macro (Hayes & Rockwood, in press). Initially, we included four demographic control variables in our model: gender,

age, living with a spouse/partner and living with children. These demographic variables were chosen as controls as they may impact relationship between the work and family domain (e.g., having children living at home may result in less time available for performing OCB-H), and were included as Level 2 covariates. Ultimately, our final models did not include any controls, because the addition of each control variable suggested that our results would not change. As Research Question 1 involved examining between- and within-person differences of our hypotheses, we report the findings of each hypothesis at both levels.

Results

A multilevel CFA hypothesizing two factors both between- and within-persons was estimated; two items from the OCB-H scale[5] were removed due to low loadings. After removal of these items, the model generally showed good fit as indicated by RMSEA of .041 (90% CI: .039; .043). The SRMSR indicated good fit for the Level 1 model at .071, but less satisfactory fit for the between-subjects portion of the model (.15). The CFI was .793 and the TLI was .784. At first glance, this would indicate poor fit, however, our null model suggests that the CFI and TLI are not informative. The RMSEA of the null model was .097. When the null model's RMSEA is less than .158, the CFI, TLI, and other relative fit indices may not be very informative (Kenny, Kaniskan, & McCoach, 2015). Interfactor correlations suggested the correlation between OCB-H and OCB-W was high at the between-persons level, $\varphi_{Between} = .78$, $z = 2.54$, $p = .011$, but very low at the within-person level, $\varphi_{Within} = .11$, $z = 1.18$, $p = .238$. Examination of the factor variances suggested 84.2% of the variance in OCB-W and 62.1% of the variance in OCB-H was between-subjects. The between-person correlation between OCB-W and OCB-H was .78, whereas their within-person correlation was .11. Thus, as expected, although persons who typically engage in OCB-W are highly likely to engage in OCB-H, a person who engages in OCB-W on a given day is not more or less likely to engage in OCB-H on the same day. The multilevel CFA-based composite reliability of this measure was good both at the within- (OCB-H: $\omega = .76$; OCB-H: $\omega = .83$) and between- (OCB-H: $\omega = .98$; OCB-H: $\omega = .92$) person levels.

Next, we examined the correlations hypothesized from Study 1 that were available in Study 2 (see Table 4). Consistent with Hypothesis 1, the findings of Study 1, and the multilevel CFA, OCB-H was significantly correlated with OCB-W at the between-person level ($r = .59$, $p < .001$). However, the two constructs were uncorrelated at the within-person level ($r = -.01$, $p = 903$). At the between-person level, OCB-H was unrelated to all five personality traits, providing support for our discriminant validity predictions (extraversion and openness) but contrary to the predictions of Hypothesis 2A-2C (conscientiousness, agreeableness, and neuroticism, respectively). OCB-H was significantly correlated with work engagement at the between-level ($r = .24$, $p < .01$), but was unrelated at the within-person level ($r = -.03$, $p = .607$), providing partial support for Hypothesis 3. Similarly, OCB-H was significantly correlated with WIF at the between-level ($r = .30$, $p < .001$), but was unrelated at the within-person level ($r = .08$, $p = .080$), providing partial support for Hypothesis 4. At the between-person level, OCB-H was not significantly related to

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[5]The two items were: "While I was at home, I helped a co-worker learn new skills or shared job knowledge" and "While I was at home, I finished something for a co-worker who had to leave early."

segmentation preferences ($r = -.07$, $p = .402$), thus Hypothesis 5A was not supported. OCB-H was significantly related to workaholism at the between-person level ($r = .18$, $p < .05$), supporting Hypothesis 7. Notably, the correlations of variables measured at the daily level (work engagement, OCB-H, OCB-W, and WIF) were almost identical at both the between- and within-person level for all constructs except correlations involving OCB-H, suggesting substantial differences at the within- compared with the between-person level, which we discuss further in relation to Research Question 1.

Next, we examined the relationship between work engagement in the afternoon predicting WIF measured in the evening after controlling for OCB-W and OCB-H. The direct effect was not significant when controlling for OCB-H at the within-person level ($b = .02$, $p = .70$, 95% CI = $[-.08, .12]$, see Figure 2). The relationship was significant at the between-person level ($b = -.24$, $p < .01$, 95% CI = $-.39, -.09$]), which is consistent with past research. Hypothesis 8 proposed that daily OCB-W (Hypothesis 8A) and daily OCB-H (Hypothesis 8B) would mediate the relationship between daily work engagement and daily WIF. Hypothesis 8A was fully supported, as OCB-W significantly mediated the relationship between work engagement and WIF at both the within-person level (*indirect effect* = .06, 95% CI = [.03, .10] and between-person level (*indirect effect* = .09, 95% CI = [.02, .17]). Hypothesis 8B was partially supported, as OCB-H did not significantly mediate the relationship between work engagement and WIF at the within-person level (*indirect effect* = .00, 95% CI = $[-.02, .02]$, but did significantly mediate the relationship at the between-person level (*indirect effect* = .05, 95% CI = [.01, .11])[6].

Regarding our Research Question, it is clear from a comparison of our results across Study 1 and Study 2 that OCB-W exhibits similar effects at both the between- and within-person level, yet OCB-H has distinct differences. This was further confirmed with our hypothesized mediation (Hypothesis 8) through evidence of a significant contextual effect for OCB-H ($b = .05$, 95% CI = [.01, .11]), whereas the contextual effect for OCB-W was not significant ($b = .02$, 95% CI = $[-.04, .11]$). Contextual effects are a way to statistically test for differences regarding the within-group effect and between-group effect, thus a significant contextual effect means the relationship is significantly different at the between- compared with the within-person level (e.g., for OCB-H). Additionally, we examined indirect effect contrasts, which if significant, would suggest the indirect effect of our two mediators (OCB-W and OCB-H) are significantly different at the respective level. Results suggested that the within-indirect effect contrasts were significant (difference = $-.06$, 95% CI = $[-.10, -.03]$), whereas the between-indirect effect contrasts were not significantly different (difference = $-.04$, 95% CI = $[-.14, .06]$)[7].

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[6]We also tested our multiple mediator model predicting both WIF-Time and WIF-Strain (see Figures 1 and 2 in the Supplemental Materials, respectively). There were notable differences: OCB-H at the between-person level was more strongly related to WIF-Strain ($b = .70$, $p < .001$) than WIF-Time ($b = .53$, $p < .01$). Additionally, at the within-person level, OCB-H significantly predicted WIF-Strain ($b = .33$, $p < .05$) but not WIF-Time ($b = .22$, $p = .15$). The indirect effect of OCB-H at the between person level was significant for WIF-Strain but not WIF-Time. Finally, the indirect contextual effect of OCB-H was significant for WIF-Strain but not WIF-Time. Taken together, while Study 1 suggests OCB-H is similarly related to both WIF-Strain and WIF-Time, these supplemental analyses in Study 2 suggests OCB-H may be much more strongly related to WIF-Strain than WIF-Time.

[7]In the spirit of transparency, our original manuscript included workaholism as a first stage moderator of the work engagement-OCB-H relationship and work engagement-OCB-W relationship. Through the revision process we ultimately moved this to supplemental material, as the moderation was not significant. Please see the supplemental material (Figures 3 and 4) for the complete results.

Study 2 Discussion

In Study 2, we sought to examine the work engagement-OCB-WIF relationship by disentangling the hypothesized relationships (1) by OCB-W compared with OCB-H, and (2) by comparing the relationships at the between- and within-person level. The goal of this study was to highlight potential differences between the aforementioned forms of OCB and uncover whether OCB-H exhibits the same degree of variability at both levels. Notably, OCB-H exhibited much greater variability at the between-person level, suggesting employees either generally perform these behaviors or generally refrain from these behaviors, whereas OCB-W exhibited significant variability at both levels. Additionally, OCB-H was a significant predictor of WIF, but appears to emerge as a direct effect at the within-person level, whereas it serves as an indirect effect of the work engagement-WIF relationship at the between-person level.

We confirmed past research on the work engagement-OCB-W-WIF relationship and extended these findings to confirm they exist both between individuals as well as within individuals. Finally, we highlighted that the relationship between work engagement and WIF differs at the between- and within-person level, such that the constructs appear to be unrelated at the daily level but are negatively related between-individuals. Furthermore, the nature of this relationship appears to be influenced by the degree to which OCBs are performed, as evidenced by the significant indirect effects.

General Discussion

The aim of the present research was to establish initial evidence of validity for the construct of OCB-H and begin to explore the degree of variability at the between-and within-person level of this construct. In Study 1, we presented evidence of construct validity, highlighting that OCB-H is similar to, yet distinct from, OCB-W, and thus exhibits a different nomological network, particularly in the context of constructs with overlap in the home domain. In Study 2, we extended our findings to examine the degree of fluctuation at the within- and between-person levels of OCB-H. Specifically, we focused on the nature of OCB-H and OCB-W as mediators of the work engagement-WIF relationship, given past evidence of this relationship (Halbesleben et al., 2009), and that work engagement reflects the work domain whereas WIF captures the influence of work on the home domain. The overarching findings of Study 2 are that while OCB-W differs both within- and between-individuals, OCB-H displays much more between-person variability than within-person variability. In other words, employees either generally perform OCB-H to some degree or do not perform these behaviors from home at all. Furthermore, OCB-H does appear to predict WIF, however, it takes the shape of a direct effect at the within-person level, whereas it emerged as a mediator of the work engagement-WIF relationship at the between-person level.

The daily fluctuation of OCB-W also accounted for the positive relationship between work engagement and WIF, in that state work engagement during the day led to the performance of OCB-W, in turn resulting in greater levels of WIF in the evening. In other words, OCB-W helped to explain both between- and within-person variance in the work engagement-WIF relationship, whereas OCB-H only explained between-person variance. This suggests that

both OCB-W and OCB-H offer unique explanatory power behind why work engagement is associated with greater WIF. Below, we discuss the theoretical and practical implications of this study, limitations, and directions for future research.

Theoretical Implications

The present research offers a number of theoretical implications. First, the findings of both studies suggest that OCB-W and OCB-H are distinct constructs, underscoring the importance of considering the context of work behaviors. Although OCBs by definition are discretionary, aspects of OCBs have been linked with performance evaluation decisions (Whiting et al., 2008), and are often perceived by employees to be a part of their job description (Turnipseed & Wilson, 2009). The present study extends the implications of OCBs into the field of occupational health psychology by expanding the OCB content domain, offering a caveat to this well-studied construct – where the behavior was performed – which has important implications for stress outcomes, such as conflict between work and nonwork. Furthermore, OCB-H and OCB-W appear to have distinct nomological networks. Additionally, these constructs are distinct in that we observed both between- and within-person fluctuation in OCB-W (i.e., individuals differ in their general performance of OCB-W, and individuals who perform OCB-W also exhibit daily fluctuation of these behaviors), whereas we only observed between-person fluctuation in OCB-H (i.e., individuals tend to either regularly perform OCB-H or regularly refrain from OCB-H). Organizations may not be aware that employees are performing OCBs not only during their paid work hours but also at home during non-work hours. Our differentiation of OCB-W and OCB-H serves as a novel contribution to the OCB literature in that to our knowledge, this is the first body of research to examine if there is a need to distinguish *where* OCBs are performed, which has previously been assumed to have been performed while physically at work. This differentiation is timely, as communication technology advances have afforded more opportunities for work behaviors outside of work, which has been previously linked with WIF (Butts et al., 2015; Fenner & Renn, 2010). OCBs may be beneficial for organizations initially; the current study suggests that the performance of both OCB-W and OCB-H are associated with greater WIF and would likely result in the depletion of other resources. This is in line with past research suggesting that OCBs are associated with lower job satisfaction (Munyon, Hochwarter, Perrewé, & Ferris, 2010) and burnout (Vigoda-Gadot, 2007). Additionally, the performance of OCB is associated with citizenship fatigue, which consequently leads to fewer OCBs performed in the future (Bolino, Hsiung, Harvey, & LePine, 2015).

Practical Implications

The current research also has several practical implications. First, the findings of both studies highlight the growing body of literature suggesting that employees are performing work-related behaviors even after work has ended, which past research has largely attributed to technological advances, such as e-mail and mobile devices (Boswell & Olson-Buchanan, 2007; Dettmers et al., 2016). The findings of Study 1 highlight the influence of individual's preferences for integration or segmentation on performing such behaviors, as well as the degree to which they are able to segment work and home depending on organizational expectations (i.e., segmentation supplies). Organizations should be aware of the effect

of segmentation/integration congruence, such that the degree of congruence between segmentation preferences and supplies are associated with decreased WIF (Chen, Powell, & Greenhaus, 2009). Thus, OCB-H may not be inherently associated with negative outcomes, so long as the individual performing these behaviors is doing so out of their own volition rather than organizational pressure.

Regarding the findings of Study 2, although work engagement can lead to increased WIF (depending on the behaviors engaged employees perform), organizations and society as a whole can help reduce the behaviors that may lead to increased WIF and other potential negative consequences that result from the high level of resources associated with work engagement. At a societal level, countries could employ formal laws limiting employers' right to expect work after-hours. For example, France recently implemented a law banning work-related emails after 6:00 pm (Morris, 2017). A policy such as this would reduce the likelihood of OCB-H, leading to lower levels of WIF, and potentially helping to retain the good parts of work engagement, while limiting its detriments. Finally, organizations may want to encourage supervisors to restrict their own OCB-H, in turn setting an example to employees that continuing to work "off the clock" is not necessary or expected, as social norms regarding technology use after working hours are associated with increased WIF (Derks et al., 2015).

Finally, organizations should be cognizant that OCBs can be associated with higher levels of WIF, depending on the resulting behaviors performed and associated resources that may be depleted. A past meta-analysis found that WIF was related to negative outcomes for employees (e.g., increased psychological strain, higher levels of depression, stress, and anxiety), their families (e.g., higher family-related stress, lower family-related performance), and for organizations (e.g., higher rates of absenteeism, lower work-related performance) (Amstad, Meier, Fasel, Elfering, & Semmer, 2011). Thus, although organizations often strive to encourage OCBs (Skarlicki & Latham, 1997), these behaviors can have detrimental impacts on the employee, their family, and the organization.

Limitations and Future Directions

Despite the strengths of the current study, there are notable limitations. Study 1 was conducted using Prolific, an online panel system. However, we are optimistic our results would extend to conventional field samples, given recent findings that online panel data and conventional field samples typically converge (Walter, Siebert, Goering, & O'Boyle, 2019). Furthermore, additional research is warranted regarding the constructs examined in Study 1 that were not the focus of Study 2 (e.g., personality, task performance, etc.). The main limitation of Study 2 is the homogeneity of the sample, in that the sample was almost entirely Caucasian (90%) and female (79%). This limits the generalizability of the current findings in that generalizations are mostly limited to Caucasian females. However, recent studies, and especially experience sampling studies, have had similar sampling problems (i.e., Clark, Robertson, & Carter, in press; Koopman et al., 2016; Sianoja, Syrek, de Bloom, Korpela, & Kinnunen, in press). Additionally, the homogeneity of the sample limited the ability to test for race and gender differences, which may show different causal mechanisms for the work engagement-WIF link. For instance, drawing on gender role

theory, certain OCBs are more theoretically associated with the behaviors of women (e.g., altruism, courtesy), while other OCBs are more theoretically associated with the behaviors of men (e.g., sportsmanship, civic virtue) (Kidder, 2002). Furthermore, work-related helping behaviors are often assumed to be less optional for women and more rewarded for men (Heilman & Chen, 2005). Indeed, gender has exhibited both main effects and moderating effects on OCB (Allen & Jang, 2018). In sum, the relation between gender and OCB is complex, and adding the additional layer of where these behaviors are physically formed via OCB-H introduces new dynamics which warrant future research.

Another area of research that may be fruitful relating to OCB-H and OCB-W is the motives behind these behaviors, given that they influence performance evaluations (Whiting, et al., 2008). For instance, impression management and prosocial motives are associated with supervisor ratings of citizenship, meaning that some employees are "good actors" while others are "good soldiers" (Grant & Mayer, 2009). Future research should examine the motives behind those who typically perform OCB-W compared with those who typically perform OCB-H, perhaps using latent class analysis. Furthermore, different motives may be at play for OCB-H, as feelings of job insecurity are associated with an increased willingness to allow work to spill over into nonwork time (Boswell, Olson-Buchanan, & Harris, 2014), and work pressure appears to attenuate the relationship between work-nonwork integration preference and actual integration behavior (Capitano & Greenhaus, 2018). However, questions remain regarding these past findings in terms of whether the performance of work behaviors at home are attributable to work obligations (e.g., being on-call) or extra-role citizenship behaviors such as OCB-H.

Finally, future research is needed to examine the construct clarity between OCB-H and behavior-based WIF. While OCB-H and WIF were significantly correlated in both Study 1 ($r = .24$) and Study 2 (between-person $r = .30$; within-person $r = .22$), it is important to note that our measure of WIF did not include a behavior-based dimension. However, we anticipate a similar correlation between behavior-based WIF and OCB-H. Theoretically, behavior-based WIF conceptualizes conflict experienced when behaviors required in one role are incompatible with behaviors in another role (e.g., "the problem-solving behaviors I use in my job are not effective in resolving problems at home") (Carlson et al., 2000), whereas OCB-H reflects extra-role behaviors going above and beyond typical task performance via one's own volition (e.g., I volunteered for extra work assignments"). Thus, we believe these two constructs are theoretically distinct, in that one may experience behavior-based WIF but refrain from engaging in OCB-H, or vice versa. Future research is needed to clarify the distinction between these two constructs.

Conclusion

The current study aimed to introduce a physical aspect to the content domain of OCBs – whether they were performed while physically at work or physical at home. In Study 1, we provided evidence of validity for a measure of OCB-H. Specifically, we provided initial evidence of construct validity, ultimately confirming that OCB-H is related yet distinct from OCB-W, and establishing initial evidence of the nomological network of OCB-H. In Study 2, we expanded the measurement of OCB-H to the day-level by examining

the mediating influence of both OCB-W and OCB-H on the relationship between work engagement and WIF. Our findings suggest that while OCB-W exemplifies significant between- and within-person variation and significantly mediates the work engagement-WIF relationship at both levels, the vast majority of OCB-H variability is at the between-person level, and the mediating effect of OCB-H was only observed at the between-person level. Overall, our research suggests that OCB-W and OCB-H are distinct constructs regarding both their construct space and degree of variability. Ultimately, the present research suggests organizations should be aware that many employees may continue to perform work-related behaviors in the nonwork domain, and clarify expectations relating to availability after scheduled work hours.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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Expected Total Score

Test Information

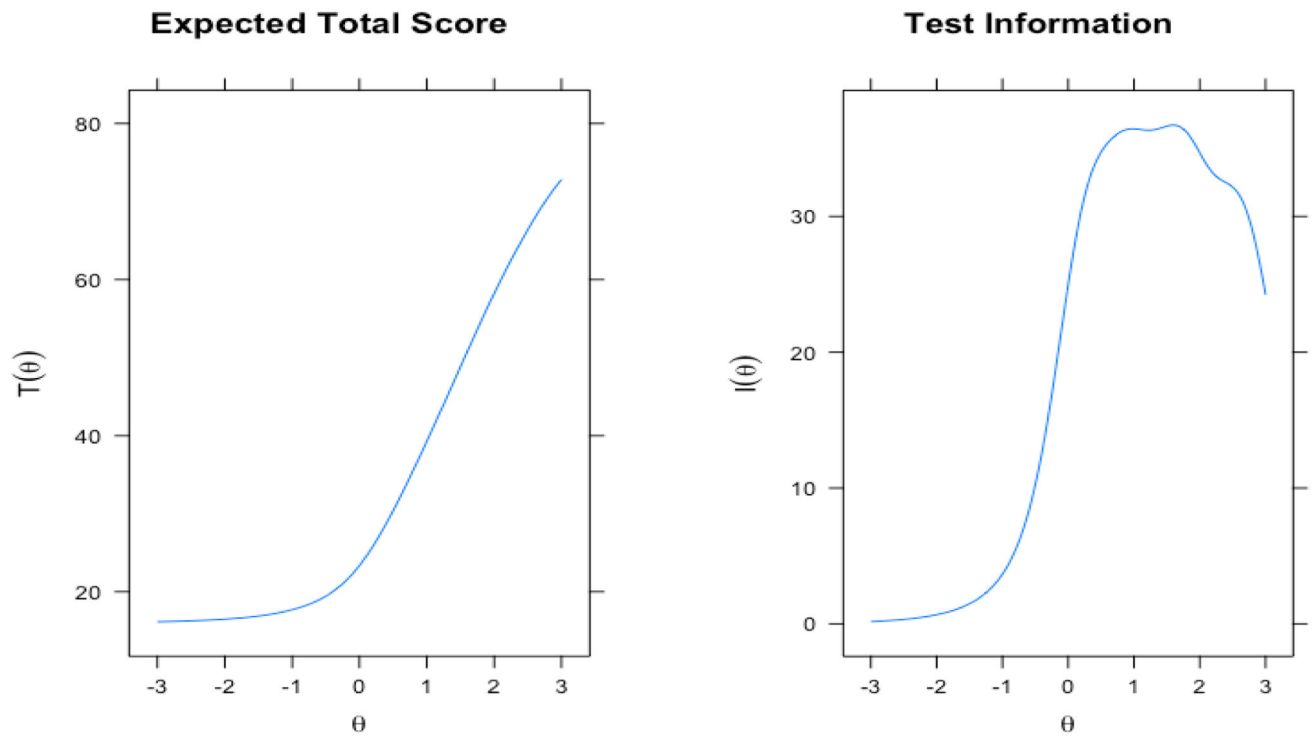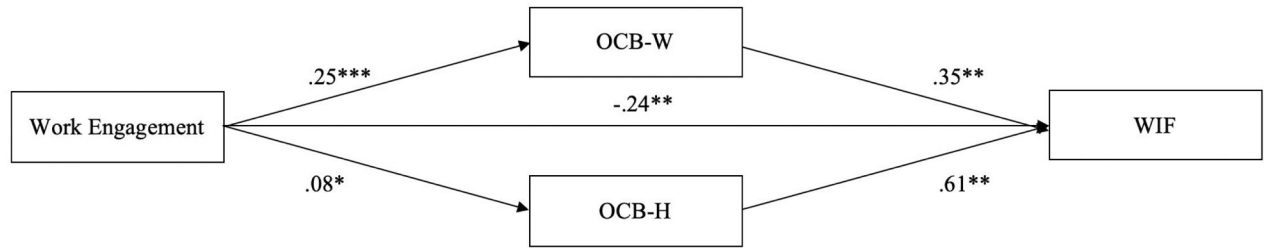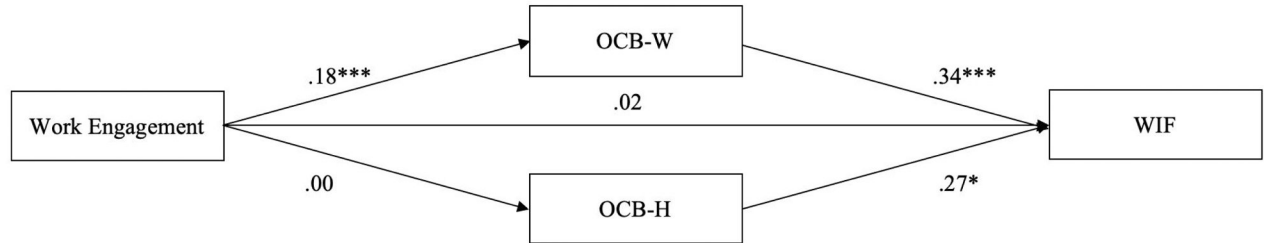**Figure 1.**

Test Characteristic (right) and Test Information Curves (left) for the OCB-H Measure in Study 1.

Note. T(θ) indicates the total score give θ, whereas I(θ)

BETWEEN

WITHIN

Figure 2.
The between- and within-person level effects for OCB-W and OCB-H mediating the work engagement-WIF relationship
* $p < .05$, ** $p < .01$, *** $p < .001$

Table 1

Correlations between Study 1 variables

	M	SD	1	2	4	5	6	7	8	9	10	11	12	13	14
1. OCB-H	1.71	.73													
2. OCB-W	2.84	.63	**.51**												
4. Task Performance	5.22	.70	.06	**.22**											
5. Extraversion	2.66	1.05	**.17**	**.19**	-.01										
6. Neuroticism	2.99	.91	.08	-.01	**-.22**	**-.18**									
7. Conscientiousness	3.38	.95	-.02	.09	**.25**	.08	**-.35**								
8. Agreeableness	3.95	.86	**.18**	**.27**	**.15**	**.16**	.02	-.02							
9. Openness	4.00	.83	.08	**.12**	**.21**	**.21**	-.04	.04	**.21**						
10. Work Engagement	4.37	1.06	**.27**	**.44**	**.28**	**.24**	**-.21**	**.17**	**.12**	.11					
11. WIF	3.14	1.21	**.24**	**.27**	-.04	.07	**.41**	**-.14**	-.04	-.11	.01				
12. Segmentation Preferences	5.75	1.27	**-.19**	-.05	**.15**	**-.14**	.03	.00	.03	-.03	**-.34**	-.04			
13. Segmentation Supplies	4.64	1.61	**-.19**	-.11	**.18**	**-.12**	**-.23**	.05	-.10	.00	.03	**-.39**	**.29**		
14. CWB	1.57	.51	**.29**	**.16**	**-.19**	.07	**.15**	**-.22**	-.11	-.08	**-.18**	**.21**	.00	-.05	
15. Workaholism	2.50	.57	**.18**	**.32**	.13	.06	**.30**	-.09	.03	-.09	**.25**	**.59**	**-.18**	**-.34**	.04

Note. N = 292. OCB-W = Organizational Citizenship Behaviors at Work; OCB-H = Organizational Citizenship Behaviors at Home;

WIF = Work interfering with Family; CWB = Counterproductive Workplace Behaviors

All correlations in bold indicate the value is statistically significant at *p* < .05.

Table 2

Bivariate and partial correlations of OCB-H in study 1

	M	SD	OCB-H Bivariate Correlations	OCB-H Controlling for OCB-W
OCB-W	2.84	.63	**.51**	-
Task Performance	5.22	.70	.06	−.06
Extraversion	2.66	1.05	**.17**	.09
Neuroticism	2.99	.91	.08	.10
Conscientiousness	3.38	.95	−.02	−.07
Agreeableness	3.95	.86	**.18**	.05
Openness	4.00	.83	.08	.02
Work Engagement	4.37	1.06	**.27**	.06
WIF	3.14	1.21	**.24**	**.13**
Segmentation Preferences	5.75	1.27	**−.19**	**−.20**
Segmentation Supplies	4.64	1.61	**−.19**	**−.16**
CWB	1.57	.51	**.29**	**.24**
Workaholism	2.50	.57	**.18**	.03

Note. N = 292. OCB-H controlling for OCB-W reflect partial correlations. OCB-W = Organizational Citizenship Behaviors at Work; OCB-H = Organizational Citizenship Behaviors at Home; WIF = Work interfering with Family; CWB = Counterproductive Workplace Behaviors.

All correlations in bold indicate the value is statistically significant at $p < .05$.

Table 3

Item response theory parameters and item-level fit statistics for the OCB-H Measure in Study 1

ID	Item Content	a	b_1	b_2	b_3	b_4	$\hat{b}$	S-χ^2	df	p
OCBH_1	Took time to advise, coach, or mentor a coworker.	3.36	0.18	2.92	5.62	8.70	4.36	38.97	24	.028
OCBH_2	Helped a coworker learn new skills or shared job knowledge.	3.29	0.69	3.31	6.11	8.21	4.58	37.71	24	.037
OCBH_3	Helped new employees get oriented to the job.	3.05	2.50	4.11	5.96	8.17	5.19	21.98	18	.233
OCBH_4	Lent a compassionate ear when someone had a work problem.	2.11	−0.82	1.24	3.00	5.13	2.14	36.32	34	.361
OCBH_5	Lent a compassionate ear when someone had a personal problem.	1.54	−0.75	0.75	2.07	3.80	1.47	63.89	50	.090
OCBH_6	Changed vacation schedule, workdays, or shifts to accommodate co-worker's needs	1.62	0.38	2.28	4.34	7.25	3.56	48.59	34	.050
OCBH_7	Offered suggestions to improve how work is done.	3.45	0.23	2.65	5.35	10.20	4.61	27.44	27	.440
OCBH_8	Offered suggestions for improving the work environment.	3.74	1.22	3.78	6.80	10.89	5.67	25.14	20	.196
OCBH_9	Finished something for a co-worker who had to leave early.	3.12	1.81	4.25	6.34	8.22	5.16	15.97	20	.718
OCBH_10	Helped a coworker who had too much to do.	3.48	1.28	4.00	6.03	8.95	5.07	20.63	19	.358
OCBH_11	Volunteered for extra work assignments.	2.73	0.84	3.06	5.19	8.54	4.41	26.87	27	.471
OCBH_12	Said good things about your employer in front of others.	1.05	−0.73	0.79	1.83	3.61	1.38	66.80	53	.096
OCBH_13	Gave up meal and other breaks to complete work	1.95	1.12	2.62	3.53	5.54	3.20	35.16	31	.277
OCBH_14	Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker	3.44	2.10	5.09	6.52	8.56	5.57	23.50	18	.172
OCBH_15	Went out of the way to give co-worker encouragement or express appreciation	3.49	0.77	2.82	4.91	7.76	4.07	4.07	4.07	4.07
OCBH_16	Defended a co-worker who was being 'put-down' or spoken ill of by other co-workers or supervisor	2.42	1.25	3.69	5.24	7.32	4.38	29.08	21	.112

Table 4

Correlations between study variables and variance composition of Study 2 variables

	N	M	SD	ICC	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. OCB-W	664	.90	.78	.57		-.01	**.31**	**.24**										
2. OCB-H	580	.19	.46	.65	**.59**		-.03	.08										
3. Work Engagement	663	3.96	1.23	.51	**.36**	**.24**		.09										
4. WIF	578	2.31	1.08	.52	**.29**	**.30**	-.10											
5. Gender	162	.79	.41		**.22**	.14	.09	**.24**										
6. Age	162	32.34	7.86		-.13	**-.16**	-.02	.01	.12									
7. Marital Status	162	.80	.40		**-.17**	**-.27**	-.03	-.14	-.11	**.16**								
8. Children	162	.30	.46		**-.17**	-.14	-.03	.07	.01	**.47**	.10							
9. Extraversion	162	2.40	.77		.05	.00	**.17**	-.02	-.07	-.03	-.04	-.04						
10. Neuroticism	162	2.40	.63		**.19**	.15	**-.29**	**.35**	**.27**	-.13	-.01	-.04	**-.27**					
11. Conscientiousness	162	3.14	.43		**.24**	.05	**.36**	-.02	**.18**	.05	-.10	.08	**.26**	**-.23**				
12. Agreeableness	162	3.27	.63		**.23**	.15	.08	.12	**.33**	.07	.04	.01	**.17**	.03	**.16**			
13. Openness	162	3.08	.65		.09	.00	.09	-.15	.07	-.10	.12	-.03	.13	-.14	.14	.12		
14. Seg. Pref	162	3.29	.70		-.02	-.07	**-.23**	.04	.07	.00	-.03	.00	-.06	-.03	-.01	.06	-.07	
15. Workaholism	162	2.67	.35		**.31**	**.18**	.06	**.39**	**.18**	-.07	**-.25**	.04	.09	**.34**	**.18**	.13	-.08	**-.23**

Note. N at level 1 = 534–664; *N* at level 2 = 148–162. Variables 1–4 are within-person variables; variables 5–15 are between-person variables. Correlations above the diagonal represent within-individual correlations. Correlations below the diagonal represent between-individual correlations. OCB-W = Organizational Citizenship Behaviors at Work; OCB-H = Organizational Citizenship Behaviors at Home; WIF = Work interfering with Family; Seg. Pref. = Segmentation Preferences. ICC = Intraclass Correlation. Values in bold indicate the value is statistically significant at $p < .05$.