Unmuting the Mic on Telework: The Development and Validation of Telework OCB and CWB Scales

By

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Abstract

This paper proposes the development and validation of two new scales for measuring telework organizational citizenship behaviors (T-OCBs) and telework counterproductive workplace behaviors (T-CWBs). These scales are being created to address the unique behaviors that teleworkers might engage in that are unique manifestations from traditional work environments. The development process involves the formulation of a set of new items generated from the ground up through a multitude of methods to fully capture the conceptual domain that is T-OCB and T-CWB. These items were then evaluated for their validity, and a new scale is presented.

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Introduction

Prior to the global pandemic caused by COVID-19, telework was already becoming a work modality that was being increasingly adopted by organizations. With the pandemic and the need to adapt to changing workplace conditions, many organizations were forced to embrace telework to keep people employed and continue operations within the organization. This trend of increased telework has not slowed down as the pandemic begins to lessen and business starts to resume normal operation. According to the Work from Home (WFH) research project, over 50% of employees expressed a desire to work from home more than 3 days per week (2023). This demonstrates that telework is still an incredibly common work modality that is desired by employees.

This meteoric rise of telework triggered by the COVID-19 pandemic led many organizations to question the effectiveness of this modality as well as the behaviors that their employees might engage in while unsupervised. Meta-analytic findings prior to the COVID-19 pandemic suggest that telework has a positive relationship with important organization outcomes such as productivity, organizational commitment, and performance (Harker & MacDonnell, 2012). With the rise in telework as a result from the pandemic, researchers are beginning to revisit some of the prior research to explore the behaviors of teleworkers. For example, Mihalca and colleagues (2021) explore determining factors for important organizational outcomes of teleworkers and provide a positive outlook for organizations seeking to continue or adopt this work modality. From their findings, they indicate a need for organizations to develop new training programs that are specific to telework and call on future research to further examine other dependent variables like burnout, engagement, and counterproductive behaviors.

With this shift comes apprehensions from some organizations about the use of telework. One study found that only 13% of executives were supportive of a workforce that consisted of fully remote workers (PwC, 2021). A potential reason that there is a disconnect between the desired amount of telework between employees and executives is the fact that organizations may feel uncertain about the behaviors of their employees when they are not being supervised. Additionally, there may be concerns about potential communication issues and productivity of their employees when they are working from home and could be presented with more distractions than in a typical office setting. As a result of these uncertainties, it has become increasingly clear that there needs to be more research regarding the behaviors of these teleworking employees to assuage some of the apprehensions held by organizations and help to guide future research on telework.

Organizational citizenship behaviors (OCBs) and counterproductive work behaviors (CWBs) have become some of the most explored constructs within the field of industrial-organizational psychology and are important components of job performance (Dalal, 2005). With behaviors manifesting in unique ways, the need to develop new measures focused specifically on telework becomes abundantly clear. The behaviors currently and previously explored by researchers may not capture the full picture as it relates to employee behaviors and other important organizational considerations regarding a telework environment. As telework continues to gain popularity, research is needed to better understand the behaviors that employees engage in whilst teleworking to best guide telework practices and understand employee behaviors that could manifest differently in this setting than in the traditional work setting.

The goal of the current study is to develop and validate two telework-specific scales to help better understand telework behavior by looking at both OCBs and CWBs. This research looks at these behaviors within the context of telework to further develop the ideas of telework organizational citizenship behavior (T-OCB) and telework counterproductive workplace behavior (T-CWB). The development and validation of these scales provides an avenue for prospective research into telework behaviors and critical organizational constructs. With the development of these scales, we can better understand the unique manifestations of OCBs and CWBs that may be exhibited by teleworkers, and how such behaviors may differ from those observed in traditional working arrangements. This study will involve a scale development and validation, which includes conducting an extensive literature review to identify the relevant dimensions of telework OCBs and telework CWBs, generating a pool of items to measure these dimensions, and administering these items to a couple of samples of teleworking employees to assess their reliability and validity. The resulting scales could be a valuable contribution to the literature on telework and organizational behavior, providing a tool that can be used by researchers and practitioners to better understand telework OCBs and CWBs. It is my hope that this study will stimulate further research in this area and ultimately lead to the development of a more comprehensive understanding of OCBs and CWBs in the telework context.

Literature Review

Telework – also known by the monikers of remote work, work-from-home, telecommuting, virtual work, amongst others – has many definitions that have been implemented within the literature. In the context of the current study, it is necessary to use a definition that can easily be understood, is able to encompass the nature of telework, and is representative of the current employee telework population. For this reason, I follow the definition created by the U.S.

Office of Personnel Management (OPM) that defines telework as “work flexibility arrangement under which an employee performs the duties and responsibilities of such employee's position, and other authorized activities, from an approved worksite other than the location from which the employee would otherwise work” (U.S. Office of Personnel Management, 2021). This definition of telework taps into the key components of the behavior that is being explored. Telework is work that occurs without the in-person contact of coworkers and supervisors, but still allows for interactions with each other using technology. Additionally, it is necessary that the definition of telework made the distinction for the location of the worker. Teleworkers are not restricted to a central office but are also not restricted to one location at all, as they can work from home offices, coffee shops, etc. or any other location that is not a central office.

Another key aspect within the literature is the previously defined dimensionality of traditional OCB and traditional CWB. Smith and colleagues (1983) split OCB into two different dimensions: the interpersonal dimension (OCB-I) and the organizational dimension (OCB-O). In their article, they discuss how these different dimensions are based on the intended target of the behavior. Behaviors targeted at individuals, such as staying late to help a coworker, would be an example of OCB-I. Behaviors that are intended to target the organization, such as talking positively about organizational experiences to outsiders, would be an example of OCB-O. This is the simplest of all the developed taxonomies for OCB, but this model has been argued to be the most parsimonious taxonomy that underlies more elaborate models (Organ & Paine, 1999). For example, another literature reviews have outlined OCB as being best represented by 5 dimensions (Tambe & Shankar, 2014). These included conscientiousness, sportsmanship, civic virtue, courtesy, and altruism. As is demonstrated by this literature review, more complex models from the two-factor solution can ultimately be created based on a further exploration of

OCB. Given the multiple taxonomies presented for OCB, this study aims to explore the simplest of all taxonomies for OCB. Thus, the following definitions from previous scholars will be used that represent OCB-O and OCB-I: *OCB-O* includes any intentional behaviors expressed to have a positive effect on the functioning of the organization (Dalal, 2005; Organ & Paine, 1999; Smith et al., 1983) and *OCB-I* includes any intentional behaviors expressed to have a positive effect on an individual(s) within the organization (Dalal, 2005; Organ & Paine, 1999; Smith et al., 1983)

Much like the two-factor model presented for OCB, a similar model exists for CWB. Within this model, Robinson and Bennett (1995) made distinctions between their idea of workplace deviance (CWB) based on the intended target of the behavior. Behaviors that are targeted at an individual (CWB-I) could include items such as calling coworkers names whereas behaviors targeted at the organization (CWB-O) include behaviors such as pretending to be sick to avoid work. Much like OCB, more complex taxonomies exist for CWB as well. These are represented in a study Wiernik and Ones (2018) from and includes dimensions such as deception, theft, withdrawal, alcohol and drug use, and others. Focusing on the simplest of the developed taxonomies, this study focuses on the two-factor solution. Thus, the definitions generated by previous researchers used in the current study for CWB-O and CWB-I are presented as: *CWB-O* includes any intentional behaviors expressed to have a negative effect on the functioning of the organization (Dalal, 2005; Gruys & Sackett, 2003; Robinson & Bennett, 1995) and *CWB-I* includes any intentional behaviors expressed to have a negative effect on an individual(s) within the organization (Dalal, 2005; Gruys & Sackett, 2003; Robinson & Bennett, 1995).

This study does not involve the development of a new construct, but rather adopts the approach of expanding upon the pre-existing constructs to explore previously unexamined

manifestations of T-OCBs and T-CWBs. By building upon the established groundwork laid by previous scholars and researchers, this research endeavor seeks to illuminate novel aspects of these behaviors within the context of telework with the purpose of expanding the literature. For this reason, both T-OCB and T-CWB definitions were crafted by incorporating a virtual element into the definitions established by previous scholars to define these constructs regarding telework. Therefore, the following definitions were created for the purposes of the development of telework specific scales:

> *Telework-OCB-O (T-OCB-O)* includes any intentional behaviors expressed through virtual work methods with the aim of having a positive effect on the functioning of the organization.
>
> *Telework-OCB-I (T-OCB-I)* includes any intentional behaviors expressed through virtual work methods with the aim of having a positive effect on an individual(s) within the organization.
>
> *Telework-CWB-O (T-CWB-O)* includes any intentional behaviors expressed through virtual work methods with the aim of having a negative effect on the functioning of the organization.
>
> *Telework-CWB-I (T-CWB-I)* includes any intentional behaviors expressed through virtual work methods with the aim of having a negative effect on an individual(s) within the organization.

To the best of my knowledge, no previous research has developed a scale to measure telework OCBs. Given this, the current study aims to address this gap in the literature by developing and validating telework specific scales for OCB. While there exists no measure for T-OCB, there has been a previously developed T-CWB measure (Holland et al., 2016).

The previous telework measure developed by Holland and colleagues (2016) was created to assess telework CWBs. Like the present study, these authors argued that one of the aspects of telework performance that remains practically unexplored is CWBs. I argue that this measure needs to be readdressed for a multitude of reasons. The scale needs to be reevaluated to account for potential applicability issues as telework has grown in popularity across jobs since the COVID-19 pandemic. Telework is more widespread now than it was in 2016 and as such, new behaviors may have manifested as people spend more time teleworking and a greater variety of jobs have shifted towards telework. For this reason, it could be pertinent to generate new items from the ground up because of this increased presence of telework. Thus, the current paper seeks to address a gap in the literature by developing a telework-specific OCB scale as well as revisiting a previously developed telework-specific CWB. These scales have important implications for future research on teleworkers and their behaviors.

With an increased teleworker presence spanning a larger number of jobs, it is necessary to revisit this study and generate new items that better encompass the essence of teleworking behaviors as they relate to OCBs and CWBs. In addition to the increased presence of telework, new software and technologies have been created for and implemented within telework contexts. Behaviors surrounding these new developments need to be examined. Additionally, the proposed scales will offer new insight into the behaviors that teleworkers are engaged in but could also be useful for organizations seeking a hybrid work environment that involves part-time telework and part-time traditional. The developed scales could be combined with existing measures of OCB and CWB to create one hybrid scale. Future research should explore this direction.

In addition to creating scales for telework behaviors, a goal of the current study is to confirm the number of factors that underlie these constructs and further understand this

taxonomy as it exists within the telework setting. Initial hypotheses regarding the dimensionality of T-OCB and T-CWB were made utilizing pre-existing research on the dimensionality of OCB and CWB. Much like what was argued by Organ and Paine (1999), the following hypotheses underscore what could potentially be a parsimonious taxonomy that could ultimately lead to more elaborate models for examination in future research:

Hypothesis 1: Telework-Organizational Citizenship Behavior will best be represented with a two-factor model comprised of Telework-Organizational Citizenship Behavior – Organizational (T-OCB-O) and Telework-Organizational Citizenship Behavior – Interpersonal (T-OCB-I).

Hypothesis 2: Telework-Counterproductive Workplace Behavior will best be represented with a two-factor model comprised of Telework-Counterproductive Workplace Behavior– Organizational (T-CWB-O) and Telework-Counterproductive Workplace Behavior– Interpersonal (T-CWB-I).

Traditionally, personality has been an individual difference antecedent that has been widely researched in relation to OCB and CWB. Conscientiousness, characterized by tendencies toward dutifulness, self-discipline, and deliberation (Roberts et al., 2009), has been established as one of the best personality predictors of organizational citizenship behaviors and counterproductive work behaviors (Organ & Ryan, 1995; Sackett & DeVore, 2001). However, research has not fully examined how conscientiousness relates to employee behaviors specific to telework employees. When considering trait activation theory (Tett & Burnett, 2003), personality traits are expressed through behavior when situational cues and job demands are relevant to the trait. In the context of telework arrangements, the nature of working remotely provides cues that should activate or deactivate conscientious tendencies, driving effects on T-OCB and T-CWB.

For highly conscientious employees, a telework environment formalized with policies, virtual communication protocols, productivity tracking, and clear role expectations acts as situational cues that activate their characteristic responsibility, self-discipline, orderliness and rule-adherence. These cues signal to conscientious teleworkers that maintaining dutiful work practices aligned with organizational standards is normative and expected, even when not co-located. As a result, their conscientious tendencies manifest through high levels of T-OCB.

In contrast, for employees low in conscientiousness, the telework arrangement provides cues that likely deactivate their personality tendencies that we see typically presented in conscientious employees. With conscientiousness insufficiently activated, potentially based on lack of supervision, these teleworkers could become more prone to higher levels of T-CWB.

Therefore, the following hypotheses are posited:

Hypothesis 3: There will be a positive relationship between conscientiousness and overall T-OCB and the facets of T-OCB.

Hypothesis 4: There will be a negative relationship between conscientiousness and overall T-CWB and the facets of T-CWB.

While some literature explores the other Big Five personality traits and their relationship with OCBs and CWBs, this research is scarce. Given this, and the potential for new behaviors to manifest as a result of telework, other personality traits should be explored as a way to uncover potential relationships that might exist between these personality traits and telework behaviors. Additionally, very little research has tackled the issue of the addition of the honesty/humility trait that is presented within the HEXACO model (Ashton & Lee, 2007). There is a level of trust that is afforded to those workers who are teleworking since it is characterized as a working modality that involves little supervision. Individual differences in this trait could provide a unique insight

into these behaviors in the sense that high scorers, or those who might be more honest, are going to be less likely to commit T-CWBs than employees scoring lower in this trait. For example, someone who scores high on honesty may be less likely to falsify working hours. Telework could potentially allow for new personality characteristics to be expressed and allow for others to be repressed. This leads to the need for an exploration of how personality variables relate to these telework behaviors. Uncovering these antecedents could provide useful information to organizations who are selecting/hiring people for telework roles as well as offering areas for potential interventions. Based on this, the following research question is posited:

> *Research Question 1:* Are there any additional personality traits (i.e. openness, extraversion, agreeableness, neuroticism, and/or honesty/humility) that could predict employee behaviors in a telework setting such as T-OCB and T-CWB?

An individual difference antecedent that has been explored in relation to CWBs are perceived benefits of unethical behavior (Alaybek et al., 2022). This concept suggests that individuals who perceive benefit from their unethical behavior are going to be more likely to engage in these CWBs than those who not feel like they can benefit and those who perceive a riskiness of their unethical behavior will engage in CWBs less. Weighing on social exchange theory (Homans, 1968), individuals engage in behaviors based on the perceived balance of costs and rewards. If an employee feels that the rewards (benefits) of engaging in CWBs outweigh the potential costs (risks), they may be more inclined to engage in such behaviors. From the findings of Alaybek and colleagues (2022), they found that this individual difference demonstrated greater predictive power than other previously explored antecedents. The authors caution the implementation of their findings in a telework setting citing the differences between telework and a traditional setting regarding comparing CWBs. The authors base their cautions on the

complexities discussed in Holland and colleagues (2016). These complexities include decreased applicability of some of the behaviors and the difference between telework circumstances like availability for the workers. While these difficulties are present, the newly designed scales aimed at tapping into new manifestations of telework-specific behaviors should provide additional insights for researchers and potentially address some of these concerns and provide the tools to better answer these questions in future research. Additionally, Alaybek and colleagues (2022) explored perceived benefits and risks of unethical behavior in the context of specifically CWBs. The current article seeks to further expand upon this research to determine this antecedent regarding OCB as well. Therefore, the following hypotheses are posited:

Hypothesis 5: There will be (a) a negative relationship between perceived benefits of unethical behavior and overall T-OCB as well as the facets of T-OCB.

Hypothesis 6: There will be a positive relationship between perceived benefits of unethical behavior and overall T-CWBs as well as the facets of T-CWB.

The role of workplace boredom could have important implications for these behaviors as bored employees might engage in negative behaviors. Prior findings have indicated that workplace boredom is negatively related to OCB and positively related to CWB (Kim, 2021). Telework affords employees unique opportunities to engage in work in different ways than traditional workers, such as working from a location such as their home or a coffee shop. When employees who are working in these locations get bored, the ways this boredom could impact behaviors might be different than in an office setting, but the relationship between boredom and these behaviors might not change. Given these opportunities, exploring the role of workplace boredom in a telework setting could present some interesting findings that might be useful for organizations. For this reason, the following hypotheses are posited:

Hypothesis 7: There will be a negative relationship between job boredom and overall T-OCB and the facets of T-OCB.

Hypothesis 8: There will be a positive relationship between job boredom and overall T-CWB and the facets of T-CWB.

Social exchange theory (Kelley, 1959) and the norm of reciprocity (Gouldner, 1960) have been examined within the context of CWBs by Sackett and Devore (2001) where they discuss employees behaving poorly when they feel like they have been wronged by the organization. When someone feels like they were wronged, social exchange theory could be helpful in explaining their behavior that follows this event. For example, if an employee feels like they were passed up on a promotion, their behavior could reflect these feelings and affect future important outcomes like job satisfaction. From this, CWBs may be demonstrated because of perceived wrongdoings of an individual and ultimately lead to lower satisfaction. On the other hand, Dalal (2005) outlines how truly satisfying work conditions and perceived fairness can lead to behaviors committed by employees that are favorable to the organization and coworkers. Using the previous example, if the same employee were to receive this promotion they could feel as though there was an adequate level of fairness, and this could be used as a potential predictor of their future behavior as well as how these behaviors could be antecedents to important outcomes such as job satisfaction.

Dalal (2005) demonstrated that by understanding these theories and how they relate to behaviors, OCB and CWB can be better understood as being an antecedent related to the construct of job satisfaction in opposite directions. Employees who exhibit more frequent OCBs tend to be more satisfied with their jobs. Conversely, employees committing more CWBs are likely less satisfied with their jobs. By observing these behavioral tendencies, organizations can

gauge the job satisfaction levels of their workforce. A higher prevalence of OCBs among employees suggests higher job satisfaction, while more frequent CWBs may indicate lower job satisfaction that needs to be addressed.

Fonner and Roloff (2010) uncovered that employees engaged in telework were more satisfied than their traditional work counterparts. Past research has shown that there does exist a positive relationship between OCB and job satisfaction (Subhadrabandhu et al., 2012). In addition, there exists a negative relationship between CWB and job satisfaction (Czarnota-Bojarska, 2015). These findings are consistent with the examination of these behaviors from the meta-analysis from Dalal (2005) where OCB and CWB are looked at as having an opposite relationship regarding job satisfaction. In a traditional workplace setting (i.e., not telework), job satisfaction is a highly explored topic. Examining job satisfaction as an outcome as it exists within the context of telework behaviors could provide useful information to organizations and individuals engaging in telework. Based on this literature, employees who are engaging in more OCBs should be more satisfied with their job, and employees engaging in more CWBs should be less satisfied with their job therefore the following hypotheses are posited:

Hypothesis 9: There will be a positive relationship between overall T-OCB and the facets of T-OCB and job satisfaction.

Hypothesis 10: There will be a negative relationship between overall T-CWB and the facets of T-CWB and job satisfaction.

A meta-analysis from Ngo-Henha (2018) reviewed the theories surrounding turnover intentions. They discuss social exchange theory (Kelley, 1959) and the norm of reciprocity (Gouldner, 1960) and how it could have important implications regarding turnover intentions. In the perspective of these theories, turnover intentions result from the non-respect of rules or

norms by the organization. Employees might be tempted to quit the organization if there is a violation of these rules. For example, employees who work hard and have positive deliverables might expect to be rewarded for their behaviors in the form of promotions, bonuses, or other forms of recognition. This could be especially true if they see their colleagues being rewarded for the same behaviors. If these employees feel like they are being fairly treated by their organization and that the implicit and explicit rules are being respected, they may engage in more OCBs to reciprocate this treatment and thus be less likely to voluntarily leave. On the other hand, if an employee feels like they are being disrespected, they could be more likely to engage in CWBs and have a greater intent to leave the organization.

One study from Chen and colleagues (1998) explored the role of OCB on turnover and found that employees who were rated as exhibiting lower levels of OCB were more likely to leave their organization than those that were rated as higher on the levels of OCB. While the current study explores self-reports of T-OCB rather than supervisor-rated OCB, this relationship is still interesting enough to explore to determine if T-OCB would relate to employees' intentions to leave their job. Additionally, previous meta-analytic findings from Carpenter and colleagues (2021) explored the link between unit-level CWB and turnover and found a positive relationship such that employees committing more unit-level CWB would be more likely to leave their jobs. Therefore, the following hypotheses are proposed:

Hypothesis 11: There will be a negative relationship between overall T-OCB and the facets of T-OCB and turnover intentions.

Hypothesis 12: There will be a positive relationship between T-CWB and the facets of T-CWB and turnover intentions.

Given the pervasiveness of research on OCBs and CWBs, the current paper also aims to address the question on the usefulness of the proposed scales as opposed to the currently developed scales for traditional work that are widely used within literature. While items have the potential to overlap amongst the telework and traditional domains, scales looking specifically at telework might provide a better picture into the behaviors of teleworkers. If these scales demonstrate incremental validity above and beyond that of traditional measures, for future research examining telework and OCBs or CWBs it would be most appropriate to use the developed scales. Therefore, the following hypothesis is presented:

Hypothesis 13: T-OCB scores will demonstrate incremental validity in the prediction of (a) job satisfaction and (b) turnover intentions above and beyond traditional OCB scores for teleworkers.

Hypothesis 14: T-CWB scores will demonstrate incremental validity in the prediction of (a) job satisfaction and (b) turnover intentions above and beyond traditional CWB scores for teleworkers.

Method

To develop and validate scales measuring telework behavior, Hinkin's (1998) guidelines for scale development were closely followed. To generate initial items, a deductive item-generation approach was used for a pilot study. The development and validation were split into two separate studies with Study 1 examining the basic psychometric properties and finalization of items and Study 2 comprehensively examining the psychometric properties of the new measures.

Pilot Study– Initial Item Generation

Four methods were used to generate the initial list of items. First, interviews were conducted with workers who were currently engaged in teleworking. These participants served as the first set of SMEs for item generation. Interviewees were presented with the definitions created for these behaviors as well as the definition for telework. From these interviews, SMEs generated items that were unique to telework based on their experiences using the definitions presented above. A total of 15 interviews were conducted with SMEs from a broad range of industries. This interview template can be seen in Appendix A.

Second, additional items were generated by reviewing previously developed and validated OCB and CWB scales to translate potential items to telework specific items. Additionally, thinking of the above definitions and these items within the context of telework definition, brainstorming strategies were used to generate further items by the author of this paper and a fellow graduate student.

The third method used 15 subject matter experts seeking a graduate degree in psychology to generate items for each construct as well. These SMEs were presented with the above definitions of T-OCB-O, T-OCB-I, T-CWB-O, and T-CWB-I and asked to generate 5 items for each category that would be specific to the context of telework using the provided definition. After gathering items using these three methods, items were analyzed for their representativeness of the telework behavior constructs and relevance. Items that were incoherent, not relevant, or duplicates were excluded from the list.

To make sure all potential items sufficiently covered the conceptual domain of T-OCB and T-CWB, additional behaviors were collected through a survey. Participants were students in an undergraduate statistics course at a large southeastern university. These participants were instructed to interview people within their personal network to generate five behaviors specific to

telework for each dimension. Participants were tasked with familiarizing themselves with relevant terms and definitions prior to interviewing personal contacts and submitting their survey responses. Additionally, participants were presented with an example item for each dimension. Participants were blind to the other items that had been generated up to this point. Participants spent time interviewing people within their personal network who have engaged in or were currently engaged in telework to explore their behaviors. After the interview, participants submitted a list of five behaviors for each of the four explored dimensions for a total of 20 behaviors. Behaviors were reduced if they were redundant, repetitive, or did not make sense as a telework behavior.

The present stage focuses on generating an initial list of items to be used in future stages. During this stage, items were generated using multiple methods. Before empirical reduction, this initial list consists of 39 total items for T-OCB (Appendix B) and 46 total items for T-CWB (Appendix C). This item pool was meant to be overly inclusive to ensure the conceptual domain of the constructs was addressed.

Study 1 – Finalizing Items

Item Reduction

The pilot study generated an over-representative item list to ensure all aspects of the constructs could be captured. This is standard practice when constructing a new scale (Hinkin, 1995). Study 1 examined the basic psychometric properties of these initial items including internal consistency and factor structure with the purpose of finalizing the items. This process involved participants providing responses to the initial set of items and completing an item-sort task (Anderson & Gerbing, 1991). The goal of this task was to reduce the number of items from the pilot study.

Participants

A total of 330 participants were recruited from a variety of different occupations to help evaluate the basic psychometric properties and complete the item-sort task. Recruitment took place using the crowd-sourced research software Prolific. Many researchers have found success using participants from Prolific to address the content validity of their scales. As per the guidelines set by Anderson and Gerbing (1991), a sample size of 20 participants is a sufficient sample for item-sort tasks and has the potential to produce agreement coefficients and correlations >.90. For this reason, only 30 of the 330 participants completed the item sort task, leaving 300 to complete the measures. The requirements to participate in this study were that participants must be 18+ years old, reside in the United States, and be classified as a high-intensity telecommuter meaning that they spend over 2.5 days per week, or around 25 hours per week, engaged in telework (Gajendran and Harrison, 2007).

Procedure

The subset of 30 of the participants were provided with the definitions of the four constructs (T-OCB-O, T-OCB-I, T-CWB-O, and T-CWB-I) and the definition of telework. These participants were tasked with strictly doing an item sort task. In addition to these definitions, participants were presented with the full list of items that were generated as part of the pilot study. Participants were then asked to sort the items into the category that they perceive to be the best for each item. Additionally, two other categories were present that participants could place items in. These included “Could never occur while teleworking” and “Other.” Colquitt et al. (2019) provide detailed instructions for Anderson and Gerbing’s (1991) approach, and these guidelines will be closely followed. For example, participants were presented with an

item such as “Attend optional virtual check-in meetings.” and asked to place this item into the construct they think best represents this item.

Anderson and Gerbing (1991) suggest assessing the substantive validity of the items upon completion of the item-sort task. Colquitt and colleagues (2019) further go to describe these indices as indicators of definitional correspondence and definitional distinctiveness. The index explored in this study is the coefficient of substantive validity (CSV). The CSV represents the amount to which participants assigned an item to the correct construct more than to any other construct (Anderson & Gerbing, 1991). This has been used successfully in previous scale development research (see Ferris et al, 2008).

By the guidelines proposed by Anderson and Gerbing (1991) the CSV will be measured using the following equation:

$$cc_{ssss} = \frac{nn_{cc} - nn_{oo}}{NN}$$

Where n_c will represent the number of respondents tasked with assigning an item within the measure to the posited construct, and n_o represents the greatest number of assignments of an item to any other construct. Finally, N is the total number of respondents (Anderson & Gerbing, 1991). The values for the CSV will range between -1.0 and 1.0, with larger values indicating greater substantive validity, or rather greater correspondence to their definition and greater distinction from the other items.

The other set of participants were presented with a list of all the behaviors generated from the pilot study. Participants were asked to respond to all the items on a seven-point Likert-Type scale based on the frequency with which they engage in the behavior while teleworking (*1- I never engage in this behavior while teleworking* to *7- I engage in this behavior every day while*

teleworking). The purpose of this sample was to further reduce the items by using exploratory factor analysis and provide data to examine the initial factor structure.

Results

Item-Sort Task

According to the guidelines outlined by Colquitt and colleagues (2019), the cutoff values for these indices' change based on the correlation between the focal scale and the orbiting scale. For the purposes of this study, items in the T-OCB-O(I) scale were paired with items in the T-OCB-I(O) scale as their orbiting scales. Similarly, items in the T-CWB-O(I) were paired with items in the T-CWB-I(O) as their orbiting scales. Given the similarity between these constructs and high correlations between them, it was necessary to use cutoff values that accounted for this similarity that presents itself both empirically and conceptually as this could lead to lower CSV values (Colquitt et al., 2019).

Given the information that is presented in the article from Colquitt and colleagues (2019) and their evaluation criteria for interpreting content validation statistics, items were kept that had a CSV value that fell into the "moderate" category of their interpretation for stronger correlations ($r > .51$) between focal scales and orbiting scales. The moderate interpretation included CSV values that are above .21. This interpretation was chosen to reduce items that were unclear to participants as to where they should be assigned and were potentially ambiguous in the way they were written. Using this moderate interpretation cutoff value allowed for the items that were of poor quality to be removed from further analysis and present a clearer picture for the EFA that was conducted in the next stage. At this point, 28 items were removed using this cutoff value leaving 57 to be analyzed as part of the exploratory factor analysis.

Exploratory Factor Analysis

An exploratory factor analysis was conducted using the Comprehensive Exploratory Factor Analysis software (CEFA) (Browne, Cudeck, Tateneni, & Mels, 2004). When determining the number of factors to retain for the T-OCB and T-CWB scale, multiple criteria were considered in a holistic approach. At the recommendation of Fabrigar and colleagues (1999), factors should be retained when the eigenvalue is greater than 1.0. Scree plots were also examined to determine the number of factors. Additionally, Tucker-Lewis index (TLI) values, RMSEA, and largest residuals were explored to make decisions based on the number of factors to retain. It was important to not only consider the fit of the solution, but also account for parsimony given the goodness of fit tests and prior theory surrounding these constructs.

For OCB, the eigenvalue > 1 rule, scree plot, TLI, and RMSEA suggested a two or three factor solution. At this point, I explored the interpretability of the obliquely rotated factor loadings. It was determined that a two-factor solution was most appropriate which was consistent with initial hypotheses. When exploring the factor loadings for each item, it was made clear that some of the items were behaving in unexpected ways. To address this, a closer look was taken at the loadings for items assigned to T-OCB-O and T-OCB-I within the item sort task as this two-factor solution was what was indicated in the EFA containing all T-OCB items. To further explore this, separate EFAs were run for items assigned to T-OCB-O and T-OCB-I. For T-OCB-O, it was apparent that a two or three-factor solution would be a more accurate representation. When considering T-OCB, the items displayed unexpected patterns, but breaking them down into the two factors (O and I) with additional analyses provided greater clarity and align with prior research exploring the dimensions of OCB-O.

The first dimension of T-OCB-O was conscientiousness, which involves behavior surpassing the minimum role requirements, as defined by MacKenzie et al. (1993). The second

dimension, civic virtue, referred to active involvement in the organization's political processes and a sense of duty, in line with Podsakoff and colleagues' (1990) description. The third dimension, sportsmanship, was characterized by a willingness to endure work-related inconveniences and impositions without complaint, as articulated by Organ (1990; p. 96). After running this three-factor solution for T-OCB-O, items that had high cross loadings or loadings of low magnitude were removed and the analysis was rerun. This process eliminated poor items that were loading onto multiple factors or did not have a high magnitude on any factor.

In contrast, the results for OCB-I were more straightforward, with all the included items loading onto a single factor, simply described as the interpersonal factor. The same process was followed in which items were removed if they presented high cross loadings or loadings low magnitude and the process was repeated. All OCB items in both factors retained demonstrated high factor loadings (>.5) on their respective factor. Overall, the reduction strategies discussed yielded 24 surviving items for T-OCB. For a detailed view of the factor loadings for both T-OCB-O and T-OCB-I items, refer to Table 1 and Table 2.

For T-CWB, the same criteria were used to determine the number of factors to retain. It was determined that a two-factor solution would be most appropriate to retain. This was again based on eigenvalues, scree plots, RMSEA, TLI, and largest residual values. This solution provided a clearly defined split between items for those that should be considered a T-CWB-O and T-CWB-I item. Identical to the process used for T-OCB, items were removed if they had factor loadings of a low magnitude or exhibited high cross loadings. After the first iteration, 13 items were removed due to low factor loadings or high cross loadings. Analyses were repeated until all issues were resolved. Using this strategy, a total of 17 items survived for the T-CWB

scale. These items also demonstrated relatively high factor loadings (>.4) on their respective factor, Factor loadings for T-CWB-O and T-CWB-I can be found in Table 3.

These findings provide partial support for Hypotheses 1 and support for 2. Hypothesis 1 predicted a two-factor solution for T-OCB. When looking at all the T-OCB items together, a two-factor solution was found to be the best fit. Issues arose around the factor loadings for the items that loaded onto the T-OCB-O factor. For this reason, these items were then subjected to further analyses where it was uncovered that T-OCB-O should be split into multiple dimensions which included civic virtue, sportsmanship, and conscientiousness. Overall, this does present a more complex solution than what was predicted for T-OCB. For Hypothesis 2, a two-factor solution was found to have the best fit for T-CWB. This also matches previous literature surrounding OCB and CWB. Additionally, this solution seems to balance both fit and parsimony, but more complex models could be explored beyond what is presented here. Since telework is a new working modality and there is little research on the new behavioral manifestations, parsimony may be very important to consider when developing an initial scale that could lead future research to explore more complex models with a greater number of factors represented. To further support these hypotheses, a confirmatory factor analysis will be conducted as part of study two that will use a new sample.

Table 1

Standardized Factor Loadings of Telework – Organizational Citizenship Behavior-Organizational

Item	T-OCB-O(C)	T-OCB-O(CV)	T-OCB-O(S)
Attend optional virtual check-in meetings.	.23	.04	**.57**
Willing to volunteer to virtually work extra hours to get tasks done.	.08	.12	**.48**
Voluntarily worked virtually or attended meetings while traveling or on vacation.	-.08	.08	**.53**

Participate in optional training for virtual work.	0	0	**.76**
Volunteer to take notes during virtual meetings and relay notes to team members.	0	**.61**	.21
Volunteer to coordinate team members' time availability via email or other tools such as using polls to schedule virtual meetings.	-.03	**.77**	.14
Advocate for virtual/remote work options.	-.16	**.55**	.24
Proactive in reminding others about virtual meetings.	.27	**.54**	.09
Posting your telework schedule on a publicly available calendar so coworkers know when you are available.	.22	**.56**	-.1
Followed virtual meeting organizational norms (such as dress code and microphone status).	**.73**	.03	.04
Followed virtual meeting technological norms (such as microphone status, camera status, and other etiquette).	**.83**	-.03	.02
Frequently uses virtual calendar/planner to plan meetings.	**.50**	.37	.03
Frequently participates during virtual meetings.	**.69**	.06	.2
Frequently updates supervisors and team members on progress of virtual work.	**.51**	.24	.07

T-OCB-O(C)= Telework-Organizational Citizenship Behavior- Organizational (Conscientiousness), T-OCB-O(CV)= Telework-Organizational Citizenship Behavior- Organizational (Civic virtue), T-OCB-O(S)= Telework-Organizational Citizenship Behavior- Organizational (Sportsmanship)

Table 2

Standardized Factor Loadings of Telework – Organizational Citizenship Behavior-Interpersonal

Item	T-OCB-I
Volunteer to virtually assist a coworker with their tasks/projects by taking on additional virtual work.	.73
Send a coworker a gift for their assistance/involvement on a virtual task (such as sending them a gift card for lunch).	.60
Teaching and encouraging coworkers how to schedule meetings using a virtual calendar.	.73
Send praise to a coworker through an email or other virtual message.	.66

Help a coworker resolve technical issues relating to their virtual work (such as invalid log-in information, virtual meeting assistance, etc.).	.73
Spend extra time helping a coworker prepare/edit/rehearse a virtual presentation.	.80
Assist a coworker in crafting a difficult and/or important electronic message to a customer, client, coworker, or supervisor.	.78
Help coworkers find links to group meetings.	.71
Change virtual work hours to accommodate the needs of a coworker even when it is an inconvenience.	.61
Offer to help new coworkers get oriented on virtual meetings.	.80

T-OCB-I= Telework-Organizational Citizenship Behavior -Interpersonal

Table 3

Standardized Factor Loadings of Telework – Counterproductive Work Behavior

Item	T-CWB-I	T-CWB-O
Intentionally excluded coworkers on virtual meetings/projects/emails when they should have been included.	**.62**	.14
Send a rude message to a coworker through virtual chat software (such as email or chat integration).	**.77**	.03
Intentionally talk over a coworker while in a virtual meeting.	**.65**	.05
Intentionally single out a coworker in a virtual meeting to criticize/hurt them.	**.77**	.02
Send a threatening message to someone at work.	**.84**	.02
Making fun of someone or making judgements based on their virtual meeting background (for things such as cleanliness, location, etc.).	**.63**	.15
Make fun of someone based on their technology or supplies (like poor camera quality, microphone quality, slow internet).	**.76**	.05
Forwarded an email or other virtual communication of a harmful rumor about someone at work.	**.65**	.11
Take screenshots or photos of coworkers while in a virtual meeting without their permission.	**.64**	.19
Spend time on unrelated work while in a virtual meeting or while clocked in (like sending unrelated emails or working on unrelated projects during a meeting).	-.12	**.75**

Overreport how long virtual tasks took to complete.	.22	**.55**
Spending time working on a separate job while clocked in for a different job (such as doing work for two separate companies simultaneously)	.15	**.41**
Spend time working on household chores not during a break (such as doing laundry, dishes, etc.) while clocked in.	-.13	**.81**
Lie about availability for a virtual meeting.	.27	**.43**
Took extended and unapproved breaks while remaining "active" online.	0	**.77**
Use virtual work devices or software for unapproved personal use (such as phones, computers, tablets, etc.).	.24	**.4**
Purposefully doing less virtual work than you know you could because of a lack of direct supervision.	.05	**.73**

T-CWB-I= Telework- Counterproductive Work Behavior – Interpersonal, T-CWB-O= Telework- Counterproductive Work Behavior – Organizational

Study 2– Validation

Psychometric Properties

At the recommendation of Hinkin (1998), the items that survive the content validity assessments above should then be subjected to further analyses to ensure that these reduced items are linked to the constructs of these telework behaviors. Study 2 examines the psychometric properties of the new measures including reliability, factor structure, convergent and discriminant validity, incremental validity, and assesses the nomological network.

Participants and Procedure

Participants at this stage should represent the population of interest (Hinkin, 1998). Given that telework is something that affects many individuals across different types of jobs, participants from multiple fields were included. To participate in the study participants were required to be 18+ years old, reside in the United States, and be engaged in telework in some capacity within their job. Hoelter (1983) recommends a minimum sample size of 200 for factor analysis. Participants were recruited using the online research software Prolific. The online

crowd sourced research approach has been met with success by researchers in the past and the guidelines from Aguinis and colleagues (2021) were followed. For this study, a sample size of 212 participants was collected with 208 indicating they teleworked to some extent within their job. Thus, a sample size of 208 was used for further analysis where participants who indicated they did not telework were excluded from future studies. Of participants who indicated their gender, 51.9% female. Participants worked an average of 36.20 hours per week and teleworked an average of 27.52 hours per week.

Measures

Telework-OCB. Telework-OCB behaviors were measured with the scale developed from the previous stages. Participants were asked to respond to all scale items for this measure under the direction "How often do you engage in the following behavior?" Participants will respond on a 5-point Likert-type scale from "1 - I do not engage in this behavior while working remotely/telework/from-home" to "7 - I engage in this behavior daily working remotely/telework/from-home."

Telework-CWB. Telework-CWB behaviors were measured with the scale developed from the previous stages. Participants were asked to respond to all scale items for this measure under the direction "How often do you engage in the following behavior?" Participants will respond on a 5-point Likert-type scale from "1 - I do not engage in this behavior while working remotely/telework/from-home" to "5 - I engage in this behavior daily working remotely/telework/from-home."

Traditional-OCB. Participants completed Smith et al.'s (1986) 16-item organizational citizenship behavior scale that includes items such as "Helps others who have been absent" and "Gives advance notice if unable to come into work."

Traditional-CWB. Participants were presented with Bennett and Robinson's (2000) 19-item workplace deviance scale. This scale includes items such as "Made fun of someone at work."

Job Satisfaction. A 10-item generic job satisfaction scale developed by Macdonald and MacIntyre (1997) was used to assess job satisfaction. An example of items that are included in the scale are "I feel good about my job" and "I feel good about working at this company."

Turnover Intentions. The 5-item Turnover Cognitions Scale (Bozeman & Perrewe, 2001) was used to measure turnover intentions. This scale includes items such as "I will probably look for a job in the near future."

Personality. The HEXACO-60 scale measuring the six dimensions of the HEXACO model was used to assess personality. This measure was developed by Ashton and Lee (2009) and presents a way to explore the personality dimensions presented in the HEXACO. Using this shorter measure allows for the examination of additional personality characteristics and their relationship to these telework behaviors while keeping the set of items at a manageable amount for participants.

Perceived Benefits/Consequences of Unethical Behavior. A 6-item subscale from Blais and Weber (2006) was used to measure participants perceived benefits and risks associated with unethical behavior. While the scale explores risk-taking in terms of social, financial, ethical, health/safety, and recreational, only the ethical items were included for this study. This scale includes items to assess perceptions of riskiness in behaviors as well as the perceptions of the benefits of these unethical behaviors.

Job Boredom. Job boredom was measured using Lee's 17-item Job Boredom Scale. This scale includes items such as "Do you find your job dull" and asks participants to respond using a 5-point scale that ranges from (1) "never" to (5) "always".

Results

Confirmatory Factor Analysis

A confirmatory factor analysis was conducted on the telework scales by imposing the factor structure identified within study one. Given the nature of this study and the inclusion of the traditional measures, a confirmatory factor analysis was also run on these established measures where a two-factor solution was imposed on each of these scales based on previous literature. Interestingly, these traditional measures indicated a worse fit to their solution than the proposed measures in the current study. The SRMR, TLI, CFI, and chi square values for these are also presented in Table 3. In addition to looking at these scales separately, the factor structure was also analyzed when combining the telework and traditional items and then imposing the overall factor structure. These values are also presented in Table 3.

As shown in Table 3, when confirming the factor structure of the telework scale from study 1, these values represented a fairly good fit for the model. The goal of the current study was to present the most parsimonious of solutions that further, more complex models could be derived from in future research studies. Solutions with a greater number of factors will more than likely produce a better fit but may lack parsimony. For this reason, future studies should continue to investigate the factor structure of the proposed telework scales in other samples. Another implication of this finding is that the relatively poorer fit between the telework and traditional scales could indicate that the traditional scales are failing to tap into a factor that could be presenting itself within the telework setting, or the traditional scales that were used could be a

limitation. When exploring the combined scales, the factor structure that was presented demonstrated an acceptable level of fit when examined holistically. While some of these values did not meet the conventional cutoffs for good fit, I would argue that a holistic interpretation indicates adequate fit given the RMSEA falling within the acceptable fit levels and the SRMR value being in this acceptable range as well.

Table 4

Confirmatory Factor Analysis (CFA) Results

	RMSEA	SRMR	CFI	TLI
Telework Scale	0.06	0.08	0.87	0.68
Traditional Scale	0.10	0.10	0.69	0.66
Combined	0.07	0.09	0.72	0.71

Convergent and Discriminant Validity

A part of validating this newly designed scale is examining these behaviors' convergent and discriminant validity. Hinkin (1998) defines convergent validity as representing the extent to which items measuring a construct on one scale relate to items measuring the same or similar construct on another scale. He also discusses discriminant validity, and this represents the extent to which items measuring a construct on one scale relate to items measuring a different construct on another scale.

To test for convergent validity of the T-OCB scale items, a modified version of Smith et al.'s (1983) previously developed OCB scale was used. This scale was modified based on literature discussing the negatively worded items in this scale and the fact that they are assessing CWB rather than OCB (Henderson et al., 2020). For this reason, the negatively worded items were removed from analysis. T-OCB scores had moderately strong and positive correlations with

traditional OCB scores (r=.504, p < .01). Given the evidence of convergent validity this indicates that while both the traditional and telework scales are tapping into the same construct, they are doing this by using unique sets of items. A similar approach for examining convergent validity was utilized with the T-CWB items where Bennet and Robinson's (2000) traditional CWB scale was used. T-CWB scores had strong a strong positive correlation with traditional CWB scores (r=.722, p < .001) providing strong evidence for convergent validity.

In addition, testing discriminant validity was done using the traditional scales as well. For testing discriminant validity, researchers administer scales measuring an unrelated construct to that of the actual construct that is being measured. For example, to explore the discriminant validity of the T-OCB measure, I used the traditional CWB measure. These constructs should be theoretically unrelated, and previous researchers have followed a similar process to explore the discriminant validity of their OCB measure (Henderson et al., 2020). This process for exploring the discriminant validity of CWB using an OCB measure was also used by Bennett and Robinson (2000). For T-OCB scores there was a negative but not significant correlation with traditional CWB measure scores (r=-.12, p>.05). T-CWB scores demonstrated a positive but not significant correlation with traditional OCB measure scores (r=.12, p > .05). These results provide evidence for the discriminant validity of these newly established measures.

Taking the findings of the convergent and discriminant validity of these measures into consideration, it appears as though the newly developed T-OCB and T-CWB measures are tapping into similar constructs as both traditional OCB and traditional CWB measures that have been well established within the literature, providing evidence for convergent validity. Additionally, they are also measuring distinctive constructs as evident by their demonstration of

discriminant validity evidence. These scales seem to be measuring their intended construct and not measuring unrelated constructs.

Nomological Network Analysis

The correlations between the newly developed scales and the explored constructs in this study can be found in Appendix E. Hypothesis 3 predicted that the correlation between T-OCB and conscientiousness scores would be positive. As expected, based on the theoretical background surrounding the role of conscientiousness and job performance behaviors, T-OCB had a positive and significant, but weak, correlation with conscientiousness (r=.14, p < .05). Interestingly, while the construct had a significant correlation, the interpersonal factor was not significant (r=.09, p > .05) whereas the organizational factor was significant (r=.14, p < .05). This makes sense given the split of the organizational factor into multiple dimensions which were comprised of sportsmanship, civic virtue, and conscientiousness. Unsurprisingly, the T-OCB-C dimension had the strongest correlation with conscientiousness (r=.267, p < .01). Overall, these results provide support for Hypothesis 3.

Hypothesis 4 predicted that the correlations between T-CWB and conscientiousness scores would be negative. Hypothesis 4 was supported such that T-CWB had a negative and significant correlation with conscientiousness (r=-.41, p < .01). This is consistent with the theory that individual's personality can be predictive of their job performance and those who are lower on conscientiousness might engage in CWBs less frequently (Dalal, 2005).

In addition to exploring these hypotheses, I also posited a research question that aimed to examine the relationship that other personality factors had with these constructs. While conscientiousness is the most explored within the previous literature exploring the role of other personality factors produced some interesting findings, especially given the potential new

manifestations that could present themselves in a telework setting. For T-OCB, there was a significant correlation with extraversion (r=.28, p < .01) and agreeableness (r=.14, p < .05). For T-CWB there was a significant correlation with openness (r=-.19, p < .001), agreeableness (r=-.16, p < .05), and honesty (r=-.42, p < .001). Even though there was not sufficient literature to make formal hypotheses for these personality factors, proposing this research question seemed to produce some interesting results. For example, when exploring the honesty factor from the HEXACO model (Ashton & Lee, 2007) this has a significant relationship with an individual's propensity to engage in CWBs in a telework.

Hypotheses 5 and 6 explored the relationship between T-OCB with perceived benefits of unethical behavior and T-CWB with perceived benefits of unethical behavior. Hypothesis 6 was not supported such that there was not a significant relationship between T-OCB and perceived benefits (r=-.03, p > .05). There was a strong positive relationship between T-CWB and perceived benefits (r=.564, p < .01) which was consistent with hypothesis 6. This could suggest that employees who feel like their unethical behaviors are going to be beneficial to them will be more likely to engage in T-CWBs.

Hypotheses 7 and 8 explore the relationship between job boredom and T-OCBs as well as job boredom and T-CWBs. Hypothesis 7 predicted there would be a negative correlation between job boredom and T-OCBs. This was based on the idea that employees who are bored with their jobs are going to engage in citizenship behaviors less. Hypothesis 7 was supported such that there was a significant but weak correlation between boredom and T-OCB (r=-.15, p < .05).

Hypothesis 8 predicted a positive correlation between T-CWB and boredom. As expected, this hypothesis was supported (r=.31, p < .01). This might be able to be looked

through the lens of the proverb “idle hands are the devil’s playthings” in the sense that employees who are bored might be more likely to engage in harmful activities. A very interesting finding from this is that it seems as though bored employees are not taking their boredom out (in the form of CWBs) on their co-workers, but rather the organization. There was a significant correlation between T-CWB-O and boredom (r=.41, p < .01) but not between T-CWB-I and boredom (r=.08, p > .05) suggesting that when employees are bored, they may engage in these behaviors targeted at the organization rather than their fellow employees. Boredom in the workplace may lead individuals to seek ways to alleviate this emotion. When individuals experience boredom, they may perceive the organization itself as a source of their dissatisfaction, leading them to engage in behaviors that directly affect the organization rather than their peers.

Next, Hypothesis 9 predicted a positive relationship between T-OCB and job satisfaction. This was based on the idea that employees who are satisfied with their job are going to be more likely to engage in positive behaviors that benefit the overall functioning of the organization. This was supported as T-OCB did have a positive relationship with job satisfaction (r=.34, p < .01). On the other hand, Hypothesis 10 predicted there to be a negative relationship between T-CWB and job satisfaction supported by a similar idea that unsatisfied employees will be more likely to engage in these CWBs. Interestingly, hypothesis 10 was not supported when examining the T-CWB construct overall (r=-.12, p > .05). While the construct overall did not have a significant correlation, there was a negative correlation that was significant between T-CWB-O and job satisfaction (r=-.17, p < .05) but not T-CWB-I and boredom (r=-.02, p > .05). Similar to boredom, it could be that employees are not attributing their lack of satisfaction to their co-workers as much as they are the organization, so when engaging in these negative behaviors they are not going to direct them towards their peers.

Hypothesis 11 predicted that T-OCB will have a negative relationship with turnover intentions. The data supported this hypothesis (r=-.17, p < .05). Additionally, Hypothesis 12 predicted that T-CWB would have a positive relationship with turnover intentions. This hypothesis was not supported by the data (r=.12, p > .05).

Additionally, it is important to distinguish how the relationship between the telework items and the assessed variables as well as the relationship between the traditional items and variables are different. If these scales are producing statistically the same correlations for all of these variables measured in the current study, the utility of the telework scale could potentially be questioned. To test this, I utilized Lee and Preacher's (2013) online calculator that assess the difference between two dependent correlations with one variable in common. In this calculator, correlations can be compared with one another. Each measure was tested with its counterpart (I.e. T-OCB with OCB, T-OCB-O with OCB-O, etc.). The main goal of this step is to determine if the correlations between the scales and the measured variables demonstrated statistically significant differences in an effort to compare these measures relationships with the variables presented in this study.

For both OCB measures, there was a significant difference in correlations between conscientiousness, honesty, and perceived benefit of unethical behavior. These findings might suggest multiple conclusions. First, traditional workers might experience more social pressure to demonstrate conscientiousness through OCBs and these could be less salient within the teleworking context. Next, with interpersonal oversight, teleworkers low in honesty might feel less pressure to engage in altruistic behaviors. For perceived benefits of unethical behaviors, there might be an over demonstration of citizenship behaviors in a traditional setting and the

perceived benefits are going to be less as the physical proximity to managers might influence this relationship.

When examining OCB-O, there were many significant differences between the correlations of the variables measured in this study and T-OCB-O and traditional OCB-O. These included honesty, extraversion and job satisfaction. Extraverted employees who thrive on social interaction may direct even more of their discretionary helping behaviors towards the organization in a remote setting to compensate for the lack of in-person contact and spontaneous interactions found in a shared office. In contrast, the social elements of an office make helping seem less discretionary for honest employees who have an innate duty to assist others. Similarly, high job satisfaction could further enable helping behaviors remotely since satisfied teleworkers want to reciprocate their perceived flexibility and autonomy from the organization by supporting others in it.

For OCB-I there were also differences between correlations of measured variables and the traditional and telework scales. For conscientiousness and boredom, the traditional scale had higher correlations than the telework scale. This could potentially be explained by the fact that on-site work allows for greater number of interactions directly with one's peers. This means, for example, that behaviors targeted at the individual are going to be more difficult to engage in during a remote work setting. In a traditional setting, highly conscientious individuals might find ways to engage in positive behaviors that target the individual and individuals who are bored will not be going out of their way to engage in these positive behaviors for their peers.

The correlation between traditional CWB and CWB-O was significantly different and higher from telework CWB and CWB-O for the agreeableness variable and honesty in the overall construct. This negative relationship between agreeableness and suggests that as

employee levels of agreeableness decrease, their engagement in CWBs increases. Therefore, highly agreeable employees would be less likely to engage in CWBs. A potential explanation for why this relationship is significantly different between traditional and telework is that within a traditional setting there are increased in-person interactions with an individual's superiors and their co-workers. Having higher levels of agreeableness is seen as a greater necessity with more frequent interactions such as the case in the traditional environment. Additionally, engaging in work through a screen could provide some psychological safety where people do not feel the need to be as agreeable with others. Finally, the negative correlation of CWB and honesty suggests that as honesty decreases, then CWBs would increase more in a telework setting. This makes sense again due to the lack of supervision that teleworkers experience.

Incremental Validity and Criterion Related Validity

When developing a new measure, it is necessary to see if the new measure is predictive above and beyond what existed previously. The aim of this step was to answer Hypothesis 13 and 14 that explores whether the generated telework items are predictive above and beyond that of traditional scale items. While this is explored in the current study, a potential limitation might be the way the scale items were presented to the participants. Given that many workers spend their time in a hybrid work arrangement (i.e. partially working from home and partially working remotely) the interpretation of items might have produced some confusion for participants. For example, the item “Taken property from work without permission”, is seemingly impossible for a remote worker to engage in given the nature of remote work, yet full time remote workers were still endorsing this item. Having participants respond to the traditional items under the direction to respond to the items while thinking about remote work only might produce different results

given that some of the items would not be applicable for these remote workers, so they would likely not be endorsed under different directions.

Even given this potential limitation, incremental validity was still explored. To test for incremental validity, hierarchical linear regression was used. Using our sample, and the measured criteria of job satisfaction and turnover intentions, a regression was run to determine the predictive power of the T-OCB and T-CWB scale. This was done by controlling for the traditional OCB and CWB scales by placing them in the first block, followed by the T-OCB and T-CWB items in the next block and regressing these onto the different constructs explored within this study.

The developed telework scales demonstrated incremental validity over the traditional measures when predicting the outcome of job satisfaction. The output for the regression is presented in Table 3 provides support for Hypothesis 13. The developed telework scales did not demonstrate incremental validity over the traditional measures when predicting the outcome of turnover intentions. The output for the regression is presented in Table 4.

Table 5. Hierarchical regression testing the incremental validity of the telework measures above and beyond the traditional measures when predicting job satisfaction.

Job Satisfaction	B	95% CI for B		SE B	Standardized B	R^2	Delta R^2
		LL	UL				
Step 1							
Constant	2.679	2.177	3.182	.255		.166	**.166*** **
OCB	.287	.187	.387	.051	.361***		
CWB	-.179	-.32	-.038	.072	-.161*		
Step 2							
Constant	2.679	2.177	3.182	.255		0.212	**0.05***
OCB	.182	.064	.300	.060	.229**		
CWB	-.220	-.419	-.021	.101	-.197*		
T-OCB	.171	.069	.274	.052	.254***		

T-CWB	-.009	-.185	.186	.089	-.010

*p<.05, **p<.01, ***p<.001

Table 6. Hierarchical regression testing the incremental validity of the telework measures above and beyond the traditional measures when predicting turnover intentions.

Turnover Intention	B	95% CI for B		SE B	Standardized B	R^2	Delta R^2
		LL	UL				
Step 1							
Constant	3.241	2.475	4.007	.388		.077	**.077*** **
OCB	-.342	-.531	-.153	.096	-.24***		
CWB	.298	.083	.513	.109	.184**		
Step 2							
Constant	3.257	2.473	4.041			.083	.006
OCB	-.275	-.495	-.055	.112	-.193**		
CWB	.229	-.086	.545	.160	.141		
T-OCB	-.089	-.242	.064	.078	-.091		
T-CWB	.086	-.182	.355	.136	.064		

*p<.05, **p<.01, ***p<.001

General Discussion

The goal of the current study was to rigorously investigate potential new manifestations of organizational citizenship behavior and counterproductive work behavior that may emerge in the growing landscape of telework. As flexible and remote work arrangements become more prevalent across industries, researchers must adapt existing behavioral measures and frameworks to accurately capture the experiences of the modern distributed workforce.

Through a process of scale development guided by theory and previous scale development research, I generated an extensive pool of items through interviews with actual teleworkers to explore how these behavioral manifestations have changed or are similar to the behaviors that exist in a traditional setting. Using confirmatory factor analyses, the factor

structure was validated across multiple samples. It was determined that a 2-factor solution for T-CWB and 4-factor solution for T-OCB presented the best fit indices. Relationships with conceptually related constructs were examined to evaluate nomological validity and contextualize the new measurements within the broader literature. For example, this study uncovered that boredom has a significant relationship with T-CWB-O but not a significant relationship with T-CWB-I which provides some insights into who is the target of these behaviors of bored employees. Correlations with similar and different constructs provided evidence of convergent and discriminant validity. For example, there were high correlations between T-OCB and the traditional OCB scales as well as the T-CWB and traditional CWB scales which provides evidence that while the scales have different items, they are assessing the same overall construct. Additionally, both T-OCB and T-CWB demonstrated correlations of .12 with the traditional CWB and OCB scales respectively which provides strong evidence for discriminant validity. Finally, the newly developed measurements demonstrated incremental predictive capacities above and beyond existing scales in the explanation of a meaningful real-world outcome, that is job satisfaction, beginning to confirm its usefulness in these virtual environments.

Practical Implications

The current scale provides new insights into measuring OCB and CWB in telework settings. Future research aiming to assess these behaviors among teleworkers should consider using this developed scale, as it better captures manifestations unique to remote work. Additionally, organizations evaluating teleworker conduct should adopt this scale, as it may furnish richer insights than traditional measures. Given that this scale was designed specifically from behaviors that were generated from teleworkers, it seems to address the applicability

concerns that have been discussed and provide a measure that can assess these important constructs.

Limitations and Future Research

While having several strengths, this study has some limitations. First, the sample included teleworkers spanning diverse remote hour ranges per week. Participants' experiences varied, which could have potentially influenced responses. While the mean number of hours teleworked fell in the “high intensity” range as defined by Gajendren and Harrison (2007), this might still be a limitation when you consider all the participants in this study. Future research could examine different telework frequency levels using similar analytical approaches.

Additionally, with some organizations returning onsite, teleworks shifting nature raises applicability concerns regarding hybrid remote/onsite employees. Potentially, combining telework and traditional scales, with prompts for employees to respond considering their respective locations, may resolve this. This might involve future research including additional scale items to address both of these working modalities. While more items might not be attractive for researchers or organizations, it ultimately might be necessary when considering how to measure these behaviors. Future research should explore ideal solutions for evaluating hybrid employee conduct across environments.

Finally, as telework continues to become an increasingly popular working modality and organizations continue to shift, the nature of some of these items might need to be reassessed in the future to account for applicability concerns. As was done in this study, the measure from Holland and colleagues (2016) that presented a T-CWB scale presented items that could potentially not be representative of the current teleworker. As we continue the trend of telework

and new jobs and organizations are able to adopt this modality, new behaviors might present themself. For this reason, revisiting the applicability of this scale might be necessary.

Conclusion

Telework is a working arrangement that gained immense popularity during the COVID-19 pandemic and has remained a popular work modality. While research has explored teleworkers to some extent, I argue that these studies might need to be revisited to account for applicability concerns as a greater number of individuals in diverse occupations have been working from home. The current study developed and provided validation for a telework scale that examined organizational citizenship behaviors and counterproductive work behaviors, both important components of job performance (Dalal, 2005), with a focus on teleworkers. Items were developed from the ground up to fully understand the behavioral manifestations that have presented themselves for teleworkers. Overall, this study provides a scale that can be used to measure OCBs and CWBs for teleworkers. More research is needed to aid in understanding how these scales should be used for hybrid workers to best understand these important aspects of job performance.

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Appendix A: SME Interview Template

You have been invited to an interview based on your experience in a telework setting. We define telework as a "work flexibility arrangement under which an employee performs the duties and responsibilities of such employee's position, and other authorized activities, from an approved worksite other than the location from which the employee would otherwise work" (U.S. Office of Personnel Management, 2021).

I am going to present you with the definition of four different behaviors. Please think about these behaviors and then discuss different actions you have done, witnessed, or you think have the possibility of occurring in a telework setting.

Telework-OCB-O (T-OCB-O) includes any intentional behaviors expressed through virtual work methods with the aim of having a positive effect on the functioning of the organization. **Please think about this definition and discuss some of the behaviors you have committed, witnessed, or think have the possibility to occur in a telework setting:**

_____

_____

_____

Telework-OCB-I (T-OCB-I) includes any intentional behaviors expressed through virtual work methods with the aim of having a positive effect on an individual(s) within the organization. **Please think about this definition and discuss some of the behaviors you have committed, witnessed, or think have the possibility to occur in a telework setting:**

_____

_____

_____

Telework-CWB-O (T-CWB-O) includes any intentional behaviors expressed through virtual work methods with the aim of having a negative effect on the functioning of the organization. **Please think about this definition and discuss some of the behaviors you have committed, witnessed, or think have the possibility to occur in a telework setting:**

_____

_____

_____

Telework-CWB-I (T-CWB-I) includes any intentional behaviors expressed through virtual work methods with the aim of having a negative effect on an individual(s) within the organization. **Please think about this definition and discuss some of the behaviors you have committed, witnessed, or think have the possibility to occur in a telework setting:**

_____

_____

_____

Appendix B: Telework OCB Initial Items

T-OCB-I

1. Volunteer to virtually assist a coworker with their tasks/projects by taking on additional virtual work.
2. Champion coworker's accomplishments and achievements using LinkedIn, Teams, or other virtual software.
3. Voluntarily attends and participates in virtual work events (such as virtual happy hours, parties, etc.).
4. Aware and cognizant of time zones of team members (such as scheduling meetings during acceptable times).
5. Virtually met with coworkers upon request outside of working hours to discuss projects and tasks.
6. Send a coworker a gift for their assistance/involvement on a virtual task (such as sending them a gift card for lunch).
7. Teaching and encouraging coworkers how to schedule meetings using a virtual calendar.
8. Send praise to a coworker through an email or other virtual message.
9. Help a coworker resolve technical issues relating to their virtual work (such as invalid log-in information, virtual meeting assistance, etc.).
10. Use a virtual praise system (such as virtual thumbs up/positive emoticons during virtual meetings).
11. Initiate ice-breaking behaviors (e.g., small talk and introductions) when meeting with coworkers/stakeholders in virtual meetings.
12. Spend extra time helping a coworker prepare/edit/rehearse a virtual presentation.
13. Assist a coworker in crafting a difficult and/or important electronic message to a customer, client, coworker, or supervisor.
14. Check in with coworkers to see how they are doing via Teams, Slack, email, etc.
15. Volunteer to host an informal check-in with coworkers such as virtual lunch or snack hours.
16. Help coworkers find links to group meetings.
17. Change virtual work hours to accommodate the needs of a coworker even when it is an inconvenience.
18. Offer to help new coworkers get oriented on virtual meetings.
19. Attend optional virtual check-in meetings.

T-OCB-O

1. Volunteered to join virtual meetings before/after scheduled working hours.
2. Championed organizational/team/department accomplishments and achievements using LinkedIn, Teams, or other virtual software.
3. Followed virtual meeting organizational norms (such as dress code and microphone status).
4. Followed virtual meeting technological norms (such as microphone status, camera status, and other etiquette).
5. Frequently uses virtual calendar/planner to plan meetings.
6. Willing to volunteer to virtually work extra hours to get tasks done.

7. Voluntarily worked virtually or attended meetings while traveling or on vacation.
8. Frequently participates during virtual meetings.
9. Participate in optional training for virtual work.
10. Volunteer to take notes during virtual meetings and relay notes to team members.
11. Volunteer to coordinate team members' time availability via email or other tools such as using polls to schedule virtual meetings.
12. Volunteer to lead a virtual discussion on how to use technology for virtual work.
13. Advocate for virtual/remote work options.
14. Praise the organization for their virtual work options on LinkedIn, Teams, etc.
15. Offer advice to the organization on how to better work remotely.
16. Proactive in reminding others about virtual meetings.
17. Made organizations aware of resources they need to effectively work remotely (laptops, cameras, headsets, etc.)
18. Frequently updates supervisors and team members on progress of virtual work.
19. Use personal (not the organizations) office supplies (like laptops, pens, ink, etc.) for doing virtual work.
20. Posting your telework schedule on a publicly available calendar so coworkers know when you are available.

Appendix C: Telework CWB Initial Items

T-CWB-I

1. Intentionally excluded coworkers on virtual meetings/projects/emails when they should have been included.
2. Send a rude message to a coworker through virtual chat software (such as email or chat integration).
3. Discretely discussed work colleagues in a negative manner while attending a virtual meeting (such as using a meeting chat or text function to privately message others).
4. Intentionally ignored emails or virtual meeting invites from superiors/coworkers.
5. Intentionally talk over a coworker while in a virtual meeting.
6. Speak negatively about a coworker/supervisor through a virtual chat (such as email, text, chat integration, etc.)
7. Express negative body language (such as rolling one's eyes) while on camera during a virtual meeting.
8. Attend a virtual meeting while others (spouse, children, strangers, etc.) could overhear or see sensitive information of clients or the company.
9. Share private work-related virtual conversations without permission.
10. State you could not attend a virtual meeting with a coworker or supervisor when you actually could attend.
11. Intentionally single out a coworker in a virtual meeting to criticize/hurt them.
12. Change someone else's work on a shared document without permission.
13. Have angry outbursts or use abusive language in virtual meetings.
14. Send a threatening message to someone at work.
15. Making fun of someone or making judgements based on their virtual meeting background (for things such as cleanliness, location, etc.).
16. Make fun of someone based on their technology or supplies (like poor camera quality, microphone quality, slow internet).
17. Forwarded an email or other virtual communication of a harmful rumor about someone at work.
18. Contribute less than your fair share on collaborative virtual documents.
19. Take screenshots or photos of coworkers while in a virtual meeting without their permission.

T-CWB-O

20. Falsify virtual working hours (such as clocking in and not starting work, or not clocking out and stopping work).
21. Falsely claimed technical difficulties to avoid completing work or attending meetings (falsified technical difficulties such as internet or connection issues).
22. Fake technical difficulties to avoid participating in virtual meetings or discussions (such as camera or microphone issues).
23. Spend time on unrelated work while in a virtual meeting or while clocked in (like sending unrelated emails or working on unrelated projects during a meeting).
24. Spend time on unrelated personal items (such as texting or answering personal emails) while attending a virtual meeting.
25. Consume alcohol or other substances during virtual working hours.

26. Play games on the phone/computer/ other hardware during virtual meetings or during scheduled working hours.
27. Overreport how long virtual tasks took to complete.
28. Partake in illicit activities while working virtually (such as visiting explicit websites, consuming illegal drugs, etc.).
29. Spending time working on a separate job while clocked in for a different job (such as doing work for two separate companies simultaneously)
30. Spend time working on household chores not during a break (such as doing laundry, dishes, etc.) while clocked in.
31. Discretely discussed non-work-related topics while attending a virtual meeting (such as using a meeting chat or text function to privately message individuals about hobbies or unrelated events).
32. Frequently deviates from virtual meeting organizational norms (such as not following dress code).
33. Frequently deviates from virtual meeting technological norms (such as microphone status, camera status, and other etiquette).
34. Use a program or other tools to appear online/active (such as an auto-clicker, periodically moving cursor or clicking keys, downloading a program).
35. Infrequently attends required virtual work events (such as happy hours, parties, etc.).
36. Infrequently engaged in virtual meetings.
37. Lie about availability for a virtual meeting.
38. Took extended and unapproved breaks while remaining "active" online.
39. Attending virtual meetings while distracted (such as attending while driving).
40. Use virtual work devices or software for unapproved personal use (such as phones, computers, tablets, etc.).
41. Intentionally use an insensitive or obscene background while participating in a virtual meeting.
42. Work from unapproved locations (e.g., coffee shop/vacation/other public spaces using public or unprotected Wi-Fi).
43. Habitually late or absent from virtual meetings/virtual communication.
44. Use an obscene or offensive screen name when attending virtual meetings.
45. Resources are damaged when returned or not returned to the organization (assuming telework resources have been distributed to employees by an organization).
46. Purposefully doing less virtual work than you know you could because of a lack of direct supervision.

Appendix D: Coefficient of Substantive Validity (CSV) Values

Item	CSV
Volunteer to virtually assist a coworker with their tasks/projects by taking on additional virtual work.	0.30
Send a coworker a gift for their assistance/involvement on a virtual task (such as sending them a gift card for lunch).	0.77
Teaching and encouraging coworkers how to schedule meetings using a virtual calendar.	0.30
Send praise to a coworker through an email or other virtual message.	0.63
Help a coworker resolve technical issues relating to their virtual work (such as invalid log-in information, virtual meeting assistance, etc.).	0.37
Spend extra time helping a coworker prepare/edit/rehearse a virtual presentation.	0.70
Assist a coworker in crafting a difficult and/or important electronic message to a customer, client, coworker, or supervisor.	0.73
Help coworkers find links to group meetings.	0.37
Change virtual work hours to accommodate the needs of a coworker even when it is an inconvenience.	0.33
Offer to help new coworkers get oriented on virtual meetings.	0.33
Attend optional virtual check-in meetings.	0.43
Championed organizational/team/department accomplishments and achievements using LinkedIn, Teams, or other virtual software.	0.43
Followed virtual meeting organizational norms (such as dress code and microphone status).	0.50
Followed virtual meeting technological norms (such as microphone status, camera status, and other etiquette).	0.37
Frequently uses virtual calendar/planner to plan meetings.	0.67
Willing to volunteer to virtually work extra hours to get tasks done.	0.40
Voluntarily worked virtually or attended meetings while traveling or on vacation.	0.27
Frequently participates during virtual meetings.	0.27
Participate in optional training for virtual work.	0.33

Volunteer to take notes during virtual meetings and relay notes to team members.	0.30
Volunteer to coordinate team members' time availability via email or other tools such as using polls to schedule virtual meetings.	0.33
Volunteer to lead a virtual discussion on how to use technology for virtual work.	0.40
Advocate for virtual/remote work options.	0.57
Praise the organization for their virtual work options on LinkedIn, Teams, etc.	0.50
Offer advice to the organization on how to better work remotely.	0.73
Proactive in reminding others about virtual meetings.	0.43
Made organizations aware of resources they need to effectively work remotely (laptops, cameras, headsets, etc.)	0.63
Frequently updates supervisors and team members on progress of virtual work.	0.37
Posting your telework schedule on a publicly available calendar so coworkers know when you are available.	0.47
Intentionally excluded coworkers on virtual meetings/projects/emails when they should have been included.	0.33
Send a rude message to a coworker through virtual chat software (such as email or chat integration).	0.77
Discretely discussed work colleagues in a negative manner while attending a virtual meeting (such as using a meeting chat or text function to privately message others).	0.43
Intentionally talk over a coworker while in a virtual meeting.	0.77
Speak negatively about a coworker/supervisor through a virtual chat (such as email, text, chat integration, etc.)	0.73
Express negative body language (such as rolling one's eyes) while on camera during a virtual meeting.	0.30
Attend a virtual meeting while others (spouse, children, strangers, etc.) could overhear or see sensitive information of clients or the company.	-0.43
Intentionally single out a coworker in a virtual meeting to criticize/hurt them.	0.87
Send a threatening message to someone at work.	0.70
Making fun of someone or making judgements based on their virtual meeting background (for things such as cleanliness, location, etc.).	0.70
Make fun of someone based on their technology or supplies (like poor camera quality, microphone quality, slow internet).	0.73

Forwarded an email or other virtual communication of a harmful rumor about someone at work.	0.67
Take screenshots or photos of coworkers while in a virtual meeting without their permission.	0.37
Falsify virtual working hours (such as clocking in and not starting work, or not clocking out and stopping work).	0.47
Falsely claimed technical difficulties to avoid completing work or attending meetings (falsified technical difficulties such as internet or connection issues).	0.40
Fake technical difficulties to avoid participating in virtual meetings or discussions (such as camera or microphone issues).	0.43
Spend time on unrelated work while in a virtual meeting or while clocked in (like sending unrelated emails or working on unrelated projects during a meeting).	0.50
Overreport how long virtual tasks took to complete.	0.53
Partake in illicit activities while working virtually (such as visiting explicit websites, consuming illegal drugs, etc.).	0.33
Spending time working on a separate job while clocked in for a different job (such as doing work for two separate companies simultaneously)	0.50
Spend time working on household chores not during a break (such as doing laundry, dishes, etc.) while clocked in.	0.27
Frequently deviates from virtual meeting technological norms (such as microphone status, camera status, and other etiquette).	0.33
Infrequently engaged in virtual meetings.	0.37
Lie about availability for a virtual meeting.	0.23
Took extended and unapproved breaks while remaining “active” online.	0.30
Use virtual work devices or software for unapproved personal use (such as phones, computers, tablets, etc.).	0.43
Work from unapproved locations (e.g., coffee shop/vacation/other public spaces using public or unprotected Wi-Fi).	0.30
Habitually late or absent from virtual meetings/virtual communication.	0.30
Resources are damaged when returned or not returned to the organization (assuming telework resources have been distributed to employees by an organization).	0.70
Purposefully doing less virtual work than you know you could because of a lack of direct supervision.	0.40

Appendix E: Correlation Table

	Mean	SD	1	2	3	4	5	6
1. Openness	3.58	0.61	0.81					
2. Conscientiousness	3.70	0.56	0.258**	0.80				
3. Extraversion	2.94	0.57	0.051	0.299**	0.72			
4. Agreeableness	3.32	0.65	0.214**	0.228**	0.297**	0.83		
5. Neuroticism	3.14	0.55	0.026	-0.131	-0.105	-0.011	0.71	
6. Honesty	3.39	0.54	0.215**	0.349**	0.078	0.365**	-0.129	0.66
7. Turnover Intentions	2.44	1.18	0.062	-0.165*	-0.279**	-0.142*	0.07	-0.072
8. Job Satisfaction	3.56	0.81	0.054	0.27**	0.527**	0.348**	-0.041	0.09
9. Perceived Benefits of Unethical Behavior	1.59	0.65	-0.153*	-0.351**	-0.112	-0.234**	-0.082	-0.423**
10. Boredom	3.33	1.15	-0.097	-0.357**	-0.482**	-0.226**	0.178*	-0.157*
11. Tele-OCB	3.57	1.20	0.103	0.139*	0.283**	0.144*	0.003	-0.113
12. Tele-OCB-O	3.81	1.22	0.096	0.163*	0.24**	0.12	0.012	-0.082
13. Tele-OCB-S	3.04	1.29	0.056	-0.005	0.22**	0.114	0.032	-0.145*
14. Tele-OCB-CV	3.24	1.54	0.056	0.108	0.226**	0.049	-0.038	-0.127
15. Tele-OCB-C	4.98	1.48	0.123	0.267**	0.163*	0.148*	0.047	0.048
16. Tele-OCB-I	3.24	1.33	0.102	0.092	0.307**	0.158*	-0.007	-0.141*
17. Tele-CWB	1.86	0.87	-0.192**	-0.416**	-0.125	-0.162*	-0.03	-0.423**
18. Tele-CWB-O	2.68	1.56	-0.119	-0.325**	-0.241**	-0.124	0	-0.356**
19. Tele-CWB-I	1.34	0.75	-0.204**	-0.349**	0.103	-0.115	-0.078	-0.291**
20. Trad-OCB	4.1	1.02	0.143*	0.361**	0.234**	0.167*	-0.129	0.158*
21. Trad-OCB-O	4.78	1.41	0.068	0.305**	-0.005	0.056	-0.077	0.246**
22. Trad-OCB-I	3.62	1.20	0.153*	0.271**	0.347**	0.198**	-0.126	0.026
23. Trad-CWB	1.67	0.73	-0.147*	-0.389**	-0.187**	-0.28**	-0.07	-0.32**
24. Trad-CWB-O	1.88	0.88	-0.111	-0.384**	-0.271**	-0.266**	-0.025	-0.327**
25. Trad-CWB-I	1.31	0.68	-0.182**	-0.273**	0.06	-0.218**	-0.148*	-0.2**

	7	8	9	10	11	12	13	14
1								
2								
3								
4								
5								
6								
7	0.92							
8	-0.643**	0.89						
9	0.089	-0.136*	0.77					
10	0.48**	-0.615**	0.222**	0.94				
11	-0.166*	0.342**	-0.03	-0.154*	*0.94*			
12	-0.156*	0.324**	-0.044	-0.137*	0.962**	0.88		
13	-0.162*	0.328**	0.023	-0.139*	0.769**	0.766**	0.71	
14	-0.129	0.238**	0.026	-0.105	0.88**	0.886**	0.573**	0.80
15	-0.115	0.272**	-0.147*	-0.108	0.766**	0.85**	0.476**	0.602**
16	-0.16*	0.328**	-0.011	-0.158*	0.937**	0.807**	0.687**	0.776**
17	0.124	-0.121	0.564***	0.313**	0.236**	0.204**	0.194**	0.256**
18	0.127	-0.167*	0.424**	0.405**	0.142*	0.152*	0.033	0.158*
19	0.055	-0.02	0.463**	0.075	0.233**	0.171*	0.3**	0.253**
20	-0.248**	0.375**	-0.196**	-0.255**	0.504**	0.465**	0.376**	0.389**
21	-0.147*	0.136	-0.202**	-0.125	0.093	0.101	0.074	0.033
22	-0.237**	0.434**	-0.117	-0.267**	0.659**	0.595**	0.486**	0.542**
23	0.145*	-0.192**	0.517**	0.347**	0.125	0.103	0.112	0.15*
24	0.167*	-0.255**	0.51**	0.429**	0.088	0.08	0.043	0.126
25	0.054	0.009	0.367**	0.053	0.173*	0.126	0.232**	0.159*

	15	16	17	18	19	20	21	22	23	24	25
1											
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5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15	0.85										
16	0.573**	0.91									
17	0.067	0.25**	*0.88*								
18	0.161*	0.112	0.823**	0.86							
19	-0.078	0.288**	0.736**	0.272**	0.90						
20	0.405**	0.497**	-0.125	-0.161*	-0.038	0.77					
21	0.146*	0.07	-0.245**	-0.242**	-0.137*	0.751**	0.66				
22	0.467**	0.668**	0.022	-0.034	0.06	0.831**	0.258**	0.82			
23	0.001	0.139*	0.722**	0.616**	0.52**	-0.087	-0.192**	0.034	0.89		
24	0.022	0.087	0.708**	0.717**	0.379**	-0.133	-0.216**	-0.013	0.959**	0.85	
25	-0.038	0.213**	0.522**	0.195**	0.669**	0.042	-0.077	0.127	0.774**	0.563**	0.88

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed