Situational Strength as a Lens to Understand the Strain Implications of Extra-Normative Work

Charles Calderwood1 · Rustin D. Meyer2 · Molly E. Minnen3

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Abstract
Employees must often perform work outside of the time and/or space requirements that typically define their job role (e.g., working after-hours, teleworking), especially during the COVID-19 pandemic. We introduce the concept of extra-normative work to capture this idea and draw on situational strength theory to test the seemingly paradoxical hypotheses that (1) the effects of extra-normative work are more harmful to employee strain when this work represents a stronger situation (i.e., one that unambiguously prescribes expected behavior), relative to when this work represents a weaker situation (i.e., one that allows for greater personal choice and behavioral latitude), but that (2) this strain is diminished when situational strength is achieved by maximizing the clarity and consistency of extra-normative work, while this strain is enhanced when situational strength is achieved by imposing greater constraints and consequences surrounding extra-normative work. These predictions were supported in an experimental vignette study, a survey focused on after-hours work experiences, and an investigation of telework in response to COVID-19. We discuss the theoretical implications of viewing extra-normative work through the lens of situational strength, while also outlining how our findings inform best practices surrounding how to communicate about and frame extra-normative work to employees.

Keywords Extra-normative work · Situational strength · Employee strain · Telework · COVID-19

While organizational life has long been recognized to be characterized by a variety of behavioral norms and expectations (Cooke & Rousseau, 1988) that influence the perceived scope of the typical job role, less is known about whether and how employees are affected by work that falls outside the norms and expectations of their job. We conceptualize this situation to be representative of a new construct that we refer to as extra-normative work, which reflects work arrangements wherein effort is required in ways, at times, and/or from locations that differ substantially from employees’ typical expectations. We further contend that the strain implications of extra-normative work depend largely on how this work is conveyed and perceived. Specifically, we frame these effects through the lens of situational strength. Situational strength reflects the idea that human social environments provide information about what behaviors should or should not be enacted. Environments that provide unambiguous information about prescribed behaviors (i.e., strong situations) encourage behavioral compliance, while environments where such information is absent and/or difficult to interpret (i.e., weak situations) leave people to their own devices to determine what to do (Mischel, 1977). Situational strength is a multi-faceted construct, encompassing perceptions of (1) consistency (compatibility of cues regarding job-related responsibilities across time and organizational levels), (2) clarity (the availability and

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Charles Calderwood
ccharl2@vt.edu
Rustin Meyer
rustin.meyer@psu.edu
Molly E. Minnen
mminnen@radford.edu

1 Department of Psychology, Virginia Tech, 109 Williams Hall, 890 Drillfield Drive, Blacksburg, VA 24061, USA
2 Department of Psychology, Penn State University, 141 Moore Building, University Park, PA 16802, USA
3 Department of Management, Radford University, P.O. Box 6954, Kyle Hall, Radford, VA 24141, USA
understandability of cues regarding job-related responsibilities), (3) consequences (the negative or positive implications of an employee’s decisions or actions), and (4) constraints (the limiting of an employee’s decision making by forces outside of their control) (Meyer et al., 2010). Our central contention is that this facet structure of situational strength is particularly critical to understanding the employee strain implications of extra-normative work. In other words, when considering that these arrangements by definition operate outside the boundaries of the typical norms that help to define and shape the scope of the work role, we argue that the situational strength of these extra-normative work arrangements and how that situational strength is achieved are key to the degree to which these arrangements influence employee strain.

We conducted three multi-modal studies (Highhouse, 2009) to test whether the situational strength of extra-normative work influences employee strain. We first used experimental vignettes (Study 1) to demonstrate that employees expect to exhibit more behavioral compliance and experience greater strain in stronger extra-normative work situations, compared to weaker extra-normative work situations. We then examined whether the four facets of situational strength have diverging implications for strain criteria in the extra-normative work context of working after-hours (e.g., nights, weekends, holidays; Study 2). Finally, we evaluated whether the situational strength of extra-normative work influences employee strain in workers who have abruptly and unexpectedly transitioned to teleworking in response to COVID-19 (Study 3). The participants in this latter study had rarely teleworked prior to the onset of the COVID-19 pandemic, such that their engagement in this telework was extra-normative relative to the scope of their typical work role. As teleworking was less common prior to the pandemic in comparison to during the pandemic, and when considering that working after-hours was arguably the most common type of extra-normative work prior to the pandemic, Study 2 provides an evidence-based comparison of the extra-normative work of working after-hours to the extra-normative work of teleworking during COVID-19 examined in Study 3.

We aim to make several contributions to the situational strength, work demand perceptions, and occupational health literatures. Conceptually, we synthesize numerous experiences reflecting working outside of the typical job role, such as supplemental work (Venkatesh & Vitalri, 1992), after-hours teleworking (Duxbury et al., 1992), and unplanned teleworking in response to COVID-19, under the umbrella extra-normative work construct. In terms of theoretical contributions, we advance situational strength as a unifying explanation for employee reactions to different manifestations of extra-normative work. Moreover, we argue that a facet-level perspective can resolve past empirical inconsistencies in documenting the strain implications of situational strength (Meyer et al., 2018; Steel et al., 2008). Specifically, we argue that clarity and consistency perceptions surrounding extra-normative work co-vary with lower strain and argue that consequence and constraint perceptions surrounding extra-normative work engender greater strain (i.e., anxiety surrounding the work role; perceptions of job stress; emotional exhaustion; McCarthy et al., 2016; Motowidlo et al., 1986; Wharton, 1993). Thus, one of our primary contributions is to test the notion that strain-based reactions are less a function of the extent to which one’s behavior is perceived as being influenced by external considerations and more a function of the extent to which these considerations are perceived by employees as either facilitating (i.e., clarity and consistency) or inhibiting (i.e., constraints and consequences) forces. Our unraveling of these contradictory influences of extra-normative situational strength yields practical implications for how extra-normative work expectations should be communicated to employees.

### Positioning the Construct Space of Extra-Normative Work

We position extra-normative work to represent an overarching class of experiences in which employees are called upon to apply effort to work in ways, at times, and/or from locations outside of their expectations surrounding their work role. While potentially related to organizational citizenship behavior (OCB), which reflects discretionary behavior that contributes to organizational functioning despite not being part of the formal organizational reward structure (Organ et al., 2006), extra-normative work is broader because it reflects the parameters of how, when, and why work is performed outside of the traditional work role scope, rather than what specific behaviors are enacted. In other words, while OCBs may be part of the criterion space of extra-normative work, extra-normative work reflects the conditions under which work is performed, rather than the occurrence of any specific contextual performance-relevant behavior or set of behaviors.

Furthermore, other work arrangements such as working overtime, telecommuting, and flexplace working (Thompson & Payne, 2015) could reflect extra-normative work, but only if these arrangements fall outside the traditional scope of a given work role. As one example, overtime is unlikely to represent extra-normative work in a work role in which employees frequently and regularly accrue overtime, while it likely does represent extra-normative work if the work role infrequently calls for overtime. In a similar manner, teleworking in response to COVID-19 likely constitutes extra-normative work if the job previously involved little to no teleworking, but is unlikely to constitute extra-normative work if the job previously included regular roles.
teleworking. Additionally, engagement in supplemental work (i.e., performing job-related responsibilities at home; Venkatesh and Vitalri, 1992) or technology-assisted supplemental work (i.e., using information and communication technologies to complete job tasks at home; Fenner & Renn, 2010) could reflect extra-normative work, but only if this work is outside the scope of the typical work role. Accordingly, extra-normative work is primarily defined by whether the work arrangement in question is or is not outside of the traditional work role scope, rather than by any objective characteristics of the work arrangement in question.

Extra-normative work is also distinct from key constructs within the role stressor literature, such as role conflict (i.e., competing demands from two or more work roles) and role ambiguity (i.e., unclear behaviors or expectations that define a work role) (Kahn et al., 1964). Regarding the former, role conflict is conceptualized to result from incompatible demands between work roles that are difficult to meet simultaneously (House & Rizzo, 1972). In contrast, extra-normative work is not by definition incompatible with meeting the demands of any core work role or multiple work roles, but instead defined by whether the work being done is outside of the typical work role. In terms of the latter, role ambiguity reflects a lack of clarity in the scope and expectations of the work role (Van Sell et al., 1981). In contrast, from a theoretical perspective, extra-normative work depends on the existence of at least some minimal definition of the typical work role and corresponding norms that govern the work role. Thus, while high levels of role ambiguity may certainly undermine clarity of what the norms guiding a work role are (Judeh, 2011), this role stressor is conceptually distinct from extra-normative work.

In addition, extra-normative work is conceptualized to be distinct from several constructs within the work/nonwork boundary management literature (Ashforth et al., 2000; Matthews et al., 2010). Of particular note, segmentation preferences (i.e., the degree to which employees desire to keep work segmented from home life; Kreiner, 2006) and collective work group norms that influence experienced work/non-work segmentation (Yang et al., 2019) may both shape perceptions of the typical work role. However, departures from these norms would still constitute extra-normative work. For example, even individuals with strong segmentation preferences working in work groups with strong segmentation norms may have had to abruptly violate these preferences and norms when moving to teleworking in the early days of the COVID-19 pandemic. Thus, this teleworking situation would reflect an extra-normative work arrangement, and would remain so until norms shifted to accommodate enduring changes to work induced by the pandemic and a corresponding adaptation in what reflects normative behavior (Miller & Prentice, 2016). Thus, while a variety of individual, interpersonal, and organizational factors may shape the work norms that influence employee behavior, there still can be a variety of extra-normative work arrangements that employees engage in that fall outside the scope of these typical norms.¹

### Theoretical Background

Situational strength theory posits that situations that provide more information about expected behaviors (i.e., stronger situations) yield greater compliance with the prescribed behavior pattern, relative to weaker situations (Meyer et al., 2010; Mischel, 1977). Applications of this theory to job-related phenomenon have demonstrated that situational strength is comprised of the multiple facets of consistency, clarity, consequences, and constraints, which reflect unique but complementary inputs to the situational strength of work-relevant situations (Meyer et al., 2010). These facets of situational strength are theorized to be generalizable across a range of different work-relevant contexts (Meyer et al., 2014), which would be expected to include extra-normative work given the broad applicability of situational strength to job-related phenomenon. Crucially, while there have been numerous and varied perspectives that emphasize the nature and structure of situations across a variety of literatures (Johns, 2006; Parrigon et al., 2017; Rauthmann et al., 2015), situational strength is the only perspective that focuses exclusively on the ways in which human behavior is externally influenced by broad situational characteristics. Consequently, we contend that this theory can best account for the range of work arrangements that could represent extra-normative work across different industries, occupations, and employment contexts.

¹ While we did not include an exhaustive set of measures of all constructs discussed in this section in the data collections which are subsequently reported, we did include measures of OCBs directed towards individuals and organizations (Williams & Anderson, 1991) and boundary-spanning work demands (which are likely at least partially relevant to engagement in technology-assisted supplemental work; Voydanoff, 2005) in Studies 2 and 3, and also included a measure of segmentation preferences (Kreiner, 2006) in Study 3. These indicators were at most modestly correlated with facets reflecting extra-normative situational strength across both studies ($r = \sim .35$ to $\sim .31$), which bolsters the contention that extra-normative work can be distinguished from several of these existing constructs in the literature.
Applying Situational Strength Theory to Extra-Normative Work

The central prediction of situational strength theory is that strong situations lead employees to perform the behaviors dictated by the situation (Meyer et al., 2010, 2014; Mischel, 1977). Consistent with this view, higher levels of each of the four facets of situational strength are argued to increase prescribed job-related behavior patterns, a prediction supported by meta-analytic (Bowling et al., 2015; Meyer et al., 2009) and primary study research (Meyer et al., 2014). Specifically, this research generally demonstrates that the criterion-oriented validity of relevant individual differences is attenuated in stronger work environments, thereby suggesting that the behavioral influence of strong situations is overriding employees’ default tendencies. Unfortunately, however, existing meta-analytic research only examines two theorized facets of situational strength and primary studies (which test all four facets) tend to largely focus on performance-relevant criteria. Thus, the effects of the four facets on strain-based outcomes are unknown.

Although it may be tempting to conclude that extra-normative work is, by definition, less likely to occur in strong situations where norms, expectations, and contingencies are relatively more established, it is important to point out that both situational strength and extra-normative work are generally enacted in a top-down fashion (i.e., from supervisors – Alaybek et al., 2017), so the same forces that set the terms and conditions of situational strength (e.g., supervisors who set schedules and reward structures) also have the power to change those arrangements (e.g., through requests for extra-normative work). Accordingly, it does not necessarily follow that extra-normative work is precluded or even less likely in jobs and work environments characterized by higher levels of situational strength.

This theorizing and empirical evidence from the situational strength literature forms the basis for two interconnected predictions. First, just as employees can perceive the situational strength of their job at a more general level (Meyer et al., 2014), they can distinguish between weaker and stronger extra-normative work situations. Second, applying the core proposition that stronger situations yield prescribed behaviors to the extra-normative work context, it follows that employees who perceive extra-normative work to represent a stronger situation would be more likely to exhibit extra-normative work demand compliance (i.e., perform the behaviors necessary to meet extra-normative work demands). We note that, given that all four facets of situational strength are expected to increase prescribed behavior patterns, we do not expect diverging implications of different facets of situational strength for extra-normative work demand compliance. Thus, we expect that:

Hypothesis 1: Employees can distinguish between weak and strong extra-normative work situations.

Hypothesis 2: Aggregate extra-normative situational strength is positively associated with extra-normative work demand compliance.

However, while all four facets of situational strength (clarity, consistency, constraints, and consequences) are expected to influence extra-normative work demand compliance in the same direction (i.e., increasing it), the theoretical picture becomes substantially murkier when considering strain criteria. At the broadest level, situational strength has been suggested to engender strain because it encourages people to engage in behaviors that they otherwise might not (Meyer et al., 2010, 2018; Shoda et al., 1994). However, the few empirical investigations that are directly relevant to this prediction have yielded inconsistent results (see Steel et al., 2008, for a review). We contend that these inconsistent results can be resolved by considering the potentially diverging implications of different facets of extra-normative work situational strength for strain. More specifically, we argue below that it should be expected that consistency and clarity facets of extra-normative work situational strength will associate with lower strain, while consequences and constraint facets will co-vary with the higher strain predicted by broader situational strength theorizing.

Regarding consistency and clarity, both of these facets provide employees with a more accurate view of what behaviors are expected of them, which should clarify the work role and reduce the ambiguity surrounding extra-normative work. Greater clarity surrounding the work role is widely recognized to have a salutary influence on strain criteria (Bliese & Castro, 2000; Lang et al., 2007), while conversely ambiguity surrounding the work role is one of the most widely supported contributors to higher levels of employee strain (Schmidt et al., 2014). These associations have typically been explained through the lens of role theory (Kahn et al., 1964), which posits that when a set of expectations relevant to the job (i.e., a role) is ambiguously defined, this ambiguity yields downstream strain reactions that undermine health, well-being, and performance (Beehr, 1976; Tubre & Collins, 2000; Van Sell et al., 1981). Therefore, while driving greater situational strength of extra-normative work, it is plausible that both consistency and clarity reduce, rather than increase, resultant strain because they present understandable and available cues that allow employees to better know the scope and expectations of this extra-normative work. Synthesizing these lines of theoretical and empirical evidence, we would thus expect that consistency (i.e., compatibility of available cues) and clarity (i.e., availability and understandability of these cues) of extra-normative work will co-vary with lower levels of employee strain.

In contrast, we anticipate that consequences and constraints underlying extra-normative work will engender
the theorized elevation of strain posited within broader situational strength theory (Meyer et al., 2010; Shoda et al., 1994). Work-related consequences are thought to be a major influence on anxiety surrounding the work role, which empirical evidence suggests is directly relevant to employee strain criteria (Calderwood et al., 2018; McCarthy et al., 2016). Constraints, by definition, undermine autonomy and the ability to make decisions about how extra-normative work should be carried out, both of which are seen as crucial to strain mitigation and well-being promotion in numerous frameworks, such as the Job Demands – Control Model (Karasek, 1979) and Self-Determination Theory (Ryan & Deci, 2017). This view aligns with past arguments built on situational strength theory, in which the undermining of perceived autonomy and the freedom to have greater agency over one’s own behavior is argued to be strain-inducing (Meyer et al., 2010, 2018; Shoda et al., 1994). Thus, to summarize our expectations surrounding how different facets of situational strength surrounding extra-normative work will relate to strain criteria, we predict that:

Hypothesis 3: Aggregate extra-normative situational strength is positively associated with employee strain. Hypothesis 4: Extra-normative (a) consistency and (b) clarity are negatively associated with employee strain. Hypothesis 5: Extra-normative (a) consequences and (b) constraints are positively associated with employee strain.

Selection of Strain Criteria

To provide an initial demonstration that situational strength surrounding extra-normative work is relevant to strain criteria, we examined several different strain criteria across the three studies reported subsequently. In Study 1 (an experimental vignette study), we elected to evaluate how extra-normative work situations varying in situational strength would influence emotional exhaustion and anxiety. We selected these strain criteria because they are viewed as widespread in organizations, have consistently been established as contributors to employee health, wellness, and performance (Bakker & Demerouti, 2017; McCarthy et al., 2016), and could be adapted to a vignette context (i.e., predicted emotional exhaustion and anxiety when facing a given situation). In Studies 2 and 3 (survey-based studies focused on the extra-normative work contexts of working after-hours and abruptly teleworking in response to COVID-19, respectively), we again evaluated emotional exhaustion, but also investigated work anxiety (nervousness and apprehension surrounding the completion of job tasks; McCarthy et al., 2016) to provide a closer conceptualization of our anxiety indicator with the employment context, relative to our approach in Study 1. We also added a measure of perceived job stress in Studies 2 and 3, as this more global perception of the stressfulness of one’s job has long been recognized to be relevant to a wide range of strain criteria in occupational contexts (e.g., Blau, 1981; Eden, 1990; Motowidlo et al., 1986).

Study 1

Sample

Participants working at least 32 h per week were recruited via Prolific Academic for a within-subjects experimental vignette study. Prolific Academic (https://www.prolific.co/) is a research-oriented crowdsourcing platform that allows researchers to target study advertisements to interested participants that meet inclusion criteria. Prolific demonstrates distinct advantages over other crowdsourcing platforms in terms of participant management, data quality, and multi-wave study capabilities (Palan & Schitter, 2020). A total of 311 participants provided informed consent, viewed a series of three vignettes, and completed an online survey to gauge their anticipated behaviors and reactions in response to these vignettes. Participants were screened out for (1) failing an attention check item (e.g., “Please select ‘Moderately Agree’ for this item”; n = 25), (2) suspicions of careless responding (i.e., survey response times equal to less than one second per item; Huang et al., 2012; n = 29), or (3) not reporting at least a high English language proficiency (n = 14). The final sample consisted of 243 participants (N = 243). The sample was fairly evenly split between males (50.2%) and females (48.6%). The majority of participants were White (87.7%), while the remainder of the sample were largely Asian (5.3%), Hispanic/Latinx (4.1%), or Black/African American (2.5%). Participants were roughly 36 years old (M = 36.26, SD = 9.76), had worked in their current job for 4.55 years (SD = 3.89), and worked 41.38 h per week (SD = 5.25) on average.

Procedure

After reading a study description and providing informed consent, participants were presented with a randomized series of three work situations and asked to describe how they would behave and feel in each situation (see Table 1). Vignettes were written to reflect extra-normative work and were experimentally manipulated to be weaker or stronger by altering contextual information pertaining to the four facets of situational strength. Participants were randomly assigned to see a Weak or Strong manipulation for each vignette and the order that the vignettes were presented to participants was randomized. The stem of the extra-normative work situation was identical across these two conditions for each
Table 1  Experimental extra-normative work vignettes

| Vignette stem | Weak situation | Strong situation | Response options |
|---------------|----------------|------------------|------------------|
| **Meeting spillover**  
Imagine that you are attending a meeting at work to plan an upcoming event. You have been brainstorming and discussing ideas about the event with a 6-member team of your coworkers. There is still work to be done, even though your workday should have ended 15 min ago. Your preference would be to leave work now, because the work day has technically ended. |  
- None of your coworkers specifically ask you to stay at the meeting longer (clarity)  
- Three of your coworkers have left work already, but the other half are clearly staying to work on the event (consistency)  
- There is no particular reason that you need to leave right now, but if you were to go home, you’d be able to pursue your preferred leisure activity (constraints)  
- Your boss has already gone home, so you know they will not see you if you decide to leave (constraints)  
- Your boss is still in the office, so you know that they will see you if you decide to leave (constraints) |  
- Several of your coworkers specifically ask you to stay at the meeting longer (clarity)  
- All six of your coworkers are clearly staying to work on the event (consistency)  
- There is no particular reason that you need to leave right now and your spouse has friends over, which would prevent you from pursuing your preferred leisure activity (constraints)  
- Your boss is still in the office, so you know that they will see you if you decide to leave (constraints) |  
1. Leave your coworkers who are still brainstorming and head home  
2. Continue to work on the event with your coworkers for now, but leave when at least one other coworker leaves  
3. Continue to work on the event with your coworkers and stay until they all begin to leave  
4. Continue to work on the event until you have everything done that you can possibly get done today |
| **Office party**  
Each year your office holds a holiday party at your close coworker’s house. The party is tomorrow night and, in a perfect world, you would not attend because you traditionally have not enjoyed this particular event. |  
- No one has directly asked you if you are attending the party but you have heard several coworkers discussing it (clarity)  
- You have spoken with numerous coworkers and it seems that about half of them are going to the party and the other half are not (consistency)  
- You have not told anyone that you will attend (constraints)  
- You know that your close coworker will not be upset if you skip the party (constraints) |  
- Your close coworker has directly reminded you about the party (clarity)  
- You have spoken with numerous coworkers and it seems that almost all of them are going to the party (consistency)  
- You have already told your close coworker that you will attend (constraints)  
- You know that your close coworker will be upset if you skip the party (constraints) |  
1. Do not attend the party  
2. Attend the party just to say hello to your close coworker and then leave right after  
3. Attend the party, say hello to your close coworker, and leave after you see that several other attendants have left  
4. Attend the party, say hello to your close coworker, and stay until the end |
| **Post-work e-mail**  
You are home after work when you see that you have an e-mail from your coworker. They tell you that they are putting together a presentation for a meeting tomorrow afternoon, and mention that they would love to have someone else look through it tonight. Ideally, you would not agree to help your coworker because you are tired and you have other activities you would rather do. |  
- You were CC’ed on this e-mail so you know that your coworker is not depending on you exclusively (clarity)  
- In the past, you and this coworker have not relied on each other for help in these types of situations (consistency)  
- You have never told your coworker that you would help them with this type of task (constraints)  
- If you do not help, it is unlikely that this decision will impact your relationship with this coworker (consequences) |  
- You were the only recipient of this e-mail so you know that your coworker is depending on you exclusively (clarity)  
- In the past, you and this coworker have consistently relied on each other for help in these types of situations (consistency)  
- You have previously told your coworker that you would help with this type of task (constraints)  
- If you do not help, it is likely that this decision will impact your relationship with your coworker (consequences) |  
1. Do not help review the presentation  
2. Agree to help tonight, but do not put much effort into it  
3. Agree to help tonight, but put a moderate amount of effort into it  
4. Agree to help tonight, and put your full effort into it |
vignette, and only the four pieces of presented contextual information underneath the stem were altered to manipulate situational strength. Participants rated the perceived situational strength of the described situation, their predicted behavior compliance, their predicted emotional exhaustion, and their predicted anxiety after reading each vignette. Participants were compensated $2.25 US for participating in this study, which took approximately 20 min to complete.

Measures

Descriptive statistics, correlations, and internal consistency estimates for all Study 1 variables are in Table 2. Unless otherwise noted, participants responded on a 6-point Likert-type scale (1 = strongly disagree; 6 = strongly agree).

Perceived Situational Strength

Participants used a 7-point sliding scale to rate the perceived situational strength of each situation, which ranged from −3 (feel free to behave in whatever way I wanted) to +3 (feel pressured to behave in a certain way).

Behavioral Compliance

Four customized response options for each vignette were created that were continuously ordered to range from a complete absence of behavioral compliance (a score of 1) to complete behavioral compliance (a score of 4).

Predicted Emotional Exhaustion

Predicted emotional exhaustion was rated using six items adapted from Wharton (1993). Sample item: “If I experienced this situation, I believe I would feel emotionally drained at work” (ω = 0.93–0.96 across responses to the three vignettes).

Predicted Anxiety

Predicted anxiety was evaluated with nine items adapted from the tension/anxiety subscale of the Profile of Mood States (McNair et al., 1971). Sample item: “If I experienced this situation, I believe I would feel tense” (ω = 0.90–0.92).

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2 Vignettes have been used to manipulate situational strength perceptions in past studies (Meyer et al., 2014). Further, predicted behavior, exhaustion, and affect have been evaluated as a function of exposure to vignettes in past research (e.g., Breen & Kashdan, 2011; Cameron et al., 2015; Chen et al., 2016).

3 The range of reliability estimates reflects internal consistency estimates across the three different vignettes.
Study 1 Results

We computed a random coefficients regression, with repeated measurements across vignettes nested within individuals (n=729 Level 1 observations), to test Hypotheses 1–3 in this initial evaluation of the effects of aggregate situational strength surrounding extra-normative work. Condition (Strong, Weak) was entered as a predictor of perceived situational strength, anticipated behavioral compliance, predicted emotional exhaustion, and predicted anxiety in this model. We statistically controlled for vignette exposure when conducting these analyses by entering two dummy coded variables that combined to represent the three experimental vignettes. In support of Hypothesis 1, participants perceived the situational strength of extra-normative work to be higher in the Strong condition than in the Weak condition (γ = 1.27, SE = 0.13, z = 9.86, p < 0.01). In support of Hypotheses 2 and 3, exposure to the Strong condition caused increases in predicted behavioral compliance (γ = 1.00, SE = 0.06, z = 16.04, p < 0.01), emotional exhaustion (γ = 0.33, SE = 0.08, z = 4.05, p < 0.01), and anxiety (γ = 0.15, SE = 0.06, z = 2.68, p < 0.05), relative to the Weak condition. These findings provide an initial proof-of-concept supporting extra-normative situational strength as a contributor to employees’ intended behavioral compliance and strain expectations.

Examination of the intra-class correlations (ICC(1)=0.19–0.49) within this random coefficients regression model suggested that between 51–81% of the criterion variance was within-person across the different measured criteria (i.e., 1–ICC(1)). Therefore, we conducted an exploratory comparison to evaluate if some extra-normative work vignettes may have engendered greater perceptions of situational strength than others (see Fig. 1). The Strong condition of all three vignettes seemed effective in engendering a moderate-to-large effect size increase in perceived situational strength, relative to the Weak condition (d=0.59–0.89). However, we did observe the meeting spillover vignette, which focused on having to continue to work outside of regularly scheduled work hours, to yield greater perceptions of situational strength than the office party (t(242) = 2.85, p < 0.01, d = 0.18) and the post-work e-mail (t(242) = 2.75, p < 0.01, d = 0.18) vignettes, which bolstered our decision to focus on after-hours work as an extra-normative work arrangement in Study 2.

Study 2

Procedure and Sample

Amazon MTurkers completed an approximately 30-min online survey housed on Qualtrics. Participants were required to (1) work in a non-executive, full-time job with expectations to work within standard business hours, (2) work in a job in which they at least occasionally work...
outside of these regularly scheduled hours (to ensure some extra-normative work among participants); (3) live with a significant other and at least one dependent minor,\(^5\) (4) have a past work approval rating of 95% or higher on MTurk (see Hauser & Schwarz, 2016), and (5) report strong English language skills. The first and second parameters were set particularly with the intent of examining extra-normative work (i.e., expectations are to work within standard business hours but some work outside of these hours occurs), with the second criteria also being necessary to ensure the presence of at least some extra-normative work that participants could provide ratings about. Participants received $2 in compensation for completing the online survey.

In total, 777 participants met all of these inclusion criteria. Participants were screened out for (1) providing a job title likely to violate the inclusion criteria (e.g., “MTurk worker”; \(n=9\)), (2) suspicions of careless responding (\(n=66\)), or (3) excessive missing data across multiple composite scales (\(n=12\)). Finally, we excluded 254 (\(n=254\)) participants who reported working overnight shifts, as we felt it unlikely that they technically met the inclusion criteria of working within standard business hours.

The final sample consisted of 436 participants (\(N=436\)). A majority of participants were female (58.0%). The majority of participants were White (83.3%), with the remainder of the sample comprised largely of participants who were Black/African American (6.9%) or Asian (5.7%). Approximately 10 percent of participants (10.6%) reported that they were Hispanic/Latinx. Participants were 34.78 years old (\(SD=7.77\)), had worked in their current job for 5.57 years (\(SD=4.61\)), and worked 41.11 h per week (\(SD=4.41\)) on average. A wide variety of occupations were represented in the sample, with the largest percentages of participants working in business management and administration (17.2%), marketing (12.4%), and information technology (11.7%).

**Measures**

Descriptive statistics, correlations, and internal consistency estimates for all Study 2 variables are in Table 3. All items were answered on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree).

**Extra-Normative Situational Strength**

Situational strength was measured using an adaptation of the Situational Strength at Work scale (SSW; Meyer et al., 2014) to an extra-normative, after-hours work context. The full adapted scale is presented in the Appendix, with the original scale items presented for comparative purposes. Basic psychometric information for the adapted scale is presented in Table 4. All facet-level subscales exhibited acceptable internal consistency (\(\omega=0.81–0.88\)).

**Emotional Exhaustion**

Emotional exhaustion was assessed with six items from Wharton (1993). Sample item: “I feel emotionally drained from my work” (\(\omega=0.91\)).

**Work Anxiety**

Work anxiety was measured with eight items from McCarthy et al. (2016). Sample item: “I am overwhelmed by thoughts of doing poorly at work” (\(\omega=0.95\)).

\(^5\) The latter inclusion criteria were present because this study is part of a larger project that incorporates how employees perceive their domestic and childcare demands.
Job Stress Perceptions

Job stress perceptions were evaluated with four items from Motowidlo et al. (1986). Sample item: “I feel a great deal of stress because of my job” ($\omega = 0.84$).

Study 2 Results

We first evaluated a seven-factor measurement model in MPlus Version 8.4 (Muthén & Muthén, 1998–2017), comprising the four situational strength facets and the three hypothesized strain correlates (emotional exhaustion, work anxiety, perceived job stress), which yielded a good fit to the data ($CFI = 0.94$, $RMSEA = 0.05$, $SRMR = 0.05$). In support of Hypothesis 4a, consistency was associated with lower emotional exhaustion ($B = -0.37$, $p < 0.01$), work anxiety ($B = -0.38$, $p < 0.01$), and perceived job stress ($B = -0.34$, $p < 0.01$). However, Hypothesis 4b was unsupported, as we had no evidence to link clarity to strain.

Table 4 Basic psychometric information for the After-Hours Situational Strength Scale

| Item | Standardized factor loading | Item-total correlation | Skewness  | Kurtosis |
|------|-----------------------------|------------------------|----------|----------|
| AH1  | .74                         | .68                    | -.35     | -.61     |
| AH2  | .70                         | .66                    | -.56     | -.25     |
| AH3  | .69                         | .65                    | -.45     | -.28     |
| AH4  | .78                         | .70                    | -.58     | -.34     |
| AH5  | .76                         | .69                    | -.60     | -.28     |
| AH6  | .65                         | .61                    | -.53     | -.42     |
| AH7  | .80                         | .76                    | -.39     | -.73     |
| AH8  | .79                         | .75                    | -.47     | -.57     |
| AH9  | .79                         | .75                    | -.40     | -.66     |
| AH10 | .79                         | .76                    | -.35     | -.75     |
| AH11 | .77                         | .74                    | -.27     | -.90     |
| AH12 | .74                         | .70                    | -.37     | -.72     |
| AH13 | .78                         | .74                    | -.31     | -.94     |
| AH14 | .71                         | .66                    | -.10     | -1.06    |
| AH15 | .76                         | .70                    | .23      | -1.02    |
| AH16 | .57                         | .54                    | -.24     | -.89     |
| AH17 | .75                         | .69                    | .37      | -.95     |
| AH18 | .72                         | .65                    | .50      | -.69     |
| AH19 | .66                         | .61                    | .55      | -.59     |
| AH20 | .63                         | .58                    | -.07     | -.91     |
| AH21 | .76                         | .70                    | .21      | -.95     |
| AH22 | .72                         | .67                    | .14      | -.97     |
| AH23 | .71                         | .66                    | .27      | -.77     |
| AH24 | .69                         | .63                    | .02      | -.94     |
| AH25 | .72                         | .66                    | .06      | -.95     |
| AH26 | .73                         | .70                    | .15      | -.95     |
| AH27 | .62                         | .59                    | .03      | -1.00    |

$N = 436$. Instructions and the full text of each item are presented in the Appendix.

6 While our hypotheses specifically focused on the bivariate relationships of each situational strength facet with strain criteria, because past scale validation work suggests that situational strength facets are positively correlated (Meyer et al., 2014), we elected to enter situational strength facets simultaneously when predicting strain criteria to allow us to understand the unique influence of each facet on each criterion when partialling out the influence of the other three facets.
criteria ($B = -0.39-0.34$, all $ns$). Hypothesis 5a was supported, with consequences found to co-vary with higher emotional exhaustion ($B = 0.33$, $p < 0.01$), work anxiety ($B = 0.006$, $p < 0.01$), and perceived job stress ($B = 0.46$, $p < 0.01$). In contrast, Hypothesis 5b was only partially supported, with constraints positively related to emotional exhaustion ($B = 0.19$, $p < 0.05$), but no evidence to link constraints to work anxiety ($B = 0.10$, $ns$) or perceived job stress ($B = -0.03$, $ns$). Using Cohen’s (1988) effect size guidelines, the contributions of the set of extra-normative work situational strength facets to perceived job stress ($R^2 = 0.16$), work anxiety ($R^2 = 0.13$), and emotional exhaustion ($R^2 = 0.19$) corresponded to between medium and large effect sizes.

### Study 3

**Procedure and Sample**

Full-time employees were recruited via Prolific Academic to complete an approximately 30-min online survey hosted on Qualtrics. All participants were required to (1) be currently working from home every day, (2) have rarely (i.e., less than one day per week) worked from home before the COVID-19 pandemic, and (3) be fluent English speakers. Consistent with our approach in Study 2, the first and second criteria combined to focus on employees engaged in extra-normative work, as these employees were now engaged in a work arrangement (i.e., working from home every day) that was not within the scope of the traditional work role (i.e., rarely working from home prior to the pandemic). Consistent with this view, participants reported that they had typically spent 7.80% of their working time working from home prior to COVID-19 on average ($SD = 10.17$), bolstering the conclusion that this work arrangement represented extra-normative work for these participants. We also note that Study 3 data were collected in June 2020, which was within the first few months of many organizations moving to teleworking in response to COVID-19 (International Labour Organization, 2020), such that longer-term pandemic-induced changes in how the traditional scope of many of these work roles were perceived likely had yet to stabilize. Participants were compensated $3.50 for their participation.

In total, 367 participants provided informed consent and indicated that they met the inclusion criteria. Participants were screened out for (1) failing an attention check item (e.g., “Please select ‘Moderately Agree’ for this item”; $n = 31$), (2) suspicions of careless responding ($n = 7$), (3) providing a job title suggesting that they did not meet the inclusion criteria (e.g., “student”; $n = 18$), or (4) reporting teleworking for more than 50% of their work time prior to the COVID-19 pandemic ($n = 21$). The final sample consisted of 290 participants ($N = 290$). The sample was fairly evenly split between males (54.8%) and females (45.2%). Most participants were White (82.1%), while the remainder of the sample were largely Asian (9.0%) or Black/African American (4.5%). Approximately 7.6% of the sample were Hispanic/Latinx. Participants were roughly 31.99 years old ($SD = 7.87$) and had worked in their current job for 4.80 years ($SD = 4.92$) on average. Most participants worked either 31–40 (63.4%) or 41–50 (32.4%) hours per week. A wide variety of occupations were represented in the sample, with the largest percentages of participants working in business management and administration (29.3%), information technology (16.2%), and education and training (11.0%).

**Measures**

Descriptive statistics, correlations, and internal consistency estimates for all Study 3 variables are presented in Table 6. Unless otherwise noted, all items were answered on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree).

### Table 5 Unstandardized parameter estimates, standard errors, and tests of statistical significance for the prediction of employee strain from extra-normative situational strength perceptions surrounding after-hours work in Study 2

| Variable     | Perceived job stress | Work anxiety | Emotional exhaustion |
|--------------|----------------------|--------------|----------------------|
|              | $B$  | $SE$  | $z$  | $B$  | $SE$  | $z$  | $B$  | $SE$  | $z$  |
| Consistency  | $-.34$ | $.15$  | $-2.27^{**}$ | $-.38$ | $.14$  | $-2.82^{**}$ | $-.37$ | $.16$  | $-2.36^{**}$ |
| Clarity      | $.03$  | $.13$  | $.24$  | $.10$  | $.12$  | $.85$  | $.05$  | $.14$  | $-0.33$ |
| Consequences | $.46$  | $.11$  | $4.19^{**}$ | $.22$  | $.10$  | $2.30^{**}$ | $.33$  | $.11$  | $2.92^{**}$ |
| Constraints  | $-.03$ | $.10$  | $-.32$ | $.10$  | $.09$  | $1.10$ | $.19$  | $.11$  | $1.75^{*}$ |

$N = 436$. Perceived job stress, work anxiety, and emotional exhaustion were simultaneously predicted from perceptions of consistency, clarity, consequences, and constraints surrounding extra-normative work. Parameter estimates were obtained using maximum likelihood estimation in MPlus. $CFI = .94$, $RMSEA = .05$, $SRMR = .05$. One-tailed tests of statistical significance are reported, consistent with our specification of directional hypotheses for facet-level relationships. The situational strength facets combined to explain 15.9% of the variance in perceived job stress, 12.8% of the variance in work anxiety, and 18.7% of the variance in emotional exhaustion.

*p < .05, **p < .01
Table 6 Means, standard deviations, internal consistency estimates, and inter-correlations for Study 3 variables

| Variable                        | M   | S.D  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|---------------------------------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Gender (1 = male; 2 = female)| 1.45| .50  | -   |     |     |     |     |     |     |     |     |     |
| 2. Age                          | 31.99| 7.87 | .06 | -   |     |     |     |     |     |     |     |     |
| 3. Number of dependent children | .52 | .91  | −.12| .33**| -   |     |     |     |     |     |     |     |
| 4. Consistency                  | 4.57| 1.37 | −.01| −.07| .11 | .90 |     |     |     |     |     |     |
| 5. Clarity                      | 4.75| 1.44 | −.04| .01 | .14*| .73**| (.93)|     |     |     |     |     |
| 6. Consequences                | 4.24| 1.30 | .01 | −.01| .08 | .15*| .22**| (.86)|     |     |     |     |
| 7. Constraints                  | 3.81| 1.39 | −.03| .00 | .04 | .03 | .35**| (.92)|     |     |     |     |
| 8. Emotional exhaustion         | 3.26| 1.31 | .04 | −.08| −.11| −.36**| −.39**| .11 | .29**| (.92)|     |     |
| 9. Work anxiety                 | 3.41| 1.32 | .10 | −.19**| −.08| −.13*| −.25**| .16**| .11 | .43**| (.94)|     |
| 10. Perceived job stress        | 3.62| 1.25 | .06 | .03 | −.05| −.25**| −.26**| .19**| .13*| .61**| .39**| (.88) |

N = 290

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

Extra-Normative Situational Strength

To evaluate extra-normative situational strength while teleworking during the COVID-19 pandemic, participants were presented with the original version of the SSW (Meyer et al., 2014). However, to draw attention to the extra-normative work implications of teleworking in response to COVID-19, the instructions and rating approach for this scale were modified (see the example screenshot presented in the Appendix). More specifically, participants were instructed to first provide ratings of each situational strength facet when reflecting about their job before teleworking in response to COVID-19 (left-hand side of screenshot) and then to provide ratings when reflecting on their job while teleworking in response to COVID-19 (right-hand side of screenshot). The latter ratings (i.e., while teleworking in response to COVID-19) were used in all subsequent analyses to represent situational strength surrounding this extra-normative work context. Participants responded to all items on a 7-point Likert-type scale (1 = Strongly disagree; 7 = Strongly agree). Estimates of internal consistency were acceptable for all facets (ω = 0.86–0.93).

Employee Strain

Emotional exhaustion, work anxiety, and job stress perceptions were measured using the same approach as in Study 2 (ω = 0.92, 0.94, and 0.88, respectively), with the exception that participants were asked to reflect on their experiences since teleworking in response to COVID-19 (rather than their experiences at a more general level).

Study 3 Results

We first computed a seven-factor measurement model in which the items corresponding to the four facets of situational strength (clarity, consistency, constraints, consequences) and the three strain criteria (emotional exhaustion, work anxiety, job stress) loaded on their intended factors, which yielded a reasonable fit to the data (CFI = 0.90, RMSEA = 0.06, SRMR = 0.06). We then computed a structural model in which each facet of situational strength was modeled as a predictor of each strain criteria (see Table 7 for obtained parameter estimates), which also yielded a reasonable fit to the data (CFI = 0.90, RMSEA = 0.06, SRMR = 0.06).

Hypothesis 4a was not supported, as we had no evidence to suggest that consistency negatively co-varied with any strain criteria (B = −0.12–0.21, all ns). Hypothesis 4b was fully supported, as clarity was associated with lower perceived job stress (B = −0.24, p < 0.05), work anxiety (B = −0.55, p < 0.01), and emotional exhaustion (B = −0.39, p < 0.01). In support of Hypothesis 5a, consequences were related to higher perceived job stress (B = 0.35, p < 0.01), work anxiety (B = 0.29, p < 0.01), and emotional exhaustion (B = 0.16, p < 0.05). Finally, and replicating findings from Study 2, Hypothesis 5b was partially supported, with constraints linked to higher emotional exhaustion (B = 0.32, p < 0.01), but not perceived job stress (B = 0.04, ns) or work anxiety.

7 While longitudinal change processes surrounding a transition to extra-normative work are not our core focus in this initial effort to conceptually develop and evaluate the extra-normative work construct, we did evaluate for exploratory purposes whether ratings of the facets of situational strength changed when moving from the normative work context of one’s regular work situation to the extra-normative work context of abruptly teleworking in response to COVID-19. Comparing participant ratings from before to while teleworking in response to COVID-19, we found that perceptions of clarity (t289 = −7.21, p < 0.01, d = 42), consistency (t289 = −5.00, p < 0.01, d = 29), constraints (t289 = −2.16, p < 0.05, d = 13), and consequences (t289 = −2.20, p < 0.01, d = 13) all decreased when moving to the extra-normative work context of abruptly teleworking in response to COVID-19.
Table 7  Unstandardized parameter estimates, standard errors, and tests of statistical significance for the prediction of employee strain from extra-normative situational strength while teleworking during COVID-19

| Variable      | Perceived job stress | Work anxiety | Emotional exhaustion |
|---------------|----------------------|--------------|----------------------|
|               | B  SE z              | B  SE z      | B  SE z              |
| Consistency   | -.12 .10 -1.21       | .21 .10 2.02 | -.16 .10 -1.58       |
| Clarity       | -.24 .13 -1.93*      | -.55 .13 -4.25** | -.39 .12 -3.16**    |
| Consequences  | .35 .10 3.72**       | .29 .09 3.11** | .16 .09 1.86*        |
| Constraints   | .04 .07 .61          | .05 .07 .67  | .32 .07 4.57**       |

N = 290. Perceived job stress, work anxiety, and emotional exhaustion were simultaneously predicted from extra-normative consistency, clarity, consequences, and constraints. Parameter estimates were obtained using maximum likelihood estimation. CFI = .90, RMSEA = .06, SRMR = .06. One-tailed tests of statistical significance are reported, consistent with our specification of directional hypotheses. The situational strength facets combined to explain 15.5% of the variance in perceived job stress, 14.2% of the variance in work anxiety, and 30.1% of the variance in emotional exhaustion.

Discussion

Work demands have long been recognized to push beyond the normative boundaries and expectations of the job (e.g., Meissner, 1971), but common perceptual filters underpinning extra-normative work have yet to be considered. Our findings suggest that situational strength is a useful theoretical lens to understand how extra-normative work influences employee strain. More specifically, we showed that (a) perceptions of extra-normative situational strength co-vary with expectations to comply with extra-normative work demands and employee strain, (b) enhancing extra-normative work through some avenues (e.g., consistency, clarity) could help employees to cope with this increasingly ubiquitous phenomenon, but that (c) enhancing extra-normative work by emphasizing or increasing consequences may be counterproductive due to harmful implications for employee strain.

Most notably, our results demonstrate that extra-normative work requests which are perceived to be consequential (e.g., “Make sure to attend this virtual meeting or your boss will be angry”) yield enhanced strain. In contrast, consistency and clarity perceptions co-varied with lower strain in the extra-normative work contexts of after-hours work and teleworking in response to COVID-19, respectively. These findings support our assertion that there are unique insights to be gained from adopting a faceted approach to extra-normative work situational strength when predicting employee strain. Finally, our replication of the relevance of constraints to emotional exhaustion specifically (but not other strain criteria) across multiple extra-normative work contexts suggests that certain facets of situational strength may be differentially relevant to specific manifestations of strain, which may further explain inconsistencies in detecting relationships between situational strength and strain in past research.

Theoretical Implications

At the broadest level, our findings suggest that situational strength may be a common perceptual factor that underlies how employees react to extra-normative work. By its very nature, this work extends employees beyond the typical boundaries of what is expected in their job, which has the potential to lead to ambiguity that causes strain (Beehr, 1976). Although the rise and expansion of knowledge work has pushed employees towards working in a more flexible and agile fashion for years (Fenner & Renn, 2010), the COVID-19 pandemic has introduced substantial uncertainty into how work will be structured, scheduled, and carried out in the future (Kniffin et al., 2020). Perhaps the starkest indicator of this difference in the present study pertains to the differential support for Hypotheses 4a and 4b in Studies 2 and 3, respectively. Namely, in Study 2 (which occurred prior to the pandemic), the influence of increased situational strength on reduced strain was carried primarily through consistency (as opposed to clarity), but in Study 3 (which occurred during the pandemic), the impact of increased situational strength on reduced strain was carried primarily through clarity (as opposed to consistency). Although speculative, one potential explanation of this diverging pattern of associations is that in the more stable/predictable pre-COVID world, knowing when, how, and why extra-normative work was likely to be required in a more consistent fashion helped employees cope with...
the effects of extra-normative work (e.g., by planning and coordinating accordingly), but in the more unstable/unpredictable world of the COVID-19 pandemic, consistency-based situational strength surrounding extra-normative work was no longer feasible, so employees began to take solace in any extra-normative work messaging that seemed to be logical, transparent, and easy to understand (i.e., entailed greater clarity).

As this example illustrates, the situational strength-based approach advanced here is both strongly theoretically grounded in extant perspectives to work situations (Meyer et al., 2010; Mischel, 1977), but also adaptable to new extra-normative work arrangements that may arise in the post-pandemic world and beyond. For example, as restrictions are lifted and the world of work begins to establish a new normal (whatever that might look like), perhaps the effects of consistent extra-normative work will return to being the dominant reducer of strain, but if or when the next major disruption hits that alters ways of working, clarity will again become paramount. Thus, our central theoretical contributions have been to demonstrate the broad applicability of situational strength theorizing to work arrangements that involve departures from when, how, and where work is typically done and to show the importance of conveying novel behavioral expectations in a way that is clear and/or consistent, as opposed to focusing on behavioral restrictions and placing contingencies on employees’ actions.

Our application of a multi-faceted view of extra-normative situational strength also helps to explain why the theorized detrimental influence of situational strength on strain has been inconsistently observed in empirical research (Steel et al., 2008). While we did observe extra-normative situational strength in the aggregate to co-vary with higher anticipated strain in Study 1, moving to a facet-level perspective in Studies 2 and 3 yielded a more nuanced pattern of results. Specifically, although consequence perceptions were harmful to strain across all criteria observed in all measured extra-normative work contexts, consistency was associated with lower strain in an after-hours work context, whereas clarity was related to lower strain in the context of teleworking in response to COVID-19. It is thus possible that variability in situational strength–strain relationships across different past studies may extend from the extent to which participants in these samples perceived different facets of situational strength, which is likely to be influenced not just by the nature of their jobs (Meyer et al., 2009) and proximal sources of information (Alaybek et al., 2017), but also by their personality and key demographic considerations (e.g., generational cohort, gender) (Meyer et al., 2014). We thus contend that a facet-oriented approach is necessary to understand the strain implications of situational strength because it permits a fine-grained assessment into the specific ways in which individuals respond to strength as communicated in various ways from various sources.

Theorists have typically positioned situational strength as a boundary condition for work-relevant relationships, such as the influence of personality (Meyer et al., 2009) or job satisfaction (Bowling et al., 2015) on job performance. In contrast, little consideration has been given to the direct prediction of employee outcomes from situational strength. Moreover, organizational research on situational strength has typically focused on perceptions of the job in general (Meyer et al., 2010), rather than more discrete aspects of context (Johns, 2006). By examining situational strength surrounding extra-normative work and expanding the nomological network of this strength to encompass the direct prediction of strain criteria, we push the boundaries of theorizing surrounding job-related situational strength and provide a roadmap for future applications of this construct. One particularly interesting application for future research that would capitalize on the interactionist tendencies of past situational strength work would be to longitudinally explore whether the occurrence of extra-normative work interacts with situational strength in predicting strain criteria over time. For example, it would be plausible that potential strain-inducing aspects of extra-normative work may have a more pronounced impact on strain criteria in strong jobs wherein extra-normative work represents a more profound deviation from typical expectations and a less impactful effect on strain criteria in weak jobs that might be characterized by a more “expect the unexpected” type mentality. Longitudinal research of this nature would be a natural extension of the foundation for applications on the extra-normative work construct that we have developed here.

When considering constraint perceptions specifically, only emotional exhaustion was supported as a correlate of this facet, a finding replicated across the after-hours work and teleworking in response to COVID-19 extra-normative work contexts. This finding suggests that some facets of situational strength may be selectively related to certain indicators of employee strain. Emotional exhaustion is a symptom of the chronic strain condition of burnout (Maslach et al., 2001), the development of which has been argued to be accelerated by organizationally imposed constraints (Leiter, 1991). In particular, constraints have long been recognized to be a major driver of employee frustration (O’Connor et al., 1982), which is a precursor to the development of burnout (Lewandowski, 2003). Future research directly targeted at understanding if and why extra-normative constraints are particularly relevant to
emotional exhaustion, relative to other strain criteria, may benefit from considering the process and time-scale by which reactions to extra-normative situational strength unfold.

**Practical Implications**

Our approach illustrates a strategy for reducing employee strain in situations that push employees to work beyond the boundaries of their typical work role. Providing consistency in policies, communications, and actions surrounding the need for extra-normative work may be an effective way to encourage meeting atypical work demands without sacrificing employee well-being. Furthermore, providing clear and easily understandable communications surrounding extra-normative work expectations appears key to mitigating strain within the specific extra-normative work context of teleworking in response to COVID-19. In contrast, constraint-based strategies to framing extra-normative work seem to engender emotional exhaustion and consequence-based strategies may be more generally counterproductive as they are likely to drive multiple aspects of employee strain that can influence health and performance (Bakker & Demerouti, 2017; Calderwood et al., 2018; Igic et al., 2017). We encourage organizations to be more cognizant of how extra-normative work demands and requests are framed in the service of diminishing employee strain, which is crucial to maintaining organizational effectiveness over time (Beehr & Newman, 1978).

**Limitations**

Our findings are contextualized by several limitations common to all three studies. First, all variables were measured via self-reports, which are subject to biases and distortions that may inflate measurement error (Donaldson & Grant-Vallone, 2002). We encourage future research to evaluate whether the strain implications of subjective perceptions of extra-normative situational strength may differ from more objective features of the work environment that impact situational strength. Utilizing objective sources of data that could be coded for factors relevant to situational strength, such as full-text e-mails (Butts et al., 2015), may also allow for direct comparisons of objective and perceptual factors relevant to extra-normative situational strength and its relationships with criteria.

In addition, data in all three studies were collected at a single point in time, which left us unable to establish how stable extra-normative situational strength is over time. Future research may benefit from efforts to understand how within-person variability in extra-normative situational strength may impact shorter-term strain criteria (e.g., insufficient daily recovery from work-related effort expenditure; Sonnentag, 2001). Investigations of this nature may add additional nuance to how extra-normative situational strength influences strain over time, as it is conceivable that some facets of situational strength (such as consequences connected to the completion or lack of completion of daily extra-normative work tasks) may show greater intra-individual variability than other facets of situational strength (such as the consistency with which extra-normative work expectations are communicated) over time.

**Conclusion**

Across three empirical studies, we demonstrated that situational strength is a useful framework to understand extra-normative work arrangements, in which employees work outside the boundaries of their typical work role. Results demonstrated that extra-normative situational strength predicts strain criteria, with diverging positive and negative implications of this situational strength depending on the specific facets considered. As such, situational strength provides an adaptable perspective to understand how changes in the nature, timing, and location of work may influence employee strain, while also providing practitioners with guidance in how best to communicate extra-normative work expectations to employees.

**Appendix**

**Adaptation of Situational Strength at Work Scale to After-Hours Work Context**

Instructions. The following statements assess your beliefs about your “after-hours work” – that is, work performed for your job that you complete outside of your regular work hours (e.g., conference calls during evenings after work, weekend travel for work, checking e-mails during vacations and holidays). Using the scale below, please rate the extent of your agreement with each statement as it pertains to your after-hours work (Table 8).
Table 8  Items for the After-Hours Situational Strength Scale presented next to the original Situational Strength at Work items

| Original scale item                                                                 | After-hours work adaptation                                                                 |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Consistency                                                                        |                                                                                             |
| • On this job, different sources of work information are always consistent with each other | • In my job, different sources of information about after-hours work are always consistent with each other (AH1) |
| • On this job, responsibilities are compatible with each other                      | • In my job, after-hours work responsibilities are compatible with each other (AH2)          |
| • On this job, all requirements are highly compatible with each other               | • In my job, all after-hours work requirements are highly compatible with each other (AH3)    |
| • On this job, supervisor instructions match the organization’s official policies   | • In my job, supervisor instructions about after-hours work match my organization’s official policies (AH4) |
| • On this job, informal guidance typically matches official policies                | • In my job, informal guidance about after-hours work is generally the same, no matter who provides it (AH5) |
| • On this job, information is generally the same, no matter who provides it         | • In my job, information about after-hours work is generally the same, no matter who provides it (AH6) |
| • On this job, procedures remain completely consistent over time                    | *Not adapted (due to perceived issues in defining what “after-hours procedures” refer to)* |
|                                                                                   |                                                                                             |
| Clarity                                                                            |                                                                                             |
| • On this job, specific information about work-related responsibilities is provided  | • In my job, specific information about my after-hours work-related responsibilities is provided (AH7) |
| • On this job, easy-to-understand information is provided about work requirements   | • In my job, easy-to-understand information is provided about my after-hours work requirements (AH8) |
| • On this job, straightforward information is provided about what an employee needs to do to succeed | • In my job, straightforward information is provided about what after-hours work an employee needs to do to succeed (AH9) |
| • On this job, an employee is told exactly what to expect                          | • In my job, an employee is told exactly what to expect regarding after-hours work (AH10)    |
| • On this job, precise information is provided about how to properly do one’s job   | • In my job, precise information if provided about how to properly complete after-hours work (AH11) |
| • On this job, specific information is provided about which tasks to complete       | • In my job, specific information is provided about which after-hours work tasks to complete (AH12) |
| • On this job, an employee is told exactly what is expected of him/her              | • In my job, an employee is told exactly what is expected from him/her in regards to after-hours work (AH13) |
|                                                                                   |                                                                                             |
| Consequences                                                                       |                                                                                             |
| • On this job, an employee’s decisions have extremely important consequences for other people | • In my job, an employee’s decision to work after-hours has extremely important consequences for other people (AH14) |
| • On this job, very serious consequences occur when an employee makes an error      | • In my job, very serious consequences occur when an employee chooses not to work after-hours (AH15) |
| • On this job, important outcomes are influenced by an employee’s actions           | • In my job, important outcomes are influenced by an employee’s after-hours work actions (AH16) |
| • On this job, other people are put at risk when an employee performs poorly        | • In my job, other people are put at risk when an employee does not work after-hours (AH17)   |
| • On this job, mistakes are more harmful than they are for almost all other jobs    | • In my job, mistakes made with regards to after-hours work are more harmful than they are for almost all other jobs (AH18) |
| • On this job, tasks are more important than in almost all other jobs               | • In my job, after-hours work tasks are more important than those in almost any other job (AH19) |
| • On this job, there are consequences if an employee deviates from what is expected | • In my job, there are consequences if an employee deviates from what is expected in regards to after-hours works (AH20) |
|                                                                                   |                                                                                             |
| Constraints                                                                        |                                                                                             |
| • On this job, an employee is prevented from making his/her own decisions           | • In my job, an employee is prevented from making his/her own decisions about after-hours work (AH21) |
| • On this job, constraints prevent an employee from doing things his/her own way    | • In my job, constraints prevent an employee from doing after-hours work his/her own way (AH22) |
| • On this job, an employee is prevented from choosing how to do things              | • In my job, an employee is prevented from choosing how to do after-hours work (AH23)          |
| • On this job, an employee’s freedom to make decisions is limited by other people   | • In my job, an employee’s freedom to make decisions about after-hours work is limited by other people (AH24) |
### Table 8 (continued)

| Original scale item                                                                 | After-hours work adaptation                                                                 |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| • On this job, outside forces limit an employee’s freedom to make decisions         | • In my job, outside forces limit an employee’s freedom to make decisions about after-hours work (AH25) |
| • On this job, procedures prevent an employee from working in his/her own way       | • In my job, procedures prevent an employee from doing after-hours work his/her own way (AH26) |
| • On this job, other people limit what an employee can do                           | • In my job, other people limit what after-hours work an employee can do (AH27)               |

### Screenshot of Instructions for Extra-Normative Work Adaptation of the SSW to the Teleworking in Response to COVID-19 Context

The following statements assess your perceptions of your workplace. Please answer each question first based on beliefs you held about **your job before teleworking in response to COVID-19 (left-hand side)**, then based on your beliefs about **your job while teleworking in response to COVID-19 (right-hand side)**. Please make sure to provide a response on both the left-hand side and the right-hand side for each question.

### Before Covid-19

| 1   | 2 | 3 | 4 Neither Disagree nor Agree | 5 | 6 | 7   |
|-----|---|---|------------------------------|---|---|----|
| Strongly Disagree |  |  |  |  |  |  |

### During Covid-19

| 1   | 2 | 3 | 4 Neither Disagree nor Agree | 5 | 6 | 7   |
|-----|---|---|------------------------------|---|---|----|
| Strongly Disagree |  |  |  |  |  |  |

In my job, specific information about work-related responsibilities is provided.

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### Declarations

#### Conflict of interest

The authors declare no competing interests.

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