

## A Resource-Based Perspective on Organizational Citizenship and Counterproductive Work Behavior: The Role of Vitality and Core Self-Evaluations

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Although results from cross-sectional between-person studies suggest a differentiation of employees in good and bad performers, recent studies have challenged this assumption by showing that performance is also dependent on more transient states that vary within individuals. Acknowledging that individuals do not only differ in reference to others, but also in reference to themselves, we integrated the between- and within-person approach in the examination of organizational citizenship behavior (OCB) and counterproductive work behavior (CWB). We propose a model informed by conservation of resources theory in which OCB and minor CWB are predicted by within-person variation in one's level of vitality, with these relationships being moderated by trait core self-evaluations (CSE). Moderated multilevel Poisson regression analyses revealed that vitality was positively related with OCB and negatively with minor CWB. CSE moderated the relationship between vitality and OCB so that individuals high in CSE engaged in OCB regardless of their vitality levels; however, contrary to our expectations, CSE did not moderate the relationship between vitality and minor CWB. Together, these findings indicate a complex reality underlying the mechanisms that drive the enactment of OCB and CWB.

### INTRODUCTION

Globalized competition, technological advancements, and changes in how work is organized, are all contributing to the growing work intensification

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that characterizes current workplace environments (Brown, 2012; Gephart, 2002). In such environments, employees are increasingly expected to work longer hours, be more accessible, and sustain heightened work stressors, a trend that is found in studies performed across countries and occupations (Feldman, 2002; Gidman, 2011; Macky & Boxall, 2009; Valeyre, 2004). As a result of those increased pressures, employees find themselves faced with the reality of constantly having to tax their energy resources to perform their job successfully. Importantly, and consistent with scholars' conceptualizations, performing one's job not only encompasses fulfilling one's in-role tasks, but also engaging in organizational citizenship behavior (OCB) and abstaining from counterproductive work behavior (CWB; Bolino, Turnley, Gilstrap, & Suazo, 2010; Rotundo & Sackett, 2002).

OCBs refer to employee behaviors that promote organizational functioning (Lee & Allen, 2002), whereas CWBs refer to behaviors that go against the legitimate interests of the organization (Sackett, 2002). Given their apparent opposing nature and the notion that OCBs are desirable for organizations, whereas CWBs are not, the interest of researchers for years has been in studying stable predictors that explain why certain employees engage in OCBs and others in CWBs (Heckert & Heckert, 2002). Researchers theorized, for example, that employees engage in OCBs because of certain personal characteristics, or because they are motivated by a desire to reciprocate what they perceive as positive treatment by their organization or co-workers (e.g., conscientiousness, perceived fairness; LePine, Erez, & Johnson, 2002). In contrast, employees are believed to engage in CWBs owing to aggressive motives, or as a means to retaliate against bad treatment (e.g., abusive supervision, hostility; Neuman & Baron, 2005). Based on this body of work, and drawing on the implicit assumption that employees and work environments can be assessed as "appropriate" or "inappropriate", scholars identified what constitutes a fitting employee (namely, one that engages in OCBs but not in CWBs), and a favorable work environment (namely, an environment that promotes OCBs and hinders CWBs; e.g., Berry, Ones, & Sackett, 2007; Organ & Ryan, 1995; Spector, 2011). Recent research, however, has revealed that OCBs and CWBs are not only triggered by stable person- and situation-related characteristics, but also by transient states, such as employees' emotional states and their level of recovery (e.g., see Dalal, Lam, Weiss, Welch, & Hulin, 2009; Ilies, Peng, Savani, & Dimotakis, 2013; Trougakos, Beal, Cheng, Hideg, & Zweig, 2015).

We contribute to this recent line of research by proposing a resource-based perspective on OCB and CWB. In particular, we test whether an individual's OCBs and minor CWBs (being less serious forms of workplace deviance; see Robinson and Bennett, 1995) are predicted by daily physical and mental energy resources as manifested in the individual's daily levels of vitality. Using

theoretical insights of conservation of resources theory (COR; Hobfoll, 1989), we argue that, although OCBs are typically depicted to have positive effects for both employees and organizations (Podsakoff et al., 2009; Podsakoff & MacKenzie, 1997), in the short term they can be draining and depleting for their enactors. In a similar manner, minor CWBs do not always stem from an intention to harm the organization or others (Neuman & Baron, 2005; Spector, 2011) as engaging in less serious forms of CWBs (i.e. withdrawal and abuse) can also be seen by employees as a means to (consciously or unconsciously) regulate their energy resources. As such, we claim that resources in general, and energy resources in particular, will be predictive of engagement in these behaviors, a view that is consistent with research linking OCBs and CWBs with outcomes closely related to resource levels, such as job stress and emotional exhaustion (Bolino & Turnley, 2005; Krischer, Penney, & Hunter, 2010). To date, however, these insights have not been extended to the study of energy resources such as vitality (with the exception of Shefer, Carmeli, & Cohen-Meitar, 2018, who studied the association of vitality and OCB at the between-person level). In fact, as Carmeli stated, “research on vitality in work settings is relatively rare” (2009, p. 46). The importance of such research is, however, evident, especially in the context of a growing work intensification, where employees’ mental and physical energy resources are increasingly taxed (Brown, 2012; Gephart, 2002).

Although research shows that work has intensified for most employees, across countries and occupations (e.g., Feldman, 2002; Macky & Boxall 2009), some individuals are better equipped for coping with the taxation of their energy resources than others. A stable person-level characteristic that we assume to play an important role in this process is trait core self-evaluations (CSE), or the “fundamental appraisals individuals make about their self-worth and capabilities” (Chang, Ferris, Johnson, Rosen, & Tan, 2012, p. 81). Due to CSE’s ability to affect an employee’s perceptions and reactions to individual stressors, we expect that decreases in one’s daily vitality levels should have a smaller impact for people high on trait CSE than for people low on trait CSE (Kammeyer-Mueller, Judge, & Scott, 2009). This argument is supported by the overlap of CSE’s lower-order traits with the coping resources identified in past stress research (i.e. self-efficacy and self-esteem Harris, Harvey, & Kacmar, 2009; Hobfoll, 2001).

With the present paper, we aim to make a number of theoretical and practical contributions. First, we examine *why* employees differ in the manifestation of OCB and less serious forms of CWB (i.e. withdrawal and abuse), and *what* motivates the enactment of these behaviors by using COR theory’s insights on daily energy fluctuations, and stable personal resource levels. Second, by integrating the within- and between-person approaches on the study of OCBs and minor CWBs, we aim to provide a novel account of *which* factors can

influence performance of these behaviors in the short and long term, namely state vitality and trait CSE, respectively. Third, by applying a multilevel, repeated measures research design, we aim to respond to the call for more episodic approaches in OCB and CWB research (Dalal et al., 2009; Spector & Fox, 2010; Trougakos et al., 2015). The need for such studies is ever more pressing given that results at the between-person level cannot straightforwardly be generalized to the within-person level and vice versa (for a detailed theoretical explanation of this matter, see Hamaker, 2012), and considering that up to 78 percent of variability in OCB and CWB is due to within-person differences (e.g., Dalal et al., 2009; Spanouli & Hofmans, 2016). Fourth, by focusing on a model that combines both stable and transient variables, we aim to offer insights on how organizations are able to achieve higher employee performance by focusing on both between-person practices (e.g., recruitment and selection), and within-person practices (e.g., training and development). Finally, we aim to show that extra-role behaviors can be performed at the expense or benefit of employees' energy resources and, as such, employers should be cognizant of the demands placed on employees and their potential consequences, especially in the context of work intensification (Brown, 2012; Gephart, 2002).

## COR Theory: A Resource Perspective

COR theory offers a dynamic perspective on individuals and their surroundings. Its basic premise is that "people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources" (Hobfoll, 1989, p. 516). According to COR theory, resources represent those entities that are considered valuable by individuals, or that can serve as a means to acquire what they consider valuable (Hobfoll, 2002).

Such resources fall into four main categories: objects, conditions, personal characteristics, and energies (Wells, Hobfoll, & Lavin, 1999). Whereas object resources are universally valued due to their physical nature (e.g., tools for work), conditions are considered resources only to the extent that the individual considers them important and valuable (e.g., seniority at work). Personal characteristics, in turn, are inherent to the individual and refer to those individual features that help individuals resist or control a loss of resources (e.g., self-efficacy). Energy resources have instrumental value (e.g., time) in that they are the resources that people commonly invest to obtain other valued resources (Hobfoll, 1989). In the present study, we will focus on two of those resources: energy resources (i.e. vitality) and personal characteristics (i.e. trait CSE).

## Energy Resources: Vitality as an Antecedent of OCB

To complete their daily work-related tasks, employees have to invest energy resources such as time, attention, and mental and physical energy. The latter two are excellent indicators of energy levels and are well represented by the concept of vitality, which refers to the subjective feeling of having high levels of physical and mental energy (Ryan & Deci, 2008). As it is evident from its definition, an individual's perception of vitality is influenced by both somatic and cognitive factors, yet it is important to note the subjective perception of such experiences. Two individuals may experience comparable levels of physical pain, for example, but one may perceive this as a debilitating experience, while another may perceive this as a challenge to overcome (Ryan & Frederick, 1997), a factor that reflects the salience of vitality as a construct.

Although vitality has only relatively recently been introduced in organizational research (Carmeli, 2009), empirical findings have shown vitality to relate to important employee outcomes such as commitment, job performance, OCB, and presenteeism (DeJoy, Della, Vandenberg, & Wilson, 2010; Dubreuil, Forest, & Courcy, 2014; van Scheppingen et al., 2014), deeming the study of vitality at work a promising field for future research.

Important for our exposition is the awareness that energy levels are not infinite but resemble an hourglass: when individuals have already expended a large share of these resources, they will experience low vitality. Due to its basic premise that "people strive to retain, protect, and build resources" (Hobfoll, 1989, p. 516), COR theory proposes that, when individuals are in good capacity of resources, they tend to invest these resources to acquire other valued resources. Thus, COR theory indicates that the chances that people engage in resource investment behaviors increase when they are already rich in resources to begin with. This suggestion has, for example, been supported by findings showing a positive link between psychological well-being and performance (Wright & Hobfoll, 2004) or weekly job resources and weekly work engagement (Bakker & Bal, 2010).

Past research suggests that engaging in OCB can be considered as an investment of resources. First, and because of its positive consequences for organizational functioning (Podsakoff & MacKenzie, 1997), performing OCBs helps individuals to advance their careers, as shown by its positive link with performance ratings and reward allocation decisions (Podsakoff, Whiting, Podsakoff, & Blume, 2009). At the same time, engaging in OCBs comes at the expense of employees' energy resources, with OCB being related to feeling tired, worn out, or on edge (Bolino, Hsiung, Harvey, & Lepin, 2015). Indeed, whereas engaging in OCBs might have long-term beneficial effects, it is depleting in the short term. Hence, individuals will take into consideration their resource reservoir when deciding whether to engage in OCB or

not (Troughakos et al., 2015). Provided that OCBs represent behaviors that go beyond employees' predefined tasks, when individuals experience low capacity of resources, they will focus on retaining or protecting their existing resources and, thus, will be less likely to engage in resource investment endeavors such as OCB.

In the context of our study, we expect that when employees experience a good capacity of energy resources represented by high levels of vitality, they will be more likely to engage in OCB than when they experience low levels of vitality. In line with this idea, Shefer et al. (2018) have found a positive link between vitality and OCB at the between-level, whereas the idea that fluctuations in energy resources are related to fluctuations in OCB has been supported by research showing that psychological detachment, which can revitalize resource levels, is positively linked with OCB (Binnewies, Sonnentag, & Mojza, 2010). It is also in line with research showing that a depletion of cognitive, psychological, and physiological resources, manifested in exhaustion (Troughakos et al., 2015), is negatively related with OCB. Because of these reasons, we expect high daily levels of vitality to be positively related to daily enactments of OCB.

*Hypothesis 1:* Within-person variation in vitality is positively related to within-person variation in OCB.

## Energy Resources: Vitality as an Antecedent of CWB

According to COR theory, resource loss has a great impact on individuals, with this impact even exceeding that of resource gain (Hobfoll, 1989). More specifically, COR theory predicts that, when individuals face a potential or actual loss of resources, as in the case of decreased energy resources, they will exert their efforts not only by protecting, but also—if possible—by replenishing their resources (Westman, Hobfoll, Chen, Davidson, & Lasky, 2004). These claims have been supported by studies showing a positive relationship between role stress and depersonalization (Lee & Ashforth, 1996), and a positive link between perceived abusive supervision and feedback avoidance (Whitman, Halbesleben, & Holmes, 2014).

A relevant way to retain or replenish one's resources in a working context might be to engage in CWBs. CWB is an umbrella construct, typically representing the dark side of employees' extra role performance. Traditionally, scholars have either studied CWB as a single index (e.g., Miles, Borman, Spector, & Fox, 2002), or subdivided it into various categories of CWBs. Regarding the latter, the categorizations receiving the most research attention are the ones differentiating per target (towards the individual and towards



the organization; e.g., Bennett & Robinson, 2000), per severity (minor and serious; e.g., Robinson & Bennett, 1995), and per behavior type (abuse, withdrawal, theft, production deviance and sabotage; e.g., Spector et al., 2006). For the needs of this study, we will focus on minor CWBs and more specifically on abuse and withdrawal (see the Appendix for an overview of all CWBs measured in our study). We argue that, although CWBs are traditionally depicted as malicious intentional actions that harm the organization (Sackett, 2002; Spector & Fox, 2002), minor CWBs can also be viewed by employees as a way to cope with faced adversities (Krischer et al., 2010). In terms of COR, minor CWBs can be considered as an individual's strategy to avoid further resource loss, protect or even replenish their remaining resources. Since engaging in CWB is highly frowned upon by organizations, we hypothesize that, when employees feel high levels of vitality, they will resist engaging in CWBs because possible implications of such behaviors may threaten their existing resources. When employees experience low levels of vitality, however, the momentary relief that minor CWBs such as abuse or withdrawal can offer might outweigh the uncertainty of potential implications following CWBs. Consequently, employees experiencing low vitality levels might consider that risk work taking. A case in point is an instance when an employee may choose to ignore a colleague's request for help, or after having an extremely tough day at work, may choose to arrive later to work the day after. At the same time, we have to acknowledge that enactment of CWBs is not always the result of calculated intentional actions. In fact, there is a large literature base showing that engaging in CWBs can act as a temporary emotional response to a situation (e.g., Bauer & Spector, 2015; Spector & Fox, 2002), or that CWBs can be used as a response to emotional exhaustion (Bolton, Harvey, Grawitch, & Barber, 2012). As vitality pertains to the experience of high levels of physical and mental energy, we expect that when employees experience low levels of vitality, they may feel the compulsion to engage in minor forms of CWB such as abuse or withdrawal, or simply may lack the self-regulation resources to refrain from these behaviors. For example, consider an instance when an employee may find it hard to resist taking a longer break than usual after completing a demanding task, or might find it hard to refrain from starting an argument with a rude colleague or customer.

In line with this idea, past studies have found that CWB is positively related with constructs indicating low resource levels, such as emotional exhaustion (Krischer et al., 2010), low levels of vigor (Little, Nelson, Wallace, & Johnson, 2011), and burnout (Smoktunowicz et al., 2015). Similarly, within-person results indicate that daily stressors are positively related to daily enactment of CWBs (Yang & Diefendorff, 2009). We therefore suggest that high daily levels of vitality will be negatively related to daily enactments of minor CWB (i.e. abuse and withdrawal).

*Hypothesis 2:* Within-person variation in vitality is negatively related to within-person variation in minor CWB.

## Personal Resources: The Moderating Role of Core Self-Evaluations

Although all individuals experience stress when losing resources, COR theory suggests that some individuals may be better equipped for coping with resource loss than others (Hobfoll, 1989). Particularly individuals with a greater pool of resources are less at risk of depletion and are, therefore, better able to cope with resource loss. Moreover, those people are also better at managing their existing resources, which means they are better able to allocate their remaining resources successfully. The resources that can best fulfil this dual function are personal resources (Hobfoll, 2002; Ten Brummelhuis & Bakker, 2012).

These personal resources, otherwise referred to as key resources (Halbesleben, Neveu, Paustian-Underdahl & Westman, 2014; Ten Brummelhuis & Bakker, 2012), are well represented by trait core self-evaluations (CSE). CSE reflects an individual's fundamental appraisal of their worthiness, effectiveness, and capability as a person (Judge, Erez, Bono, & Thoresen, 2003). CSE is a higher-order trait that encompasses four lower-order traits: self-esteem, self-efficacy, locus of control, and emotional stability (Judge, Locke, & Durham, 1997). Self-esteem refers to the basic appraisals individuals make about their self-worth (Judge, Locke, Durham, & Kluger, 1998), while self-efficacy pertains to one's capabilities to deal with different events in one's life (Judge et al., 1997). Events are appraised as being the function of internal factors, when individuals have an internal locus of control, while one's tendency to be confident, secure, or steady is reflected in one's emotional stability (Judge & Bono, 2001). The four traits that comprise trait CSE function similarly to resource caravans (for more information on resource caravans see Hobfoll, 2002, 2011) in that they do not exist in isolation, but tend to co-vary (Judge, Erez, Bono & Thoresen, 2002). For example, individuals who trust their ability to overcome adverse circumstances, will tend to be more emotionally stable when faced with such circumstances.

Trait CSE appears to be a very salient construct in the context of our study, given the ability of CSE to affect both the perceptions and reactions to positive and negative stimuli (Ferris et al., 2011; Harris et al., 2009; Kammeyer-Mueller et al., 2009). More specifically, research shows that high CSE individuals tend to have a lower sensitivity to negative stimuli and a higher sensitivity to positive stimuli (Ferris et al., 2011), with meta-analytic evidence showing that individuals high in CSE report fewer stressors compared to low



CSE individuals (Kammeyer-Mueller et al., 2009). We thus expect that individuals high in CSE will have a higher threshold of perceiving a potential resource loss as threatening, as the appraisals individuals make do not only depend on the objective situations they encounter but are also a function of the beliefs they hold about themselves and their capabilities to control a situation (Judge et al., 1998). The confidence that high CSE individuals have in their capabilities to address a challenging situation is also reflected in their ability to orchestrate resource gains, and in their response to a threat or an actual loss of resources. In line with this idea, empirical results show that CSE is an indicator of both high approach and low avoidance temperament, which means that individuals high in CSE are generally more likely to put their efforts into actively pursuing a positive outcome, rather than avoiding a negative one (Ferris et al., 2011). Given that high CSE individuals have a larger pool of regulatory resources to draw from compared to low CSE individuals, attempts of low CSE individuals to self-regulate might be compromised if these resources are depleted (Chang et al., 2012; Debusscher, Hofmans, & De Fruyt, 2016a; Ferris et al., 2011; Judge, Bono, Erez, & Locke, 2005). This idea is supported by meta-analytic results associating CSE with higher levels of problem-solving and lower levels of avoidance coping (Kammeyer-Mueller et al., 2009).

Translated in COR theory processes, high CSE individuals will tend to perceive and evaluate stressful situations (i.e. low levels of vitality) more favorably compared to their low CSE counterparts, as they have a higher threshold of perceiving a potential loss as threatening due to their larger resource pool, and/or because they have a more effective coping style to respond to it (Hobfoll, 2002; Ten Brummelhuis & Bakker, 2012). High CSE individuals will generally also be better equipped to orchestrate resource gains (e.g., through engagement in OCBs), because in order to gain resources one first needs to invest some, and any investment of resources goes hand in hand with a temporary—at best—loss of resources (which may ultimately lead to a loss spiral or gain spiral depending on the outcome of the investment; Westman et al., 2004). Resource investments are, therefore, easier for individuals high in CSE, as those individuals have a larger pool of resources to draw from and/or are better able to allocate their existing resources. This larger pool of resources combined with their high self-regulatory capacities, and their tendency to adopt approach goals (Chang et al., 2012; Ferris et al., 2011; Judge et al., 2005), implies that high CSE individuals will be better equipped to deal with a resource loss situation, and will tend to react to these situations in a more constructive manner (e.g., by refraining from performing CWBs).

We therefore expect that within-person decreases in one's vitality level should have a smaller impact for people high on trait CSE than for people low on trait CSE. Consistent with this reasoning, studies showed that

individuals low in trait neuroticism (the equivalent of high emotional stability), behave less neurotically when faced with high job demands, compared to individuals high in trait neuroticism (Debusscher, Hofmans, & De Fruyt, 2016b). Past results also showed that emotional stability moderates the positive relationship between stressors and strain, such that individuals high in emotional stability react less strongly to the stressors (Kammeyer-Mueller et al., 2009). COR theory not only claims that *decreases* in resources matter less for people high in resources, but it also theorizes that *increases* should have a smaller impact. The reason is that COR theory assumes that gaining resources is more salient in the context of resource loss (Hobfoll, 2002). That is, “whereas resource gains may have little impact on people who are not experiencing loss or loss cycles, these gains become potent where major or sustained resource loss has been experienced” (Chen, Westman, & Hobfoll, 2015, p. 97). Applied to our study, this means that within-person increases in vitality are more salient when the individuals are low compared to when they are high in trait CSE. Combining both mechanisms—that both increases and decreases in vitality matter less for people high in trait CSE—leads to the following set of hypotheses:

*Hypothesis 3:* CSE moderates the within-person relationship between vitality and OCB such that the relationship is weaker for people high on CSE than for people low on CSE.

*Hypothesis 4:* CSE moderates the within-person relationship between vitality and minor CWB such that the relationship is weaker for people high on CSE than for people low on CSE.

## METHODS

### Participants

Our sample consisted of 81 full-time employed Belgian employees, of which 46 were women. Respondents were on average 35 years old ( $SD = 10.79$ ) and had worked for their current organization for 7 years ( $SD = 8.87$ ). Most participants held a professional Bachelor's degree. Respondents were employed in a variety of sectors such as tourism, finance and economics, marketing and education, and communication.

### Procedure

A research assistant contacted individuals from her personal network asking them to participate in a 10-day daily diary study, resulting in 121 individuals who initially agreed to participate in the study. Before participants enrolled

in the diary study, they filled out an online survey asking them about their demographics, while also measuring their level of trait CSE. Next, they took part in the diary study in which questions pertained to vitality, OCBs and minor CWBs. Since the data collection took part in Belgium, all measures were translated from the original English version to Dutch and French using the back-translation procedure (Brislin, 1980). We distributed the daily online questionnaires created in Qualtrics via email, for 10 workdays towards the end of the workday, with the order of items randomized. All daily questionnaires that were filled out after midnight on each day of measurement were deleted from our data set, as well as any respondents that failed to fill out at least two daily questionnaires (note that at least two observations are needed for an individual to be able to separate between- from within-person variability).

In terms of the number of observations, we have a total of 550 daily observations from 81 individuals for testing Hypotheses 1 and 2. This corresponds to 6.79 observations per participant on average (or a response rate of 67.90%). When looking at individual response rates, 13 participants completed all 10 diaries, 13 completed 9 diaries, 10 completed 8 diaries, 11 completed 7 diaries, 6 completed 6 diaries, 11 completed 5 diaries, 9 completed 4 diaries, 3 completed 3 diaries, and 5 completed 2 diaries. As we do not have trait CSE data for 5 of these participants, the sample size drops to 521 daily observations from 76 individuals for testing the moderation hypotheses (i.e. Hypotheses 3 and 4).

We applied the general guidelines of our institution at the time of data collection, which did not require us to ask for permission from an ethical committee. Despite the fact that institutional approval was not required, we followed the American Psychological Association Codes of Ethics regarding the use of an informed consent. In particular, participants were informed about the purpose and expected duration of the study, they were informed that they had the right to withdraw from the study at any point without any consequences, they were reassured that their answers would be anonymized and kept confidential, and they were encouraged to contact us should any issues arise.

## Measures

CSE was measured with the 12-item Core Self-Evaluations scale of Judge et al. (2003). An example item of this scale is “I am confident I get the success I deserve in life”. Participants indicated their answers on a 5-point scale, ranging from “strongly disagree” to “strongly agree”. The alpha reliability coefficient of the CSE scale was 0.79.

*OCBs* were measured with the scale of Dalal et al. (2009) which was explicitly designed for measuring OCB in experience sampling research. The scale consists of eight items with “Today I did something that was not required” being an example. Participants had to indicate whether or not they had engaged in each OCB item during that workday. As OCB is a formative construct that represents a set of behaviors that are conceptually related but not necessarily correlated within one day (e.g., it is not because on one day you praised a co-worker to others that you also showed genuine concern for another colleague on that same day), we calculated no internal consistency reliability index (see also Debusscher, Hofmans, & De Fruyt, 2016b).

*Minor CWBs* were measured with 9 out of 45 items of Spector et al.’s Counterproductive Work Behavior Checklist (2006). Since this scale was intended to measure CWB over a longer period of time, we only included items that reflected less serious instances of CWB mainly reflecting behaviors of abuse and withdrawal, such as “Today I started an argument with someone at work” and “Today I left work earlier than I was allowed to”. A complete list of included items can be found in the Appendix. Participants scored each item by indicating whether they had engaged in each of the behaviors that day at work. Similar to OCB, minor CWB is a formative construct and, therefore, no internal consistency reliability was computed.

*Vitality* was measured with the use of the corresponding four-item scale of the Medical Outcomes Study (MOS) short form 36-items health survey (Ware & Sherbourne, 1992). An example item is “Did you have a lot of energy today?” Respondents rated each item on a six-point scale ranging from “all of the time” to “none of the time”. As we focus on within-person fluctuations in vitality in our study, we tested the within-person reliability of the four-item vitality scale using the multilevel confirmatory factor analysis approach of Geldhof, Preacher, and Zyphur (2014), resulting in a within-person omega reliability coefficient of 0.85.

## Analyses

Because participants provided ratings on ten different working days, the data have a nested structure with  $i$  daily measurements nested within  $j$  persons. To account for dependencies in our data resulting from this nested data structure, we analyzed the data using multilevel modelling with measurements at the first and persons at the second level of analyses. Moreover, to correctly model OCB and minor CWB, which were measured as count variables (i.e. individuals indicated for each OCB/minor CWB behavior whether they engaged in it that day), we performed two-level Poisson regression analyses in Mplus version 7.31 (Muthén & Muthén, 1998–2011). In our data, missingness was due to participants missing assessments (i.e. beep wise missing data), implying that different participants have a different number of completed

assessments. Fortunately, multilevel models can elegantly deal with such missing data. Moreover, full-information maximum likelihood (FIML) has been shown to effectively recover population estimates in the presence of extensive missing data (Enders, 2010), which is even true in multilevel designs (Silvia, Kwapil, Walsh, & Myin-Germeys, 2014). Since the estimator in our models (Restricted Maximum Likelihood—MLR) computes the point estimates in exactly the same way as FIML does, we are confident that our analyses are robust to missingness in our sample.

To test our first and second hypothesis (i.e. within-person variation in vitality is positively related to within-person variation in OCB (Hypothesis 1) and negatively with minor CWB (Hypothesis 2), we first removed all between-person variability in the vitality scores by group-mean centering them, and then we regressed OCB (resp. minor CWB) on the group-mean centered vitality scores:

$$\ln(OCB_{ij}) = \beta_{0j} + \beta_{1j}vitality_{ij} \quad (1)$$

$$\beta_{0j} = \gamma_{00} + \mu_{0j} \quad (2)$$

$$\beta_{1j} = \gamma_{10} + \mu_{1j} \quad (3)$$

The third and fourth hypothesis (pertaining to the moderating effect of CSE) were tested by adding (1) the direct effect of CSE on OCB (resp. minor CWB), and (2) the cross-level interaction between vitality and CSE to the previous models. That is, we tested a model in which within-person fluctuations in vitality predicted within-person fluctuations in OCB (resp. minor CWB), where between-person fluctuations in CSE predicted between-person fluctuations in OCB (resp. minor CWB), and where between-person fluctuations in CSE predicted the strength of the within-person relationship between vitality and OCB (resp. minor CWB). Before performing these analyses, the trait CSE scores were grand-mean centered.

$$\ln(OCB_{ij}) = \beta_{0j} + \beta_{1j}vitality_{ij} \quad (4)$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}CSE_j + \mu_{0j} \quad (5)$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}CSE_j + \mu_{1j} \quad (6)$$

## RESULTS

Means, intra-class correlation coefficients (ICCs), variances (on the diagonal) and the within- and between-person correlations between OCB, vitality,

minor CWB, and CSE are shown in Table 1. First, the ICCs revealed that a substantial part of the variance in OCBs (i.e. 56%), vitality (i.e. 49%), and minor CWBs (i.e. 71%) was located at the within-person level. Regarding the interrelationships, we found statistically significant correlations between OCB and vitality ( $r_{within} = 0.14$ ;  $p = .015$ ;  $r_{between} = 0.49$ ;  $p < .001$ ) and between vitality and minor CWB ( $r_{within} = -0.13$ ;  $p = .001$ ;  $r_{between} = -0.43$ ;  $p = .008$ ), both at the within- and between-person level. Moreover, between-person differences in CSE correlated positively with between-person differences in vitality ( $r = 0.58$ ;  $p < .001$ ). Finally, although there was a strong negative correlation between OCB and minor CWB at the between-person level ( $r = -0.52$ ;  $p = .002$ ), the correlation was non-significant at the within-person level ( $r = -0.06$ ;  $p = .304$ ).

Subsequently, we tested whether within-person fluctuations in vitality related to within-person variation in OCBs and minor CWBs. In line with Hypothesis 1, we found that within-person variation in vitality ( $\gamma_{10} = 0.05$ ;  $p = .007$ ) was positively related to within-person variation in OCBs. Furthermore, and in support of Hypothesis 2, we found a negative within-person relationship between vitality and minor CWBs ( $\gamma_{10} = -0.33$ ;  $p = .002$ ).

Finally, we tested the moderating effect of CSE on the within-person relationship between vitality and OCB (resp. minor CWB). In line with Hypothesis 3, we found that between-person differences in CSE moderated the relationship between vitality and OCB ( $\gamma_{11} = -0.08$ ;  $p = .014$ ). The exact nature of this moderation effect is shown in Figure 1, showing the within-person relationship between vitality and OCB for different levels of trait CSE. As can be seen from this plot, the relationship between vitality and OCB was stronger for individuals low in trait CSE. This is confirmed by a simple slopes analysis (using the procedure by Preacher, Curran & Bauer, 2006), showing that the relationship between vitality and OCB is positive and significant for people low on CSE ( $-1 SD$ ) (*simple slope* = 0.08;  $p = .002$ ) and

TABLE 1  
Means, ICCs, Variances and Correlations of Study Variables

	Mean	ICC	1	2	3	4
1. Vitality	1.99	.51	.65/.87	.14*	-.13***	-
2. OCB	5.77	.44	.49**	2.24/.24	-.06	-
3. Minor CWB	0.63	.29	-.43**	-.52**	.68/.28	-
4. CSE	2.64	-	.58***	.18	-.27	-.24

Note. Within-person variances are before and between-person variances are after the slash. Within-person correlations are above and between-person are below the diagonal.

\*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ .



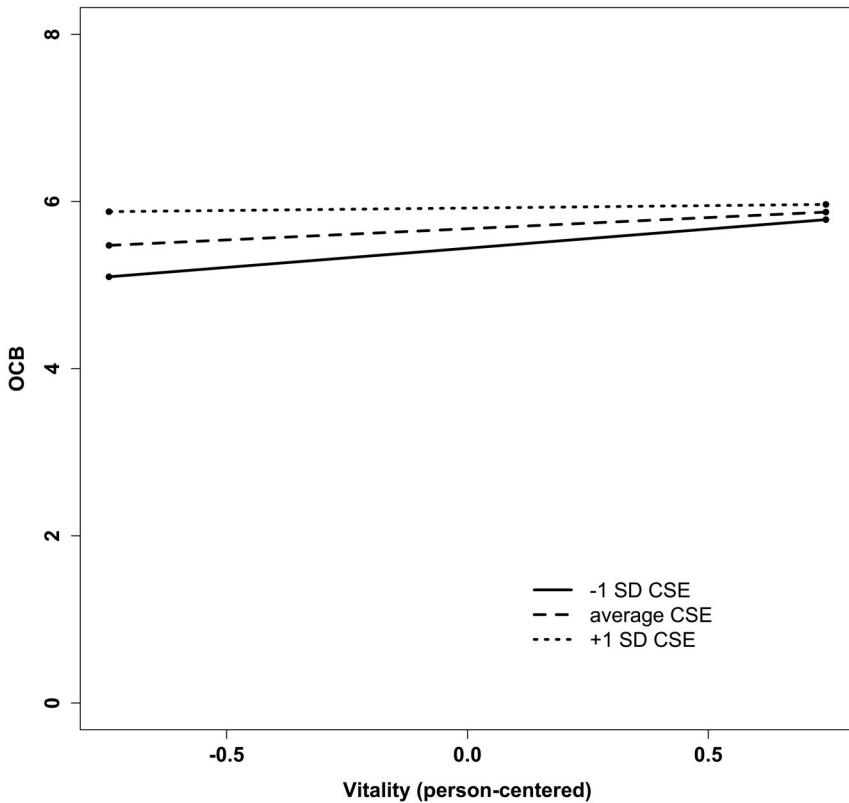


FIGURE 1. The relationship between vitality and OCB for different levels of trait CSE

average on CSE (*simple slope* = 0.05;  $p = .015$ ). For individuals with an above average level of trait CSE (+1 *SD*), however, vitality and OCB were unrelated (*simple slope* = 0.01;  $p = .651$ ). Moreover, the results from this analysis also showed that vitality was positively related to OCB ( $\gamma_{10} = 0.04$ ;  $p = .023$ ), and that between-person differences in CSE were unrelated to between-person differences in OCB ( $\gamma_{01} = 0.09$ ;  $p = .213$ ).

For minor CWB, our findings did not support Hypothesis 4 as between-person differences in CSE did not moderate the relationship between vitality and minor CWB ( $\gamma_{11} = -0.01$ ;  $p = .952$ ). We did find that vitality was negatively related to minor CWB ( $\gamma_{10} = -0.32$ ;  $p = .006$ ), and that between-person differences in CSE were marginally negatively related to between-person differences in minor CWB ( $\gamma_{01} = -0.55$ ;  $p = .051$ ).

## DISCUSSION

For a long time, research on OCB and CWB has focused on the prediction of stable, between-person differences in OCB and CWB. Although this between-person perspective has offered great insights into person- and organization-related characteristics predicting who tends to engage in OCB and CWB, it is becoming clear that the traditional classification of employees in “good soldiers” or “bad apples” is oversimplified. Everyone at times engages in OCBs and CWBs, and these behaviors can be predicted from personal states and events that happen in the person’s environment (Dalal et al., 2009; Ilies et al., 2013). Moreover, an exclusive between-person focus on OCB and CWB is limiting because results at the between-person level cannot straightforwardly be generalized to the within-person level and vice versa (Hamaker, 2012). For example, whereas it is known that people who exercise regularly tend to have lower levels of blood pressure (i.e. a negative between-person correlation between physical exercise and blood pressure), one’s blood pressure increases when exercising (i.e. a positive within-person correlation). Although between- and within-person relationships can of course be equivalent, “similar within-person and between-person relationships are merely coincidental if they exist at all” (McCormick, Reeves, Downes, Li, & Ilies, 2020, p. 330). In the specific case of OCB, the meta-analysis of McCormick et al. (2020) showed that in 16 percent of the cases the strength of between- and within-person correlations were significantly different, while in 4 percent of the cases they even differed in sign. Hence, studying the within-person association between vitality and OCB and CWB has clear theoretical and practical relevance.

Regarding the theoretical contributions, we introduced and tested a resource-based perspective on individual’s OCBs and minor CWBs according to which within-person fluctuations in those behaviors are predicted from within-person fluctuations in one’s energy resources. In line with our expectations, within-person variation in energy resources, as represented by within-person variation in vitality, related in a positive way to within-person variation in OCBs and in a negative way to within-person variation in minor CWBs. This indicates that being rich or low in energy resources predicts whether an individual engages in what is generally perceived as constructive versus destructive organizational behaviors. These findings complement the dominant perspective on within-person fluctuations in OCB and CWB, according to which such within-person fluctuations are primarily driven by one’s emotional experiences (Spector & Fox, 2002). Our study adds to this perspective by showing that not only one’s affective states matter, but also the extent to which one is momentarily rich in energy resources. Moreover, by revealing that energy resources predict both OCBs and minor CWBs, our findings show that the claim that “many of the same organizational

conditions (or at least their perception) are associated with CWB and OCB, although in opposite directions” (Spector & Fox, 2002, p. 287) also holds for person-related conditions, such as one’s level of vitality.

Moreover, the findings of the present study suggest that OCB and CWB result from a complex interplay of between- and within-person differences. This realization is supported by the fact that OCBs result from the dynamic interplay of within-person fluctuations in vitality and between-person differences in CSE, stressing the need for research that focuses on both within- and between-person fluctuations, preferably using an integrative approach. Note that this finding does not contradict the existence of between-person differences in people’s tendency to engage in OCB and CWB. On the contrary, and in line with our results, we maintain that both stable individual traits and fluctuating states are responsible for the elicitation of OCBs and minor CWBs, and that only by taking both into consideration can we reach a more accurate depiction of these organizational phenomena.

Regarding the interaction between individual traits and states, we found that CSE moderated the positive relationship between vitality and OCBs such that for individuals low in CSE the positive relationship between vitality and OCBs was stronger than for individuals high in CSE. This indicates that for individuals low in CSE the presence of high energy resources was a decisive factor to engage in OCBs, while this was less the case for individuals high in CSE. Furthermore, the moderation effect indicates that individuals low in CSE, but not individuals high in CSE, tend to refrain from engaging in OCBs in the face of energy loss (i.e. when they are low in vitality). Such finding is in line with one of COR theory’s basic premises that people aim at conserving their remaining resources when they are low in resources (Hobfoll, 1989). Moreover, because the interaction concerns an interplay between energy and personal resources, our findings show that the COR premise cuts across different resource categories and is not category-specific.

In contrast to our findings for OCB, however, the moderating effect of CSE was not evident in the relationship between vitality and minor CWBs. This finding might suggest that the counterbalancing of low levels of vitality by engaging in less serious CWBs can be regarded as a phenomenon that does not depend on an individual’s level of CSE. This result is of particular importance as it might underline the significance of resource loss for the individual (Hobfoll, 1989), by showing that individuals are much more similar when it comes to their need to replenish resources. Furthermore, it reveals the prevalence of the coping function of minor CWBs for their enactors.

Our study adds to the literature on extra-role performance by showing how daily within-person fluctuations in OCB and minor CWB are related to an employee’s energy levels, thereby underlining the salience of studying vitality in work settings. Moreover, by integrating a within-person focus and

insights of COR theory, our study sheds light on the factors predicting fluctuation of OCBs and minor CWBs within individuals. In particular, COR theory suggests that individuals exert great efforts to retain, and whenever possible to build up their resources. Hence, any potential or actual loss of resources is treated as a threat and has a great impact on individuals, with the effect of resource loss largely exceeding that of resource gain (Hobfoll, 1989). Consistent with such a resource-based perspective on OCB and CWB, our results suggest that, although OCBs have been shown to have positive effects for both employees and organizations in the long term (Podsakoff et al., 2009; Podsakoff & MacKenzie, 1997), in the short term the enactment of OCBs might require energy resources. Consequently, when low in vitality, people might refrain from engaging in OCBs. Similarly, when we focus on the short-term effects of less serious forms of CWB for their enactors, our findings tend to suggest that those behaviors do not always stem from an intention to harm the organization or others, but can also reflect a momentary coping strategy to protect or replenish people's energy levels. Indeed, from the COR perspective, the negative within-person association between vitality and minor CWBs can be interpreted as a way to protect and even replenish one's resources. Hence, although past research has demonstrated that, in accordance with the norm of reciprocity (Gouldner, 1960), performance of CWB can lead to retribution by the recipients of those behaviors (Scott, Restubog, & Zagenczyk, 2013), in the short term employees might prioritize the protection or replenishment of their resources by nevertheless engaging in minor CWBs. Finally, COR theory also suggests that some individuals may be better equipped for coping with such a loss than others (Hobfoll, 1989). Our results showed that, in line with the theory's suggestions, personal resources in the form of trait CSE do indeed act as a buffer in the link between daily vitality and OCBs. However, the same did not hold true for the daily vitality link with minor CWBs.

## Practical Implications

Our results showed that roughly half of the variance for OCB and minor CWB was located at the within-person level, a result that is in accordance with results from past within-person studies on OCB and CWB (e.g., Dalal et al., 2009; Spanouli & Hofmans, 2016). This finding suggests that OCB and minor CWB vary approximately as much between as within individuals. An important practical implication is that selecting the "appropriate" employee does not suffice to ensure favorable employee behaviors. It is therefore in the interest of both organizations and employees to provide the latter with enough resources daily to enable them to engage in OCBs and refrain from performing CWBs, an advice that becomes even more important in the

current context of work intensification. In line with past research studying vitality as an outcome, we argue that organizational contexts that support an employee's autonomy and competence should enhance vitality levels (Sheldon, Ryan, & Reis, 1996).

Taking into consideration our results, individuals high in CSE seem to be less affected by within-person changes in their energy levels. Although we have studied CSE as a stable, between-person characteristic, recent research shows that it not only differs between individuals but also fluctuates within the individual. Moreover, such within-person fluctuations are important as they relate to within-person fluctuations in task performance, OCB, CWB, and transformational leadership behaviors (Debusscher et al., 2016b; Doci & Hofmans, 2015; Hofmans, Debusscher, Doci, Spanouli, & De Fruyt, 2015). An important implication thereof is that organizations can try to build employees' personal resources by adopting practices that enhance each of CSE's sub-components. To name but a few, such practices can include building employees' confidence through positive feedback, acknowledging their personal contributions by celebrating their accomplishments, and optimizing their work environment by obliterating any unnecessary stressors.

## Limitations

Notwithstanding the strengths of our study, we acknowledge that our study is not without limitations. Our data were collected via self-reports, which means that our results might be influenced by common method bias. The reason we chose to use self-reports nonetheless, was that an individual's CSE and vitality cannot be measured via another source; and even though this is possible with OCB and CWB, meta-analytical studies concluded that the use of self-reports is a viable choice for these constructs (Berry, Carpenter, & Barratt, 2012; Carpenter, Berry, & Houston, 2014). Moreover, the issue of common method bias and social desirability bias was partly dealt with in our analysis because we person-centered our data. By doing this, we removed any between-person variance that accounted for systematic over- or under-estimation of the ratings.

Another limitation of our study pertains to the use of convenience sampling, and the fact that we cannot rule out the possibility of self-selection bias. For that reason, we urge caution in generalizing our results to the general working population. Another threat to the generalizability of our findings is that we did not include control variables in our questionnaires, which were designed to be very short to reduce dropout and nonresponse. Whereas the lack of control variables at the between-person level is not an issue for the interpretation of our within-person relations in the sense that between-person variables cannot account for within-person variation, such between-person

variables might still moderate the within-person relations. Hence, it remains an open question to what extent our within-person findings can be broadly generalized or are moderated by between-person factors. Moreover, at the within-person level, the lack of within-person control variables prevents us from ruling out the possibility that the relation between vitality and OCB/minor CWB might be inflated by transient variables we did not account for, such as mood effects. In addition, due to the correlational nature of our data, we cannot infer causality. That means that, even though we can show that vitality and CSE predict OCB and minor CWB at the within-person level, we cannot safely conclude what causes what.

In terms of measurements, because we adhered to COR theory's concepts of resource loss and investment (Hobfoll, 1989), we chose to focus on variables that are less commonly investigated in the context of OCB and CWB but have a clear relevance to COR theory. Vitality is arguably one of the best indicators of energy resources, while trait CSE—by capturing an individual's fundamental appraisal of their worthiness, effectiveness, and capability as a person (Judge et al., 2003)—lies at the very core of what personal resources are. Although this choice of variables allowed for a proper test of our resource-based perspective on OCB and CWB, predictors that have received more attention within the OCB and CWB literatures might also fit such a resource-based perspective. For example, conscientiousness is often seen as a personal resource helping people to resist stressors (Perry, Witt, Penney, & Atwater, 2010), while according to Frederikson's (2001) broaden-and-build theory positive emotions broaden our thinking and help individuals building up resources. As such, future research might want to look further into a resource-based perspective on OCB and CWB using different resource-based constructs.

Finally, our research design did not allow us to measure the fluctuation of resources within each workday, as we only measured respondents' resource levels at the end of each work day. In addition, caution must be taken so as to not generalize our results for the entire spectrum of CWBs. Since we only included minor CWB items that mainly pertained to abuse and withdrawal in our questionnaire, we are unable to conclude whether the same mechanisms would hold true for what are considered more serious types of CWB, such as theft or sabotage. Moreover, the dichotomous response options we used for the scales of OCB and minor CWB did not allow us to measure whether respondents have performed any behaviors more than once during the day, and respondents were unable to indicate whether a certain item did not apply for them. Finally, in our survey, we included two items to detect random answering. However, further analyses followed by personal contacts with respondents who participated in the study indicated that the wording of



these questions was misleading, thus rendering these questions meaningless. Hence, we did not use these questions to filter out responses.

## Future Recommendations

An evident future research recommendation is the use of an experimental design in order to determine causality of the relationships and to explain how the relationship unfolds within a day. Although we maintain, for example, that low levels of vitality will lead to decreased instances of OCB, one can argue that it is engagement in OCB that leads to decreased vitality. An experimental research would be able to resolve such questions by testing causality.

Another fruitful research area would be to investigate the full spectrum of motives and consequences that enactment of OCB and different types of CWB have on behalf of the individuals who are engaging in these behaviors. Examples of such studies could be a study on the link between a perceived obligation to engage in OCB and burnout, or the relationship between emotional exhaustion and CWB. For a long time, the discussion has been dominated by the constructive OCB versus destructive CWB paradigm, and with the exception of a few studies taking a different approach (e.g., Halbesleben, Harvey, & Bolino, 2009; Krischer et al., 2010), these aspects are severely understudied. Yet, if we are to acknowledge that our world is often more complex than the schemata we create to understand it, we must acknowledge that these patterns oftentimes need to be challenged and expanded.

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## APPENDIX

### MINOR CWB ITEMS

Today I daydreamed rather than did my work  
Today I told people outside the job what a lousy place I work for  
Today I took a longer break than I was allowed to take  
Today I left work earlier than I was allowed to  
Today I tried to look busy while doing nothing  
Today I ignored someone at work  
Today I refused to help someone at work  
Today I started an argument with someone at work  
Today I insulted or made fun of someone at work