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Not if, but how they differ: A meta-analytic test of the nomological networks of burnout and engagement

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ABSTRACT

The distinctiveness between work engagement and burnout has long been an issue of debate. To address this issue, we use a recently developed technique by Yu et al. (2016) to specify and test a meta-analytic structural equation model (MASEM) which accounts for the non-independence between engagement and burnout as well as the simultaneous effects of all relationships in our model, based on job demands-resources (JD-R) theory. We also estimate the degree of variability of these relationships across subpopulations. We report the findings as a distribution of effect size estimates—each estimate in the distribution representing the true effect size for a potential subpopulation—around the mean average estimate for each relationship in the model. Based on the findings, we conclude that overall burnout and engagement display empirically distinct relationships within the JD-R model (i.e., they are not antipodal), particularly in terms of antecedents. Perhaps most interestingly, rather than a polar opposite pattern of relationships, challenge demands have a similarly positive relationship to *both* burnout (β = 0.35, SD = 0.10) *and* engagement (β = 0.35, SD = 0.08), suggesting that challenge demands simultaneously lead—in equal force—to both engagement and burnout. In addition, the distributions of effect sizes are nearly identical for both relationships, indicating that this holds true for nearly all subpopulations. As expected, hindrance demands have a positive relationship with burnout (β = 0.31, SD = 0.10) and have a relatively weak, negative relationship on average to engagement (β = −0.07, SD = 0.07); work resources have a negative relationship with burnout (β = −0.15, SD = 0.06) and are positively related to engagement, but in absolute terms they are a stronger predictor of engagement (β = 0.33, SD = 0.05). In terms of outcomes, burnout and engagement predict a variety of behavioral and attitudinal outcomes differentially from one another, although the differences are less clear due to wide variation in effect sizes in the population. Future research directions are discussed alongside practical implications.

1. Introduction

A sea change occurred in psychology at the turn of the millennium. Psychologists were called upon to move beyond understanding pathology and begin to investigate how to heighten human flourishing and the so-called positive aspects of psychology (Seligman & Csikszentmihalyi, 2000). In synchrony with this call to focus on the positive aspects of psychology, researchers investigating how to reduce employee responses to chronic stress (i.e., burnout) also began to investigate how to induce employee thriving and well-being at work (e.g., engagement). In the more than 15 years since this change of tides, and particularly after 2002 when a measure of work engagement—an active and positive motivational state toward one's work (Nimon, Shuck, & Zigarmi, 2016)—was validated by Schaufeli and colleagues (Schaufeli, Salanova, González-Romá, & Bakker, 2002), the number of research articles on work engagement produced each year has grown tremendously. Yet, while interest has grown exponentially in researching engagement, so has confusion surrounding its conceptualization and its measurement.

In fact, some have argued that we may have lost sight of what exactly engagement is conceptually (e.g., Newman & Harrison, 2008), and others have noted potential empirical issues with its measurement (e.g., Cole, Walter, & Bedeian, 2012; Maslach, Leiter, & Schaufeli, 2008). In particular, there is heated disagreement as to what the nature of engagement is in its relation to its health-impairing counterpart, burnout. For instance, some conceptualize engagement to be the polar

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opposite of burnout (i.e., the absence of burnout) while others conceptualize it to be a distinct state. This debate continues today.

This study seeks to first address the debate of whether burnout and engagement are simply polar opposite constructs—meaning low burnout is equivalent to high engagement and vice versa—or in fact distinct constructs from one another; we do this by providing a brief conceptual and empirical review of the literature on burnout and engagement. After reviewing the literature and presenting the corresponding evidence that seems to indicate the two constructs are indeed distinct states, we then provide a brief overview of the theoretical model which we use to test our primary research question: *on average, how do burnout and engagement differ in their distinct relationships with theoretical antecedents and outcomes?*

Our study builds off of existing work which has sought to clarify whether and to what degree burnout and engagement are distinct constructs (e.g., Byrne, Peters, & Weston, 2016; Cole et al., 2012; Newman, Joseph, & Hulin, 2010; Shuck, Nimon, & Zigarmi, 2017). On the one hand, there is meta-analytic evidence which highlights the high correlations between engagement and other constructs in its nomological network (e.g., burnout, job satisfaction). For example, Cole et al. (2012) through conventional meta-analyses, critiqued the high correlations between dimensions of the most common measures of burnout, the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) and engagement, the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002). Other scholars, again through conventional meta-analyses, noted that the UWES provided little unique variance beyond a higher-order factor of three commonly studied job attitudes (i.e., job satisfaction, job involvement, and organizational commitment; Newman et al., 2010).

However, in light of some of the limitations to conventional meta-analysis, other scholars have attempted to "untangle" the complexity of this issue using structural equation modeling (SEM) with large, primary datasets. For instance, Byrne et al. (2016), after controlling for the simultaneous interrelationships in their model, showed that engagement showed discriminant validity with some of these same job attitudes. Furthermore, they found that at the construct level "engagement is not the same as the opposite of the burnout construct", despite Cole et al.'s (2012) meta-analysis suggesting that "the UWES assesses a reverse-scored MBI", (Byrne et al., 2016; p. 1219). In addition, Shuck et al. (2017) investigated the empirical overlap of engagement to the same three job attitudes analyzed in the Newman et al. (2010) meta-analysis by examining an exhaustive number of combinations of these constructs in order to partition out the unique variance of each. In addition, both Byrne et al. (2016) and Shuck et al. (2017) found that two measures of engagement, the UWES and the job engagement scale (JES; Rich, Lepine, & Crawford, 2010), not only had distinct nomological networks, but the measures themselves measured different, theoretical aspects of engagement.

In summary, the current state of the debate as to whether engagement is distinct from burnout and other related job attitudes is, simply put, complicated. On one hand, meta-analytic evidence presents a situation in which the two most commonly used measures of burnout and engagement show correlations so high that they suggest redundancy (Cole et al., 2012). meta-analytic evidence also shows a high degree of overlap with common job attitudes (Newman et al., 2010), which as Shuck et al. (2017) colorfully put it, suggests engagement is "the repackaging of old goods; new label, same old merchandise" (p. 81). Yet on the other hand, when scholars conduct analyses which are more sophisticated than those possible with conventional meta-analyses, engagement appears to show patterns of discriminant validity with both burnout (Byrne et al., 2016) and job attitudes (Shuck et al., 2017).

With this state of the science in mind, we seek to build from the current body of work testing the nomological networks of engagement and burnout using a technique which can leverage the advantages of each approach: the power and generalizability of *meta*-analysis with the sophistication of SEM, wherein the non-independence of constructs (i.e., such as that with engagement, burnout, and related job attitudes) and the complex, simultaneous interrelationships of an entire theoretical model can be accounted for. In this study, we test a theoretical model based on the job demands-resources model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) using a recently developed technique (Yu, Downes, & Carter, 2016) which uniquely accounts for potential non-independence between constructs, such as burnout and engagement. This technique allows us to simultaneously test all parametric relationships in an entire model, thereby allowing us to see *how* burnout and engagement differ from one another and their nomological networks. The technique we employ also allows us to determine *how often* they differ, by providing an entire distribution of effect sizes (i.e., standardized path coefficients) representing the percentage of subpopulations which fall within the given range of effect sizes. This is useful to locate potential relationships which have high variability, indicating moderation which can be explored with future research. In this way we can more definitively determine not only *if*, but *how* engagement's and burnout's nomological networks differ, thereby advancing theory and practice. Prior to implementing this technique, we provide a brief review of the literature on engagement and burnout to provide a theoretical context for the model which we test.

1.1. Conceptual review of engagement

Conceptually, engagement has often been viewed in two main ways: as antipode (i.e., "polar opposite") or as a distinct state (i.e., negatively related albeit distinct construct from burnout). In the first view, as the antipode or diametric opposite of burnout, employees are thought to begin a certain job with a level of positive motivation or state of mind (i.e., engagement), which if the demands of the job outweigh the resources available to the employee will then begin to erode this motivational high and eventually deteriorate, over time, into the motivational low of burnout (Maslach & Leiter, 1997). In fact, the very name of the concept, *burnout*, implies such a process as of a smoldering fire: "once a fire was burning but that fire cannot continue burning brightly unless there are sufficient resources that keep being replenished" (Schaufeli, Leiter, & Maslach, 2009, p. 205). Under this conceptualization, engagement has been operationalized as the inverse pattern of burnout scores on the MBI.

Yet others have conceptualized engagement as a qualitatively different state, a distinct construct from burnout. Under this "distinct states" view, engagement is typically conceptualized as a positive and persistent work-related state characterized by the affective-cognitive dimensions of vigor, dedication, and absorption (Schaufeli et al., 2002). Engagement and burnout are still conceptualized, in this view, as antithetical in nature, but rather than "perfectly complementary and mutually exclusive states, burnout and engagement are independent states that—because of their antithetical nature—are supposed to be negatively related" (Schaufeli & Bakker, 2004; p.294). Schaufeli and colleagues have argued that, defined as distinct states, burnout and engagement are best assessed with independent measures, such as the MBI for burnout (Maslach & Jackson, 1981) and the to-date most commonly used measure of work engagement, the UWES.

Another "distinct states" conceptualization and corresponding measure is that of the JES (Rich et al., 2010). The JES is based on early work by Kahn (1990), who conceptualized engagement as a unique psychological state in which an employee "harnesses" their physical, emotional, and cognitive energies to complete their work. Schaufeli (2013) has noted that the content of the UWES and JES share similar dimensions (with different labels) and items. Furthermore, others have noted that each measure taps into different aspects of the same construct (Byrne et al., 2016; Shuck et al., 2017). See Byrne et al. (2016) for distinctions on when each scale might be applied to specific research questions. However, considering their similarities and to gain