

# Work as a Calling: A Theoretical Model

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Perceiving work as a calling has been positioned as a key pathway to enhancing work-related well-being. However, no formal theory exists attempting to explain predictors and outcomes of living a calling at work. To address this important gap, this article introduces a theoretical, empirically testable model of work as a calling - the Work as Calling Theory (WCT) - that is suitable for the contemporary world of work. Drawing from research and theory in counseling, vocational, multicultural, and industrial-organizational psychology, as well as dozens of quantitative and qualitative studies on calling, the WCT is presented in three parts: (a) predictors of living a calling, (b) variables that moderate and mediate the relation of perceiving a calling to living a calling, and (c) positive (job satisfaction, job performance) and potentially negative (burnout, workaholism, exploitation) outcomes that result from living a calling. Finally, practical implications are suggested for counselors and managers, who respectively may seek to help clients and employees live a calling.

## **Public Significance Statement**

This article offers the first integrative theory of work as a calling, proposing how perceiving calling links to a living a calling and in turn promotes positive and potentially negative outcomes. The theoretical model may be useful for researchers, counselors, and organizational leaders.

*Keywords:* calling, job satisfaction, theoretical model

Scholarship on work as a calling is vibrant—with over 200 studies published in the last 10 years demonstrating that perceiving a calling to work is linked with an increased sense of meaning and satisfaction in one's career, work, and life across diverse samples of college students and working adults (Duffy & Dik, 2013). These effects are especially pronounced when individuals are actually able to live out that calling. Indeed, those who are living out a calling tend to be the happiest, most committed, and most engaged employees (Douglass, Duffy, & Autin, 2016; Duffy, Allan, Autin, & Douglass, 2014; Duffy, Autin, & Douglass, 2016; Duffy & Dik, 2013; Wrzesniewski, 2012; Yoon, Daley, & Curlin, 2017; Yoon, Hunt, Ravella, Jun, & Curlin, 2016). Despite this high level of scholarly interest, the study of calling has arguably lacked coherence due to the lack of an overarching

theoretical model to guide research. This concern, in turn, may limit the ability of counselors and organizational leaders to work with clients and employees, respectively, seeking to live out a calling.

The development of such a theoretical model is also necessary in order to provide a lens on the construct that fits with the ever-changing world of work in the 21st century (Lips-Wiersma & Wright, 2012; Yeoman, 2014). For example, although recent population estimates suggest that approximately 50% of the American workforce feel they have a calling (Duffy, Autin, Allan, & Douglass, 2015), the correlation between having and living a calling hovers around .50 (Duffy, Allan, et al., 2014; Duffy & Autin, 2013; Duffy, Autin, et al., 2015). Clearly, perceiving and living a calling are closely associated but not synonymous; some people who perceive a calling are unable to live it out, often due to a variety of contextual factors limiting access to opportunity and work choice (Duffy et al., 2016). Furthermore, studies have suggested that even those living a calling may at times encounter negative effects such as burnout, workaholism, and organizational exploitation (Berkelaar & Buzzanell, 2015; Bunderson & Thompson, 2009; Dik & Duffy, 2012). Developing a sound theoretical framework concerning how perceiving and living a calling are linked, and how they interact to promote positive work-related outcomes, represents an important next step in this area of research and practice.

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In this article, we seek to formulate a theory of calling at work. We begin by reviewing definitions of calling within the literature, drawing on several conceptual and empirical articles that have attempted to identify the key elements of calling and distinguish it as a unique construct. Next, we propose a new model that explains and drives further exploration of predictors of living a calling, variables that affect the relation between perceiving a calling and living a calling, and the specific positive—and potentially negative—work outcomes that occur as a result of living a calling (see Figure 1). Our proposed theoretical model is not intended to “reinvent the wheel” on calling research, but to provide a parsimonious, empirically and conceptually supported framework that functions (as theories do) to explain extant research and drive future research in the area. However, there are three main components of the WCT that differentiate it from previous literature reviews (e.g., Dik & Duffy, 2015; Duffy & Dik, 2013; Wrzesniewski, 2012) or tests of empirical models set up to predict living a calling (e.g., Duffy, Allan, et al., 2014; Duffy et al., 2016).

First, whereas previous empirical tests have examined isolated sections of the proposed model, the model in this manuscript is unique in depicting how all hypothesized paths to living a calling function theoretically as a whole. This offers an important unifying and integrative perspective intended to paint a more complete picture of how a perceived calling leads to a lived calling and the resulting outcomes. Second, whereas previous literature reviews (and the vast majority of empirical studies) have positioned perceiving a calling as a direct predictor of workplace experiences, this new model positions living calling as the desired outcome of work experiences, which has important implications for how researchers structure future studies. Third, our model includes both hypothesized positive and negative outcomes of living a calling.

Although many scholars have called for increased attention to the “dark side” of calling, our model includes these possible outcomes and speculates on the types of individuals and workplace characteristics that may promote negative outcomes. We believe this addition will be critical in ramping up future research in this area, which to date has been very limited.

Finally, although elements of the WCT may apply more broadly, the WCT is intended to capture the experiences of a calling as it applies to paid employment. For example, an unanswered calling may occur when someone perceives a calling but is unemployed and has little opportunity to live it out. We believe callings can and do occur outside of the work domain (e.g., parenthood, voluntarism, leisure pursuits), but exploring the process within diverse life roles is outside the scope of the current article.

### Conceptualization of Calling

Several reviews (e.g., Berkelaar & Buzzanell, 2015; Bunderson & Thompson, 2009; Dik & Duffy, 2009, 2015; Elangovan, Pinder, & McLean, 2010; Wrzesniewski, 2012) have noted a lack of consistency in how calling is conceptualized in the literature. Such conceptual differences are unsurprising for a new and emerging area of scholarship and have been framed as “a sign of the evolving and dynamic nature of research on callings” (Wrzesniewski, 2012, p. 46). Yet disagreement on definitions also creates obstacles for theory development, especially as diverse conceptualizations of calling have in turn led to the development of different, and in some ways opposing, measures of the construct. In this section, we briefly review the various ways calling has been conceptualized and recommend a multidimensional, broadly rele-

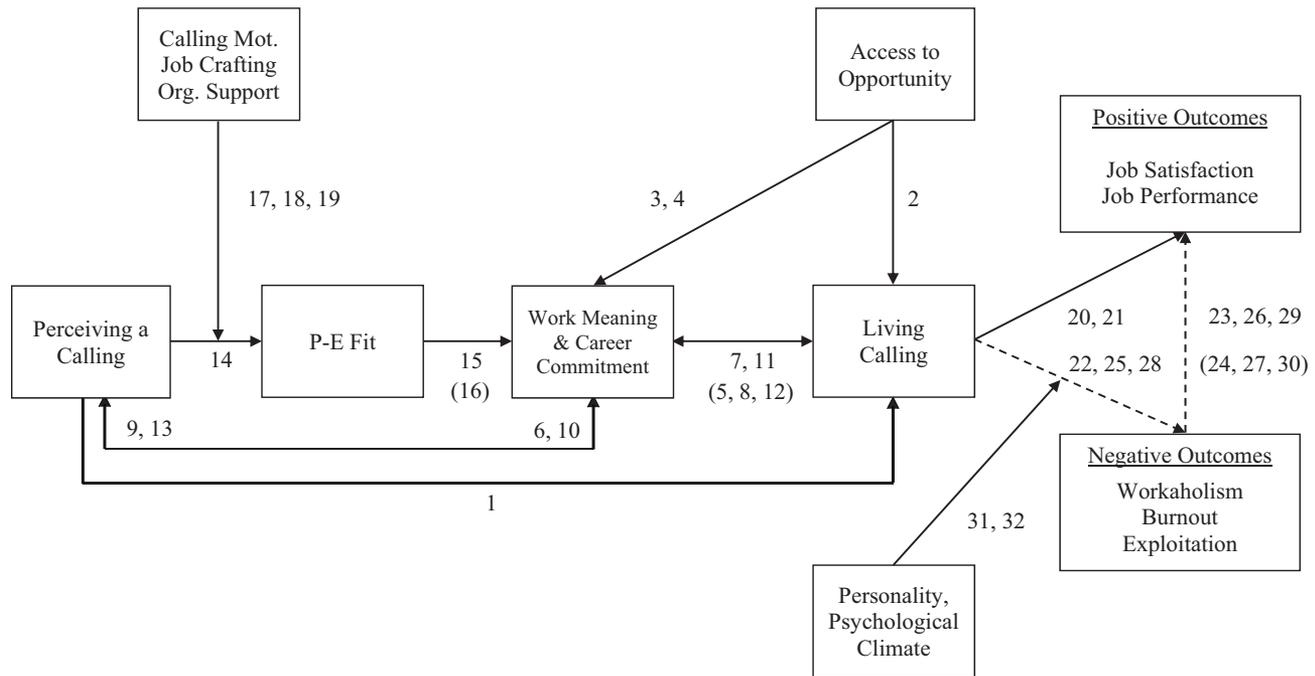


Figure 1. Theoretical model. Note dashed lines indicate proposed negative associations for select individuals. Paths in parentheses are mediation propositions.

vant conceptualization of calling intended to facilitate development of theory, stimulate ongoing empirical research, and encourage meaningful practical application.

Bellah, Madsen, Sullivan, Swidler, and Tipton (1986) first articulated the now frequently cited distinction between three work orientations: job (work as a means to material benefits), career (work as a means to achieve, advance, and gain power and prestige), and calling (work as a fulfilling, socially valuable end in itself). In their classic study, Wrzesniewski, McCauley, Rozin, and Schwartz (1997) operationalized these orientations and found them to distribute evenly across a diverse sample of nonfaculty university employees, with the highest levels of job satisfaction and life satisfaction reported by those who perceived a calling. Subsequent scholarship has focused on the construct of calling in its own right (as opposed to a contrast with other work orientations), including several efforts to propose a conceptual definition of calling.

For example, Dobrow and Tosti-Kharas (2011) defined the construct as “a consuming, meaningful passion people experience toward a domain” (p. 1005). This approach emphasizes calling as central to one’s identity, promoting meaningful involvement within a particular work domain that benefits one’s self, family, and/or society. Praskova, Creed, & Hood, (2015) took a similar approach, framing calling as a “mostly self-set, salient, higher order career goal, which generates meaning and purpose for the individual” (p. 93) and that can be pursued via goal-directed behavior. These conceptualizations are consistent with an earlier definition by Hall and Chandler (2005), who framed a calling more fundamentally as “what a person sees as his [sic] purpose in life” (p. 160); their view is tied to the notion that calling has evolved from a religiously oriented term to a more humanistic, self-focused concept. Bunderson and Thompson (2009) described such definitions as representative of “modern” views of calling, which emphasize an inner drive toward self-fulfillment and personal happiness. Some definitions of calling have included the concept of personal fulfillment itself, but this concept is arguably best positioned as an outcome of calling rather than a defining characteristic.

An alternative perspective of calling is the “neoclassical” perspective that links to the concept’s historic roots by emphasizing an external caller or destiny, a sense of duty, and prosocial motives (Bunderson & Thompson, 2009; cf. Hardy, 1990, for more on the historic and religious context of calling). As an example of this approach, Dik and Duffy (2009) defined *calling* as “a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation” (p. 427). This approach to conceptualizing calling aligns more closely with the historic usage of the term (Hardy, 1990), while broadening its application to a wider population than explicitly religious classical definitions.

Moving beyond conceptual treatments, scholars have started investigating how research participants define the term. For example, Bunderson and Thompson (2009) interviewed zookeepers, whose sense of duty and prosocial obligation reflected a neoclassical understanding of calling. Other qualitative studies have investigated college students, who have conceptualized calling as consisting of a guiding force, a sense of personal “fit” with a job, and altruistic attitudes that align with a broader sense of purpose

and meaning (Hunter, Dik, & Banning, 2010), as well as a sense of passion and a burden for living the calling (French & Domene, 2010). These results mirror those found among Chinese students (Zhang, Dik, Wei, & Zhang, 2015) and share considerable overlap with themes identified among university employees (Hagmaier & Abele, 2012; Hunter et al., 2010), devout Catholics (Hernandez, Foley, & Beitin, 2011), counseling psychologists (Duffy, Foley, et al., 2012), physicians (Bott, Duffy, et al., 2017), and working mothers in academia (Oates, Hall, & Anderson, 2005). Such studies strongly suggest that the construct of calling is multidimensional, a matter that research has started to address (e.g., Dik, Eldridge, Steger, & Duffy, 2012; Hagmaier & Abele, 2012; Hirsch, 2012).

An application of the cultural lens approach (Hardin, Robitschek, Flores, Navarro, & Ashton, 2014) may reveal, as research on calling unfolds, that some conceptualizations and measures of calling may fit for some cultural groups better than others. For example, groups who value religion and spirituality may be drawn to the “summons” aspect of the construct to a greater degree than other groups (Dik, Duffy, & Tix, 2012). Similarly, groups that value individualism may be drawn to the meaning and purpose dimension more so than other groups, whereas those who value collectivism may emphasize prosocial goals such as service to family, community, or society more broadly (Dik & Duffy, 2009). Recently, Dik and Shimizu (in press) proposed that one way to empirically investigate the diverse conceptualizations of calling is to use typological approaches such as taxometric analysis (Ruscio, Haslam, & Ruscio, 2006). Such strategies could identify whether there are discrete types of calling (e.g., neoclassical vs. modern, sacred vs. secular), or whether calling is dimensional in nature, suggesting that the diverse approaches to understanding and applying calling may differ more as a matter of degree than kind.

Such differences in how calling may be understood by participants may be more likely to manifest in how people develop and discern a calling (i.e., the antecedents of calling) rather than how a calling influences outcomes. This is because so far, results across research studies investigating correlates of calling have been extremely consistent regardless of how calling is conceptualized (cf. Duffy, Allan, Bott, & Dik, 2014; Duffy, Autin, et al., 2015; Duffy & Dik, 2013; Wrzesniewski, 2012), even across diverse cultural contexts (e.g., Hagmaier & Abele, 2012; Park, Sohn, & Ha, 2016; Praskova et al., 2015; Rothmann & Hamukang’andu, 2013; Zhang, Dik, Wei, & Zhang, 2015). Although more research is needed to understand the latent taxonomic and/or multidimensional nature of calling, the issue of which definition of calling is the right one ultimately may not be the right question to ask, given the fluidity of language usage in diverse contexts. Indeed, it appears likely that differences in scholars’ definitions of calling reflect differences in the definitions held by the people they study. Nevertheless, researchers are responsible for clearly defining the concepts they are targeting for investigation, even while acknowledging that consensus is elusive. Presently, research participants with callings generally tend to (a) approach their work in a way that ties it to a sense of meaning and purpose, (b) focus on prosocial contributions they can make through their work, and (c) identify an external and/or internal force guiding them to a particular career. Of these dimensions, the latter two make the construct distinct from closely related constructs such as meaningful work, intrinsic motivation, and sense of purpose at work (Brown & Lent, 2016; Dik & Duffy, 2009).

Therefore, the discussion that follows frames calling as an approach to work that reflects seeking a sense of overall purpose and meaning and is used to help others or contribute to the common good, motivated by an external or internal summons. Although this conceptualization of calling refers to one's approach to work, it does not necessarily imply that these components are currently occurring in one's job or workplace; it is possible to perceive a calling but not be living it out, in other words. Furthermore, perceiving a calling does not merely refer to a potentially desired career, but must contain meaning, prosocial motivation, and a sense of being compelled (internally and/or externally) to be considered a complete representation of the construct. Finally, as has been demonstrated in scholarship on "dirty work," we expect any legitimate occupation can be considered a calling (Ashforth & Kreiner, 1999; Rosso, Dekas, & Wrzesniewski, 2010).

## Theoretical Propositions

### Predictors of Living a Calling

With this definition of calling in mind, we now turn to discussing the key propositions of the WCT. Imagine for a moment you perceive a calling—you feel summoned to a particular kind of work through which you will achieve purpose in life and contribute to the greater good. You have narrowed down your career options and decided on one specific path, one through which you hope to use your abilities to make a meaningful difference in the world. However, your next step—finding or creating a tangible opportunity within the career to which you feel called—is never guaranteed. Indeed, perceiving a calling does not necessarily imply that one is currently living out that calling. This distinction is important; even though someone might perceive a calling, the benefits of approaching work as a calling likely cannot be fully experienced unless there is an opportunity to actually live out that calling (Duffy, Bott, Allan, Torrey, & Dik, 2012; Duffy & Dik, 2013). Recognizing this, we propose that the central variable in our theoretical model is living a calling, and that it is primarily through living a calling that individuals can reap the rewards of positive work outcomes such as job satisfaction and performance. We begin our presentation of the theory by documenting the two proposed exogenous predictor variables of living a calling—perceiving a calling and access to opportunity—and then discuss variables that may moderate or mediate the link of perceiving a calling to living a calling (see Figure 1).

**Perceiving a calling.** To live out a calling one must perceive a calling, and several studies have directly or indirectly examined the connection between these two overlapping yet distinct constructs. Studies that have assessed both perceiving and living a calling at the same time have found scores on measures of these variables to correlate between .35 and .54 (Duffy, Allan, Autin, & Bott, 2013; Duffy, Bott, et al., 2012; Duffy, Douglass, Autin, & Allan, 2016; Duffy, Torrey, England, & Tebbe, 2017). These studies have also documented differences in how well each construct predicts outcomes, with living a calling consistently correlating more strongly with outcomes such as work meaning, job satisfaction, life meaning, and life satisfaction and also serving as a full mediator variable between perceiving a calling and these outcomes (Duffy, Allan, et al., 2013; Duffy, Douglass, et al., 2016; Duffy, Torrey, et al., 2017).

Other research has examined the relation among these variables more indirectly. For example, Berg, Grant, and Johnson (2010) interviewed a group of individuals who perceived a calling but were not living it out—the authors described this as an "unanswered" calling—and found that not living out a calling was often accompanied by regret over not following that career path and stress over trying to pursue their callings outside of paid employment. Similarly, Gazica and Spector (2015) found that individuals who did not perceive a calling reported better job-, life-, and health-related outcomes than those with unanswered callings (and that the best outcomes were reported by those with "answered callings"). Two additional studies focused on differences by employment status, assuming that the workplace is a key avenue for the expression of one's calling. Not surprisingly, Duffy, Bott, Allan, and Autin (2015) found that although a sample of involuntarily unemployed adults were just as likely as employed adults to perceive a calling, they were significantly less likely to feel they were living a calling. Torrey and Duffy (2012) examined how perceiving a calling differentially linked to life satisfaction for employed, voluntarily unemployed, and involuntarily unemployed adults; they found that this link was nonsignificant for adults who were involuntarily unemployed.

Based on the accumulation of research findings, it is evident that perceiving and living a calling are distinct variables, that living a calling more strongly links to relevant outcomes than perceiving a calling, and that perceiving a calling is best positioned as a variable that predicts living a calling, in turn connecting to well-being outcomes. It is also clear that one cannot live out a calling unless one perceives a calling in the first place. In sum, we propose that perceiving a calling directly predicts living a calling (Proposition 1).

**Access to opportunity.** Positioning perceiving and living a calling as overlapping but distinct variables suggests other factors may contribute to living a calling in addition to simply having a calling. We propose that access to vocational opportunity also acts as a direct predictor of living a calling, such that living a calling is predicated on perceiving a calling and also the ability to pursue that calling.

In an ideal world, once a person perceives a calling to or within a career path, the next step is to follow opportunities that will enable living out that calling. However, systems of oppression such as racism, classism, sexism, and heterosexism constrain the employment opportunities available to people with marginalized social statuses (e.g., racial/ethnic minority people, people living in poverty, women, sexual minority people). Indeed, many people have little choice when it comes to pursuing employment, and thus, to survive, must accept work that is not aligned with their personal characteristics or aspirations (Blustein, Kozan, Connors-Kellgren, & Rand, 2015; Duffy et al., 2016). The deleterious effects of social stratification on career development begins early, with oppression associated with race, ethnicity, social class, gender, and geographic location restricting educational progress among youth, thereby limiting the range of opportunities available in adulthood (Fouad & Bynner, 2008). Another form of oppression, heterosexism, has been found to limit the career trajectories of sexual minority individuals across their life span (Dispenza, Brown, & Chastain, 2016). Consider the picture of restricted and unequal access to opportunity globally, where an estimated one third of the world's population subsists on incomes of \$2 per day

or less. Borgen (2005) estimated that perhaps only 10% of the world's youth will experience the freedom of choosing a career based on their interests and pursuing it without major external constraints.

Researchers have begun to explore the impact of limited access to opportunity by investigating how perceiving a calling and living a calling may differ among employed adults of various demographic backgrounds. For example, Duffy, Allan, et al. (2013) examined how two components of social class—education and household income—related to perceiving and living a calling. Household income was nonsignificantly correlated with perceiving a calling ( $r = .05$ ) but was weakly correlated with living a calling ( $r = .21$ ). Similarly, those with a graduate/professional degree were significantly more likely than those with a college degree or less to endorse living a calling, and those with a college degree were significantly more likely to endorse living a calling than those with less than a college degree. Duffy and Autin (2013) found the same pattern of results with an independent sample of employed adults, showing that perceiving a calling did not differ by income or education, but living a calling did, with higher yearly incomes and greater educational attainment predicting higher levels of living a calling. As previously mentioned, Duffy, Bott, et al. (2015) found similar results, with employment status related to living a calling but not perceiving one. To summarize, it appears that aspects of social class have little impact on people perceiving a calling, but play a significant role in living out a calling—those with higher levels of education and income and who are employed are more likely to live out their calling. One plausible explanation for these results is that education, income, and employment represent manifestations of a broader access to opportunity construct, which impacts how able an individual is to translate a perceived calling into a lived calling.

In addition to actual access to opportunity is the perception that one has the capacity to make occupational choices despite constraints, termed *work volition* (Duffy, Diemer, Perry, Laurenzi, & Torrey, 2012). Stated more simply, *work volition* refers to how much choice people believe they have in their individual career decision-making, reflecting the subjective dimension of perceived barriers to career progress rather than the objective dimension of real barriers described in the previous section. For individuals who perceive a calling, low work volition may push them to feel they will not be able to find or create work opportunities that enable them to live their calling (Duffy & Autin, 2013; Duffy, England, et al., 2017). Such individuals may persist in current jobs or pursue new jobs they perceive to be more readily accessible but misaligned with their calling. In contrast, those who face minimal barriers and sense greater freedom in their job selection process may be more successful in procuring positions that help them live out their calling. Research on work volition is new and emerging. However, several studies have demonstrated that work volition is strongly correlated with living one's calling (Duffy et al., 2016; Duffy & Autin, 2013; Duffy, England, et al., 2017). Therefore, we propose that work volition, in conjunction with objective indicators, is as a marker of access to opportunity.

Based on the research reviewed above, we propose that real and perceived access to opportunity—as measured by educational attainment, income, employment status, and work volition—directly predicts living a calling (Proposition 2). Individuals with greater educational attainment, income, work volition, and who are em-

ployed will be more likely to feel they are living out their callings. Importantly, although we view access to opportunity as predictive of living a calling, this is just one of several variables in the model positioned as predictors. In other words, although access to opportunity makes living a calling more likely to occur, we believe that individuals across the spectrum of opportunity may find ways to live out their calling.

### Linking Perceiving a Calling With Living a Calling

The distinction between perceiving and living a calling has been an important advancement in calling research, yet researchers have just begun to investigate the mechanisms that govern the link between the two constructs. We propose that workplace experiences are the key drivers that lead people who perceive a calling to feel like they are living their callings. In the following sections, we delineate how specific experiences at work facilitate the linkage of these two variables. New types of work experiences may emerge as relevant as research continues in this area, but currently, work meaning and career commitment appear to be the critical connectors between perceiving and living a calling.

Prior to expounding on these work experiences, it is first important to note that, just as is the case for living a calling, experiencing meaning and commitment at work is proposed to be affected by access to opportunity. Specifically, numerous studies have demonstrated that individuals with greater access to opportunity are more likely to view their work as meaningful and feel committed to their careers (e.g., Allan, Autin, & Duffy, 2014). This is likely due to access to opportunity offering individuals greater choice, allowing for the selection of the type of work that is meaningful and the types of careers that people want to stay in long term. Accordingly, we propose that access to opportunity will predict work meaning (Proposition 3) and career commitment (Proposition 4), and that these variables will mediate the relation of access to opportunity to living a calling (Proposition 5).

**Work meaning.** As reviewed in our conceptualization of calling, a key component across definitions is the pursuit and experience of purpose and meaning. Perceiving a calling implies that the job to which one perceives as a calling serves as a significant source of life meaning, or as an arena for expressing meaning and purpose. Accordingly, we propose that those who perceive a calling will view their career as highly tied to their overall life meaning when they feel that the specific work they are currently doing is meaningful. Research has supported the strong links of perceiving a calling and living a calling to work meaning with samples of working adults (Douglass et al., 2016; Duffy, Allan, et al., 2013; Duffy, Allan, et al., 2014; Duffy, Autin, et al., 2015; Duffy et al., 2012; Duffy, Douglass, et al., 2016; Hirschi, 2012; Hocke-Mirzashvili & Hickerson, 2014; Steenkamp-Scheinhardt & Naring, 2015; Steger, Dik, & Duffy, 2012; Steger, Pickering, Shin, & Dik, 2010; Zhang, Hirschi, Herrmann, Wei, & Zhang, 2017).

Initial studies examining the links among these variables positioned work meaning as an outcome of living a calling (Duffy, Allan, et al., 2013; Duffy, Bott, Allan, et al., 2012). However, in the first study to explore how these variables related longitudinally across three time points, Duffy et al. (2014) found that although these two variables each affected each other over time, work meaning was much stronger as a predictor than as an outcome of

living a calling. Duffy, Douglass, et al. (2016) later confirmed the direction of these relations with a new sample of working adults and tested the specific hypothesis that work meaning mediated the relation between perceiving a calling and living a calling, finding this positioning of variables to serve as the best fit to the data. Accordingly, based on these studies, we propose that perceiving a calling predicts work meaning (Proposition 6), that work meaning predicts living a calling (Proposition 7), and that (accordingly) work meaning mediates the relation of perceiving a calling with living a calling (Proposition 8). Over time, individuals who perceive a calling will experience increased work meaning, which in turn will lead to an increased sense that one is living that calling.

Furthermore, although we expect the temporal relation among these constructs to primarily flow as proposed in Figure 1, we recognize that individuals without a calling may enter work environments where meaning builds first and then a calling develops because of their experiences in the workplace. As such, we view this relation as reciprocal and propose that work meaning will also predict perceiving a calling (Proposition 9). Individuals who develop a sense of meaning in their career will over time view that career as more of a calling.

**Career commitment.** *Career commitment* refers to the level of commitment one has to an occupation or career field. Quantitative studies have found that perceiving and living a calling are strongly linked to greater commitment to one's career (Duffy, Allan, et al., 2013; Duffy, Allan, et al., 2014; Duffy, Autin, et al., 2015; Duffy et al., 2016; Duffy, Bott, Allan, et al., 2012; Duffy, Dik, & Steger, 2011; Duffy, Douglass, et al., 2016; Goodin et al., 2014; Rawat & Nadavulakere, 2015). These studies have been supported by numerous qualitative studies among individuals with callings, who consistently report a strong commitment to their current career (e.g., Bunderson & Thompson, 2009; Conklin, 2012; Duffy, Foley, et al., 2012; Oates et al., 2005). Scholars have even demonstrated that some with strong perceptions of a calling can be so committed to their career that they display narrow-mindedness or "tunnel vision," in which they ignore potentially helpful feedback that might threaten their sense of calling, focused singly on achieving that goal (Dobrow Riza & Heller, 2015; Dobrow & Tosti-Kharas, 2012).

Like work meaning, previous studies investigated career commitment as an outcome of living a calling. However, Duffy et al. (2014) also found career commitment was a stronger predictor versus outcome of living a calling. Duffy, Douglass, et al. (2016) similarly found this causal direction to more adequately fit the data, with perceiving a calling relating to living a calling in part by way of increased career commitment. Accordingly, we propose that perceiving a calling predicts career commitment (Proposition 10), that career commitment predicts living a calling (Proposition 11), and that, accordingly, career commitment mediates the relation of perceiving a calling with living a calling (Proposition 12). Over time, individuals who perceive a calling will experience an increased sense of commitment to their career, which in turn will lead to an increased sense that one is living a calling. Furthermore, as is the case for work meaning, we also propose that perceiving a calling and commitment are reciprocally related (Proposition 13). Individuals who grow a sense of commitment in their career will over time view that career as more of a calling.

## Linking Perceiving a Calling, Work Meaning, and Career Commitment

Although work meaning and career commitment represent the primary proposed variables linking perceiving and living a calling, we suspect that there are other individual and workplace variables that connect perceiving a calling to these constructs. Specifically, we propose one central mediator (person-environment [P-E] fit) and three moderators (calling motivation, job crafting, organizational support) that explain how a perceived calling links to increased levels of work meaning and career commitment (see Figure 1). A moderator variable is proposed to alter the relation between two variables, and a mediator variable is proposed to explain the relation between two variables (Frazier, Tix, & Barron, 2004). In the proposed theoretical model, the mediator variable of P-E fit is meant to capture how a perceived calling leads to increased work meaning and commitment whereas the moderator variables capture for whom these links may be more pronounced and may be ideal targets for intervention.

**PE fit.** We propose that the central factor paving the way for those who perceive a calling to build meaning and commitment in their job is P-E fit. This concept harkens back to one of the most pervasive and longstanding theoretical paradigms in psychology and is rooted in Parsons' (1909) trait-and-factor model and Lewin's (1951) formulation, suggesting that when the environment (E) is compatible with the worker's personal characteristics (P), and vice versa, positive work experiences are more likely to occur (Pervin, 1968). Researchers also have proposed—and evidence supports—that people are motivated to pursue work opportunities when they perceive a match between personal characteristics and the occupation (Johnson, Tang, Chang, & Kawamoto, 2013). The prosocial dimension of work as a calling also points to the importance of expanding the concept of person-environment fit to include "social fit," or the degree of fit between a person and a particular set of salient social needs (e.g., Dik & Duffy, 2015; Dik, Duffy, & Eldridge, 2009).

A primary way that P-E fit may serve as a mediator relates to job choice. Specifically, people who perceive a calling may be motivated to seek out a work opportunity that fits this calling well. In turn, a good-fitting work opportunity may provide an environment that enables a sense of meaning and commitment. This possibility is consonant with qualitative research in which some participants mention fit as a characteristic of what it means to have a calling (Duffy, Foley, et al., 2012; Hunter et al., 2010). It also is supported by voluminous quantitative research demonstrating that P-E fit (especially person-job and person-organization fit) predicts outcomes such as job satisfaction, work meaning, organizational commitment, tenure, and decreased quitting (Duffy et al., 2015; Kristof-Brown, Zimmerman, & Johnson, 2005), many of which have also been shown to link to living a calling (Duffy & Dik, 2013). P-E fit theories that recognize the dynamic relation between the person and the environment, such as Dawis and Lofquist's (1984) theory of work adjustment and Schneider's (1987) attraction-selection-attrition theory, provide frameworks useful for explaining how people driven by perceiving a calling may use a congruent environment to derive meaning and form a basis for commitment to that calling.

This empirical and theoretical support points to the hypothesis that individuals who perceive a calling tend to seek employment in

a job and/or organization that supports the calling, typically by aligning with their personal attributes. The strong P-E fit then facilitates perceptions of meaningful work and a desire to remain employed in the position through which the perceived calling can be actualized. Stated formally, we propose that perceiving a calling directly predicts P-E fit (Proposition 14), such that those who feel a calling will be more likely over time to enter into work environments that fit that calling. In turn, P-E fit is proposed to directly predict work meaning and career commitment (Proposition 15) and to mediate the links of perceiving a calling with work meaning and career commitment, such that one reason that people who perceive a calling feel committed to and draw meaning from their careers is because they enter into environments that fit them well (Proposition 16).

**Calling motivation.** *Calling motivation* pertains to an individual's level of motivation to pursue her or his calling (Duffy et al., 2015). Calling motivation theoretically develops after one discerns a calling (e.g., it is different from the dimensions of a calling such as the summons component) and refers to the amount of effort one is willing to invest to pursue a calling. Stemming from core principles of self-determination theory (SDT; Deci & Ryan, 2000), scholars and researchers have proposed that a perceived calling can be considered a type of goal, and living a calling would mean satisfying that goal (Duffy et al., 2017; Hall & Chandler, 2005). The degree to which an individual reaches a goal is predicated upon her or his motivation to pursue it (Deci & Ryan, 2000), and the same principle may apply to pursuing a calling. One study has found that unemployed individuals who perceived a calling were more likely to enact job search strategies if they had high levels of calling motivation (Duffy, Bott, et al., 2015). In another study, which examined calling motivation specifically as a moderator, Duffy, England, et al. (2017) found that individuals who had greater calling motivation were significantly more likely to enact a perceived calling. Building off these findings and core principles of SDT, we propose that calling motivation moderates the direct association of perceiving a calling with P-E fit, such that for people who are more motivated to pursue their calling, the direct association of perceiving a calling with P-E fit is stronger (Proposition 17).

**Job crafting.** P-E fit theories often focus on job choice, but many people may work in jobs that do not fit them well or that they "fell into." For those who enter a job that does not match their perceived calling, job crafting is a method through which they may be able to nevertheless alter their work environment in ways that can help to build fit, meaning, and commitment. This link has been implicitly suggested by Hardin and Donaldson (2014) who note that employees actively evaluate if they are engaged in the type of work that they desire. Employees engage in such evaluation and can subsequently act to create a better fit. This may especially be the case for individuals who have limited access to opportunity. Defined as the process of changing the relational, behavioral, and cognitive engagements involved in one's work (Wrzesniewski & Dutton, 2001), *job crafting* is a means through which a perceived calling can result in stronger P-E fit, and may be particularly effective for populations who face barriers or lack opportunity to acquire a job that initially matches their perceived calling. It also provides a clear application to practice (Dik & Duffy, 2015).

In a qualitative study of employees from a variety of fields who felt unable to live out their callings through their current employ-

ment, Berg et al. (2010) found they implemented three types of job crafting techniques. First, task emphasizing was characterized by altering the assigned task to better fit one's calling or spending increased energy, time, or attention on those assigned tasks which related to one's calling. Second, job expanding was demonstrated by adding temporary or permanent tasks to one's workload that reflect one's calling. Third, role reframing was exemplified by cognitively aligning a job duty with the fulfillment of a calling-related social purpose or expanding one's job-related responsibilities to include fulfillment of social purpose that matches one's calling. Mirroring findings on the relation between living one's calling and well-being outcomes (e.g., Duffy et al., 2013), employees noted feeling greater enjoyment and meaning when job crafting.

A series of other cross-sectional and longitudinal studies have found job crafting to promote aspects of fit, satisfaction, meaning, engagement, and commitment (Leana, Appelbaum, & Shevchuk, 2009; Lu, Wang, Lu, Du, & Bakker, 2014; Tims, Bakker, & Derks, 2013, 2015). Bakker (2011) suggested that engaged employees who implement job crafting techniques may be motivated to interact with the environment in ways that create their own great place to work. In the one study that examined calling and job crafting quantitatively, Esteves and Lopes (2017) found that perceiving a calling was moderately correlated ( $r = .46$ ) with the ability to take on job related challenges. Based on the evidence reviewed above, we propose that individuals with perceived callings who engage in job crafting strategies will be more likely to build a stronger sense of fit with their jobs because they are motivated to seek out changes and challenges in their workplace that better match their job with their perceived calling. Stated formally, we propose that job crafting strengthens the direct link of perceiving a calling with P-E fit (Proposition 18). Importantly, given that crafting is a robust predictor of various vocational outcomes (Rudolph, Katz, Lavigne, & Zacher, 2017), empirical testing is needed to confirm this as the best way to position the construct in the model.

**Organizational support.** Organizational support reflects the level of provision, care, assistance, and encouragement that employees experience within their work environment that can be attributed to the organization. Organizational support is proposed to influence several psychological processes that contribute to a higher level of engagement in work (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Research demonstrates that those who perceive organizational support experience heightened job satisfaction, meaning, positive mood, organizational commitment, job involvement, and performance, along with lower withdrawal intentions and turnover (Rhoades & Eisenberger, 2002). The social capital that may result from the interaction of an employee with a perceived calling and a supportive organization also has been linked to beneficial outcomes, and likely both promotes and is promoted by P-E fit (Lee, Reiche, & Song, 2010). Other research has found that organizational support is associated with job embeddedness and affective commitment and mediates the relation between socialization tactics (such as orientation, training, and other effective onboarding strategies) and organizational commitment (Allen & Shanock, 2013). Finally, Duffy and Autin (2013) found living a calling and perceived organizational support to moderately correlate among a sample of working adults, and Lee (2016) found that the degree to which organizations supported

knowledge-sharing significantly mediated the relation of perceiving a calling and job satisfaction among hotel employees.

We hypothesize that those who perceive a calling and who experience high levels of organizational support are more likely to experience positive work outcomes that facilitate living a calling. This is because an individual's specific organization will provide the structure and support that is needed for an individual to feel that environment is a match to their calling. In contrast, those who experience little support are more likely to feel that the organization is a barrier, rather than a facilitator, of opportunities to live out their calling. Therefore, we propose that organizational support moderates the relation between perceiving a calling and P-E fit, such that employees who perceive a calling and have high levels of organizational support are more likely to feel their work environment fits them well (Proposition 19).

We suspect that the three moderators described above may provide ways for an individual to translate a perceived calling into an answered calling, even without changing jobs. However, if motivation, crafting, and support consistently remain low, a calling may continue to be "unanswered." In these cases, individuals may need to find a new work environment to live their calling.

**Summary.** Research points to living a calling as the key gateway to experiencing the positive effects of perceiving a calling, such that perceiving a calling is potent (in a positive direction) only inasmuch as one is able to live it out (Duffy & Dik, 2013). Yet some workers, more so than others, are able to actively live out their callings on the job. We propose that perceiving a calling and access to opportunity are the key exogenous predictor variables of living a calling, and that the relation of perceiving a calling and living a calling is mediated by work meaning and commitment. We further propose that the relation between perceiving a calling with meaning and commitment is also mediated by P-E fit and moderated by calling motivation, job crafting, and organizational support. Put another way, we theorize that employees who perceive a calling can live out their callings because they feel enabled to seek out or create opportunities that fit them well, ultimately leading to high levels of work meaning and career commitment; this is made easier and/or possible when they possess greater access to vocational opportunity.

## Outcomes of Living a Calling

### Positive Outcomes

*Positive outcomes* refer to the direct benefits that living a calling has on one's work life. We posit that these effects include positive generalized attitudes toward one's work (job satisfaction) and success at one's work (performance). Most research that has examined work-related outcomes of living a calling has assessed job satisfaction. With general samples of working adults (Chen, May, Schwoerer, & Augelli, 2016; Duffy et al., 2012, 2014) and adults representing diverse identities (e.g., in terms of lesbian/gay/bisexual/transsexual/queer status and country of origin; Allan, Tebbe, Duffy, & Autin, 2015; Douglass et al., 2016; Kim, Praskova, & Lee, 2016; Lazar, Davidovitch, & Coren, 2016; Xie, Xia, Xin, & Zhou, 2016), studies have found living a calling to strongly relate to job satisfaction. Therefore, we hypothesize that living a calling predicts satisfaction with one's job (Proposition 20). Specifically, because living a calling represents the fulfillment of a career one

feels compelled to pursue, that serves as an important source of meaning, and that contributes to the greater good, enacting this calling on a daily basis in the workplace is proposed to, over time, boost a sense of satisfaction with that work.

We also suspect that employees who are living their calling will evidence higher levels of job performance. With samples of salespersons, Park et al. (2016) found living a calling to significantly correlate with total commissions and number of policies sold. Similar correlations were found in a study by Lee, Chen, and Chang (2016) relating a sense of calling to task and contextual performance over a one month period with a sample of organizational employees. Also, qualitative studies with individuals who are living out their calling have demonstrated that these individuals are often high performers in their respective workplaces (e.g., Bunderson & Thompson, 2009; Duffy et al., 2012). Based on these studies, perhaps due to the inherent meaning of the work and the benefit workers derive from engaging in it, it seems evident that individuals living a calling are highly motivated to perform well at their jobs. Therefore, we propose that those who are living their calling will evidence greater job performance (Proposition 21).

### Negative Outcomes

Although living a calling has been predominantly associated with positive outcomes, for some individuals in some conditions, living a calling may also have negative consequences, including workaholism, burnout, and organizational exploitation (Dik & Duffy, 2012).

**Workaholism.** Workaholism is, most simply, an addiction to work. Workaholics are obsessed with working and devote personal time and long hours to work (Ng, Sorensen, & Feldman, 2007). People who perceive a calling often sacrifice personal time to pursue their calling (Berkelaar & Buzzanell, 2015). Many scholars have also suggested that calling can be linked to workaholism, and some evidence substantiates the claim (Duffy, Douglass, & Autin, 2015). Bunderson and Thompson (2009) found that zookeepers who were living their calling had high levels of investment in their work and were more likely to sacrifice personal time for work, and Clinton, Conway, and Sturges (2017) found that calling intensity related to longer working hours. Keller, Spurk, Baumeler, and Hirschi (2016) also found perceiving a calling to correlate with more working hours and weakly, but significantly, with workaholism. In a qualitative study with psychologists (Duffy, Foley, et al., 2012), some participants who were living out their calling described becoming so attached to their job that they would be willing to make substantial sacrifices in nonwork domains (e.g., family, friends).

Given its ties to a sense of meaningfulness, the focus on enhancing the greater good, and even a sense of work as spiritually sanctioned for some, work as a calling may leave some workers vulnerable to an overinvestment in their work (Dik & Duffy, 2012). Some individuals may rationalize unhealthy levels of investment in their work as necessary or even praiseworthy, given the societal and/or personal value of what they are trying to accomplish. For these reasons, we propose that, for some individuals, living a calling may be related to increased workaholism in their career (Proposition 22).

For individuals who do develop workaholic tendencies from living out their calling, we propose this will have a negative impact

on work outcomes. A recent meta-analysis of 89 articles found workaholism to negatively predict outcomes such as job satisfaction and performance (Clark, Michel, Zhdanova, Pui, & Baltes, 2016). Scholars have asserted that workaholics have reduced levels of job satisfaction and have increased turnover rates and poor job performance (e.g., Robinson, 1999; Scott, Moore, & Miceli, 1997; Spence & Robbins, 1992); these claims have been substantiated in a host of studies with diverse samples (Brady, Vodanovich, & Rotunda, 2008; Burke, 2001; Burke & MacDermid, 1999; Caesens, Stinglhamber, & Luypaert, 2014; Shimazu & Schaufeli, 2009; Shimazu, Schaufeli, & Taris, 2010). Thus, we propose that workaholism will directly predict decreased job satisfaction and performance (Proposition 23), as an obsession with ones work over time is hypothesized to lead to less satisfaction with this work. Furthermore, for some people, workaholism is proposed to mediate the relation between living a calling and job satisfaction (Proposition 24). Specifically, living a calling over time may lead to decreased job satisfaction because of the development of workaholic tendencies.

**Burnout.** *Burnout* is defined as a prolonged response to chronic emotional and interpersonal stressors on the job (Maslach, Schaufeli, & Leiter, 2001), and Cardador and Caza (2012) asserted that burnout may be one detrimental outcome associated with pursuing a calling. In support of this assertion, they highlighted research findings from two professions that are commonly associated with callings: nurses and teachers (Hartnett & Kline, 2005; Sherman, 2004). Hartnett and Kline demonstrated that during the first 5 years of service, teachers have elevated rates of leaving their profession. Sherman revealed that nurses experience increased rates of burnout, and Vinje and Mittelmark (2007) further corroborated this link through a study that found perceiving a calling to be associated with higher levels of burnout among an independent sample of nurses. Finally, with a sample of 355 junior doctors, Creed, Rogers, Praskova, and Searle, (2014) found perceiving a calling to be positively linked with burnout. In this way, the same features of living a calling that can provide benefits—a sense of being compelled to do meaningful work that helps people—may create vulnerabilities, to the extent that it repeatedly draws individuals into highly emotionally and interpersonally stressful environments (Duffy, Douglass, et al., 2015; Hagmaier, Volmer, & Spurk, 2013; Yoon et al., 2017; Yoon et al., 2016). These findings inform our proposition that living a calling may positively predict burnout for some people (Proposition 25). Specifically, over time we hypothesize that certain individuals who live out their calling may eventually develop burnout.

Job burnout has been associated with decreased levels of both of our proposed work outcomes. Maslach et al. (2001) noted that burnout is linked to decreased job satisfaction and lower productivity and effectiveness at work (performance). Several other scholars have examined burnout in relation to our proposed work outcomes and have found burnout to negatively correlate with job satisfaction and performance (e.g., Bakker, Van Emmerik, & Van Riet, 2008; Chung & Han, 2014; Demerouti, Bakker, & Leiter, 2014). Based on these consistent negative relations between burnout and our proposed work outcomes, we propose that burnout will directly predict decreased job satisfaction and performance (Proposition 26), as feeling overwhelmed with one's work over time is hypothesized to lead to less satisfaction with this work. For some individuals, burnout is proposed to mediate the relation between

living a calling and job satisfaction (Proposition 27). Specifically, living a calling over time may lead to decreased job satisfaction because of work becoming more overwhelming.

**Organizational exploitation.** Finally, living a calling may also lead to organizational exploitation for some employees. In reviews of the potential negative effects of living a calling, Berke-laar and Buzzanell (2015); Bunderson and Thompson (2009); Dik and Duffy (2012), and Duffy, Douglass, et al. (2015) specifically identify organizational exploitation as a maladaptive potential vulnerability for employees with callings. In Bunderson and Thompson's (2009) study, the authors found that some zookeepers living their calling felt that they were at risk of exploitation from their employers. These employees indicated that because they were intrinsically motivated, employers did not see the need to provide extra incentives and asked the employees to complete more difficult or unpleasant jobs. Schabram and Maitlis (2016) reported similar findings in an article on the different types of calling paths of those employed as animal shelter workers. Considering results from these studies, we propose that in some cases living a calling is associated with organizational exploitation (Proposition 28). Put another way, it's possible that some people might encounter organizational exploitation while living out their calling.

Positioning organizational exploitation as a mediator between living a calling and our proposed work outcomes implies a link between organizational exploitation and job satisfaction and performance. As highlighted by Bunderson and Thompson (2009), workers living out their calling may often be assigned difficult or unpleasant tasks and may experience increased job demands, which negatively correlate with job satisfaction (Cortese, Colombo, & Ghislieri, 2010; Dwyer & Ganster, 1991) and job performance (Babakus, Yavas, & Ashill, 2009; Bakker et al., 2008; Gilboa, Shirom, Fried, & Cooper, 2008). If these increased demands are assigned in an unfair manner, perceptions of organizational injustice may result; this, too, has been found to negatively predict job satisfaction and performance (e.g., Cohen-Charash & Spector, 2001). Thus, we propose that exploitation will directly predict decreased job satisfaction and performance (Proposition 29). Exploitation is also proposed to mediate the relation between living a calling and job satisfaction (Proposition 30), such that certain individuals living a calling over time may experience decreased job satisfaction and lower performance, if living a calling makes them a target of greater exploitation in the workplace.

## Moderators to Negative Outcomes

When considering the potential dark side of calling, we noted that these outcomes may arise for some individuals, suggesting the presence of moderators in the link between living a calling and these negative outcomes. By including these moderators, we are suggesting that certain individuals may be predisposed to experiencing negative outcomes while living a calling in certain work contexts. This section explores how personality factors and psychological climate may moderate the associations between living a calling and workaholism, burnout, and organizational exploitation. Importantly, this section of the theoretical model contains the least backing from previous research and as such should be considered speculative and in particular need of empirical investigation.

**Personality factors.** Within psychological research, personality has been conceptualized in various ways. In organizational and vocational research, personality is typically discussed in terms of The Five Factor Model of personality (known as the Big Five; Goldberg, 1990). Goldberg distilled the following five domains to comprise the Big Five: agreeableness, conscientiousness, extraversion, neuroticism, and openness to experience. Agreeableness is related to being cooperative and likable; conscientiousness represents achievement and dependability; extraversion regards how active, assertive, and sociable a person is; neuroticism is associated with emotional instability (e.g., poor emotional adjustment, anxiety, depression); and openness to experience is characterized by curiosity, creativeness, and open-mindedness.

In addition to the Big Five, we anticipate other traits may also play an important role in proneness to negative outcomes. One is perfectionism (Burke, 1999; Burke, Davis, & Flett, 2008; Clark, Lelchook, & Taylor, 2010). Specifically, individuals with perfectionistic tendencies may attempt to make their calling “perfect,” setting up unrealistic standards that are unlikely to be met. A second is need for achievement, which has been shown to predict workaholism, as has a third: self-esteem (Ng, Sorensen, & Feldman, 2007). Individuals who have a high need for achievement and who suffer from low self-esteem, or whose self-esteem is higher within the work role than other life roles, may be prone to developing workaholic tendencies.

The job demands-control model (Karasek, 1979) is a useful framework for understanding how personality factors may moderate the link of living a calling to negative work outcomes, in which the demands of one’s job are positioned as contributors to distress and strain at work. Ilies, Johnson, Judge, and Keeney (2011) integrated personality into the model and suggested that personality factors may moderate the link between workplace demands and stress at work. Specifically, those with maladaptive personality traits may be more prone to experiencing a work environment as stressful and demanding, ultimately leading to greater feelings of distress and strain. Research has supported this proposition, showing that maladaptive personality traits—such as high levels neuroticism, low conscientiousness, or low agreeableness—are related to heightened experiences of stress and strain at work and may moderate the links between workplace demands and experiences of workplace stress (Aziz & Tronzo, 2011; Bakker, Van Der Zee, Lewig, & Dollard, 2006; Burke, Matthiesen, & Pallesen, 2006; Jackson, Fung, Moore, & Jackson, 2016).

Given that most work is at times stressful, even for people working in careers they view as a calling, we suspect that maladaptive personality traits will moderate the link between living a calling and the proposed negative outcomes of workaholism, burnout, and exploitation. Specifically, individuals living out their calling with maladaptive traits—manifested by variables such as higher levels of neuroticism, perfectionism, need for achievement, and lower levels of agreeableness, conscientiousness, and self-esteem—will evidence higher levels of workaholism, burnout, and experiences of exploitation in their work environment (Proposition 31). Considering there are currently no published studies to support this claim in the calling literature, this proposition is speculative and research is needed to understand both the general hypotheses but also what specific maladaptive traits may have the strongest moderation effects.

**Psychological climate.** Along with personality factors, psychological climate is posited to moderate the links between living a calling to workaholism, burnout, and organizational exploitation. Psychological climate represents an individual’s evaluation of their work environment based on their own perceptions of the workplace (James et al., 2008). James and James (1989) identified common factors related to psychological climate, and found that people generally consider these four aspects of their work environment: (1) levels of role stress and harmony; (2) the amount of challenge and autonomy at work; (3) facilitation and support displayed by leadership; and (4) the amount of cooperation and friendliness. According to the composition theory for climate (James, 1982), individuals are the subjects of focus when studying psychological climate. However, James contended that individual climate scores may be aggregated to define an organization’s climate. Given that vocational research within counseling psychology tends to focus on individual perspectives as opposed to those of organizations, we formally position psychological climate as a moderator, but we underscore that in some instances, researchers may engage in higher level analyses by aggregating individual psychological climates to operationalize organizational climate.

By including psychological climate broadly as a moderator, researchers may choose to select climates that fit their research questions. For instance, some studies have examined specific psychological climates related to gender and race inequity, finding that such inequitable climates are associated with greater levels of job stress and turnover intentions for women and racial and ethnic minorities (King, Hebl, George, & Matusik, 2010; McKay et al., 2007). Another study among adolescent athletes found that a perceived peer motivational climate was associated with lower levels of stress and burnout (Smith, Gustafsson, & Hassmén, 2010). In a study of health care providers, a perceived climate of authenticity was found to moderate the link between emotion regulation during one’s work and burnout, such that people who perceived their work environment to promote authentic behavior experienced lower levels of burnout at work while regulating emotions at work (Grandey, Foo, Groth, & Goodwin, 2012). These findings are similar within organizational climate research. For example, a meta-analysis of 51 empirical studies found that climates that promoted warmth, cooperation, autonomy, and support were associated with lower levels of withdrawal intentions (Carr, Schmidt, Ford, & DeShon, 2003).

Building from the findings reviewed above, psychological climate may help to explain which individuals experience negative outcomes because of living a calling. It may be that some people who are living out their calling experience psychological climates that are conducive to promoting workaholism, burnout, and a culture of organizational exploitation. As such, we formally propose that psychological climate moderates the link of living a calling to these negative workplace outcomes (Proposition 32). Specifically, individuals living a calling in work environments perceived to be unhealthy may be more likely to experience burnout, workaholism, and exploitation. Although not formally proposed, researchers able to gather enough individual-level data on a specific climate may also seek to aggregate this information and examine how organizational climate may also moderate these links.

**Summary.** Building on previous research, we propose that living a calling primarily leads to increased satisfaction and per-

formance. However, it is important to recognize the oft-described “double-edged sword” of calling (Berkelaar & Buzzanell, 2015; Bunderson & Thompson, 2009). Despite the positive effects that may result from living a calling, we have outlined some potential pitfalls of living out a calling in the form of workaholism, burnout, and organizational exploitation that some individuals might experience. All three of these negative effects can adversely impact job satisfaction and performance. By incorporating these negative effects into our model of calling, we pave the way for researchers to begin investigating some of callings’ most interesting and counterintuitive facets. By positioning personality factors and psychological climate as moderators of the link between living a calling and these negative work outcomes, we hope to catalyze research regarding which types of individuals are most prone to these negative effects.

### Discussion

This manuscript answers the call to provide a theory that explains extant research on calling and that offers a roadmap to guide further research on the topic. Overall, empirical research on calling remains relatively new and definitional diversity lingers (e.g., Berkelaar & Buzzanell, 2015; Dik & Duffy, 2009; Duffy & Dik, 2013; Elangovan et al., 2010; Wrzesniewski, 2012). Nevertheless, we have argued that the accumulated scholarly work on the construct is sufficient for informing theory development, including the model proposed in this article, which serves as the first formal theory to describe how perceiving and living a calling links to work outcomes.

Building on substantial quantitative and qualitative research that has identified multiple components of a calling, the Work as Calling Theory (WCT) uses a definition of calling that reflects its multidimensional nature with components related to meaning, prosocial motivation, and an internal or external summons. Highlighting the distinction between perceiving a calling and actually living it out, we propose that perceiving a calling alone does not lead to living a calling without also being accompanied by access to opportunity. We also propose specific mechanisms linking perceiving a calling to living that calling in one’s work, articulated in the form of mediators and moderators. A perceived calling is more likely to be actively expressed (i.e., lived out) when individuals are experiencing meaning and commitment in their career, and reciprocally, developing meaning and commitment to work may also help strengthen one’s perception of work as a calling. Meaning and commitment are more likely to occur for individuals who are in environments that are a good fit for their calling. Those who are motivated to pursue their calling can shape their work experiences in ways that better align with their calling. And those who are supported by their organization are more likely experience high levels of fit, leading to an increased sense of commitment and meaning.

When individuals are living their callings in their work, we propose they will experience increased job satisfaction and job performance. However, we also believe that some individuals—especially those with maladaptive personality traits or those in challenging work environments—can be vulnerable to experiencing negative effects of living a calling. These effects have largely been overlooked by scholars to date, but represent an important part of the WCT for which empirical investigation is especially

needed. Unhealthy callings may lead some individuals to engage in workaholism, experience burnout, or suffer exploitation by unscrupulous employers, which in turn may cause decreased work satisfaction and performance.

In sum, this model attempts to paint a complete picture based on prior research and theory about how a discerned calling turns into a lived calling and the possible outcomes of living that calling. In the remainder of this discussion we focus on future research directions that stem from the WCT, and close with how the WCT may be useful in informing practice for counselors and employers.

### Future Research Directions

The most obvious directions for future research to pursue are tied to the WCT’s 32 propositions, which are supported by varying levels of existing evidence. The most important potential contribution of the model is to drive research that tests these propositions and, based on this research, adapt the model accordingly. The theory is informed by a substantial body of existing research that until this point has accumulated without being guided by an overarching theory. This paper provides a theory that explains and consolidates this research while proposing new directions as well. As with any new theory, further empirical testing will determine the extent to which the theory’s structure and associated propositions are valid or in need of modification and extension.

As previously mentioned, more research is needed to explore the underlying latent structure of calling. Numerous measures of calling have been developed (see Duffy, Autin, Allen, & Douglass, 2015). Several of these measures, such as the Calling and Vocation Questionnaire (Dik et al., 2012), evidence a multidimensional structure that aligns with the neoclassical perspective of calling—that is, that callings originate beyond the self, tie work to a sense of purpose or meaning, and focus on prosocial pursuits. A fruitful avenue for future research may be to test measurement equivalence of latent factors to determine if the relative importance of the facets of calling depends on factors such as vocational personality or cultural background. For example, drawing from Holland’s theory of vocational choice and adjustment (Nauta, 2012), it is possible that people with strong social interests would place greater emphasis on the prosocial component of calling. However, participants with occupations outside of the social domain, such as salespeople, have been shown to endorse living a calling (e.g., Park et al., 2016). Thus, these participants may place greater emphasis on other aspects of calling, such as deriving meaning from work. Alternatively, for people with strong religious or spiritual backgrounds, the transcendent summons aspect of calling may be the most central (Dik, Duffy, & Tix, 2012).

It is important for research to apply the same scrutiny to other key components of the model presented in this article. Scholars have previously used the Cultural Lens Approach (Hardin et al., 2014; Robitschek & Hardin, 2017) to systematically evaluate the ways that culture influences interpretation and operationalization of key constructs and propositions in classic theories of vocational psychology. In this spirit, we encourage scholars who engage in research on calling to do so with the understanding that elements of the model may need to be changed or adapted based on cultural context. For example, typical assessments of P-E fit emphasize the extent to which aspects of the individual (e.g., values, interests) align with characteristics of the work environment. However, for

people from more collectivistic cultures whose self-construals are more interdependent, a more culturally valid approach may be to assess “social fit,” or the extent to which one’s job matches the needs of one’s family, community, or the broader society (Dik & Duffy, 2015). Similarly, in addition to job satisfaction and job performance—which place the functioning of the individual in the foreground—the list of potential outcomes of living a calling may need to expand to include individuals’ ability to contribute to family and community well-being.

Similar to the point above, we believe our explicit positioning of access to opportunity as a central predictor of living a calling can help pave the way for calling-related research for those typically marginalized and underrepresented. Simply perceiving a calling does not ensure living a calling, especially for those who face substantial barriers to career choice. As highlighted within the Psychology of Working Theory (PWT; Duffy, Blustein, et al., 2016), forms of oppression such as classism, heterosexism, racism, and sexism limit the vocational opportunities of many people. Future research is needed to disentangle the various factors that may promote or hinder access to opportunity. For example, in the PWT, economic constraints and marginalization experiences are proposed to affect the securement of decent work via choice in the work domain, or work volition. Perhaps this same flow of variables occurs in the prediction of living a calling. Access to opportunity may also affect living a calling differently across various demographic groups and life stages; for example, certain variables may be more predictive when an individual is at the start, middle, or end of their career. Access to opportunity may also directly affect other model variables versus just meaning, commitment, and living a calling. Exploring the potentially nuanced relation between access to opportunity and living a calling will be essential in testing the validity of this model for all groups.

We believe the WCT offers research directions in an area relatively unexplored in regard to calling: interventions. A majority of the studies reviewed in this article are cross-sectional. Although this type of research is essential for an emerging construct, a necessary next step is discovering how to help translate a perceived calling into a lived calling. Intervention studies could focus on two groups of variables. First, understanding whether boosting motivation, crafting, or support actually build a stronger connection between a perceived calling and P-E fit is an important direction for research to investigate. Career commitment and work meaning are also proposed to reciprocally predict perceiving a calling, and some research has shown that viewing one’s work as meaningful can be boosted via a relatively simple intervention (e.g., Allan, Duffy, & Collisson, 2017). We suspect there are numerous other interventions that may help an individual discern a calling, or build stronger fit between their calling and work environment, that future researchers should explore.

Next, although the WCT explains calling within the context of work, it is important to recognize—as Super (1990) did—that numerous life roles exist (e.g., child, parent, leisurite, citizen), and their relative importance may shift across the life span. It follows that callings may exist for various contexts and roles other than work (e.g., Berg et al., 2010; Coulson, Oades, & Stoyles, 2012), that people may have several callings at once, and that the relative importance of these callings may vary according to developmental stage. Future research is needed to determine whether the proposed model fits for individuals who perceive callings to a role outside of

work or who perceive multiple callings. In assessing the generalizability of the WCT to other types of callings, it is critical that researchers incorporate factors that more accurately fit the particular domain of life being examined (e.g., assess family/friend support in place of organizational support when measuring a calling to parenthood).

Finally, as discussed above, the majority of research on calling to date has focused on the positive aspects of perceiving and living a calling and many questions remain concerning the dark side of a calling. Indeed, some of the features of living a calling that serve as its strengths can, under some circumstances, serve to facilitate negative outcomes instead. This phenomenon, to date, is poorly understood. It may be that certain types of people living a calling are particularly predisposed to workaholism and burnout and certain work environments are particularly exploitative. Individuals living out a calling who are neurotic, perfectionistic, have a high need for achievement, and low self-esteem, and who work in competitive, highly demanding, and emotionally stressful work environments may be at most at risk for experiencing negative effects. However, given that this part of the theory is the least developed, researchers are encouraged to explore their own ideas around individual and environmental factors that may predispose people to experience negative effects of a lived calling.

## Practical Implications

The WCT is intended to contribute to the research literature, but also inform practical implications for counselors and managers working with clients and employees, respectively, eager to live out their calling. Each level of the present theoretical model (having a calling, living a calling, specific effects, and general work outcomes) guides an important set of suggestions for counselors and organizational leaders who seek to improve the work attitudes and experiences of those who perceive a calling. These recommendations should be considered in light of three cautions. First, the following suggestions are not exhaustive (indeed, broader treatments of practice implications are available; e.g., Dik & Duffy, 2015; Dik et al., 2009). Rather, they serve as an introduction to the implications that stem from the particular variables included in the model. Second, these suggestions assume that the propositions of this model are accurate but would require empirical investigation to support, especially regarding their utility across the diverse populations in the world of work. Third, not all clients or employees have or want a calling in the work domain. With these caveats in mind, we will outline important implications informed by the WCT.

## Approaching, Perceiving, and Living a Calling

It is critical to initially assess how a client or employee approaches work, which could entail viewing one’s job as a calling (Dik et al., 2009). As noted previously, approximately 50% of working adults in the United States feel they have a calling (Duffy, Autin, et al., 2015). Identification of whether a client or employee perceives a calling can inform not only the likelihood of their engagement at work (i.e., enthusiasm and willingness to sacrifice for work, satisfaction from work, decreased absenteeism; Bunder-son & Thompson, 2009; Peterson, Park, Hall, & Seligman, 2009; Wrzesniewski et al., 1997), but also will provide invaluable infor-

mation about the degree of fit between the client/employee and their current or future work environment. Assessment of a client/employee's approach to work may open the door to examine strategies to increase the likelihood that their current work tasks align with the potential calling. This unique idea within this model suggests that understanding these specific reasons will allow for specific interventions such as increasing support, motivation, or crafting. Ultimately, based on the model, it is critical that counselors and managers take the first step of engaging clients/employees in a dialogue about their approach to work to make space for discussions about calling-oriented approaches.

With regard to crafting, counselors and organizational leaders might advise clients/employees to try and temporarily or permanently change tasks involved in their job to better reflect their callings (job crafting; see Berg, Dutton, & Wrzesniewski, 2013; Dik & Duffy, 2012, 2015; Hershenson, 1996). Counselors or managers might engage clients/employees in cognitive crafting techniques, helping them to mentally connect their day-to-day work experience with the larger mission of their career or organization, perhaps leading to a broader sense of purpose. With regard to support, counselors or managers should encourage clients/employees to build support networks among colleagues (i.e., through teambuilding practices, retreats, specialized workshops) so that they feel more supported by as many people as possible in their workplace. The vast majority of qualitative studies with those living out their calling demonstrate that it is a career highly intertwined with others and this network may be essential in maintaining a calling over time.

### Navigating the Dark Side

Finally, the hypothesized "dark side" of living a calling can potentially be mitigated through proactive practices intended to foster occupational health. As a general rule of thumb, working with clients/employees to take a proactive approach by fostering healthy workplace practices is a more effective strategy than the negatively framed "don't let it happen" directive (Dik & Duffy, 2012). For example, actively encouraging clients/employees to strive for and implement policies that support work-life balance can foster well-being long term, while specifically reducing the likelihood that clients/employees more vulnerable toward workaholism will drift toward unhealthy work patterns. Encouraging such healthy practices can also ward against burnout and potentially steer clients/employees away from becoming overloaded with unpleasant or unjustly distributed work tasks even if there are short-term rewards for doing so. However, just as important is being mindful of the negative personality traits that may promote living out a calling in a negative fashion, such as neuroticism and perfectionism. It is imperative that counselors and managers explore these tendencies among clients/employees and caution of their potential for negatives effects.

### References

- Allan, B. A., Autin, K. L., & Duffy, R. D. (2014). Examining social class and work meaning within the Psychology of Working Framework. *Journal of Career Assessment, 22*, 543–561. <http://dx.doi.org/10.1177/1069072713514811>
- Allan, B. A., Duffy, R. D., & Collisson, B. (2017). Helping others increases meaningful work: Evidence from three experiments. *Journal of Counseling Psychology*. Advance online publication. <http://dx.doi.org/10.1037/cou0000228>
- Allan, B. A., Tebbe, E. A., Duffy, R. D., & Autin, K. L. (2015). Living a calling, life satisfaction, and workplace climate among a lesbian, gay, and bisexual population. *Career Development Quarterly, 63*, 306–319. <http://dx.doi.org/10.1002/cdq.12030>
- Allen, D. G., & Shanock, L. R. (2013). Perceived organizational support and embeddedness as key mechanism connecting socialization tactics to commitment and turnover among new employees. *Journal of Organizational Behavior, 34*, 350–369. <http://dx.doi.org/10.1002/job.1805>
- Ashforth, B. E., & Kreiner, G. E. (1999). "How can you do it?": Dirty work and the challenge of constructing a positive identity. *Academy of Management Review, 24*, 413–434. <http://www.jstor.org/stable/259134>
- Aziz, S., & Tronzo, C. L. (2011). Exploring the relationship between workaholism facets and personality traits: A replication in American workers. *The Psychological Record, 61*, 269–286. <http://dx.doi.org/10.1007/BF03395760>
- Babakus, E., Yavas, U., & Ashill, N. J. (2009). The role of customer orientation as a moderator of the job demand-burnout-performance relationship: A surface-level trait perspective. *Journal of Retailing, 85*, 480–492. <http://dx.doi.org/10.1016/j.jretai.2009.07.001>
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science, 20*, 265–269. <http://dx.doi.org/10.1177/0963721411414534>
- Bakker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology, 146*, 31–50. <http://dx.doi.org/10.3200/SOCP.146.1.31-50>
- Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress, & Coping, 21*, 309–324. <http://dx.doi.org/10.1080/10615800801958637>
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1986). *Habits of the heart. Individualism and commitment in American life*. New York, NY: Harper & Row.
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81–104). Washington, DC: American Psychological Association.
- Berg, J. M., Grant, A. M., & Johnson, V. (2010). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings. *Organization Science, 21*, 973–994. <http://dx.doi.org/10.1287/orsc.1090.0497>
- Berkelaer, B. L., & Buzzanell, P. M. (2015). Bait and switch or double-edged sword? The (sometimes) failed promises of calling. *Human Relations, 68*, 157–178. <http://dx.doi.org/10.1177/0018726714526265>
- Blustein, D. L., Kozan, S., Connors-Kellgren, A., & Rand, B. (2015). Social class and career intervention. In P. J. Hartung, M. L. Savickas, & W. B. Walsh (Eds.), *APA handbook of career interventions: Vol. 1. Foundations* (pp. 243–257). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/14438-014>
- Borgen, F. H. (2005). Advancing social justice in vocational theory, research and practice. *The Counseling Psychologist, 33*, 197–206. <http://dx.doi.org/10.1177/0011000004272722>
- Bott, E. M., Duffy, R. D., Borges, N. J., Braun, T. L., Jordan, K., & Marino, J. F. (2017). Called to medicine. Physicians' experiences of a career calling. *Career Development Quarterly, 65*, 113–130. <http://dx.doi.org/10.1002/cdq.12086>
- Brady, B. R., Vodanovich, S. J., & Rotunda, R. (2008). The impact of workaholism on work-family conflict, job satisfaction, and perception of leisure activities. *The Psychologist-Manager Journal, 11*, 241–263. <http://dx.doi.org/10.1080/10887150802371781>

- Brown, S. D., & Lent, R. W. (2016). Vocational psychology: Agency, equity, and well-being. *Annual Review of Psychology*, *67*, 541–565. <http://dx.doi.org/10.1146/annurev-psych-122414-033237>
- Bunderson, J. S., & Thompson, J. A. (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly*, *54*, 32–57. <http://dx.doi.org/10.2189/asqu.2009.54.1.32>
- Burke, R. J. (1999). It's not how hard you work but how you work hard: Evaluating workaholism components. *International Journal of Stress Management*, *6*, 225–239. <http://dx.doi.org/10.1023/A:1021936220220>
- Burke, R. J. (2001). Workaholism components, job satisfaction, and career progress. *Journal of Applied Social Psychology*, *31*, 2339–2356. <http://dx.doi.org/10.1111/j.1559-1816.2001.tb00179.x>
- Burke, R. J., Berge Matthiesen, S., & Pallesen, S. (2006). Workaholism, organizational life and well-being of Norwegian nursing staff. *The Career Development International*, *11*, 463–477. <http://dx.doi.org/10.1108/13620430610683070>
- Burke, R. J., Davis, R. A., & Flett, G. L. (2008). Workaholism types, perfectionism, and work outcomes. *The Journal of Industrial Relations and Human Resources*, *10*, 30–40. <http://dx.doi.org/10.4026/1303-2860.2008.0083.x>
- Burke, R. J., & MacDermid, G. (1999). Are workaholics job satisfied and successful in their careers? *The Career Development International*, *4*, 277–282. <http://dx.doi.org/10.1108/13620439910279761>
- Burke, R. J., Matthiesen, S. B., & Pallesen, S. (2006). Workaholism, organizational life and well-being of Norwegian nursing staff. *Career Development International*, *11*, 463–477. <http://dx.doi.org/10.1108/13620430610683070>
- Caesens, G., Stinglhamber, F., & Luypaert, G. (2014). The impact of work engagement and workaholism on well-being. *The Career Development International*, *19*, 813–835. <http://dx.doi.org/10.1108/CDI-09-2013-0114>
- Cardador, M. T., & Caza, B. B. (2012). Relational and identity perspectives on healthy versus unhealthy pursuit of callings. *Journal of Career Assessment*, *20*, 338–353. <http://dx.doi.org/10.1177/1069072711436162>
- Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology*, *88*, 605–619. <http://dx.doi.org/10.1037/0021-9010.88.4.605>
- Chen, J., May, D. R., Schwoerer, C. E., & Augelli, B. (2016). Exploring the boundaries of career calling: The moderating roles of procedural justice and psychological safety. *Journal of Career Development*. Advance online publication. <http://dx.doi.org/10.1177/0894845316671214>
- Chung, B., & Han, J. Y. (2014). Influential factors related to job satisfaction in hospice nurses: Focus on emotional labor and burnout. *Journal of Korean Academy of Nursing Administration*, *20*, 322–331. <http://dx.doi.org/10.1111/jkana.2014.20.3.322>
- Clark, M. A., Lelchhook, A. M., & Taylor, M. L. (2010). Beyond the Big Five: How narcissism, perfectionism, and dispositional affect relate to workaholism. *Personality and Individual Differences*, *48*, 786–791. <http://dx.doi.org/10.1016/j.paid.2010.01.013>
- Clark, M. A., Michel, J. S., Zhdanova, L., Pui, S. Y., & Baltes, B. B. (2016). All work and no play? A meta-analytic examination of the correlates and outcomes of workaholism. *Journal of Management*, *42*, 1836–1873. <http://dx.doi.org/10.1177/0149206314522301>
- Clinton, M. E., Conway, N., & Sturges, J. (2017). "It's tough hanging-up a call": The relationships between calling and work hours, psychological detachment, sleep quality, and morning vigor. *Journal of Occupational Health Psychology*, *22*, 28–39. <http://dx.doi.org/10.1037/ocp0000025>
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A metaanalysis. *Organizational Behavior and Human Decision Processes*, *86*, 278–321. <http://dx.doi.org/10.1006/obhd.2001.2958>
- Conklin, T. A. (2012). Work worth doing: A phenomenological study of the experience of discovering and following one's calling. *Journal of Management Inquiry*, *21*, 298–317. <http://dx.doi.org/10.1177/1056492611414426>
- Cortese, C. G., Colombo, L., & Ghislieri, C. (2010). Determinants of nurses' job satisfaction: The role of work-family conflict, job demand, emotional charge and social support. *Journal of Nursing Management*, *18*, 35–43. <http://dx.doi.org/10.1111/j.1365-2834.2009.01064.x>
- Coulson, J. C., Oades, L. G., & Stoyles, G. J. (2012). Parent's conception and experience of calling in childrearing. *Journal of Humanistic Psychology*, *52*, 22–247. <http://dx.doi.org/10.1177/0022167810382454>
- Creed, P. A., Rogers, M. E., Praskova, A., & Searly, J. (2014). Career calling as a personal resource moderator between environmental demands and burnout in Australian junior doctors. *Journal of Career Development*, *41*, 547–561. <http://dx.doi.org/10.1177/0894845313520493>
- Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual-differences model and its applications*. Minneapolis, MN: University of Minnesota Press.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227–268. [http://dx.doi.org/10.1207/S15327965PLI1104\\_01](http://dx.doi.org/10.1207/S15327965PLI1104_01)
- Demerouti, E., Bakker, A. B., & Leiter, M. (2014). Burnout and job performance: The moderating role of selection, optimization, and compensation strategies. *Journal of Occupational Health Psychology*, *19*, 96–107. <http://dx.doi.org/10.1037/a0035062>
- Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist*, *37*, 424–450. <http://dx.doi.org/10.1177/0011000008316430>
- Dik, B. J., & Duffy, R. D. (2012). *Make your job a calling: How the psychology of vocation can change your life at work*. Philadelphia, PA: Templeton Press.
- Dik, B. J., & Duffy, R. D. (2015). Strategies for discerning and living a calling. In P. Hartung, M. Savickas, & B. Walsh (Eds.), *APA handbook of career intervention* (pp. 305–317). Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/14439-023>
- Dik, B. J., Duffy, R. D., & Eldridge, B. M. (2009). Calling and vocation in career counseling: Recommendations for promoting meaningful work. *Professional Psychology: Research and Practice*, *40*, 625–632. <http://dx.doi.org/10.1037/a0015547>
- Dik, B. J., Duffy, R. D., & Tix, A. P. (2012). Religion, spirituality, and a sense of calling in the workplace. In P. C Hill & B. J. Dik (Eds.), *The psychology of religion and workplace spirituality* (pp. 113–134). Charlotte, NC: Information Age.
- Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (2012). Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling Scale (BCS). *Journal of Career Assessment*, *20*, 242–263. <http://dx.doi.org/10.1177/1069072711434410>
- Dik, B. J., & Shimizu, A. B. (in press). Multiple meanings of calling: Next steps for studying an evolving construct. *Journal of Career Assessment*.
- Dispenza, F., Brown, C., & Chastain, T. E. (2016). Minority stress across the career-lifespan trajectory. *Journal of Career Development*, *43*, 103–115. <http://dx.doi.org/10.1177/0894845315580643>
- Dobrow, S. R., & Tosti-Kharas, J. (2011). Calling: The development of a scale measure. *Personnel Psychology*, *64*, 1001–1049. <http://dx.doi.org/10.1111/j.1744-6570.2011.01234.x>
- Dobrow, S. R., & Tosti-Kharas, J. (2012). Listen to your heart? Calling and receptivity to career advice. *Journal of Career Assessment*, *20*, 264–280. <http://dx.doi.org/10.1177/1069072711434412>
- Dobrow Riza, S. D., & Heller, D. (2015). Follow your heart or your head? A longitudinal study of the facilitating role of calling and ability in the pursuit of a challenging career. *Journal of Applied Psychology*, *100*, 695–712. <http://dx.doi.org/10.1037/a0038011>
- Douglass, R. P., Duffy, R. D., & Autin, K. L. (2016). Living a calling, nationality, and life satisfaction: A moderated, multiple mediator model.

- Journal of Career Assessment*, 24, 253–269. <http://dx.doi.org/10.1177/1069072715580324>
- Duffy, R. D., Allan, B. A., Autin, K. L., & Bott, E. M. (2013). Calling and life satisfaction: It's not about having it, it's about living it. *Journal of Counseling Psychology*, 60, 42–52. <http://dx.doi.org/10.1037/a0030635>
- Duffy, R. D., Allan, B. A., Autin, K. L., & Douglass, R. P. (2014). Living a calling and work well-being: A longitudinal study. *Journal of Counseling Psychology*, 61, 605–615. <http://dx.doi.org/10.1037/cou0000042>
- Duffy, R. D., Allan, B. A., Bott, E. M., & Dik, B. J. (2014). Does the source of a calling matter? External summons, destiny, and perfect fit. *Journal of Career Assessment*, 22, 562–574. <http://dx.doi.org/10.1177/1069072713514812>
- Duffy, R. D., & Autin, K. L. (2013). Disentangling the link between perceiving a calling and living a calling. *Journal of Counseling Psychology*, 60, 219–227. <http://dx.doi.org/10.1037/a0031934>
- Duffy, R. D., Autin, K. L., Allan, B. A., & Douglass, R. P. (2015). Assessing work as a calling: An evaluation of instruments and practice recommendations. *Journal of Career Assessment*, 23, 351–366. <http://dx.doi.org/10.1177/1069072714547163>
- Duffy, R. D., Autin, K. L., & Bott, E. M. (2015). Work volition and job satisfaction: Examining the role of work meaning and P-E fit. *Career Development Quarterly*, 63, 126–140. <http://dx.doi.org/10.1002/cdq.12009>
- Duffy, R. D., Autin, K. L., & Douglass, R. P. (2016). Examining how aspects of vocational privilege relate to living a calling. *The Journal of Positive Psychology*, 11, 416–427. <http://dx.doi.org/10.1080/17439760.2015.1092570>
- Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The Psychology of Working Theory. *Journal of Counseling Psychology*, 63, 127–148. <http://dx.doi.org/10.1037/cou0000140>
- Duffy, R. D., Bott, E. M., Allan, B. A., & Autin, K. L. (2015). Calling among the unemployed: Examining prevalence and links to coping with job loss. *The Journal of Positive Psychology*, 10, 332–345. <http://dx.doi.org/10.1080/17439760.2014.967798>
- Duffy, R. D., Bott, E. M., Allan, B. A., Torrey, C. L., & Dik, B. J. (2012). Perceiving a calling, living a calling, and job satisfaction: Testing a moderated, multiple mediator model. *Journal of Counseling Psychology*, 59, 50–59. <http://dx.doi.org/10.1037/a0026129>
- Duffy, R. D., Diemer, M. A., Perry, J. C., Laurenzi, C., & Torrey, C. L. (2012). The construction and initial validation of the Work Volition Scale. *Journal of Vocational Behavior*, 80, 400–411. <http://dx.doi.org/10.1016/j.jvb.2011.04.002>
- Duffy, R. D., & Dik, B. J. (2013). Research on calling: What have we learned and where are we going? *Journal of Vocational Behavior*, 83, 428–436. <http://dx.doi.org/10.1016/j.jvb.2013.06.006>
- Duffy, R. D., Dik, B. J., & Steger, M. S. (2011). Calling and work related outcomes: Career commitment as a mediator. *Journal of Vocational Behavior*, 78, 210–218. <http://dx.doi.org/10.1016/j.jvb.2010.09.013>
- Duffy, R. D., Douglass, R. P., & Autin, K. L. (2015). The dark side of callings. In D. B. Yaden, T. D. McCall, & J. H. Ellens (Eds.), *Being called: Secular, sacred, and scientific perspectives* (pp. 13). Review of General Psychology–25). Santa Barbara, CA: Praeger.
- Duffy, R. D., Douglass, R. P., Autin, K. L., & Allan, B. A. (2016). Examining predictors of work volition among undergraduate students. *Journal of Career Assessment*, 24, 441–459. <http://dx.doi.org/10.1177/1069072715599377>
- Duffy, R. D., England, J. W., Douglass, R. P., Autin, K. A., & Allan, B. A. (2017). Perceiving a calling and well-being: Motivation and access to opportunity as moderators. *Journal of Vocational Behavior*, 98, 127–137. <http://dx.doi.org/10.1016/j.jvb.2016.11.003>
- Duffy, R. D., Foley, P. F., Raque-Bodgan, T. L., Reid, L., Dik, B. J., Castano, M. C., & Adams, C. (2012). Counseling psychologists who view their careers as a calling: A qualitative study. *Journal of Career Assessment*, 20, 293–308. <http://dx.doi.org/10.1177/1069072711436145>
- Duffy, R. D., Torrey, C. L., England, J. W., & Tebbe, E. A. (2017). Calling in retirement: A mixed methods study. *The Journal of Positive Psychology*, 12, 399–413. <http://dx.doi.org/10.1080/17439760.2016.1187201>
- Dwyer, D., & Ganster, D. (1991). The effects of job demands and control on employee attendance and satisfaction. *Journal of Organizational Behavior*, 12, 595–608. <http://dx.doi.org/10.1002/job.4030120704>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500–507. <http://dx.doi.org/10.1037/0021-9010.71.3.500>
- Elangovan, A. R., Pinder, C. C., & McLean, M. (2010). Callings and organizational behavior. *Journal of Vocational Behavior*, 76, 428–440. <http://dx.doi.org/10.1016/j.jvb.2009.10.009>
- Esteves, T., & Lopes, M. P. (2017). Crafting a calling: The mediating role of calling between challenging job demands and turnover intention. *Journal of Career Development*, 44, 34–48. <http://dx.doi.org/10.1177/0894845316633789>
- Fouad, N. A., & Bynner, J. (2008). Work transitions. *American Psychologist*, 63, 241–251. <http://dx.doi.org/10.1037/0003-066X.63.4.241>
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115–134. <http://dx.doi.org/10.1037/0022-0167.51.1.115>
- French, J. R., & Domene, J. F. (2010). Sense of “calling”: An organizing principle for the lives and values of young women in university. *Canadian Journal of Counselling and Psychotherapy*, 44, 1–14.
- Gazica, M. W., & Spector, P. E. (2015). A comparison of individuals with unanswered callings to those with no calling at all. *Journal of Vocational Behavior*, 91, 1–10. <http://dx.doi.org/10.1016/j.jvb.2015.08.008>
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, 61, 227–271. <http://dx.doi.org/10.1111/j.1744-6570.2008.00113.x>
- Goldberg, L. R. (1990). An alternative “description of personality”: The big-five factor structure. *Journal of Personality and Social Psychology*, 59, 1216–1229. <http://dx.doi.org/10.1037/0022-3514.59.6.1216>
- Goodin, J. B., Duffy, R. D., Borges, N. J., Ulman, C. A., D’Brot, V. M., & Manuel, R. S. (2014). Medical students with low self-efficacy bolstered by calling to medical speciality. *Perspectives on Medical Education*, 3, 89–100. <http://dx.doi.org/10.1007/s40037-014-0110-7>
- Grandey, A., Foo, S. C., Groth, M., & Goodwin, R. E. (2012). Free to be you and me: A climate of authenticity alleviates burnout from emotional labor. *Journal of Occupational Health Psychology*, 17, 1–14. <http://dx.doi.org/10.1037/a0025102>
- Hagmaier, T., & Abele, A. E. (2012). The multidimensionality of calling: Conceptualization, measurement and a bicultural perspective. *Journal of Vocational Behavior*, 81, 39–51. <http://dx.doi.org/10.1016/j.jvb.2012.04.001>
- Hagmaier, T., Volmer, J., & Spurk, D. (2013). Calling and burnout: Integrating career research with occupational health psychology. In B. R. Doolittle (Ed.), *Psychology of burnout: New research* (pp. 19–32). Hauppauge, NY: Nova Science Publishers.
- Hall, D. T., & Chandler, D. E. (2005). Psychological success: When the career is a calling. *Journal of Organizational Behavior*, 26, 155–176. <http://dx.doi.org/10.1002/job.301>
- Hardin, E. E., & Donaldson, J. R. (2014). Predicting job satisfaction: A new perspective on person-environment fit. *Journal of Counseling Psychology*, 61, 634–640. <http://dx.doi.org/10.1037/cou0000039>
- Hardin, E. E., Robitschek, C., Flores, L. Y., Navarro, R. L., & Ashton, M. W. (2014). The cultural lens approach to evaluating cultural validity of psychological theory. *American Psychologist*, 69, 656–668. <http://dx.doi.org/10.1037/a0036532>
- Hardy, L. (1990). *The fabric of this world: Inquiries into calling, career choice, and the design of human work*. Grand Rapids, MI: Eerdmans.

- Hartnett, S., & Kline, F. (2005). Preventing the fall from the "Call to Teach": Rethinking vocation. *Journal of Education & Christian Belief*, 9, 9–20. <http://dx.doi.org/10.1177/205699710500900103>
- Hernandez, E. F., Foley, P. F., & Beitin, B. K. (2011). Hearing the call: A phenomenological study of religion in career choice. *Journal of Career Development*, 38, 62–88. <http://dx.doi.org/10.1177/0894845309358889>
- Hershenson, D. B. (1996). Work adjustment: A neglected area in career counseling. *Journal of Counseling & Development*, 74, 442–446. <http://dx.doi.org/10.1002/j.1556-6676.1996.tb01890.x>
- Hirschi, A. (2012). Callings and work engagement: Moderated mediation model of work meaningfulness, occupational identity, and occupational self-efficacy. *Journal of Counseling Psychology*, 59, 479–485. <http://dx.doi.org/10.1037/a0028949>
- Hocke-Mirzashvili, T. M., & Hickerson, C. (2014). U.S. public relations educators' identification and perception of the discipline. *Public Relations Review*, 40, 100–106. <http://dx.doi.org/10.1016/j.pubrev.2013.11.002>
- Hunter, I., Dik, B. J., & Banning, J. H. (2010). College students' perceptions of calling in work and life: A qualitative analysis. *Journal of Vocational Behavior*, 76, 178–186. <http://dx.doi.org/10.1016/j.jvb.2009.10.008>
- Ilies, R., Johnson, M. D., Judge, T. A., & Keeney, J. (2011). A within-individual study of interpersonal conflict as a work stressor: Dispositional and situational moderators. *Journal of Organizational Behavior*, 32, 44–64. <http://dx.doi.org/10.1002/job.677>
- Jackson, S. S., Fung, M. C., Moore, M. A. C., & Jackson, C. J. (2016). Personality and workaholism. *Personality and Individual Differences*, 95, 114–120. <http://dx.doi.org/10.1016/j.paid.2016.02.020>
- James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology*, 67, 219–229. <http://dx.doi.org/10.1037/0021-9010.67.2.219>
- James, L. R., Choi, C. C., Ko, C.-H. E., McNeil, P. K., Minton, M. K., Wright, M. A., & Kim, K. (2008). Organizational and psychological climate: A review of theory and research. *European Journal of Work and Organizational Psychology*, 17, 5–32. <http://dx.doi.org/10.1080/13594320701662550>
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74, 739–751.
- Johnson, R. E., Tang, M. U., Chang, C., & Kawamoto, C. K. (2013). A self-regulation approach to person-environment fit. In A. L. Kristof-Brown & J. Billsberry (Eds.), *Organizational fit: Key issues and new directions* (pp. 74–98). Oxford, UK: Wiley-Blackwell. <http://dx.doi.org/10.1002/9781118320853.ch4>
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285–308. <http://dx.doi.org/10.2307/2392498>
- Keller, A. C., Spurr, D., Baumeler, F., & Hirschi, A. (2016). Competitive climate and workaholism: Negative sides of future orientation and calling. *Personality and Individual Differences*, 96, 122–126. <http://dx.doi.org/10.1016/j.paid.2016.02.061>
- Kim, H. J., Praskova, A., & Lee, K. H. (2016). Cross-cultural validation of the Career Calling Scale for Korean emerging adults. *Journal of Career Assessment*, 25, 434–449. <http://dx.doi.org/10.1177/1069072716639852>
- King, E. B., Hebl, M. R., George, J. M., & Matusik, S. F. (2010). Understanding tokenism: Antecedents and consequences of a psychological climate of gender inequality. *Journal of Management*, 36, 482–510. <http://dx.doi.org/10.1177/0149206308328508>
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58, 281–342. <http://dx.doi.org/10.1111/j.1744-6570.2005.00672.x>
- Lazar, A., Davidovitch, N., & Coren, G. (2016). Gender differences in calling and work spirituality among Israeli academic faculty. *Journal of International Education Research*, 12, 87–98. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1108338.pdf>
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52, 1169–1192. <http://dx.doi.org/10.5465/AMJ.2009.47084651>
- Lee, A. Y. P., Chen, I. H., & Chang, P. C. (2016). Sense of calling in the workplace: The moderating effect of supportive organizational climate in Taiwanese organizations. *Journal of Management & Organization*. Advance online publication. <http://dx.doi.org/10.1017/jmo.2016.16>
- Lee, K. J. (2016). Sense of calling and career satisfaction of hotel frontline employees. *International Journal of Contemporary Hospitality Management*, 28, 346–365. <http://dx.doi.org/10.1108/IJCHM-01-2014-0026>
- Lee, Y., Reiche, B. S., & Song, D. (2010). How do newcomers fit in? The dynamics between person-environment fit and social capital across cultures. *International Journal of Cross Cultural Management*, 10, 153–174. <http://dx.doi.org/10.1177/1470595810370911>
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Westport, CT: Greenwood Press.
- Lips-Wiersma, M., & Wright, S. (2012). Measuring the meaning of meaningful work: Development and validation of the Comprehensive Meaningful Work Scale (CMWS). *Group & Organization Management*, 37, 655–685. <http://dx.doi.org/10.1177/1059601112461578>
- Little, T. D. (1997). Mean and covariance structures (MACS) analyses of cross-cultural data: Practical and theoretical issues. *Multivariate Behavioral Research*, 32, 53–76. [http://dx.doi.org/10.1207/s15327906mbr3201\\_3](http://dx.doi.org/10.1207/s15327906mbr3201_3)
- Lord, R. G., Brown, D. J., & Freiberg, S. J. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior and Human Decision Processes*, 78, 167–203. <http://dx.doi.org/10.1006/obhd.1999.2832>
- Lu, C., Wang, H., Lu, J., Du, D., & Bakker, A. B. (2014). Does work engagement increase person-job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior*, 84, 142–152. <http://dx.doi.org/10.1016/j.jvb.2013.12.004>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422. <http://dx.doi.org/10.1146/annurev.psych.52.1.397>
- McKay, P. F., Avery, D. R., Tonidandel, S., Morris, M. A., Hernandez, M., & Hebl, M. R. (2007). Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psychology*, 60, 35–62. <http://dx.doi.org/10.1111/j.1744-6570.2007.00064.x>
- Nauta, M. M. (2012). Temporal stability, correlates, and longitudinal outcomes of career indecision factors. *Journal of Career Development*, 39, 540–558.
- Ng, T. W. H., Sorensen, K. L., & Feldman, D. C. (2007). Dimensions, antecedents, and consequences of workaholism: A conceptual integration and extension. *Journal of Organizational Behavior*, 28, 111–136. <http://dx.doi.org/10.1002/job.424>
- Oates, K. L. M., Hall, M. E. L., & Anderson, T. L. (2005). Calling and conflict: A qualitative exploration of interrole conflict and the sanctification of work in Christian mothers. *Journal of Psychology and Theology*, 33, 210–223.
- Park, J., Sohn, Y. W., & Ha, Y. J. (2016). South Korean salespersons' calling, job performance, and organizational citizenship behavior: The mediating role of occupational self-efficacy. *Journal of Career Assessment*, 24, 415–428. <http://dx.doi.org/10.1177/1069072715599354>
- Park, Y. (2010). The predictors of subjective career success: An empirical study of employee development in a Korean financial company. *International Journal of Training and Development*, 14, 1–15. <http://dx.doi.org/10.1111/j.1468-2419.2009.00337.x>
- Parsons, F. (1909). *Choosing a vocation*. Boston, MA: Houghton Mifflin.

- Pervin, L. A. (1968). Performance and satisfaction as a function of individual–environment fit. *Psychological Bulletin*, 69, 56–68. <http://dx.doi.org/10.1037/h0025271>
- Peterson, C., Park, N., Hall, N., & Seligman, M. E. P. (2009). Zest and work. *Journal of Organizational Behavior*, 30, 161–172. <http://dx.doi.org/10.1002/job.584>
- Praskova, A., Creed, P. A., & Hood, M. (2015). The development and initial validation of a Career Calling scale for emerging adults. *Journal of Career Assessment*, 23, 91–106. <http://dx.doi.org/10.1177/1069072714523089>
- Rawat, A., & Nadavulakere, S. (2015). Examining the outcomes of having a calling: Does context matter? *Journal of Business and Psychology*, 30, 499–512.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698–714. <http://dx.doi.org/10.1037/0021-9010.87.4.698>
- Robinson, B. E. (1999). The Work Addiction Risk Test: Development of a tentative measure of workaholism. *Perceptual and Motor Skills*, 88, 199–210. <http://dx.doi.org/10.2466/pms.1999.88.1.199>
- Robitschek, C., & Hardin, E. E. (2017). The future of counseling psychology viewed through the cultural lens approach. *Journal of Counseling Psychology*, 64, 359–368. <http://dx.doi.org/10.1037/cou0000207>
- Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, 91–127. <http://dx.doi.org/10.1016/j.riob.2010.09.001>
- Rothmann, S., & Hamukang'andu, L. (2013). Callings, Work Role Fit, Psychological Meaningfulness and Work Engagement among Teachers in Zambia. *South African Journal of Education*, 33, 1–16.
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102, 112–138. <http://dx.doi.org/10.1016/j.jvb.2017.05.008>
- Ruscio, J., Haslam, N., & Ruscio, A. M. (2006). *Introduction to the taxometric method: A practical guide*. Mahwah, NJ: Erlbaum.
- Schabram, K., & Maitlis, S. (2016). Negotiating the challenges of a calling: Emotion and enacted sensemaking in animal shelter work. *Academy of Management Journal*, 60, 584–609. <http://dx.doi.org/10.5465/amj.2013.0665>
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437–453. <http://dx.doi.org/10.1111/j.1744-6570.1987.tb00609.x>
- Scott, K. S., Moore, K. S., & Miceli, M. P. (1997). An exploration of the meaning and consequences of workaholism. *Human Relations*, 50, 287–314. <http://dx.doi.org/10.1177/001872679705000304>
- Sherman, D. W. (2004). Nurses' stress & burnout. How to care for yourself when caring for patients and their families experiencing life-threatening illness. *The American Journal of Nursing*, 104, 48–56. <http://dx.doi.org/10.1097/0000446-200405000-00020>
- Shimazu, A., & Schaufeli, W. B. (2009). Is workaholism good or bad for employee well-being? The distinctiveness of workaholism and work engagement among Japanese employees. *Industrial Health*, 47, 495–502. <http://dx.doi.org/10.2486/indhealth.47.495>
- Shimazu, A., Schaufeli, W. B., & Taris, T. W. (2010). How does workaholism affect worker health and performance? The mediating role of coping. *International Journal of Behavioral Medicine*, 17, 154–160. <http://dx.doi.org/10.1007/s12529-010-9077-x>
- Smith, A. L., Gustafsson, H., & Hassmén, P. (2010). Peer motivational climate and burnout perceptions of adolescent athletes. *Psychology of Sport and Exercise*, 11, 453–460. <http://dx.doi.org/10.1016/j.psychsport.2010.05.007>
- Spence, J. T., & Robbins, A. S. (1992). Workaholism: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58, 160–178. [http://dx.doi.org/10.1207/s15327752jpa5801\\_15](http://dx.doi.org/10.1207/s15327752jpa5801_15)
- Steenkamp-Scheinhardt, C., & Naring, G. (2015). Workers with a calling: Blessed or in need in our care system? *Gedrag en Organisatie*, 28, 27–45. <http://dx.doi.org/10.5553/GenO/092150772015028001003>
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The Work and Meaning Inventory (WAMI). *Journal of Career Assessment*, 20, 322–337. <http://dx.doi.org/10.1177/1069072711436160>
- Steger, M. F., Pickering, N., Shin, J. Y., & Dik, B. J. (2010). Calling in work: Secular or sacred? *Journal of Career Assessment*, 18, 82–96. <http://dx.doi.org/10.1177/1069072709350905>
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197–261). San Francisco, CA: Jossey-Bass.
- Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources, and well-being. *Journal of Occupational Health Psychology*, 18, 230–240. <http://dx.doi.org/10.1037/a0032141>
- Tims, M., Bakker, A. B., & Derks, D. (2015). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, 24, 914–928. <http://dx.doi.org/10.1080/1359432X.2014.969245>
- Torrey, C. L., & Duffy, R. D. (2012). Calling and well-being among adults: Differential relations by employment status. *Journal of Career Assessment*, 20, 415–425. <http://dx.doi.org/10.1177/1069072712448894>
- Vinje, H. F., & Mittelmark, M. B. (2007). Job engagement's paradoxical role in nurse burnout. *Nursing & Health Sciences*, 9, 107–111. <http://dx.doi.org/10.1111/j.1442-2018.2007.00310.x>
- Wrzesniewski, A. (2012). Callings. In K. S. Cameron & G. Spreitzer (Eds.), *Handbook of positive organizational scholarship* (pp. 45–55). New York, NY: Oxford University Press.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26, 179–201.
- Wrzesniewski, A., McCauley, C. R., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31, 21–33. <http://dx.doi.org/10.1006/jrpe.1997.2162>
- Xie, B., Xia, M., Xin, X., & Zhou, W. (2016). Linking calling to work engagement and subjective career success: The perspective of career construction theory. *Journal of Vocational Behavior*, 94, 70–78. <http://dx.doi.org/10.1016/j.jvb.2016.02.011>
- Yeoman, R. (2014). *Meaningful work and workplace democracy: A philosophy of work and a politics of meaningfulness*. Basingstoke, UK: Palgrave Macmillan. <http://dx.doi.org/10.1057/9781137370587>
- Yoon, J. D., Daley, B. M., & Curlin, F. A. (2017). The association between a sense of calling and physician well-being: A national study of primary care physicians and psychiatrists. *Academic Psychiatry*, 41, 167–173.
- Yoon, J. D., Hunt, N. B., Ravella, K. C., Jun, C. S., & Curlin, F. A. (2016). Physician burnout and the calling to care for the dying: A national survey. *American Journal of Hospice and Palliative Medicine*, 34, 931–937. <http://dx.doi.org/10.1177/1049909116661817>
- Zhang, C., Dik, B. J., Wei, J., & Zhang, J. (2015). Work as a calling in China: A qualitative study of Chinese college students. *Journal of Career Assessment*, 23, 236–249. <http://dx.doi.org/10.1177/1069072714535029>
- Zhang, C., Hirschi, A., Herrmann, A., Wei, J., & Zhang, J. (2017). The future work self and calling: The mediational role of life meaning. *Journal of Happiness Studies*. Advance online publication. <http://dx.doi.org/10.1007/s10902-016-9760-y>

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