



Research on calling: What have we learned and where are we going?



Ryan D. Duffy ^{a,*}, Bryan J. Dik ^b

^a University of Florida, USA

^b Colorado State University, USA

ARTICLE INFO

Article history:

Received 11 April 2013

Available online 21 June 2013

Keywords:

Calling

Well-being

Review

ABSTRACT

Work as a calling is an emerging concept for scholars across a variety of psychological disciplines. In the current paper, the extant literature on calling is reviewed, showcasing its salience among college student and adult populations and highlighting consistent links between perceiving a calling and heightened levels of career maturity, career commitment, work meaning, job satisfaction, life meaning, and life satisfaction. These links appear most robust when individuals are actually living out their calling at work. Seven suggestions are proposed for future researchers to better understand what it means to have and live a calling: developing a stronger conceptual understanding, collecting more longitudinal data, studying more diverse cultural groups, focusing on behavioral outcomes, examining the dark side of a calling, building theory, and testing interventions. It is hoped that the promising research base and vast areas of potential growth will continue to make the study of calling attractive to scholars across psychological disciplines.

© 2013 Elsevier Inc. All rights reserved.

1. Introduction

It's relatively easy to recognize the importance of calling within popular culture. As a slogan for Monster.com, as a lesson in Oprah's LifeClass, or as a focus for the Dali Lama's latest book on happiness, the notion of finding and living out one's calling in the context of work is indeed an emergent concept. Despite literally centuries of wisdom on the topic from theologians and philosophers, only a handful of empirical studies on calling were available in the social science literature prior to 2007, the apparent tipping point. Since that time, research on the concept has burgeoned, resulting in a corpus of findings across a range of subdisciplines within psychology (and related fields such as organizational behavior and management) that inform how calling relates to proximal work and well-being variables. In this paper, we begin by discussing the different ways calling is defined in the literature. Next, we provide a narrative review of the research on calling and, based on insights and limitations from this research, provide suggestions for future scholarship in this area.

2. What calling means

The conceptual meaning of calling represents perhaps the most controversial issue within the literature. Although a calling has been described as an orientation (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1986), mind-set, or perspective (Dik & Duffy, in press-a,b), most scholars frame calling as a psychological construct that may be folded into larger career theories or interventions, rather than a new theory of career development or career counseling—analogueous to well-studied vocational constructs like self-efficacy or outcome expectations. Nevertheless, there is no consensus on how the term is defined, and current approaches are diverse, but can be organized using a general distinction between “neoclassical” and “modern” definitions. Echoing an earlier

* Corresponding author at: University of Florida, Department of Psychology, PO Box 112250, Gainesville, FL 32611, USA.

E-mail address: rduf@ufl.edu (R.D. Duffy).

observation by Baumeister (1991), Bunderson and Thompson (2009) noted that neoclassical approaches reflect how the term has been understood historically, and emphasize a sense of destiny and prosocial duty. In contrast, modern approaches generally focus on an inner drive toward self-fulfillment or personal happiness. This debate over which definition is the “right” one is arguably more of a linguistic question than a scientific one, particularly given evidence that research participants also are divided in terms of how they understand the term (e.g., Hirschi, 2011). As Wrzesniewski (2012) summarized, “it is a sign of the evolving and dynamic nature of research on callings that the definition of callings is the subject of ongoing debate” (p. 46).

In their review of the range of definitions across the humanities and social sciences, Dik and Duffy (2009) identified three components that, when combined, were emblematic of a calling in the work domain. The first was the notion of an external summons—that if an individual feels “called” to a specific type of work, this necessarily implies a “caller,” which may come in the form of a higher power, the needs of society, a family legacy, the needs of one’s country, or any other force external to the individual. This component is consistent with the literal meaning of “calling” and with how the term has been used in the context of work historically. The second component is that a person’s approach to work aligns with her or his broader sense of purpose in life; for such individuals, work is either a source of purpose in life, or serves as a life domain that allows an expression of a sense of purpose. The third component is that a person’s career is prosocially oriented; that is, individuals with a calling use their career to directly or indirectly help others or advance the greater good.

The combination of these three components – an external summons, meaning/purpose, and prosocial motivation – is what distinguish calling from closely related constructs such as work centrality (Dubin, 1956), work commitment (Loscocco, 1989), work engagement (Kahn, 1990), meaningful work (Rosso, Dekas, & Wrzesniewski, 2010), and prosocial work behaviors (Grant, 2007, 2008). Furthermore, Dik and Duffy (2009) suggested that individuals endorse a calling along spectrum (not simply having one versus not having one), introduced a distinction between seeking and experiencing a calling, described calling as an ongoing process rather than something to be discovered once and for all, and proposed that callings often change over time. This conceptualization of calling has informed what are currently the two most widely used instruments to assess calling in empirical research (Dik, Eldridge, Steger, & Duffy, 2012).

Qualitative studies with college students (Hunter, Dik, & Banning, 2010) and working adults who view their career as a calling (Bunderson & Thompson, 2009; Duffy, Foley, et al., 2012; Hernandez, Foley, & Beitin, 2011) have assessed how individuals actually define the term. In accordance with the second and third components of Dik and Duffy’s (2009) definition, calling is most often defined as a highly meaningful career that is used to help others in some fashion. In these studies, participants described a remarkable range of sources of the calling, some external (e.g., God, a higher power), some internal (e.g., one’s own interests, skills, values, and passions), and some that may fall in the overlap of internal and external, such as a sense of destiny (e.g., what one is meant to do). Some scholars have argued that these internal source conceptualizations are a better fit for how the construct is viewed in the current culture, noting that many individuals who feel a calling do not identify an external caller, but rather point to working in the career that aligns with their strongest internal passions (Dobrow & Tosti-Kharas, 2011; Elangovan, Pinder, & McLean, 2010; Hagmaier & Abele, 2012; Hall & Chandler, 2005). Accordingly, several instruments of calling have been developed conceptualizing calling as arising from an inner voice or sense of passion (Dobrow & Tosti-Kharas, 2011; Hagmaier & Abele, 2012).

A recent study surveyed a group of working adults who felt that they had a calling and asked them which of the three source conceptualizations best fit where their calling originated—external summons, sense of destiny, or perfect fit. More than half of the participants identified with the notion of finding a perfect fit (55%), with 23% identifying an external summons and 22% a sense of destiny. More importantly, the degree to which individuals felt they were living their calling, felt satisfied with their work, and felt satisfied with life was the same regardless of source conceptualization (Duffy, Allan, Bott, & Dik, *in press*). However, complicating the interpretation of these results is the likelihood that these sources are not mutually exclusive for many participants, a point that is often made when scholars describe counseling and organizational implications of the construct (e.g., Dik & Duffy, 2012).

The question of which definition is the “right” one is complex, and not ultimately one that empirical research can answer directly. Nevertheless, findings from Dik and Duffy’s (2009) review, qualitative research, and one study on endorsement rates of particular sources of calling suggest the following. For research purposes, a calling might best be defined as an approach to work that reflects the belief that one’s career is a central part of a broader sense of purpose and meaning in life and is used to help others or advance the greater good in some fashion. A calling source is integral to most conceptualizations of the term but is variable, and may arise from an external summons, a sense of destiny, a sense of fit with one’s passions, or other areas which have not yet been assessed. The role of the perceived source in how a sense of calling develops is not yet well-understood, a point we review below. However, in research to date, the perceived source of an individual’s calling appears to play very little role in the degree to which an individual is living out her or his calling or is satisfied with work and life.

3. What have we learned?

Since 2007 approximately 40 studies have been completed examining how a sense of calling links to work-related and general well-being outcomes. This section reviews results from these studies across six primary domains: the prevalence of calling, career maturity, work outcomes, domain satisfaction, well-being, and the distinction of perceiving vs. living a calling. Research in the first five domains will be discussed with scales assessing the perceived presence of calling, and research using scales that measure living a calling will be reviewed in the final domain. Given the different ways calling has been conceptualized and measured, the particular instruments utilized in each study will be discussed. Apart from early categorization studies, the majority of studies have been based on Dik and Duffy’s (2009) conceptualization of calling. These studies have used either the BCS, which has a

unidimensional scale assessing the presence of a calling, or the Calling and Vocation Questionnaire, which includes three subscales assessing external summons, prosocial motivation, and meaning/purpose, as well as a total score. Other scales have been developed by Dobrow and Tosti-Kharas (2011), who conceptualized calling as a meaningful passion, and Hagmaier and Abele (2012), who conceptualized calling as a career to which one strongly identifies, contributes to a sense of meaning, and is guided by a transcendent force. For clarity, despite the definitional diversity, scholars usually describe a calling as consisting of multiple components that can be meaningfully summarized in a unidimensional total score.

3.1. Prevalence

On a basic level, the cultural relevance of the calling construct can be appraised by assessing the extent to which some segment of the population actually endorses the term as applicable to their own career development. One of the first empirical studies conducted on calling provided adults with three paragraphs describing work as a job (e.g., work primarily as means to an income), a career (e.g., work as a status ladder that meets achievement needs), or a calling, and asked which one best matched their approach to work (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). The authors found that approximately 1/3 of participants viewed their work as a calling. In a study linking calling to work outcomes, Duffy, Dik, & Steger (2011) asked adults working at a university if they had a calling, and approximately half said yes. Just as striking, more than two thirds of a sample of college students expressed that the construct was a relevant consideration in how they thought about their careers (Hunter et al., 2010).

More often, researchers study calling on a continuum. The most popular instrument to assess calling is the Brief Calling Scale (BCS; Dik, Duffy, & Tix, 2012; Dik, Eldridge, et al., 2012; Dik, Steger, Gibson, & Peisner, 2012), which contains the item, "I have a calling to a particular kind of work," that participants answer on a five point scale ranging from *not at all true of me* to *totally true of me*. With a sample of over 5000 diverse undergraduate students, Duffy and Sedlacek (2010) found that 30% reported that this statement was mostly true of them and 14% felt it was totally true. In a study on the link of calling to life satisfaction, Duffy, Allan, Autin, and Bott (2013) surveyed a diverse sample of 671 working adults using the same instrument. They found that 28% indicated that the statement was mostly true of them and 15% felt it was totally true. Demand characteristics may inflate these agreement rates to an extent, but even accounting for this possibility, these studies suggest that calling is a salient construct for a substantial proportion of college students and working adults.

3.2. Career maturity

Career maturity broadly pertains to an individual's level of career progress in relation to her or his stage of career development (Crites, 1976), and is a construct most often studied with college student populations. A number of studies have tied perceiving a calling to aspects of career maturity. With a sample of 846 German undergraduates, Hirschi and Hermann (2013) used the BCS and found that the perception of a calling related to career planning and career self-efficacy across three time points. Duffy and Sedlacek (2007) surveyed over 3000 first year college students using the BCS and found that perceiving a calling was strongly correlated with vocational self-clarity, comfort with one's career choice, and career decidedness, findings corroborated by Steger, Pickering, Shin, and Dik (2010) and Hirschi and Hermann (2013), each using the BCS. Analogously, using the BCS and studying a sample of 269 German college students, Hirschi and Hermann (2012) found perceiving a calling to be positively correlated with a stronger vocational identity. With a sample of 255 college students, Dik, Sargent, and Steger (2008) used the BCS and found the sense of a calling to positively correlate with career decision self-efficacy and outcome expectations, findings which were supported by the results from a sample of 855 Canadian college students using the Calling and Vocation Questionnaire (CVQ; Dik & Duffy, 2012; Domene, 2012). These six studies suggest that college students who perceive a calling to a particular career tend to be more planful, confident, and decided in their career decisions, and more likely to expect positive outcomes for following a specific career path.

3.3. Work outcomes

Several studies have assessed the relation of calling to work related outcomes among employed adults. Duffy, Allan, and Dik (2011) analyzed data from 370 university employees and found that those endorsing a calling on the BCS reported greater career commitment, organizational commitment, and lower withdrawal intentions, with career commitment serving as a mediator (i.e., a variable that helps explain why two other variables are associated with each other) between calling and organizational commitment and withdrawal intentions; adults endorsing a calling were more committed to their organization and less likely to withdraw because they were more committed to their careers. Other studies with working adults have corroborated the link of calling to career commitment (Duffy, Bott, Allan, Torrey, & Dik, 2012; Duffy et al., 2013; each using the BCS), turnover intentions, and organizational commitment (Cardador, Dane, & Pratt, 2011; using Wrzesniewski et al.'s calling orientation scale). With a sample of 529 German employees, Hirschi (2012) used the BCS and found calling to be strongly linked to work meaningfulness, as well as a strong sense of occupational identity, occupational self-efficacy, work engagement, and person–job fit. The link of calling to a sense of work meaning specifically has been replicated with samples of American working adults (Duffy et al., in press; Duffy et al., 2013).

Results from these five studies suggest that working adults more likely to perceive their job as a calling tend to be more committed to their jobs and organizations, feel their work is a strong fit with their personal preferences, and are more likely to

find meaning at work. These results are consistent with findings from qualitative studies of academics, zookeepers, and psychologists (Bunderson & Thompson, 2009; Duffy, Allan, et al., 2012; Oates, Hall, & Anderson, 2005; Sellers, Thomas, Batt, & Ostman, 2005). In each of these studies, participants spoke at length of the strong commitment they had to their jobs and the sense of meaning they felt at work.

3.4. Domain satisfaction

A frequently studied criterion variable in research on calling is domain satisfaction. Duffy, Allan, et al. (2011) surveyed 312 undergraduate students using the CVQ and found perceiving a calling to moderately correlate with academic satisfaction. Career decision self-efficacy and work hope were found to fully mediate this link, suggesting that calling related to greater satisfaction within the academic domain due to increased feelings of confidence in one's career decision making and hope about one's future career. A qualitative and quantitative study by Coulson, Oades, and Stoyles (2012a,b) found that individuals with children who viewed parenthood as a calling were more satisfied as parents. Most studies of satisfaction, however, have focused on the relation of calling to job satisfaction among working adults, as well as mediators that may help explain this relation.

Early studies invited groups of adults to select one of three ways they viewed their work—as a job, a career, or a calling. These studies found that adults who viewed their work as a calling were more likely to be satisfied with their jobs than adults viewing their work as a job or career (Davidson & Caddell, 1994; Wrzesniewski et al., 1997). Since that time a series of studies have confirmed that perceiving a calling and job satisfaction positively correlates at a moderate or strong level using a variety of calling instruments (Duffy, Allan, et al., 2011; Duffy et al., 2013; Duffy et al., *in press*; Hagmaier & Abele, 2012; Harzer & Ruch, 2012; Peterson, Park, Hall, & Seligman, 2009). In an effort to explain this relation using the BCS, Duffy, Allan, et al. (2011) found that the link of calling to job satisfaction was mediated by career commitment, and also using the BCS, Duffy et al. (*in press*) found that this link was mediated by career commitment and work meaning. Findings from these eleven studies suggest a moderate to strong link between calling and satisfaction within the academic, parenting, and job domains, and that the reason for the link of calling to job satisfaction may be due to increased commitment to one's career and meaning experienced at work.

3.5. Well-being

Studies examining the relation between calling and well-being have mainly focused on life meaning and life satisfaction as criterion variables. With a sample of over 5000 undergraduate students, Duffy and Sedlacek (2010) using the BCS found perceiving a calling to weakly correlate with life satisfaction and moderately correlate with life meaning; similar correlations were found by Steger et al. (2010; using the BCS) and Duffy, Allan, et al. (2012; using the CVQ) with different samples of undergraduates and also by Duffy, Manuel, Borges, and Bott (2011) using the BCS with samples of first and third year medical students. In an effort to explore the dynamics in how perceiving a calling related to life meaning, Steger and Dik (2009), using the BCS, found that college students seeking meaning in life were more likely to experience meaning if they reported that they approached their work as a calling. In terms of employed adult samples, the earlier categorization studies by Davidson and Caddell (1994) and Wrzesniewski et al. (1997) each found adults with a calling to be more satisfied with life. Similarly, Peterson et al. (2009) surveyed 9803 employed adults and had them rate on a four point scale how well each of Wrzesniewski et al.'s (1997) three work orientation descriptions (i.e., job, career, or calling) fit for them. The authors found that perceiving a calling was moderately correlated with zest for life and life satisfaction. Not surprisingly, with adult samples that are more likely to be in the working world, the links of calling to life satisfaction were more pronounced than with college samples.

Two of the studies with undergraduate samples attempted to examine mediators in the link of calling to life satisfaction. Steger et al. (2010) found religiousness to mediate this relation with religious students and found life meaning to mediate this relation with both highly religious and less religious students. Building off this research, Duffy, Bott, et al. (2012) found life meaning and academic satisfaction to fully mediate the link between calling and life satisfaction; endorsing a calling related to increased life satisfaction because of increased satisfaction within the academic domain and increased life meaning. Results from these eight studies suggest that perceiving a calling is linked with increased life meaning and life satisfaction, and that life meaning and domain satisfaction may mediate the link between calling and life satisfaction.

3.6. Perceiving vs. living distinction

The studies reviewed above each assessed the degree to which individuals perceived a calling. However, recent research has suggested that there is a critical distinction between perceiving a calling and living a calling. On a basic level, studies have found that the bivariate relations between perceiving a calling and living a calling to proximal outcomes differ. For example, among working adults, Duffy et al. (*in press*) found pronounced differences: living a calling, compared to perceiving a calling, was more strongly correlated with career commitment ($r = .68$ vs. $.33$), work meaning ($r = .62$ vs. $.34$), and job satisfaction ($r = .52$ vs. $.23$). Also with working adults, Duffy et al. (2013) found that living a calling was more strongly correlated with life satisfaction than perceiving a calling ($r = .48$ vs. $.17$).

Depending on one's perspective, living a calling can be viewed as either a moderator (i.e., a variable that alters the relation between two variables) or a mediator linking perceiving a calling to proximal outcomes. For example, Duffy et al. (*in press*) found living a calling to moderate the link of perceiving a calling to work meaning and career commitment; these links were positive only for individuals with medium or high levels of living a calling. Alternatively, Duffy et al. (2013) demonstrated that living a

calling fully mediated the link between perceiving a calling and life satisfaction; perceiving a calling linked to greater satisfaction with life because of an increased sense that one was living out that calling. Some research has examined what might account for the ability of people who perceive a calling to live out their calling. Duffy et al. (2013) and Duffy and Autin (2013), each using the BCS, found that those with higher incomes and higher levels of education were more likely to feel that they were living a calling, but the perception of a calling was the same across class groups. Furthermore, Duffy and Autin (2013) found that volition in one's career decision making partially mediated the relation of perceiving a calling to living a calling; that is, perceiving a calling linked to living a calling in part due to an increased ability to choose desired careers.

The results from these three studies demonstrate an important distinction between perceiving and living a calling. Without being able to live out a calling within the career path to which one feels called, the links between perceiving a calling and work-related and general well-being criterion variables diminish in magnitude. Indeed, in a qualitative study by Berg, Grant, and Johnson (2010) on "unanswered" callings, individuals who were not able to live out their calling at work often described experiencing regret over not fulfilling this calling and stress from trying to live out their callings outside of work. As researchers continue to investigate this area, it appears critical to measure both of these constructs to get an accurate assessment of the role that calling plays in life.

4. Where are we going?

The narrative review presented above highlights findings from the growing area of calling research. Generally, perceiving a calling has been linked to greater career maturity, career commitment, work meaning, life meaning, job satisfaction, and life satisfaction. These links are especially pronounced when individuals report that they are living out their calling within the career to which they feel called. Yet there remain critical gaps that need to be addressed for a more complete understanding of the role that calling plays in individuals' lives. In the following section, we discuss seven domains in research on calling that are in particular need of attention: conceptualization, longitudinal research, research with diverse populations, behavioral outcomes, the dark side of calling, theory, and interventions.

4.1. Conceptualization

As discussed in the [Introduction](#), scholars have conceptualized calling in a number of different ways, with the main area of non-overlap concerning the source of a calling. That is, does a calling come from something internal or external to the individual, or some combination of both? Furthermore, is an identified source of a calling a necessary part of the construct, functionally? Although research has consistently found that perceiving a calling links to healthy work and well-being outcomes regardless of if, or how, the source of the calling is measured, it may be that the perceived source affects both the development and experience of a calling. For example, religiously committed individuals may be more likely to experience an external call, and when living their calling, may be most satisfied when they feel it aligns with this external summons. Piecing apart how calling is conceptualized by individuals – in particular the source of a calling – is necessary to build a stronger theoretical foundation of the construct.

4.2. Longitudinal research

The vast majority of studies on calling have been cross-sectional, precluding causal interpretations and limiting knowledge on how calling might affect people over time. Most researchers have positioned calling as a predictor variable of work and well-being outcomes, suggesting that calling functions in a similar fashion as goals, gratitude, and prosocial behavior—performing these activities theoretically leads to heightened well-being. However, only a few studies have actually examined how calling links to proximal variables over time.

Using a calling scale that assesses meaningful passion for work, Dobrow and Tosti-Kharas (2011) surveyed a group of aspiring musicians at three time points over a seven year period. They found calling at time 1 to significantly correlate with domain satisfaction, career self-efficacy, career insight, and intentions to pursue a career in music 3.5 and 7 years later. Higher levels of calling at time 1 also were associated with choosing a music-oriented college program. Using this same sample and instrument, Dobrow and Tosti-Kharas (2012) found that behavioral involvement in music and feeling socially comfortable in the music environment linked to an increased sense of calling over time, and also found that levels of calling declined over a seven year period (from age 17 to 24). Three studies have examined the potential causality of calling and proximal variables. In Hirschi and Hermann's (2012) study with German undergraduate students, calling was found to predict vocational identity six months later. Hirschi and Hermann's (2013) study tracked a new group of German students at three time points over a one year period, finding calling to predict an increase in career planning and self-efficacy, while planning and career decidedness also predicted an increase in calling. In Duffy, Manuel, Borges, and Bott's (2011) study, medical students were surveyed at the start of their first and third years of medical school. Time 1 calling was unrelated to time 2 vocational development and life meaning, but vocational development and life meaning at time 1 predicted calling at time 2. Students who endorsed higher levels of life meaning and vocational development at the start of medical were more likely to endorse a calling two years later. Intriguingly, like Dobrow and Tosti-Kharas's (2012) study, medical students were less likely to view their career as a calling after completing two years of medical school.

The results of these five studies suggest that calling may relate to positive work and well-being outcomes over time, but the directionality of these relations remains unclear. Findings also suggest that, at least for young adults in medical school and in the

field of music, the perception of a calling may actually decrease over time. However, particularly in light of potential practical applications (e.g., career counseling) of this area of research, the importance of better understanding the impact of having and living a calling over time cannot be overstated.

4.3. Research with diverse populations

To date the majority of research on calling has been conducted with individuals living in North America who are predominantly White and either currently working or in college. There are several exceptions; [Torrey and Duffy \(2012\)](#) studied how calling links to life satisfaction in unemployed adults, and some researchers ([Hagmaier & Abele, 2012](#); [Hirschi, 2011, 2012](#); [Hirschi & Hermann, 2012, 2013](#)) have studied calling in populations of German college students and working adults. Also, studies with large samples of American undergraduate students and American working adults did not find any meaningful differences in the experience of a calling across racial groups ([Duffy & Autin, 2013](#); [Duffy & Sedlacek, 2010](#)). Yet the lack of diversity overall makes it impossible to know how calling is defined and functions with individuals in, for example, Non-Western cultures, for children and adolescents prior to college, or for racial and ethnic minority groups. Although some scholars (e.g., [Dik & Duffy, 2009](#); [Dik, Duffy, et al., 2012](#)) have suggested that the construct has considerable cross-cultural relevance, efforts to investigate this claim empirically are needed to substantiate it. Broadening the populations sampled in calling research is an important step to achieving that goal.

4.4. Behavioral antecedents, correlates, and outcomes

To date, few studies have examined how calling links to overt behaviors, either as antecedents, correlates, or outcomes of calling. For example, does time engaging in guided self-reflection or career counseling help someone develop a calling? Does having a calling link to greater task completion and performance outcomes at work? Do people who have a calling work more hours? Do people with a calling perform more prosocial behaviors? What specific behavioral steps do people who perceive a calling take to live their callings out, or to maintain or enhance their sense of calling?

Most qualitative studies with individuals living out their callings do discuss behaviors of participants, including spending time in self-reflection, working long hours, engaging in helping behaviors at work, and crafting their jobs in ways that align with what they feel called to do ([Bunderson & Thompson, 2009](#); [Conklin, 2012](#); [Duffy, Allan, et al., 2012](#); [Hernandez et al., 2011](#)). However, all of these studies focused on small groups of people with the same underlying attribute (having a calling); as yet, quantitative research of how these behaviors link to a sense of calling, such as comparisons of how such behaviors vary across those with and without callings, is conspicuously absent from the literature.

4.5. The dark side

Scholars have discussed the possible dark side of a calling, in which having and/or living a calling may relate to negative outcomes for some individuals (e.g., [Cardador & Caza, 2012](#); [Dik & Duffy, 2012](#)). Using the same sample of aspiring musicians described above, [Dobrow and Tosti-Kharas \(2012\)](#) found that those with a calling were less receptive over time to advice from trusted mentors that threatened their sense of calling, pointing to the risk of career foreclosure or “tunnel vision” that may accompany a calling. In their study examining career commitment as a mediator between calling and work outcomes, [Duffy, Allan, et al. \(2011\)](#) found that career commitment actually acted as a suppressor variable in the link between calling and withdrawal intentions; that is, individuals with a calling who were not committed to their career were more likely to have intentions of withdrawing from their current job. In line with the [Berg et al.'s \(2010\)](#) study, it may be having a calling, but not being able to live out that calling, could potentially be related to negative outcomes.

Even individuals who are currently living their calling may experience downsides. In the extensive qualitative study by [Bunderson and Thompson \(2009\)](#) of zookeepers, participants noted that although they felt that they were living their calling, some felt overworked and at risk of exploitation from their employers. Some participants noted that for intrinsically motivated employees who perform well because they view the work as a calling, employers may not see a need in providing extra incentives or extrinsic reward, resulting in such employees being passed over for pay raises. Similarly, such employees may be asked to do more difficult or unpleasant jobs than other employees due to their willingness to readily comply to such requests. Another vulnerability of a calling is workaholism, or an over-identification with work resulting in difficulty maintaining work and nonwork balance ([Cardador & Caza, 2012](#)). As evidenced in the qualitative study with psychologists ([Duffy, Foley, et al., 2012](#)), people with a calling may become so attached to their job they will make sacrifices in non-work domains (e.g., friends, family, spouse), defending or rationalizing their overinvestment in work because they view it as a calling.

In sum, despite the evidence that having and living a calling relate to positive outcomes, evidence also points to a dark side of calling for individuals who foreclose too early on their career choices, work in jobs that are not their calling, become too invested in their work, or get exploited by their employers. However, the limited research on this topic makes any conclusions suggestive rather than definitive. More scholarship is needed to understand the variety of ways calling may lead to negative outcomes, and moderator variables that help explain what types of individuals are most likely to experience such outcomes.

4.6. Theory

Developing a more thorough understanding of how calling is conceptualized, functions longitudinally and among diverse populations, and links to positive psychological and behavioral outcomes will lay the foundation for the formation of empirically testable theories. These initial research steps are necessary for theory development to be based on sound science. To date, the primarily cross-sectional nature of research on calling has most often been absent of theory, or has been guided by theories used for constructs that resemble a calling (e.g., self-determination theory). Much of the early research on calling was inductive in nature, with scholars explaining patterns of relations without a clearly articulated overarching conceptual framework. This is an understandable and not unhelpful starting point, but as scholarship on calling has begun to mature, the need for theory to guide the path forward has become obvious.

Theoretical models are needed to explain how calling links to domain satisfaction and overall life satisfaction. Several studies have tested increasingly complex models using cross-sectional data, and these might be used as guides for establishing formal models that are tested using longitudinal data. For both domain and life satisfaction, it seems critical that living a calling is hypothesized to serve as a mediator or moderator—either by explaining the relation of calling to outcomes (mediator) or changing the strength of the relation of calling to outcomes (moderator). For the domain satisfaction model, several studies using the BCS have pointed to work meaning and career commitment as mediators between the calling and satisfaction within the work domain (Duffy et al., 2013; Duffy et al., *in press*; Hirschi, 2012). As such, it may be that in the work domain feeling called leads to increased feelings of career commitment and work meaning for those who are living out their calling, which in turn leads to increased job satisfaction.

Building a theoretical model of life satisfaction is slightly more complex. Duffy et al. (2013) attempted to blend components of the domain satisfaction model with findings from studies connecting life meaning to life satisfaction. Specifically, they found that among working adults, living a calling linked to greater satisfaction in life due to increased life meaning and job satisfaction. This model also postulated that the link of living a calling to job satisfaction was mediated by career commitment and work meaning. Although this model was tested using cross sectional data, it fit the data better than an alternative model whereby work meaning and career commitment were proposed to be predictors of living a calling.

The constructs of living a calling, life meaning, work meaning, and career commitment may be integral components in theoretical models linking calling to domain and life satisfaction. However, this naturally assumes that these variables and domain and life satisfaction are outcomes of having a calling, a premise that is impossible to evaluate until sufficient longitudinal and experimental data are collected to allow examination of causal directionality.

4.7. Intervention

Finally, the generally consistent links found between calling and positive outcomes make it a potential target for individual and organizational interventions designed to increase people's ability to discern and live out a calling. To date, one empirical study (Dik & Steger, 2008), one pilot study (Dik, Steger, et al., 2012), three practice-focused journal articles (Adams, 2012; Dik, Duffy, & Eldridge, 2009; Dik, Duffy, & Steger, 2012c), two chapters (Dik & Duffy, *in press-a,b*), and several trade books (e.g., Brennfleck & Brennfleck, 2005; Dik & Duffy, 2012), have addressed this issue directly. Generally, these authors suggest that the best way to discern one's calling is developing an openness to new directions, actively exploring one's interests, values, and skills and how these match with potential jobs, and connecting one's work with a tangible, prosocially-oriented purpose. In terms of living out a calling, it is suggested that individuals actively craft their current job to make it more meaningful or prosocial (Berg, Dutton, & Wrzesniewski, *in press*) and, if that is too difficult or impossible, explore ways to live out their callings outside of work.

However, the extent to which these suggestions connect to the construct of calling per se is speculative given the lack of actual intervention research. Empirically testable interventions are often the result of an accumulation of research suggesting how, why, and for whom potentially modifiable variables link to positive outcomes. Answers to these questions will create opportunities to engage in translational research, which form the foundation for evidence-based intervention development. Yet this effort only can occur with the collection of longitudinal data and the use of more sophisticated research designs to understand the extent to which calling is a modifiable variable, to identify for whom modifications might have the greatest impact, and to explore the most effective strategies and mechanisms for intervention.

5. Conclusion

This is truly an exciting time for researchers across a variety of social science disciplines to study what it means to explore, discover, and live out a calling. Researchers have found that at the very least a sizeable minority of American college students and adults endorse a calling, and that viewing one's career as a calling is linked with a host of positive work and well-being criterion variables. These include, but are not limited to, heightened levels of career maturity, career commitment, work meaning, job satisfaction, life meaning, and life satisfaction. The link of calling to these variables is especially pronounced when people are living out their calling at work, and numerous in-depth qualitative studies have highlighted how the lives of individuals doing so are extremely meaningful and fulfilling. Like other well-studied constructs within the field of positive psychology (e.g., gratitude, altruism, goals), developing a sense of calling and engaging in work that aligns with this calling may be an important route to enhance well-being.

However, what makes research in this area exciting is not just the generally consistent results linking calling to positive outcomes, but also the vast array of questions that remain unanswered in the literature. To date, most research on calling has been cross-sectional, has used primarily American samples, has overlooked the potentially negative outcomes of having a calling, and has lacked a robust theoretical model from which to formulate hypotheses. Furthermore, research on interventions to help individuals grow and live out a calling is minimal, which limits the extent to which results from this literature can inform interventions delivered by practitioners.

In sum, the state of the calling literature is much like that of a toddler—developed to the point of being able to stand on her own two legs, but with much room for future growth. The field of psychology is rich with constructs analogous to calling that at first were commonly used constructs in popular culture and then eventually underwent rigorous scientific exploration to clarify their nomological nets, build theory, and ultimately evaluate how the constructs may be developed in people via intervention. Our review of this literature is meant to ignite interest in this area for scientists across a variety of disciplines in psychology and allied fields. There is much yet to be learned, and no better time than now to join the growing numbers of scholars attempting to understand what it means to have and live a calling.

References

- Adams, C. M. (2012). Calling and career counseling with college students: Finding meaning in work and life. *Journal of College Counseling, 15*, 65–80, <http://dx.doi.org/10.1002/j.2161-1882.2012.00006.x>.
- Baumeister, R. F. (1991). *Meanings of life*. New York: Guilford.
- 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: Harper & Row.
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (in press). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace*. : American Psychological Association (in press).
- 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>.
- Brennfleck, K., & Brennfleck, K. M. (2005). *Live your calling: A practical guide to finding and fulfilling your mission in life*. San Francisco, CA: Jossey-Bass.
- 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>.
- 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>.
- Cardador, M. T., Dane, E. L., & Pratt, M. G. (2011). Linking calling orientations to organizational attachment via organizational instrumentality. *Journal of Vocational Behavior, 79*, 367–378, <http://dx.doi.org/10.1016/j.jvb.2011.03.009>.
- 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>.
- Coulson, J. C., Oades, L. G., & Stoyles, G. J. (2012a). Parent's conception and experience of calling in childrearing: A qualitative analysis. *Journal of Humanistic Psychology, 52*, 22–247, <http://dx.doi.org/10.1177/0022167810382454>.
- Coulson, J. C., Oades, L. G., & Stoyles, G. J. (2012b). Parents' subjective sense of calling in childrearing: Measurement, development and initial findings. *The Journal of Positive Psychology, 7*, 83–94, <http://dx.doi.org/10.1080/17439760.2011.633547>.
- Crites, J. (1976). A comprehensive model of career development in early adulthood. *Journal of Vocational Behavior, 9*, 105–118.
- Davidson, J. C., & Caddell, D. P. (1994). Religion and the meaning of work. *Journal for the Scientific Study of Religion, 33*, 135–147, <http://dx.doi.org/10.2307/1386600>.
- 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*. West Conshohocken, PA: Templeton Press.
- Dik, B. J., & Duffy, R. D. (in press-a). Strategies for discerning and living a calling. In P. Hartung, M. Savickas, & B. Walsh (Eds.), *APA Handbook of Career Intervention*. Washington, D.C.: APA (in press).
- Dik, B. J., & Duffy, R. D. (in press-b). Best practices in promoting calling and vocation in career counseling. In M. Pope, L. Flores, & P. Rottinghaus (Eds.), *The role of values in careers*. Charlotte, NC: Information Age Publishing (in press).
- Dik, B. J., Duffy, R. D., & Eldridge, B. (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. (2012a). 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 Publishing.
- Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (2012b). 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., Duffy, R. D., & Steger, M. F. (2012c). Enhancing social justice by promoting prosocial values in career development interventions. *Counseling and Values, 57*, 31–37.
- Dik, B. J., Sargent, A. M., & Steger, M. F. (2008). Career development strivings: Assessing goals and motivation in career decision-making and planning. *Journal of Career Development, 35*, 23–41, <http://dx.doi.org/10.1177/0894845308317934>.
- Dik, B. J., & Steger, M. F. (2008). Randomized trial of a calling-infused career workshop incorporating counselor self-disclosure. *Journal of Vocational Behavior, 73*, 203–211, <http://dx.doi.org/10.1016/j.jvb.2008.04.001>.
- Dik, B. J., Steger, M. F., Gibson, A., & Peisner, W. (2012c). Make your work matter: Development and pilot evaluation of a purpose-centered career education intervention. *New Directions for Youth Development, 132*, 59–73.
- 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>.
- Domene, J. F. (2012). Calling and career outcome expectations: The mediating role of self-efficacy. *Journal of Career Assessment, 20*, 281–292, <http://dx.doi.org/10.1177/1069072711434413>.
- Dubin, R. (1956). Industrial worker's worlds: A study of the "central life interest" of industrial workers. *Social Problems, 3*, 131–142.
- Duffy, R. D., Allan, B. A., Autin, K. L., & Bott, E. M. (2013a). 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., & Bott, E. M. (2012a). Calling and life satisfaction among undergraduate students: Investigating mediators and moderators. *Journal of Happiness Studies*, 13, 469–479. <http://dx.doi.org/10.1007/s10902-011-9274-6>.
- Duffy, R. D., Allan, B. A., Bott, E. M., & Dik, B. J. (in press). *Does the source of a calling matter? External summons, destiny, and perfect fit.* (in press).
- Duffy, R. D., Allan, B. A., & Dik, B. J. (2011a). The presence of a calling and academic satisfaction: Exploring potential mediators. *Journal of Vocational Behavior*, 79, 74–80. <http://dx.doi.org/10.1016/j.jvb.2010.11.00>.
- 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., Bott, E. M., Allan, B. A., Torrey, C. L., & Dik, B. J. (2012b). 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., Dik, B. J., & Steger, M. S. (2011b). 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., Foley, P. F., Raque-Bogdan, T. L., Reid, L., Dik, B. J., Castano, M. C., et al. (2012c). 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., Manuel, R. S., Borges, N. J., & Bott, E. M. (2011c). Calling, vocational development, and well-being: A longitudinal study of medical students. *Journal of Vocational Behavior*, 79, 361–366. <http://dx.doi.org/10.1016/j.jvb.2011.03.023>.
- Duffy, R. D., & Sedlacek, W. E. (2007). The presence of and search for a calling: Connections to career development. *Journal of Vocational Behavior*, 70, 590–601. <http://dx.doi.org/10.1016/j.jvb.2007.03.007>.
- Duffy, R. D., & Sedlacek, W. E. (2010). The salience of a career calling among college students: Exploring group differences and links to religiousness, life meaning, and life satisfaction. *The Career Development Quarterly*, 59, 27–41. <http://dx.doi.org/10.1002/j.21610045.2010.tb00128.x>.
- 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>.
- Grant, A. M. (2007). Relational job design and the desire to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417. <http://dx.doi.org/10.5465/AMR.2007.24351328>.
- Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *The Journal of Applied Psychology*, 93(1), 108–124. <http://dx.doi.org/10.1037/0021-9010.93.1.108>.
- 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>.
- 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>.
- Harzer, C., & Ruch, W. (2012). When the job is a calling: The role of applying one's signature strengths at work. *The Journal of Positive Psychology*, 7, 362–371. <http://dx.doi.org/10.1080/17439760.2012.702784>.
- 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>.
- Hirschi, A. (2011). Callings in career: A typological approach to essential and optional components. *Journal of Vocational Behavior*, 79, 60–73. <http://dx.doi.org/10.1016/j.jvb.2010.11.002>.
- 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>.
- Hirschi, A., & Hermann, A. (2012). Vocational identity achievement as a mediator of presence of calling and life satisfaction. *Journal of Career Assessment*, 20, 309–321. <http://dx.doi.org/10.1177/1069072711436158>.
- Hirschi, A., & Hermann, A. (2013). Calling and career preparation: Investigating developmental patterns and temporal precedence. *Journal of Vocational Behavior*, 83, 51–60. <http://dx.doi.org/10.1016/j.jvb.2013.02.008>.
- 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>.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724.
- Loscocco, K. A. (1989). The interplay of personal and job characteristics in determining work commitment. *Social Science Research*, 18, 370–394.
- 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 in academia. *Journal of Psychology and Theology*, 33, 210–223.
- 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>.
- 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>.
- Sellers, T. S., Thomas, K., Batt, J., & Ostman, C. (2005). Women called: A qualitative study of Christian women dually called to motherhood and career. *Journal of Psychology and Theology*, 33, 198–209.
- Steger, M. F., & Dik, B. J. (2009). If one is searching for meaning in life, does meaning in work help? *Applied Psychology: Health and Well-Being*, 1, 303–320. <http://dx.doi.org/10.1111/j.1758-0854.2009.01018.x>.
- 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>.
- 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>.
- Wrzesniewski, A., McCauley, C., 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>.
- Wrzesniewski, A. (2012). Callings. In K. Cameron, & G. Spreitzer (Eds.), *Oxford Handbook of Positive Organizational Scholarship* (pp. 45–54). New York: Oxford University Press.