# **Measuring Satisfaction and Meaning at Work**

Michael F. Steger<sup>1,2</sup>, Bryan J. Dik<sup>1</sup>, Yerin Shim<sup>1</sup> Colorado State University, USA, <sup>2</sup>North-West University, South Africa

Correspondence to: Michael F. Steger, Department of Psychology, Colorado State University, Fort Collins, CO, 80523-1876, michael.f.steger@colostate.edu

Steger, M. F., Dik, B. J., & Shim, Y. (in press). Assessing meaning and satisfaction at work. In S. J. Lopez (Ed.), *The Oxford handbook of positive psychology assessment* (2nd Ed.). Oxford, UK. Oxford University Press.

#### Measuring Satisfaction and Meaning at Work

What makes work worth doing? Work provides a means of making a living, a way to occupy one's time, and a forum to satisfy achievement needs. However, from a positive psychological perspective, the answer to the question of why work is worthwhile goes far beyond these reasons. Instead, we should anticipate that the best work experiences add value to people's lives and are an important part of their personal and communitarian flourishing. Ideally, work also is enjoyable, provides a desirable sense of challenge, and both cultivates and makes use of people's strengths. At its best, work also contributes to the health and equity of organizations, communities, and societies.

There is a substantial volume of research on job satisfaction, the most widely studied topic in organizational behavior research (Spector, 1997) and long a focal construct in both industrial-organizational and vocational psychology (Lent & Brown, 2006). Our PsychINFO search with the keyword "job satisfaction" revealed nearly 3,500 articles since 2000, and high-quality measures of the constructs abound. Research on meaning at work, on the other hand, is relatively new, and finding appropriate instruments to assess work meaning can be challenging. In part, this is because research frequently has used proxy measures. In this chapter, our focus is on measures designed to assess job satisfaction, meaningful work, and perceptions of work as a calling.

Whereas happiness has often served as a shorthand term and public face for positive psychology (e.g., Diener & Biswas-Diener, 2008; Gilbert, 2005; Lyubomirsky, 2006; Seligman, 2003), happiness per se has not made many in-roads into the world of work. In fact, we were unable to locate any measures of work happiness with even adequate psychometric support. Therefore, we begin with a review of job satisfaction measures, which have provided a critical, although incomplete, contribution to our understanding of work-related well-being. We proceed to review measures of work meaning and perceptions of work as a calling, two other constructs that overlap with work happiness. We close with observations and recommendations for future measurement of this aspect of positive human functioning.

# **Measuring Job Satisfaction**

Job satisfaction refers to how well people like their jobs, or more formally, an emotional state emerging from a cognitive appraisal of job experiences (Fritzsche & Parrish, 2005). Most definitions of job satisfaction focus on its affective component, although most measures of the construct place a greater emphasis on the cognitive aspects of the construct (Fisher, 2000). Job satisfaction has been measured predominantly using self-report

instruments that can be divided into two categories: (1) facet measures, which assess satisfaction with specific aspects of a job such as job security, coworkers, working conditions, company policies, and opportunities for achievement, accomplishment, and advancement (Weiss, Dawis, England & Lofquist, 1967); and (2) global measures, which focus on overall appraisals of a job. As Fritzsche and Parrish (2005) note, no theory is available to guide selection of which facets are most important under which circumstances. Furthermore, global job satisfaction does not equal the sum of the facet scores (Highhouse & Becker, 1993; Scarpello & Campbell, 1983).

#### **Facet Measures**

The most popular facet measures of job satisfaction are the Job Descriptive Index (JDI; Smith, Kendall, & Hulin, 1969), the Job Satisfaction Survey (JSS; Spector, 1985), and the Minnesota Satisfaction Questionnaire (MSQ; Weiss et al., 1967). The JDI is a 72-item scale in which respondents evaluate adjectives and phrases according to the extent to which each describes their job using the anchors "yes," "no," and "uncertain" (represented by "?"). Item responses are summed to provide scores on satisfaction with Work, Pay, Promotions, Supervision, and Coworkers. Internal consistency reliabilities for JDI facets are in the .8s, and mean test-retest reliability coefficients averaged across multiple studies range from .56 to .67 across the facets. Meta-analytic evidence also supports the convergent and discriminant validity of JDI subscale scores, with facet scores correlating in predicted directions with criterion variables, conforming to a nomological net of job satisfaction relations (Kinicki, Mckee-Ryan, Schriesheim, & Carson, 2002).

The shorter JSS uses 36 items with a 6-point scale ("strongly agree" to "strongly disagree") to assess nine facets (Pay, Promotion, Supervision, Fringe Benefits, Contingent Rewards, Operating Procedures, Coworkers, Nature of Work, and Communication). Internal consistency reliabilities reported by Spector (1985) for the facets range from .60 (Coworkers) to .82 (Supervision), with a value of .91 for the total score and 18-month test-retest coefficients ranging from .37 to .71. A multitrait-multimethod matrix analysis using JSS and JDI facet scales supported their construct validity (Spector, 1985).

Finally, the MSQ has 100-item and 20-item (5-point scale ranging from "not satisfied" to "extremely satisfied") versions that assess a total of 20 job satisfaction facets, providing a comprehensiveness that many researchers find desirable. The scale scores have a median internal consistency reliability coefficients above .8, median one-week test-retest correlations of .83, convergent and discriminant correlations that conform to hypotheses, and concurrent validity evidence from group differences in satisfaction (e.g., Dawis, Pinto, Weitzel, & Nezzer, 1974; Dunham, Smith, & Blackburn, 1977; Weiss et al., 1967).

#### **Global Measures**

One frequently used measure of global job satisfaction is the Job in General Scale (JIG; Ironson, Smith, Brannick, Gibson, & Paul, 1989), an 18-item scale designed for use in tandem with the JDI, serving as a "more global, more evaluative, and longer in time frame" (p. 195) measure. JIG items consist of adjectives or short phrases paired with the same response scale as the JDI. Internal consistency estimates range from .91 to .95, with convergent correlations of .66 to .80 with other global satisfaction scales. Many researchers opt for very short measures of global job satisfaction, particularly when job satisfaction is a secondary focus in a study. For example, Chen and Spector (1991) used a 3-item scale that yielded an alpha of .85 and correlated in predicted directions with convergent and discriminant criterion variables. Often even one-item scales are used (e.g., "All and all, how satisfied would you say you are with your job?" Quinn & Staines, 1979). One-item scales frequently are criticized, but Wanous, Reichers and Hudy (1997) demonstrated in a meta-analytic study that the corrected mean correlation between single-item and multi-item

satisfaction measures was r = .67, and the minimum estimated test-retest reliability for single items scales was r = .70.

#### **Summary**

Apart from the lack of theory available to guide selection of the facets in facet instruments, and the fact that scales emphasize cognitive rather than affective aspects of the construct, the measurement of job satisfaction is a strength of research in organizational and vocational psychology. The most popular job satisfaction instruments are well-designed and supported by strong evidence of reliability and validity. Yet from a positive psychology perspective, questions can be raised regarding the comprehensiveness of construct. Job satisfaction is a useful criterion for those interested in how favorably people view particular aspects of their jobs, or their jobs overall, but as typically assessed, job satisfaction focuses mainly on hedonic well-being and, to a lesser extent, personal fulfillment. This overlaps with definitions of work meaning and perceptions of work as a calling, but meaning and calling emphasize eudaimonic aspects of well-being (e.g., a sense of purpose, contribution, and prosocial attitudes) that, if addressed by existing job satisfaction scales at all, are usually a peripheral consideration.

### **Measuring Meaningful Work**

Meaningful work can be considered an umbrella term, which subsumes a range of constructs, including work meaning, work meaningfulness, and the positive connotations associated with the meaning of work. Meaningful work refers broadly to the amount of significance people perceive to exist in their work (Rosso, Dekas, & Wrzesniewski, 2010). Others have argued that, as in the broader psychological tradition of meaning in life, work is meaningful not only when it is judged to be significant, but also when it is viewed as having a distinct purpose or point (Steger & Dik, 2009). A closely related term is calling. The idea of work serving as a calling has deep historical and religious roots. However, in modern parlance, a distinction has been made between neoclassical conceptualizations of calling that emphasize, duty, destiny, and a transcendent summons (Bunderson & Thompson, 2009; Dik & Duffy, 2009), and "modern" conceptualizations that frame calling as an inner drive to do fulfilling and self-actualizing work (Baumeister, 1991; Hall & Chandler, 2005). We will review scholarly definitions of calling in a later section. First, we will examine the ways in which meaningful work has been defined and operationalized. Two trends have dominated meaningful work assessment. The first is the guiding influence of an early definition of meaningful work. The second is the deployment of ad hoc, single-use measures of meaningful work.

### **Job Diagnostics Survey**

Currently, there are only a handful of measures of meaningful work available in the published domain. The earliest example of assessing meaningful work comes from ground-breaking research on job design. The Job Characteristics Model (Hackman & Oldham, 1976) proposed a set of important job qualities, a set of psychological mediators that linked these job characteristics to outcomes, and a set of valued personal and work outcomes. Meaningful work was seen as an important psychological state that mediates between the job characteristics of skill variety, task identity, and task significance and the outcomes of internal [intrinsic] work motivation, work performance, satisfaction with work, and absenteeism and turnover (Hackman & Oldham, 1976). To test their model, Hackman and Oldham developed the Job Diagnostics Survey (JDS; 1975). The JDS defined the *experienced meaningfulness of the work* as "[t]he degree to which the employee experiences the job as one which is generally meaningful, valuable, and worthwhile" (Hackman & Oldham, 1975, p.162). Although this definition could be considered overly vague (e.g., what do employees consider meaningful?), it has been monumentally influential. Subsequent

efforts to understand meaningful work have almost uniformly adopted this definition, or very similar definitions.

The JDS uses two pairs of items to assess experienced meaningfulness of work. The first pair refers to respondents' personal feelings: "Most of the things I have to do on this job seem useless or trivial" (reverse-scored) and "The work I do on this job is very meaningful to me." The second pair refers to other people in the respondents' organization: "Most people on this job feel that the work is useless or trivial" (reverse-scored) and "Most people on this job find the work very meaningful." Hackman and Oldham (1975) reported initial internal consistency reliability was acceptable ( $\alpha = .76$ ), and a later review confirmed this general range of reliability estimates (.74-.81; Fried & Ferris, 1987). Although we were unable to locate more recent reviews, the Job Characteristics Model, by bracketing meaningful work with job characteristics and work and personal outcomes, anticipated a trend that emerged in the 2000s. Researchers began using proxy measures for meaningful work, rather than measuring meaningful work itself. There are studies in which specific job characteristics, like task identity and task significance, were used as proxies for meaningful work (e.g., Piccolo & Colquitt, 2006), and others where a haphazard array of variables were assembled and labeled as meaningful work (e.g., Britt, Dickinson, Moore, Castro, & Adler, 2007). It may be the case that these proxy measures were directed at filling a vacuum in meaningful work measurement. Although the JDS scale has fine reliability, the fact that half of its items require judgments about other people's attitudes toward a job shifts the focus away from an individual's personal convictions that his or her own job is meaningful. Yet, to discard these items leaves only two items remaining.

For the past several decades, ad hoc measures of meaningful work appeared in isolated efforts to explore other constructs, as in Spreitzer's (1995) study of empowerment at work. Spreitzer used three items to assess a meaning dimension of empowerment: "The work I do is very important to me," "My job activities are personally meaningful to me," and "The work I do is meaningful to me." The influence of the Job Characteristics Model's definition of meaningful work is apparent in these items. In fact, one of the items is a JDS item with a couple of words omitted. Although these three items demonstrated good internal consistency reliability ( $\alpha = .87$ ), little additional psychometric development was attempted.

# May and Colleagues' Meaningful Work Scale

A somewhat more developed example of creating meaningful work measures for the purposes of testing ideas about other constructs comes from May, Gilson, and Harter (2004). In their investigation of engagement in work, May and colleagues pulled together items from other sources to more fully capture meaningful work. They used all three of the items Sprietzer (1995) developed, as well as one item from Hackman and Oldham (1980), which itself was a modified version of an item from the JDS: "The work I do on this job is worthwhile." Finally, two items were drawn from an unpublished dissertation by Tymon (1988): "My job activities are significant to me" and "I feel that the work I do on my job is valuable." Again, it is worth pointing out that all of these items are subtle variations on the definition (and indeed items) of meaningful work first delineated by Hackman and Oldham (1975). May and colleagues reported good reliability for scores on the scale formed by these items ( $\alpha = .90$ ). There has, however, been very little further psychometric development of this scale.

### Arnold and Colleagues' Meaningful Work Scale

The unfortunate gravitation toward ad hoc measurement utilization is probably the dominant trend in how meaningful work has been operationalized. The measure(s) of meaningful work published by Arnold, Turner, Barling, Kelloway, and McKee (2007) does not snap that streak. However, in Arnold and colleagues' research of the mediating role of meaningful work in the relationship of transformational leadership and psychological well-

being, a new definition of meaningful work appears. Meaningful work was defined as "finding a purpose in work that is greater than the extrinsic outcomes of the work" (Arnold et al., 2007, p. 195). Curiously, two different measures were assembled to assess meaningful work in the two studies they conducted with different samples. In only one of the studies did Arnold and colleagues use a measure that derived from their definition. In the study with funeral directors and dental hygienists, Arnold et al (2007) developed four items to measure meaningful work: "The work I do in this job is fulfilling," "The work I do in this job is rewarding," "I do not achieve important outcomes from the work I do in this job" (reverse-scored) and "I am able to achieve important outcomes from the work I do in this job." Internal consistency of this measure in this sample was good ( $\alpha = .84$ ).

#### **Workplace Spirituality Scale**

Arnold and colleagues used six items taken from a subscale of Ashmos and Duchon's (2000) Workplace Spirituality Scale (WSS). The original subscale used seven items to assess meaningful work as an important component of workplace spirituality. The WSS measures workplace spirituality at three different levels: (a) individual level, (b) work unit level, and (c) organizational level. One of the subscales directed at individual-level workplace spirituality is labeled "meaning at work." The seven items were not driven using a particular definition of the construct, but rather by a recognition that "employees want to be involved in work that gives meaning to their lives" (Ashmos & Duchon, 2000, p. 136). This conceptualization is vague, yet it subtly shifts the focus away from workplace activities to the overall contribution of work to the entirety of people's lives. In this sense, the WSS meaning at work subscale may come closer to capturing a positive psychological perspective of meaningful work than the other measures reviewed so far. Three of the items offer a perspective of meaningful work that resonates with Seligman's (2003) ideas about meaning consisting of connecting with endeavors larger than one's self. These items are: "The work I do is connected to what I think is important in life," "I see a connection between my work and the larger social good of my community," and "I understand what gives my work personal meaning." However, the remaining items appear fairly riddled with extraneous item content like joy, ("I experience joy in my work"), energy ("My spirit is energized by my work"), and diffuse positive feelings about work ("I look forward to coming to work most days"). The final item seems to aim at measuring perceptions of one's work contributing to some good: "I believe others experience joy as a result of my work." The internal consistency of the WSS subscale was good in the original sample ( $\alpha = .86$ ), and with the six-item version used in Arnold et al. ( $\alpha = .84$ ; 2007).

#### **Work and Meaning Inventory**

In an effort to provide a theoretically-driven measure of meaningful work, Steger, Dik, and Duffy (in press) developed a brief measure that captures three primary dimensions that emerged in a literature review of meaningful work. The Work and Meaning Inventory (WAMI), which is included in the Appendix to this chapter, uses subscales for Positive Meaning, Meaning-Making through Work, and Greater Good Motivations to create a composite Meaningful Work score. Initial reliability (α's from 0.82 to 0.89 for subscale scores and .93 for total scores), validity, and factor structure estimates are solid, and this may be a promising measure. In validating the WAMI, Steger and colleagues found that total ans subscale scores correlated in expected directions with measures of well-being, job satisfaction, work motivation, withdrawal intentions, organizational commitment, and days absent from work. The Meaningful Work total score explained unique variance in job satisfaction, above and beyond withdrawal intentions, organizational commitment, and calling. This score also explained unique variance in number of days absent from work above and beyond job satisfaction, withdrawal intentions, organizational commitment, and calling. This latter result is particularly important as it shows that meaningful work is a better predictor of absenteeism

that the widely-used variable, job satisfaction, cementing its key role in people's investment in their work. Initial research with an earlier version of the WAMI found that Meaningful Work scores were positively correlated with using one's strengths at work and with job satisfaction (Littman-Ovadia & Steger, 2010).

### **Summary**

Several decades of research on meaningful work has yielded few advances beyond the initial efforts within the Job Characteristics Model (Hackman & Oldham, 1979), which stressed personal meaningfulness and importance. As measures gained items, they retained good reliability, but began to subsume other constructs (including fulfillment, joy, optimism, and energy) on a seemingly ad hoc basis. Emerging efforts have begun to focus on developing more theoretically sound measures.

## **Measuring Calling**

### University of Pennsylvania Work-Life Questionnaire

Efforts to measure calling emerged a couple of decades after efforts to measure meaningful work. However, these efforts have been more systematic overall. Wrzesniewski, McCauley, Rozin, and Schwartz (1997) were among the first researchers who attempted to measure calling. Although an earlier effort by Davidson and Caddell (1994) used a vignette approach to assess the construct, Wrzesniewski et al (1997) appealed to theory by applying this strategy to a well-known conceptual distinction between perceptions of work as a job, career, or calling that had been proposed in a best-selling book by Bellah, Madsen, Sullivan, Swidler, and Tipton (1985). Specifically, they asked participants to read each of three paragraphs designed to capture these three work orientations and indicate how much they were like each description using a 4-point scale (3 = very much, 2 = somewhat, 1 = a little, 0)= not at all like me). Eighteen true-false items that were related to the three dimensions of job, career, and calling also were included to measure participants' behaviors and feelings related to work. Examples of items related to calling were: "I would choose my current work life again if I had the opportunity," "If I was financially secure, I would continue with my current line of work even if I was no longer paid," and "My work is one of the most important things in my life."

# **Work Orientation Scale**

Based on the items of the University of Pennsylvania Work-Life Questionnaire (Wrzesniewski, 1997), Wrzesniewski (under review) developed a scale that measures an individual's work orientation. The scale was consisted of a total of 7 items with two subscales of calling orientation (5 items) and career orientation (2 items). *Calling orientation* was defined as perceiving work as an end itself, working to gain deep fulfillment that work brings and to contribute to the greater good (Wrzesniewski, under review). The responses were rated in a 4-point scale ranging from 1 = not at all to 4 = a lot. A high calling score indicated a calling orientation, while a low calling score indicated a job orientation. The internal consistency of the calling orientation subscale was  $\alpha = .73$  in Wrzeniewski's (under review) study with 1,257 unemployed participants.

# **Vocational Identity Questionnaire**

Dreher, Holloway, and Schoenfelder's (2007) *Vocational Identity Questionnaire* (VIQ) was developed to measure people's sense of calling. Dreher et al. (2007) use "vocation" interchangeable with calling and define it as people's attitudes toward work such that "Whether paid or unpaid, when work is a vocation, people use their time and talents in meaningful ways, finding fulfillment, building community, and making personal contributions to the world" (pp. 103-104). The VIQ is consisted of 9 items with two factors of Intrinsic Motivation and Meaning (6 items) and Joy and Satisfaction (3 items) and uses a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) to rate the responses. The internal

consistency of the total scale was  $\alpha = .84$ , and those of the two subscales were  $\alpha = .82$  and  $\alpha = .59$ , respectively.

# **Brief Calling Scale**

Dik and Steger (2006) developed a brief scale measuring the presence of, and search for calling. Calling was defined in the BCS instructions as "a person's belief that she or he is called upon to do a particular kind of work" (Dik, Eldridge, Steger & Duffy, in press). The Brief Calling Scale (BCS) consists of 4 items with two subscales, *presence of calling* (2 items) and *search for calling* (2 items). The responses are rated on a 5-point scale ranging from 1 = not at all true of me to 5 = totally true of me. The correlation between the two items of BCS-Presence was reported by Duffy and Sedlacek (2007) as r = .81, and r = .75 for BCS-Search items, and scores on the scale correlate in predicted directions and magnitudes with self-efficacy, outcome expectations, materialism, spirituality, and sense of calling assessed using the career development strivings strategy (Dik, Sargent & Steger, 2008)

### **Calling and Vocation Questionnaire**

Recognizing the need for a theoretically based and psychometrically sound measure of calling, Dik et al. (in press) developed the Calling and Vocation Ouestionnaire (CVO), which is a multidimensional scale based on Dik and Duffy's (2009) definition of calling as "a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or driving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation" (p. 427). The scale is comprised of 24 items that uses a 4-point scale ( $1 = not \ at$ all true of me, 7 = absolutely true of me) to measure the presence of calling (CVQ-P) and search for calling (CVQ-S), as well as six subscales measuring "presence of" and "search for" each of the three dimensions in Dik and Duffy's (2009) definition: Transcendent Summons, Purposeful Work, and Prosocial Orientation. Initial validation results with college students shows that CVQ subscale scores show a high internal consistency ranging from  $\alpha = .85$  to  $\alpha$ = .92 and high 1-month test-retest reliability for CVQ-P (r = .75) and CVQ-S (r = .67). Construct and criterion-related validity evidence was supported in the scale development sample, and by convergent and discriminant correlations in a multitrait-multimethod matrix study using self-report and informant-report scores (Dik et al, in press).

# **Summary**

Early calling measures gravitated toward a broad, "personal meaningfulness" interpretation of calling. More recent efforts have focused on some components that are specific to classical and neoclassical views of calling, however, including the sense that people were summoned or destined to fulfill a certain kind of work. Like one of the meaningful work scales (Work and Meaning Inventory), many calling scales also consider the capacity for work to contribute to some larger good.

### **Applications of Meaningful Work Measurement**

Most of the measures reviewed in this chapter were designed with research in mind. One implication of this is that they typically do not yield cut-off scores indicating that one person has "meaningless work," and the next "meaningful work." Measures of job satisfaction, especially, have been used in workplaces, usually to gain an idea of the current working climate of an organization. However, the best measures reviewed here hold untapped potential for applications with individuals, as tools to help clients understand their work experience, track growth and decline in meaning and satisfaction over time and across jobs, and to make tangible the impact of positive (and negative) work experiences on the rest of people's lives. Coaches working with workers, executives, leaders, managers, and entrepreneurs can use measures of meaningful work, calling, and job satisfaction to stimulate conversation about why their clients are working, and why they have been investing so much in their work, or perhaps divesting themselves from it. Clinicians working with people

struggling with psychological distress can use these generally-brief measures to explore with clients the carry-over from working life to personal life. Organizational consultants can use these measures to help their corporate clients gauge whether employees are resonating with their mission, culture, and social environment at work, particularly if the organizations are concerned with corporate social responsibility or serve multiple bottom lines. We will use a brief case to exemplify one way to work with measures of meaningful work. It is a familiar situation of someone gaining more pay and responsibility, but trading away at least some of what they loved about work.

Shawna had worked as a physical therapist (PT) in a clinic that was part of a large hospital. She was very well-regarded by her co-workers, and active in creating a warm, collegial, and effective work environment. Her positive impact on the clinic—and the excellent reputation the clinic had within the larger hospital organization—were noticed at the organizational level. Shawna was encouraged to apply for a manager-level job, in which she would be responsible for the clinic and all of the physical therapists, occupational therapists, speech-language pathologists, and support staff working there. She pursued the job and was hired as the clinic manager. It meant a greater pay, access, and influence within the organization. However, Shawna sought counseling, telling her therapist that she felt "stressed out," "empty," and "depressed." The stresses of her managerial role quickly became apparent in session. Initially, the pace and volume of work and personality clashes with other managers seemed to be a source of Shawna's misery. The therapist asked Shawna to fill out the WAMI. Her *Meaningful Work* total score was a depressing 13. She rated nearly every item a 1. The only exceptions were the three items on the *Greater Good Motivations* subscale. The therapist then asked Shawna to complete the WAMI for her previous position as a PT. Her total score was significantly higher, 44 out of 50, although her *Greater Good Motivations* subscale score was still the highest. The only item that was not rated a 4 or 5 was "I view my work as contributing to my personal growth," which was rated a 3. When Shawna was asked about this item, she said that she felt like things had become somewhat routine in her physical therapy work, and that she wanted new challenges. When she was offered the management job, it seemed like a perfect way to grow. Further conversation helped Shawna conclude that she missed seeing a positive impact on people that she achieved daily as a PT, and that she missed doing what had resonated so deeply with her personal values of helping and being with people. Later sessions explored how Shawna could reconnect with meaningful work while identifying and engaging in new challenges. In Shawna's case, the conventional answer to positive work outcomes—promotions, responsibility, and pay raises—left meaningful work behind.

#### Conclusion

Depending on whether researchers and practitioners are interested in relatively simple feelings of satisfaction at work (in general or with respect to multiple facets) or more complex perceptions of personal meaning or a sense of calling, numerous measurement options are available. We believe that all three of these constructs capture different elements of the work experience, although they probably overlap considerably on an empirical basis. In particular, we would point to the distinction between meaningful work—perceptions of personal significance, understanding, and impact at work—and calling—meaningful work toward which one feels summoned or destined and which benefits a greater good. The terms often are used interchangeably, without consideration of their differing theoretical and conceptual histories and articulations.

#### References

- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12, 193–203.
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry*, 9, 134–145.
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the heart*. Berkeley, CA & London: University of California Press.
- Britt, T.W., Dickinson, J.M., Moore, D.M., Castro, C.A., & Adler, A.B. (2007). Correlates and consequences of morale versus depression under stressful conditions. *Journal of Occupational Health Psychology*, 12, 34-47.
- Bunderson & Thompson (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly*, *54*, 32–57.
- Chen, P. Y., & Spector, P. E. (1991). Negative affectivity as the unde.rlying cause of correlations between stressors and strains. *Journal of Applied Psychology*, 76, 398-407.
- Dawis, R. V., Pinto, P. P., Weitzel, W., & Nezzer, M. (1974). Describing organizations as reinforcer systems: A new use for job satisfaction and employee attitude surveys. *Journal of Vocational Behavior*, *4*, 55-66.
- Dik, B. J., & Duffy, R. D. (2009). Calling and vocation at work: Definitions and prospects for research and practice. *The Counseling Psychologist.*, 424-450.
- Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (in press). Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling Scale (BCS). *Journal of Career Assessment*.
- 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.
- Dik, B. J. & Steger, M. F. (2006, July). Work as a calling: Randomized trial of a calling-based career development workshop. Paper presented at the National Career Development Association Global Conference, Chicago, IL.
- Dreher, D. E., Holloway, K. A., & Schoenfelder, E. (2007). The Vocation Identity Questionnaire: Measuring the sense of calling. *Research in the Social Scientific Study of Religion*, 18, 99-120.
- 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.
- Dunham, R. B., Smith, F. J., & Blackburn, R. S. (1977). Validation of the Index of Organizational Reactions with the JDI, the MSQ, and Faces Scales. *Academy of Management Journal*, 20, 420-432.
- Fisher, C. D. (2000). Mood and emotions while working: Missing pieces of job satisfaction? *Journal of Organizational Behavior*, 21, 185-2002.
- Fritzsche, B. A., & Parrish, T. J. (2005). Theories and research on job satisfaction. In R. Brown & R. Lent, Eds. *Career development and counseling: Putting theory and research to work* (pp. 180-202). New York: Wiley.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Design Survey. *Journal of Applied Psychology*, 60, 159-170.
- Hackman J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organization Behavior and Human Decision Processes*, 16, 250-279.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.

- Highhouse, S., & Becker, A. S. (1993). Facet measures and global job satisfaction. *Journal of Business and Psychology*, 8, 117-127.
- Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a job in general scale A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, 74, 193-200.
- Kinicki, A. J., Mckee-Ryan, F. M., Schriesheim, C. A., & Carson, K. P. (2002). Assessing the construct validity of the Job Descriptive Index: A review and meta-analysis. *Journal of Applied Psychology*, 87, 14-32.
- Littman-Ovadia, H., & Steger, M. F. (2010). Character strengths and well-being among volunteers and employees: towards an integrative model. *Journal of Positive Psychology*, 6, 419-430.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11–37.
- Piccolo, R. F., & Colquitt, J. A, (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49, 327-340
- Quinn, R. P., & Staines, G. L. (1979). *The 1977 Quality of Employment Survey*. Ann Arbor, MI: Institute for Social Research.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology*, *36*, 577-600.
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology, 13*, 693-713.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *The Academy of Management Journal*, *38*, 1442-1465.
- Steger, M. F., Dik, B. J., & Duffy, R. D. (in press). Measuringmeaningful work: The Work and Meaning Inventory (WAMI). *Journal of Career Assessment*.
- Tymon, W. G., Jr. (1988). *An empirical investigation of a cognitive model of empowerment*. Unpublished doctoral dissertation, Temple University, Philadelphia.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247-252.
- Wrzesniewski, A. (under review). Careers and callings: How work meanings shape job transitions.
- 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.

### *Appendix*

The Work and Meaning Inventory (WAMI)

Please indicate how well the following statements applies to you and your work and/or career. Please try to answer as truthfully as you can.

	Absolutely Untrue		Neither True nor Untrue/ Can't Say		Absolutely True
1. I have found a meaningful career.	1	2	3	4	5
2. I view my work as contributing to my personal growth.	1	2	3	4	5
3. My work really makes no difference in the world.	1	2	3	4	5
4. I understand how my work contributes to my life's meaning.	1	2	3	4	5
5. I have a good sense of what makes my job meaningful.	1	2	3	4	5
6. I know my work makes a positive difference in the world.	1	2	3	4	5
7. My work helps me better understand myself.	1	2	3	4	5
8. I have discovered work that has a satisfying purpose.	1	2	3	4	5
9. My work helps me make sense of the world around me.	1	2	3	4	5
10. The work I do serves a greater purpose.	1	2	3	4	5

### Scoring the WAMI:

Responses for items 1, 4, 5, & 8 can be summed for the *Positive Meaning* subscale score. Responses for items 2, 7, &, 9 can be summed for the *Meaning-Making through Work* subscale score.

Item #3 is a reverse-scored item. Responses for item #3 can be subtracted from 6, then added to responses for items 6 & 10 for the *Greater Good Motivations* subscale score.

The scores from the *Positive Meaning, Meaning-Making through Work*, and *Greater Good Motivations* subscales can be summed for the *Meaningful Work* total score.