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WORK ENGAGEMENT AND THE POSITIVE POWER OF MEANINGFUL WORK

Simon L. Albrecht

People prosper when they are engaged in meaningful work and organizations prosper when their employees are similarly engaged.

- Steger and Dik (2010, p. 139)

Positive psychology has emerged as an extremely popular, influential, and powerful paradigm within the science and practice of contemporary psychology. An internet search of the term "positive psychology" will yield around 37 million hits (April, 2013).

Positive psychology was originally aimed at counterbalancing a perceived overemphasis on understanding and working with the negative, dysfunctional, or "deficit" dimensions of human functioning (Seligman & Csikszentmihalyi, 2000). The deficit focus of traditional psychology has been characterized in terms of the "4 Ds" - damage, disease, disorder, and dysfunction (Bakker & Schaufeli, 2008). Positive psychology, in contrast, has as its focus the positive spectrum of human experience (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000), and concerns itself with constructs such as happiness, well-being, flourishing, optimal functioning, and flow (Linley, Joseph, Harrington, & Wood, 2006).

Seligman's (2002) book on authentic happiness served as an important catalyst which sparked and popularized much of the contemporary interest in positive psychology. Seligman argued there are three distinct forms of a happy life. The first, "the pleasant life," is based in hedonic principles, and derives from the pursuit and experience of positive emotions. The second form, the "good life," derives from the pursuit, experience, and enjoyment of the things that people value and are good at. Seligman characterized the "good life" in terms of engagement and flow. The third form of happy life, the "meaningful life," provides for the highest and most lasting form of happiness. A meaningful life, according to Seligman, derives from the pursuit and experience of doing the things one values and believes in. In contrast to the hedonism associated with the "pleasant life," meaningfulness is associated with "eudemonia," a form of happiness achieved by living virtuously, engaging in meaningful activities and attaining goals that have intrinsic merit (Ryan & Deci, 2001; Ryff & Singer, 2008). Although Seligman (2011) has in recent times extended the three forms of the happy life to include relationships and achievement, the eudemonic elements associated with engagement, meaning, purpose, and achievement remain recognized as core dimensions of happiness and well-being.

POSITIVE PSYCHOLOGY AND WORK

The application of positive psychology to the context of work has attracted enormous interest within both academic and practitioner domains over the past decade (e.g., Keyes & Haidt, 2003; Linley, Harrington, & Garcea, 2010; Luthans, 2002). From a practitioner perspective, there has been a proliferation of organizational development, human resource, talent management, leadership development, team development and coaching programs, initiatives,

and interventions that have positive psychological principles at their core. The Gallup organization, for instance, has administered the Clifton Strengths Finder in thousands of organizations across the globe, aiming to help people learn about and build upon their talents and strengths to enhance all facets of their working experience (see Clifton & Harter, 2003).

Within the academic domain there has similarly been a proliferation of academic books, reviews, research papers, commentaries, and conferences devoted to the topic of positive psychology at work (e.g., Cameron, Dutton, & Quinn, 2003; Linley et al., 2010). Positive organizational scholarship (POS; Cameron et al., 2003) and positive organizational behavior (POB; Luthans, 2002; Wright, 2003) have emerged as two distinct but related streams within the work-related positive psychology literature. Bakker and Derks (2010, p. 200) noted that POS is primarily concerned with "the workplace and the accomplishment of work-related outcomes" and POB is primarily concerned with "individual psychological states and human strengths that influence employee performance." Irrespective of the degree of overlap between the two streams (for commentary see Hackman, 2009; Luthans & Avolio, 2009; Roberts, 2006), both streams have emerged to support and progress "more focused theory building, research, and effective application of positive traits, states, organizations, and behaviors" (Luthans & Youssef, 2007, p. 322).

MEANINGFUL WORK

Meaningful work is fundamental to POS, and more generally to positive psychology (Cartwright & Holmes, 2006). Cartwright and Holmes argued that organizations need to address and understand the deeper needs of employees in order to retain them and keep them motivated, engaged, and performing. Understanding how to create, experience, manage, and maintain meaningful work provides powerful capability for achieving optimum and sustainable work outcomes for individuals and organizations (Steger & Dik, 2010).

Despite claims in support of the importance and utility of meaningful work there is no universally agreed definition as to its core characteristics or dimensions. Hackman and Oldham (1980) recognized meaningfulness as an important psychological condition at work, reflected in the extent to which people invest themselves in their job role and tasks. Kahn (1990) argued that the psychological state of meaningfulness refers to people feeling worthwhile, useful, and valuable, that they make a difference, and are not taken for granted in their work-related activities and experience. Irrespective of the numerous alternative definitions of meaningful work that have been offered (e.g., Cardador & Rupp, 2011; May, Gilson, & Harter, 2004; Spreitzer, 1995; Steger & Dik, 2010), notions of importance, purpose, and contribution are common to most. For the present purposes, meaningful work is defined as a positive psychological state whereby people feel they make a positive, important, and useful contribution to a worthwhile purpose through the execution of their work.

When thinking about the nature of meaningful work it is necessary to conceptually and empirically differentiate the construct from its antecedents, consequences, and correlates. It is also important to embed an understanding of meaningful work within reputable models, theories, and frameworks. For example, drawing from Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2000), it will be important to establish whether people have a need for meaningful work, the factors that help satisfaction of that need, and the motivational and other consequences which result from the satisfaction of the need.

Although Steger and Dik (2010) argued that "empirical support lags behind the claims thus far made in the field about work as meaning" (p. 139), researchers have shown that meaningfulness is positively linked to psychological well-being (Zika & Chamberlain, 1992), positive mood (King, Hicks, Krull, & Del Gaiso, 2006), psychological benefits (Britt, Adler,

& Bartone, 200), and greater organizational commitment, intrinsic work satisfaction, and job involvement (Milliman, Czaplewski, & Ferguson, 2003). Nevertheless, additional research on the conceptualization, measurement, and modeling of meaningful work is needed (Steger & Dik, 2010).

WORK ENGAGEMENT

The past decade has witnessed a very considerable amount of academic and practitioner interest in the idea of work engagement (see Albrecht, 2010a; Bakker, Albrecht, & Leiter, 2011; Bakker & Leiter, 2010; Macey & Schneider, 2008). Macey, Schneider, Barbera, and Young (2009) commented that "rarely has a term . . . resonated as strongly with business executives as employee engagement has in recent years" (p. xv).

Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002), in what is the most widely cited scholarly definition of engagement, proposed that engagement is "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption." Even though alternative conceptualizations and measures have been advanced (e.g., May et al., 2004; Rich, LePine, & Crawford, 2010), researchers have consistently shown engagement to be positively associated with attitudinal and wellbeing related outcomes such as commitment (Hallberg & Schaufeli, 2006) and health (Halbesleben, 2010), as well as with "bottom line" outcomes such as job performance (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008), client satisfaction (Salanova, Agut, & Peiro, 2005), and financial returns (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a).

A broad range of theories has been invoked to explain the emergence and maintenance of employee engagement (e.g., Conservation of Resources Theory, Hobfoll, 1989; Self Determination Theory, Deci & Ryan, 2000; Social Exchange Theory, Blau, 1964; Role Theory, Kahn, 1990; Broaden and Build Theory of Positive Emotions, Fredrickson, 2001 ; the Job Demands- Resources (JD- R) model, Bakker & Demerouti, 2007, 2008). The JD-R model remains the most widely cited and widely researched model of engagement. The JD- R model shows how job resources (e.g., autonomy, feedback, supervisor support) and personal resources (e.g., self-efficacy, optimism, resilience) directly influence work engagement, which in turn influences outcomes such as in-role performance, extra-role performance, creativity, and financial outcomes. Additionally, the JD-R model predicts that job resources become more salient and gain motivational potential when employees experience high levels of job demands (Bakker, 2010).

Despite the growing consensus around the JD- R model as a very useful framework for understanding work engagement, unresolved issues remain and there are numerous areas which warrant future research (see Albrecht, 2010b; Bakker et al., 2011). For example, despite the significant advances in understanding which organizational, job, and personal resources influence engagement, more remains to be learned about the psychological mechanisms that explain how and why the provision or experience of job resources results in increased engagement. The psychological processes assumed to underlie the associations have not been fully explored and have not been widely tested.

A number of theoretical perspectives and psychological processes such as felt obligation, satisfaction of needs for meaningfulness, and positive mood, can serve to explain how the provision of job resources can result in employee experiences of work engagement. Saks (2006), for example, invoked social exchange theory to explain how job resources such as feedback, autonomy, and organizational support, result in engagement. Saks argued that the amount of cognitive, emotional, and physical resources that an individual is prepared to devote to the performance of his or her work roles "is contingent on the economic and socio-

emotional resources received from the organization" (p. 603). In other words, social exchange theory contends that favorable treatment or resourcing from one party establishes in another party a felt obligation to return or reciprocate such favorable treatment (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger, Cummings, Armeli, & Lynch, 1997). Saks, however, did not explicitly operationalize and test relevant social exchange constructs such as felt obligation or reciprocity in his research. Similarly, while engagement researchers (e.g., Bakker, 2009; Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010) have invoked Fredrickson's (2001) broaden and build theory of positive emotions and Hobfoll's (1989) conservation of resources theory to explain the emergence of engagement, very few explicit tests of these theoretical explanations have been conducted within engagement-related research. Although researchers continue to work on identifying the psychological mechanisms, such as positive affect, that explain how personal and job resources lead to engagement (e.g., Salanova, Llorens, & Schaufeli, 2011), additional research is warranted. The present chapter primarily focuses on satisfaction of the need for meaningful work as a potential explanatory construct while also considering the potential mediating influence of felt obligation and positive affect.

May et al. (2004) and Yan den Broeck, Yansteenkiste, De Witte, and Lens (2008) are among the few researchers who have focused on the psychological processes which explain how job resources result in the experience of work engagement. Van den Broeck and her colleagues reported that the satisfaction of three basic psychological needs, as suggested by Self Determination Theory (Ryan & Deci, 2000), partially mediated the influence of job resources on engagement (vigor) and the influence of job demands on emotional exhaustion. Van den Broeck et al. concluded that basic psychological needs represent "an overarching mechanism fuelling both employee motivation and energy and, hence, explaining the emergence of both work engagement and burnout" (p. 289).

Van den Broeck, Vansteenkiste, De Witte, Soenens, and Lens (2010) noted that the literature on basic need satisfaction has been hampered by the use of ad hoc measures that do not contain items that tap explicitly into the satisfaction of basic needs "as such" (p. 984). Yan den Broeck et al. argued that many previously developed need satisfaction items better capture antecedents of need satisfaction as opposed to need satisfaction per se. However, in contrast to their assertion that their items reflect the "psychological experience of need satisfaction itself" (p. 283), similar criticisms can be leveled against the items developed by Van den Broeck et al. Items such as "I feel like I can pretty much be myself at work," "People at work care about me," and "I don't feel very competent at work" do not explicitly assess needs, nor the extent to which needs are satisfied. Yan den Broeck et al.'s items appear to more strongly reflect antecedent job resources such as social support (e.g., "People at work care about me") or personal resources such as self-efficacy (e.g., "I don't feel very competent at work"). Valid measures of need satisfaction need to explicitly assess psychological needs and the extent to which such psychological needs are satisfied.

POSITIVE PSYCHOLOGY, MEANINGFUL WORK, AND ENGAGEMENT

Despite the obvious conceptual overlap between work engagement and a positive psychological approach to work, until recently, the POS and engagement literatures have, to a large extent, traveled along separate paths. Bakker and Demerouti (2008) and Bakker and Derks (2010) are among the not so many researchers and engagement scholars who have explicitly linked the construct of engagement to POS or POB. Chapters from Linley et al.'s

(2010) recent handbook of "positive psychology and work" (e.g., Harter & Blacksmith, 2010; Stairs & Galpin, 2010) and chapters from the present edited volume also evidence efforts to advance clearer connections between the construct of engagement and POS.

The construct of meaningful work provides an obvious means by which connections between positive psychological scholarship and engagement might be further strengthened. The construct is of central importance to both disciplines. With respect to positive psychology, and as previously noted, Seligman (2002) identified the "meaningful life" as the highest form of happiness. With respect to engagement, Kahn (1990), who initiated much of the subsequent theory and research on engagement, argued that meaningful work is a necessary prerequisite to the experience of work engagement. More recently, Stairs and Galpin (2010) claimed that the "research is clear that people who are in jobs that are personally meaningful are more engaged than those who are not" (pp. 161- 162). It needs to be noted, however, that Stairs and Galpin did not provide or reference empirical evidence in support of their claim and contrary to their claim, and despite a clear logic and clear conceptual links between the constructs, there is limited empirical evidence to suggest meaningful work is associated with engagement. Additional research is needed to establish the relationship between meaningful work and engagement. Furthermore, and as noted by Steger and Dik (2010) despite "the intuitive appeal of the claim that viewing work as a meaningful and socially valuable part of one's life, there is a need for continued effort in developing a theory of work as meaning" (pp. 132- 133).

MEANINGFULNESS AS A PSYCHOLOGICAL PROCESS MEDIATING JOB RESOURCES AND WORK ENGAGEMENT

Kahn (1990) argued that the psychological experience of meaningfulness mediates the influence of job resources on work engagement. Kahn argued that autonomy, for instance, results in a sense of individual ownership over work, which then leads to the experience of psychological meaningfulness. Kahn also identified feeling valued, mutual respect, appreciation, rewarding interpersonal interactions with coworkers and clients, and feedback on performance as important "conditions" for the experience of meaningful work. Kahn proposed that the experience of meaningfulness, in turn, influences employee personal engagement or disengagement at work. Kahn's qualitative findings were corroborated in a follow-up empirical study by May et al. (2004). Of the three psychological states examined by May and colleagues (meaningfulness, safety, and availability), meaningfulness had by far the strongest positive association with engagement ($\beta = .73, \beta = .17, \beta = .01$, respectively).

Beyond the work of Kahn (1990) and May et al. (2004), alternative literatures also suggest that the psychological experience of meaningful work might mediate the influence of organizational, job, and personal resources on motivational outcomes such as engagement. The very significant body of research on job design (Hackman & Oldham, 1980) and psychological empowerment (Spreitzer, 1995; Thomas & Velthouse, 1990) suggests that jobs with enriched job characteristics result in a stronger sense of meaning, which in turn leads to positive outcomes such as job satisfaction and motivation. In the job characteristics model (JCM; Hackman & Oldham, 1980), for example, meaningful work is conceptualized as a critical psychological state mediating the influence of skill variety, task identity, and task significance on outcomes. Humphrey, Nahrgang, and Morgeson (2007), in their meta-analysis of job characteristics research, identified experienced meaningfulness as the most important or "most critical" (p. 1341) psychological state, mediating the relationship between job characteristics and outcomes. Indeed, Humphrey et al. suggested their results justify modification to the JCM such that experienced meaningfulness should be modeled as the

primary mediator of the influence of motivational characteristics on work outcomes. Johns, Xie, and Fang (1992, p. 667) arrived at similar conclusions and argued that experienced meaning was a "particularly encompassing psychological state," serving as a mediator for all five of the motivational characteristics.

SATISFACTION OF NEED FOR MEANINGFUL WORK AS A MEDIATOR

Beyond the direct experience of meaningfulness, and consistent with need based motivational theories (e.g., Herzberg, 1959; Maslow, 1943; McClelland, 1961), the *satisfaction of the need* for meaningfulness is theoretically motivational and therefore likely to be strongly associated with engagement. As previously noted, Van d en Broek et al. (2008, 2010) referenced Self Determination Theory (Deci & Ryan, 2000) in an attempt to explain how job resources, through the satisfaction of needs for autonomy, belongingness, and competence, result in engagement. Also, as previously noted, there has been limited empirical research that has focused on satisfaction of the need for meaningfulness. Albrecht and Su (201 2) are among the few researchers who have examined the mediating influence of the satisfaction of the need for meaningful work in the relationship between job resources and employee engagement. Albrecht and Su, using structural equation modeling on data drawn from a sample of Chinese telecommunications workers, found that performance feedback (as a job resource) was associated with engagement through fulfilling employees' need for meaningful work. No support, however, was found for satisfaction of meaningful work mediating the influence of autonomy or colleague support on engagement. Albrecht and Su concluded that further research is required to better understand how different job resources influence engagement through different psychological processes across different cultural contexts. The research summarized in the Research Preview (below) extends the Albrecht and Su study and provides additional empirical evidence in support of their proposed modeling within an English speaking sample.

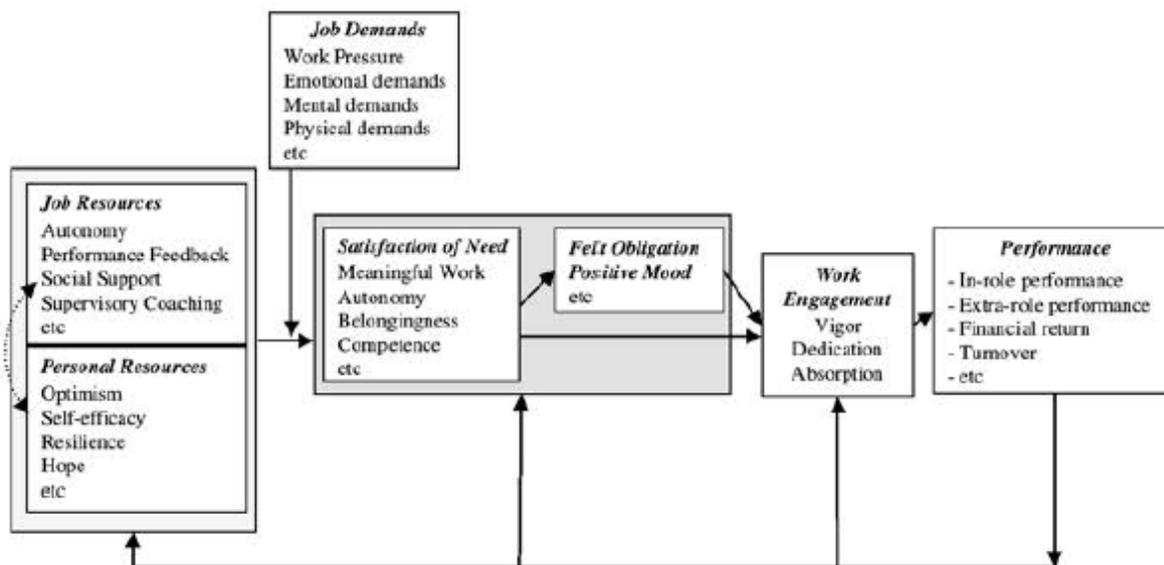


Fig. 1. Psychological Mediators in the Job Demands–Resources model (after Bakker, 2010; Bakker & Demerouti, 2007, 2008).

Fig. 1 shows an extension of the **JD-R** model (Bakker, 2010; Bakker & Demerouti, 2007, 2008) that explicitly models the satisfaction of the need for meaningful work mediating the relationship between job and personal resources and engagement. Fig. 1 shows how job resources (e.g., autonomy, colleague support, performance feedback) and personal resources (e.g., self-efficacy) lead to the satisfaction of psychological needs (e.g., need for meaningfulness, autonomy, competence, belonging) that in turn lead to felt obligation and positive mood and to work engagement. Engagement, in turn, leads to desirable downstream performance outcomes. Consistent with research findings (e.g., Xanthopoulou et al., 2009a) reciprocal relationships are also modeled.

MEASURING MEANINGFUL WORK AND THE SATISFACTION OF NEED FOR MEANINGFUL WORK

Meaningful work has been measured in a number of ways. Oldham, Hackman, and Stepina (1978), for instance, measured experienced meaningfulness with four items: "most of the things I have to do in this job seem useless or trivial" (R); "the work I do on this job is very meaningful to me"; "most people on this job feel the work is useless or trivial" (R); and "most people on this job find the work very meaningful." Oldham and his colleagues reported an alpha reliability of $\alpha = .71$ for the four-item scale. May et al. (2004) measured psychological meaningfulness with six items drawn from Spreitzer's (1995) and May's (2003, unpublished) work: "the work I do on this job is very important to me," "my job activities are personally meaningful to me"; "the work I do on this job is worthwhile," "my job activities are significant to me"; "the work I do on this job is meaningful to me"; and "I feel that the work I do on this job is valuable." May et al. (2004) reported an alpha of $\alpha = .90$ for the six-item scale.

As previously noted, existing measures of need satisfaction have been criticized for not explicitly measuring need satisfaction per se (Van den Broeck et al., 2008). Also as previously noted, despite Van den Broeck et al. arguing that the items they developed reflect the "psychological experience of need satisfaction itself" (p. 283), a close inspection of their items suggests otherwise. To redress this situation, Albrecht and Su (2012) developed items specifically focused on the satisfaction of need for meaningful work. Albrecht and Su drafted four need satisfaction questions that were prefaced with: "At your work, to what extent are these psychological needs being satisfied?" The four items, translated into Chinese, were: "Feeling you are achieving something important through your work," "Feeling that your work helps make a positive difference to others," "Feeling that your work is meaningful," and "Feeling that through your work you make a worthwhile contribution." To prompt respondents to report on their level of satisfaction of the need, they were asked to respond on a 5-point Likert scale, ranging from 1 "not at all satisfied" to 5 "very highly satisfied." Respondents also had an option to indicate "not applicable/not a need." Albrecht and Su reported an alpha reliability of $\alpha = .85$ for the four-item scale and evidenced convergent and discriminant validity.

An additional consideration with respect to the measurement and modeling of need satisfaction centers on the issue of whether needs are best modeled as first-order factors or, alternatively, as part of a higher-order need satisfaction factor. Van den Broeck et al. (2008) modeled need satisfaction as a composite higher-order construct constituted of satisfaction with autonomy, belongingness, and competence. However, on theoretical grounds, the influence of a range of different resources on a range of different needs might usefully be examined. Consistent with this view, Van den Broeck et al. (2010) argued that task autonomy will more likely be strongly related to satisfaction of the autonomy need than to the

satisfaction of belongingness or competence needs, whereas skill utilization and coworker support will more likely be strongly related to competence and relatedness need satisfaction, respectively. Additional needs such as the need for meaningful work (Kahn, 1990), need for achievement, and need for power (McClelland, 1965) might also usefully be examined within the JD-R context because of their previous application in motivational theories.

RESEARCH PREVIEW

Job resources and employee engagement: The mediating role of job meaningfulness, felt obligation, and positive mood

Work engagement has attracted growing attention in management and academic circles. The JD-R model (Bakker & Demerouti, 2008) shows how job resources influence work engagement. However, the psychological processes that underpin these relationships have not been fully established. The present research aimed to assess the potential mediating effects of satisfaction of need for meaningful work, felt obligation, and positive mood on the relationships between job resources and engagement. Drawing from the POS literature, needs theory (e.g., Deci & Ryan, 2000), social exchange theory (Blau, 1964), and the motivational processes implicit in the JD-R model (Bakker & Demerouti, 2007), the proposed relations are modeled below in Fig. A.

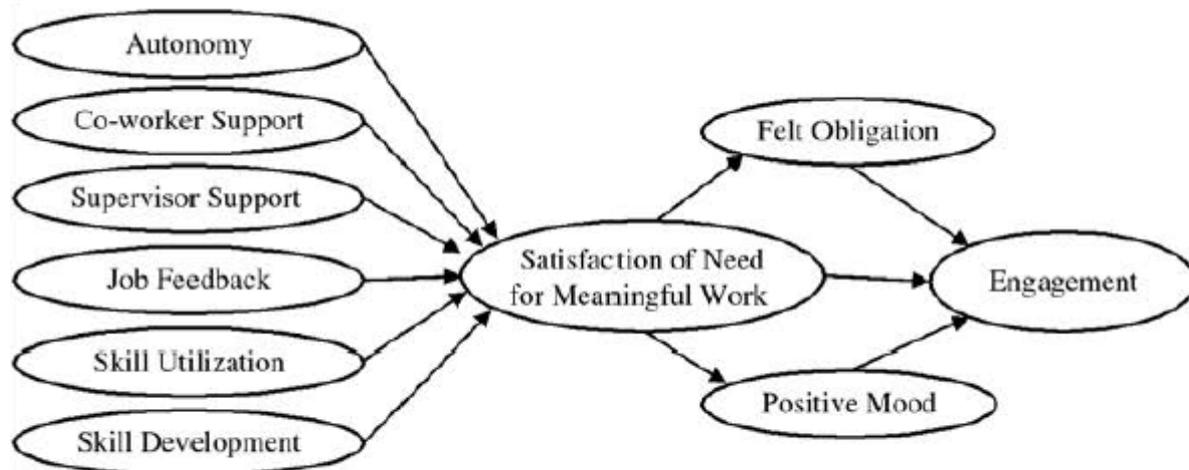


Fig. A. Proposed Model.

Method

Participants, required to be working full-time for a minimum of six months in an organization of 20 or more employees, were recruited using a snowball sampling strategy. Participants ranged in age from 18 to 65 years and worked in a diversity of roles in a range of industries and sectors. The online survey process resulted in 384 useable cases being available for analyses. The items measuring satisfaction of the need for meaningful work are described in the body of the chapter. All additional measures were sourced or adapted from previously published studies. For example, the measure for felt obligation was adapted from Eisenberger, Armeli, Rexwinkle, Lynch, and Rhoades (2001) and the measure for positive mood was adapted from Warr (1990). Engagement was measured with items drawn from the

UWES-9 (Schaufeli, Bakker, & Salanova, 2006), and measures of job resources were adapted from scales previously used in the engagement literature (e.g., Bakker, Demerouti, & Schaufeli, 2003; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Bakker, Demerouti, & Verbeke, 2004).

Results

Confirmatory factor analysis provided evidence to support the convergent and discriminant validity of the measures. The overall measurement model yielded acceptable fit statistics ($\chi^2/df= 2.256$, GFI = .91 , NFI = .91 , TLI = .94, CFI = .95, RMSEA = .057) and all items loaded .72 (standardized loadings) or higher on their designated factor. Although structural equation modeling of the proposed model (see Fig. A) yielded generally acceptable fit indices ($\chi^2/df= 2.435$, GFI = .84, NFI = .90, TU= .93, CFI = .94, RMSEA = .061), 4 of the 11 proposed structural paths were not significant. Autonomy, co-worker support, and supervisor support were not significantly associated with satisfaction of the need for meaningful work, and felt obligation was not significantly associated with engagement. Respecification of the model (see Fig. B), based on an examination of the parameter estimates and the AMOS modification indices (see Anderson & Gerbing , 1988), yielded a theoretically defensible and good fitting model ($\chi^2/df= 2.418$, GFI = .85, NFI = .91, TLI = .94, CFI = .95, RMSEA= .061). Fig. B shows positive mood and satisfaction of the need for meaningful work having a significant direct effect on engagement. Satisfaction of the need for meaningful work also had direct effects on positive mood and felt obligation.

Autonomy was found to have a strong direct effect on skill utilization and a significant indirect effect on satisfaction of the need for meaningful work through its influence on skill utilization. Skill utilization had significant direct associations with satisfaction of the need for meaningful work and with positive mood. Furthermore, and beyond the significant direct effects modeled in Fig. B, autonomy, supervisor support, skill development, skill utilization, and satisfaction of need for meaningful work, all had significant indirect effects on engagement. Autonomy, skill development, and skill utilization had significant indirect effects on felt obligation; and autonomy, supervisor support, skill development, and skill utilization had significant indirect effects on positive mood. Felt obligation, although not having a significant direct effect on engagement, had a significant indirect effect on engagement through its influence on positive mood. Overall, the model explained 79% of the variance in engagement, 44%, of the variance in positive mood, 27% of the variance in felt obligation, 30% of the variance in satisfaction of the need for meaningful work, and 29% of the variance in skill utilization.



Fig. B. Respecified Model.

Discussion

The theoretically proposed mediated relationships, explaining how job resources result in engagement, to a large extent were supported. Satisfaction of the need for meaningful work and positive mood were shown to have significant direct effects on engagement and also to mediate the influence of job resources on engagement. While felt obligation, as a social exchange related construct, did not directly influence engagement, the effects of various job resources on positive mood were found to be mediated by felt obligation. Interestingly, autonomy, rather than having a direct effect on need for meaningful work was found to have a strong direct effect on skill utilization and a significant indirect effect on satisfaction of need for meaningful work through its influence on skill utilization. Skill utilization emerged as an important predictor of satisfaction of the need for meaningful work and of positive mood. Skill utilization might therefore warrant additional attention as a job resource within JD- R related research and practice. Supervisor support, consistent with the social support literature (Eisenberger et al., 2001), had a social exchange related direct influence on felt obligation as well as significant indirect effects on positive mood and engagement.

Overall, despite meaningful work previously being identified as a central variable in the context of job design (Humphrey et al., 2007) there has been limited research on satisfaction of the need for meaningful work as a central explanatory mechanism accounting for how job resources result in employee engagement. The present research goes some considerable way toward highlighting the important role that meaningful work, positive mood, and felt obligation play in the motivational processes associated with employee engagement.

INTERVENTIONS TO DEVELOP MEANINGFULNESS AT WORK

Within the broad suite of positive psychological interventions being applied in organizational contexts, organizations have become increasingly interested in how to develop employee engagement (Bakker et al., 2011). Although many anecdotal and practitioner case-study accounts of how to develop engagement have been published (e.g., Buckingham & Coffman, 1999), Schaufeli and Salanova (2010) recently argued that there is limited published evidence suggesting that interventions to improve work engagement are effective. Certainly, given what is known from the accumulated organizational development literature, it is very likely there will never be a simple "magic pill" or "silver bullet" (Schneider, 1996, p. 10) which can be applied to develop, embed, and sustain engagement in organizational settings. In contrast, sustained and committed efforts using some combination of individual, job, and organizational level interventions will be needed. Meaningful work potentially provides a useful integrating lens by which such interventions can be designed, implemented, and evaluated.

At the level of the organization, the development and communication of clear and compelling purpose and vision statements potentially provide the foundation for employees experiencing their work to be meaningful and engaging. Organizational purpose statements define the reason an organization exists and organizational vision statements describe an "idealized picture of the future based around organizational values" (Rafferty & Griffin, 2004, p. 332). Purpose and vision provide for shared mental models (Cannon-Bowers, Salas, & Converse, 1990) and, being motivational in nature (Griffin, Parker, & Mason, 2010; Shamir, House, & Arthur, 1993), also provide the context for the initiation, direction, intensity, and maintenance of goal-directed effort (Kanfer, 1991), coordinated goal-focused decision-making, and for meaningful goal-focused interactions. In terms of Self Determination Theory (Deci & Ryan, 2000), purpose and vision enable employees to satisfy

their needs for belongingness, competence, achievement, and control. Without a clearly defined and shared purpose and direction, satisfaction of such employee needs is unlikely to be attainable. It is therefore incumbent on all levels of leadership and management to ensure that employees have opportunities to understand and internalize their organization's purpose and to become connected to a shared and compelling vision. Effective organizational purpose and vision statements, ideally being participatively set, brief, clear, future oriented, stable, challenging, and inspiring (Baum, Locke, & Kirkpatrick, 1998) will help satisfy employees' need for meaningful and engaging work. Similarly, given that meaningful work is a basic value that people associate with work (Ros, Schwartz, & Surkiss, 1999), all levels of leadership and management need to recognize and actively endorse meaningful work and employee engagement as core organizational values (George & Brief, 1992). Increasingly, the literature makes clear that transformational and empowering leaders are key resources for the development of employee engagement (Albrecht & Andreetta, 2011; Tims, Bakker, & Xanthopoulou, 2011). Ongoing training and development interventions to support leadership and management effectiveness in these domains (e.g., multi-rater leadership feedback processes) are also warranted. More generally, Gruman and Saks (2011) recently argued that human resource management (HRM) practices and processes, such as performance management systems, need to be designed to promote employee engagement and to recognize individual needs, goals, and desires as important parts of goal setting and performance management processes.

With respect to job level interventions aimed at developing meaningful work and work engagement, the JCM (Hackman & Oldham, 1980) and the JD-R model (Bakker & Demerouti, 2007, 2008) suggest clear intervention strategies. Given that job characteristics and job resources have been shown to play an important role in the experience of meaningful work and of work engagement (May et al., 2004), the redesign of jobs can be undertaken in order to better satisfy employee needs for meaningful work and to promote engagement. For example, developing supervisor or colleague support and redesigning work processes to enhance feedback and autonomy will very likely increase the experience of meaningfulness and engagement (Bakker, 2010; Humphrey et al., 2007). More generally, job-enrichment initiatives (e.g., enabling workers to interface and negotiate more directly with clients or customers) have been shown to result in increased satisfaction of meaningfulness and engagement at work (Grant et al., 2007). Such job enrichment practices potentially create positive challenges for employees and greater opportunities for workers to see the impact of their work, thereby increasing their motivation and engagement.

Finally, in terms of individual level interventions, training and development programs aimed at increasing the meaningfulness, positivity, and engagement that employees experience at work should be implemented. Beyond generic strengths-based positive psychology interventions that have been shown to be applicable in organizational contexts (see Clifton & Harter, 2003; Schaufeli & Salanova, 2010), the person-job fit, person-organization fit, and psychological contract literatures provide useful insights to inform such programs and interventions. More specifically, employees might usefully be encouraged and trained to engage in job crafting (Wrzesniewski & Dutton, 2001). Job crafting enables employees to more effectively focus on changing the characteristics of their jobs and their relationships with others "to revise the meaning of the work and the social environment at work" (Bakker, 2010, p. 238). Similarly, training and development activities focused on helping individuals identify their personal vision and purpose (George & Brief, 1992), and to match their personal vision and purpose with the organizational vision and purpose, will provide a firm platform to enhance individual meaning and engagement at work (Bindl & Parker, 2010). Interventions aimed at building personal resources such as positivity and psychological capital (e.g., efficacy beliefs, optimism, hope, and resiliency) will also be

useful in increasing engagement at work (Sweetman & Luthans, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b). Ongoing research aimed at determining how best to adapt the increasingly available generic positive psychology interventions to different organizational contexts will also likely prove helpful.

Importantly, whichever strategies are used to enhance the experience of meaningful work, felt obligation, positivity, and engagement in organizational contexts, there is a clear and ongoing need to systematically evaluate the effectiveness of such interventions across a range of different contexts. Conventional evaluation taxonomies (Kirkpatrick & Kirkpatrick, 2006) assessing the impact of interventions at the level of reaction, learning, behavior, outcomes, and return on investments, might usefully be employed.

FUTURE RESEARCH

Additional research in a number of areas is needed to further establish the psychological processes that explain why and how organizational, job, and personal resources result in positive motivational individual, team, and organizational outcomes. As previously noted, additional research could usefully be devoted toward understanding which needs are most salient to, or best "matched" (De Jonge & Dormann, 2006) with, which resources. Similarly, researchers could usefully devote further attention toward identifying how psychological variables mediate the influence of organizational, job, and personal demands on an extended suite of motivational and health outcomes. Britt et al. (2001), for example, showed that experiencing work as meaningful had a positive association with perceived ability to deal with stress. More research could usefully be conducted in this area.

The inclusion of additional organizational level variables (e.g., senior leadership, vision clarity, organizational climate) will likely help advance our understanding of the determinants of meaningfulness and engagement at work (Albrecht, 2010b). Sivanathan, Arnold, Turner, and Barling (2004), for example, noted that transformational leadership has been found to be positively associated with congruence of values between leaders and followers (Jung & Avolio, 2000) and with employees believing in the higher purpose of work (Sparks & Schenk, 2001). Such findings have clear implications for leaders, leadership development, and employees' experiences of meaningfulness and engagement at work.

Additional research could usefully be conducted on the individual difference variables that influence the extent to which individuals experience meaning and engagement at work. Hardiness, as a personality trait, for example has been shown to be positively associated with the tendency to find meaning in work (Britt et al., 2001). Self-efficacy, attributional style, positivity, conscientiousness, and locus of control could all plausibly influence the extent to which employees perceive meaningfulness in their work and explain positive mood, felt obligation, and engagement. Steger and Dik (2010), on this issue, noted that "we need to better understand who is most likely to experience meaningful work ... , the basic personality, cognitive, and interpersonal styles of people who approach work as meaning ... [and the] extent ... work as meaning [is] a stable trait that varies little over time and across situations, as opposed to a malleable values-based characteristic that is amenable to change efforts" (p. 139).

Further research could also usefully be conducted on additional psychological variables likely to mediate the influence of demands and resources on work engagement. For example, research on the mediating influence of theoretically derived constructs such as positive mood, self-efficacy, psychological capital (Luthans & Youssef, 2007), and psychological empowerment (Spreitzer, 1995) could usefully be conducted. Such further research should best be framed within longitudinal designs to more confidently assess the

causal, reciprocal, and dynamic relationships among the constructs considered (see Salanova et al., 2010).

CONCLUSION

There has been widespread academic and practitioner interest in understanding the newly emerged positive psychological construct of engagement. While job resources have been found to significantly influence engagement, the motivational processes implicit in the JD-R model have yet to be fully explored. Drawing from need-based motivational theories (e.g., Deci & Ryan, 2000) and social exchange theory (Blau, 1964), the case was here made that the degree of satisfaction regarding the meaningfulness of work can be important to understanding, generating, and managing work engagement. The issues, theories, measures, and models herein described, and the broader positive role of meaningful work, should be the subject of on-going empirical investigation within the domain of POS.

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