

# Work, the Work-Family Interface, and Subjective Well-being

By Michael Ford, Yi-Ren Wang, & Youjeong Huh, University of Alabama

**Citation:**

Ford, M., Wang, Y.-R., & Huh, Y. (2018). Work, the work-family interface, and subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers. DOI:nobascholar.com

**Abstract:**

Work is a significant contributor to subjective well-being (SWB) among working people and their families. Chronic, structural work conditions and discrete emotionally-charged events have potential to influence SWB via job satisfaction, affective states experienced at work, and spillover of work into family life. In this chapter we review cumulative empirical findings on the relationship between SWB and a) characteristics of the work that people perform, b) social support and leadership at work, c) fairness and mistreatment at work, d) perceived characteristics of one's employing organization, and e) the work-family interface. Also considered are emerging research questions about the dynamics and causal directions among work and SWB, the integration of and recovery from work and other life roles (e.g., family), empirical findings taking a global perspective on work and SWB, and the role of precarious employment arrangements and unemployment in worker SWB. Empirical results indicate that factors from each of these areas correlate with SWB, although some are more predictive than others, and results vary across dimensions of SWB. Furthermore, questions remain about causal relationships and temporal dynamics among work and SWB and differences across cultures and regions of the world. As science continues to accumulate on SWB, the role of work will continue to be better understood alongside other life factors.

Working people spend the majority of their waking hours on the job, and the characteristics of their jobs and work situations vary in systematic ways that contribute to their quality of life and well-being. Work also tends to spill over into other areas of life, which has additional implications for well-being and functioning in family and other life domains. Relatedly, there is increasing pressure in many societies to sacrifice family and leisure in order to respond to work-related pressures. Thus, a complete understanding of subjective well-being needs to incorporate the experiences and chronic conditions that characterize work life. What are these experiences and working conditions that contribute to subjective well-being (SWB) and which are most important? And how are these structured and organized?

Fortunately, there is large literature with many replicable findings on the work-related factors that contribute to SWB. In this chapter we review major models and empirical findings on the relationship between work and SWB. We also consider the spillover of work into other areas of life, especially family. To be comprehensive, we will start by describing the structure of empirical models linking work to SWB. This will be followed by a discussion of specific findings on the relationship between SWB and job characteristics, the work context, and the work-family interface. Finally, empirical findings and unanswered questions on emerging topics will be considered.

The primary focus of our review across these topics will be on the effects of the work *situation* on SWB. With that said, there are many variables at the individual level such as personality traits, coping behaviors, and appraisal processes that may moderate the effects of work-related factors. These are covered extensively in other chapters within this handbook and can be applied to work as well as to other life domains. Because income and finances are covered in detail in other chapters within this volume, our chapter will focus mainly on nonfinancial factors, and will address financial factors only to the extent that they influence SWB via other mechanisms (e.g., perceived fairness, supportiveness, precarious

employment). Finally, unless otherwise noted, the core sections of this review will focus on evidence that has accumulated over many studies and has been reported in meta-analyses. The section on new and emerging topics will also discuss a mixture of evidence from meta-analyses and individual studies.

### **Empirical Approaches to Work and Subjective Well-being**

Before delving into the specific work-related factors in SWB, it is important to consider the general structure of these factors and linkages to more general models of SWB. As noted in other chapters of this Handbook, the basic structure of SWB includes overall summary evaluations of one's life, such as life satisfaction and satisfaction with specific life domains (e.g., health, work, family), as well as one's emotional experiences, such as positive and negative affective states (Diener, 2013). There is general support for the notion that these three dimensions, namely satisfaction, positive emotions, and negative emotions, are related but also distinct (Diener, 2013).

Similar to overall SWB, work-related SWB is structured into overall summary evaluations of one's job and emotional states experienced in response to work. Accordingly, the contributions of work to overall SWB are primarily through their influence on a) job satisfaction, and b) emotional experiences at work. Affective Events Theory (AET) (Weiss & Cropanzano, 1996) specifies this distinction and its implications for work-related antecedents. From the perspective of AET, structural work conditions that are relatively stable from day to day, such as one's job duties, organizational procedures, and pay and benefits, influence the stable component of one's job satisfaction. This stable component of job satisfaction tends to change primarily as a function of major changes to one's work situation, such as a pay raise, promotion, or a reorganization of one's job duties. On the other hand, there are discrete work events that come and go on a daily level. These might include interactions with customers or supervisors, task accomplishments and failures, or layoffs in the organization. Discrete events trigger positive and negative emotions that also vary daily, and in turn contribute to daily variance in job satisfaction. Thus, the determinants of job satisfaction include chronic features of work that are relatively stable over time as well as discrete work events that vary from day to day or even from moment to moment. Likely for this reason, there is extensive evidence that job satisfaction and work-related affect are partially stable and partially variable over time (Ilies & Judge, 2002; Judge & Ilies, 2004).

The primary contribution of work to general SWB is through job satisfaction, which represents an overall psychological response to one's job, comprises cognitive and affective components (Hulin & Judge, 2003), and reflects the extent to which work meets the values and needs that are important to the worker (Locke, 1976). The correlation between job and life satisfaction has been found to be approximately .40 (Bowling, Eschleman, & Wang, 2010; Michel, Mitchelson, Kotrba, LeBreton, & Baltes, 2009; Erdogan, Bauer, Truxillo, & Mansfield, 2012), while correlations between job satisfaction and general positive and negative affect are estimated at .38 and -.27, respectively (Bowling, Eschleman, & Wang, 2010). Thus, the factors at work that contribute to job satisfaction should in turn influence overall life satisfaction. Work can also contribute to SWB independent of job satisfaction through its direct influence on other areas of life. In particular, work can influence family life in negative and positive ways (Ford, Heinen, & Langkamer, 2007; Greenhaus & Powell, 2006), and this influence on family life should further contribute to overall SWB (Michel et al., 2009; Erdogan et al., 2012). The effects of work on one's health should also play a role in SWB. There is extensive evidence that working conditions correlate with and predict self-reported physical symptoms (Nixon, Mazzola, Bauer, Krueger, & Spector, 2011), which in turn contribute to SWB. Thus, work can contribute to SWB via job and family satisfaction as well as through one's health.

With empirical models of work and SWB in mind, we now consider established empirical findings on the relationship between SWB and a) the work itself, which refers to the features of the tasks that individuals perform; b) the work context, which refers to the social context of work and the employee-organization relationship; and c) the work-family interface, which refers to the influence of work on family life.

## **Established Research Findings**

Research on work and SWB has yielded a large body of cumulative knowledge about the predictors of SWB from the work domain and the work-family interface. The research findings that have been synthesized in meta-analyses will be the focus of this section. These findings are primarily based on cross-sectional correlations between self-reported working conditions and experiences and self-reported measures of job satisfaction, life satisfaction, and/or indicators of affective well-being such as positive affect, negative affect, stress, emotional exhaustion, or fatigue. Concerns about causality and endogeneity in these effects warrant consideration and will be visited later in this chapter. However, when possible, we will also discuss available evidence from individual studies on specific effects that have been studied longitudinally.

## The Work Itself

Some of the most robust predictors of job satisfaction, and in turn overall SWB, are characteristics of the work itself that workers perform. Much of the initial research on the work-related predictors of job satisfaction was inspired by the human relations approaches to management that emerged in the 1960s and 1970s (e.g., McGregor, 1960) as alternatives to the rigid specialization, division of labor, and chain of command characteristic of traditional bureaucratic approaches to work organization. Human relations approaches emphasized the importance of enjoyable, interesting, and enriching work for developing a satisfied and motivated workforce. Around the time of this change in thinking among management scholars, knowledge and theory were also being developed on employee workload and its impact on work role stress (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964).

The most influential of the human relations approaches was the job characteristics model (Hackman & Oldham, 1976), which specified five characteristics of work that improve motivation and satisfaction. These are as follows: a) *job autonomy*, or the freedom to decide what to do and how and when to do it; b) *skill variety*, or the opportunity to perform different types of tasks and use one's different capabilities; c) *task significance*, or the chance to perform work that is personally meaningful and contributes to important outcomes; d) *task identity*, or the opportunity to create discrete products that one has ownership over; and e) *feedback*, or information about how one is doing that comes directly from the job itself rather than from someone else such as a supervisor. The opportunity to work with others is also sometimes considered within this framework. Early meta-analytic estimates of the correlations between each of these factors and job satisfaction ranged from .20 to .34 (Loher, Noe, Moeller, & Fitzgerald, 1985; Fried & Ferris, 1987). More recent estimates are similar, ranging from .23 for task identity to .37 for autonomy (Humphrey, Nahrgang, & Morgeson, 2007). With respect to affective subjective well-being, results for these dimensions are less clear. Job autonomy ( $r = -.18$ ), feedback ( $r = -.15$ ), and task identity ( $r = -.13$ ), have been found to predict lower job stress, whereas skill variety ( $r = -.10$ , *ns*) and task significance have not ( $r = .04$ ) (Humphrey et al., 2007). Anxiety has also been found to be negatively related to autonomy ( $r = -.08$ ) and feedback ( $r = -.26$ ), but not to the other dimensions. As such, it appears that the job characteristics are better predictors of job satisfaction than of affective well-being at work. There has also been surprisingly little research investigating the direct relationship between these job characteristics and life satisfaction, although a moderately positive relationship might be inferred via relationships with job satisfaction.

Some individual studies have investigated the effects of job characteristics and SWB longitudinally. This work has usually either a) examined reciprocal relations among the job characteristics and SWB via multi-wave panel design, or b) investigated the effects of job characteristics via intervention and quasi-experimentation. Individual studies have found that increases in some of these job characteristics were followed by increases in job satisfaction and affective well-being (Holman & Axtell, 2016; Morgeson & Campion, 2002), although such job enrichment can also increase training requirements and workload. Results from longitudinal panel designs have been more mixed (e.g., de Jonge, Dormann, Janssen, Dollard, Landeweerd, & Nijhuis, 2001; Mauno, Kinnunen, & Ruokolainen, 2007), suggesting that the effects of job characteristics on subsequent change in SWB are not as well understood.

Another prominent feature of the work itself that is worth considering is workload, which has been the subject of hundreds of individual studies. Workload generally refers to the amount and difficulty of one's work (Bowling & Kirkendall, 2012) and is treated as a subjective, continuous variable. Workload has been found to be negatively correlated with job satisfaction ( $r = -.18$ ) and positively correlated with distress, depression, fatigue, and emotional exhaustion ( $r = .21, .17, .10$ , and  $.38$ , respectively), but unrelated to life satisfaction ( $r = -.01$ ) (Bowling, Alarcon, Bragg, & Hartman, 2015). Because workload is sometimes associated with higher pay and status, the negative effect of workload on life satisfaction via lower job satisfaction may be offset to some degree. Still, there is a robust relationship between workload and negative affective states. As discussed later in this chapter, workload has been shown to predict subsequent increases in negative affective states in longitudinal panel studies (Ford, et al., 2014), although these effects have been found to vary substantially across studies.

Table 1								
Summary of Meta-Analytic Correlations between Work-itself Variables and Subjective Well-being Measures								
Correlations	Job Satisfaction	Positive Affect	Subjective Psychological Well-being	Life Satisfaction	Negative Affect	Emotional Exhaustion	Stress	Depression
Job Autonomy	0.37						-0.18	
Skill variety	0.32						-.10 (n.s.)	
Task significance	0.31						0.04	
Task identity	0.23						-0.13	
Feedback	0.33						-0.15	
Workload	-0.18			-0.01		0.38		0.17

Note. All correlation coefficients presented are uncorrected and at the individual level, unless noted otherwise.

In summary, it is clear that enriching job characteristics are associated with more positive levels of job satisfaction, which likely results in more positive levels of life satisfaction. Job enrichment characteristics are less consistently related to the negative affective components of SWB, however. On the other hand, workload is associated with negative affective states and lower job satisfaction, but not with overall life satisfaction, perhaps because of the pay and status that accompanies high workloads in many jobs. Individual studies also suggest that job enrichment and workload are associated with some changes in well-being, although these longitudinal effects do not appear to be as robust.

### The Work Context- Leadership and Social Support from Others at Work

Although the work itself is a strong determinant of job satisfaction and affective well-being at work, the social context within which the work is performed has received as much, if not more, empirical research attention. By social context, we are referring to the support workers received from others and the organization at large, the fairness and respect with which individuals perceive they are treated, and qualities of leadership in the organization.

Social support at work refers to instrumental (e.g., receiving help with work tasks) and emotional (e.g., having someone to talk with about personal or professional problems) assistance from others, usually supervisors or coworkers. Supportive supervisors can be important for well-being because they have control over resources and decisions that affect an employee, while supportive coworkers can be important because of the frequency with which workers interact with them in many jobs. Meta-analyses indicate that social support at work is a moderately strong predictor of job satisfaction ( $r = .24$ ), and a weaker, but significant predictor of life satisfaction ( $r = .14$ ) (Viswesvaran, Sanchez, & Fisher, 1999). A more recent review separating the sources of support suggests an even stronger relationship between coworker support and job satisfaction, after correcting for unreliability in the measures ( $r = .40$ ) (Chiaburu & Harrison, 2008). Supportive supervision or leadership, which comprises several specific forms of leadership, has shown similar cross-sectional effects ( $r = .42$ ) (Chiaburu & Harrison, 2008). When comparing types of social support, emotional or affective support from coworkers has been found to be a stronger predictor of job satisfaction ( $r = .34$ ) than is instrumental support ( $r = .24$ ) (Chiaburu & Harrison, 2008). Regarding affective well-being, there is meta-analytic evidence that supervisor support ( $r = -.28$ ) and coworker support ( $r = -.23$ ) are negatively related to emotional exhaustion or fatigue, suggesting supervisor support has a slightly stronger protective effect against negative emotions than does coworker support (Halbesleben, 2006). Individual longitudinal studies have also suggested that social support at work predicts increases in SWB, particularly when stressor levels are high (de Lange, Taris, Kompier, Houtman, & Bongers, 2004; Dormann & Zapf, 1999; ter Doest & de Jonge, 2006).

Leadership, which overlaps some with social support but includes several distinct constructs, is also an important factor in worker SWB. The most prominent leadership models that have been studied in predicting SWB at work are those involving leader behaviors, transformational/charismatic leadership phenomena, and the exchange relationship between leaders and their subordinates.

Behavioral approaches to leadership focus on the behaviors that leaders engage in, usually in reference to the supervisor. Most leader behaviors that are directly relevant for subordinate well-being fall within two general dimensions: a) *relational*, sometimes referred to as “consideration”, and b) *task-oriented*, sometimes referred to as “initiating structure” (Fleishman, Mumford, Zaccaro, & Levin, 1991; Yukl, Gordon, & Taber, 2002). Relational behaviors, which involve showing concern for the subordinate’s well-being, are moderately strong predictors of subordinate job satisfaction ( $r = .40$ ), well-being ( $r = .28$ ), and negative affective states ( $r = -.20$  to  $-.21$ ), whereas task-oriented behaviors, which involve providing clear instructions and guidance, are also positively, but not as strongly, related to job satisfaction ( $r = .19$ ) and show small but significant negative relationships with negative affective states ( $r = -.09$  to  $-.17$ ) (Judge, Piccolo, & Ilies, 2004; Montano, Reeske, Franke, & Huffmeier, 2017). Such correlations in longitudinal

studies have generally been smaller in size but still significant (Judge et al., 2004), although there is not a strong body of research on behavioral leadership and subsequent changes in subordinate SWB. Other leader behaviors that facilitate team processes, coordination, and cohesion may also contribute to SWB (Zaccaro, Rittman, & Marks, 2001), as may strategic behaviors by which leaders organize work tasks, but empirical results linking these behaviors to SWB have yet to be systematically structured and compiled.

Research on transformational/charismatic leadership focuses more on the inspirational processes through which leaders influence followers to meet and exceed expectations (Bass & Avolio, 1994). This work has differentiated *transformational* leadership from *transactional* leadership. Transformational leadership involves behaviors and processes that provide a purpose and vision for subordinates, stimulate followers intellectually, consider the needs of individual subordinates, and provide a role model that followers want to identify with. By contrast, transactional leadership involves providing clear expectations and rewards for meeting those expectations, and intervening to correct problems before they escalate. Research has found that both forms of leadership are strong predictors of worker job satisfaction, with correlations corrected for unreliability of .58 for transformational leadership and .64 for the dimension of transactional leadership involving the provision of contingent rewards (Judge & Piccolo, 2004). By contrast, laissez-faire leadership, which refers to the leader being absent from important leadership functions, is negatively correlated with job satisfaction ( $r = -.28$ ). Transformational leadership is also positively related to psychological well-being ( $r = .27$ ) and negatively related to negative affective states ( $r = -.16$  to  $-.18$ ) (Montano et al., 2017). Longitudinal research on these leadership factors and subordinate SWB has been sparse, however, and some individual studies have found little effect of transformational leadership on subsequent well-being after controlling for baseline effects (Nielsen, Randall, Yarker, & Brenner, 2008; Nielsen & Munir, 2009; Tafvelin, Armelius, & Westerberg, 2011). Thus, although people who report having transformational leaders also report better SWB, it is not clear that transformational leadership predicts increases in SWB.

The quality of the dyadic exchange relationship between workers and their leaders or supervisors, termed *leader-member exchange*, is also an important factor in job satisfaction, and thus in SWB. Low-exchange relationships between workers and their supervisors are characterized by the formal exchange of pay for performance, whereas high-exchange relationships involve trust, social support, respect, and mutual obligation between leader and follower that goes beyond formal role requirements (Graen & Uhl-Bien, 1995). Not surprisingly, leader-member exchange quality as reported by the subordinate has been found to correlate strongly with job satisfaction ( $r = .42$ ) (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012) and is also a predictor of subordinate well-being ( $r = .39$ ) and negative affective states ( $r = -.25$  to  $-.27$ ) (Montano et al., 2017). Leader-member exchange from the perspective of the subordinate has also been found to predict increases in job satisfaction longitudinally (Volmer, Niessen, Spurk, Linz, & Abele, 2011). Recent meta-analytic work has shown leader-member exchange to be highly correlated with leader behavioral dimensions (Gottfredson & Aguinis, 2016), suggesting that leader behaviors may influence SWB in part through high quality leader-member exchange relationship. One notable characteristic of this research is that it has primarily focused on leader-member exchange from the perspective of the subordinate. *Leader* perceptions of leader member exchange have been found to also be correlated with subordinate job satisfaction, although not nearly as much so (Cogliser, Schriesheim, Scandura, & Gardner, 2009).

Correlations	Job Satisfaction	Positive Affect	Subjective Psychological Well-being	Life Satisfaction	Negative Affect	Emotional Exhaustion	Stress	Depression
Social support at work	0.24			0.14				
Coworker support	.40 (corrected)					-0.23		
Emotional support	0.34							
Instrumental support	0.24							
Supervisor support	0.42					-0.28		
Leadership								
Consideration	0.4		0.28		-0.20 to -0.21			
Initiating Structure	0.19				-0.09 to -0.17			
Transformational leadership	.58 (corrected)		0.27		-0.16 to -0.18			
Transactional leadership	.64 (corrected)							
Laissez-faire leadership	-0.28							
Leader-member exchange quality	0.42		0.39		-0.25 to -0.27			

Note. All correlation coefficients presented are uncorrected for unreliability and at the individual level, unless noted otherwise.

In summary, supportive and task-oriented leader behaviors, inspirational leadership processes, and high quality trusting and respectful relationships between leaders and subordinates are relatively strong contributors to job satisfaction and should in turn relate to life satisfaction and general affect. As with the work itself, we lack cumulative evidence about the direct relationships between leaders and SWB, including life satisfaction and general life affect, but an effect can likely be inferred via the sizeable observed relationships with job satisfaction and work-related affective states. Individual longitudinal studies also suggest that social support and LMX predict future SWB after controlling for baseline levels.

### **The Work Context- Fairness, Civility, and Mistreatment**

Some of the most powerful emotional experiences at work involve situations in which workers are mistreated in some way. This mistreatment could be in the form of unfair policies, procedures, or pay; rude, uncivil, or aggressive interactions with customers, coworkers, or supervisors; or even abusive supervision. Because these experiences are so affectively charged, they have been studied more extensively at the event level and as predictors of affective well-being, although there is also a substantial body of research linking these factors to job satisfaction.

Fairness has received a large amount of empirical attention as a predictor of worker satisfaction and affect. This work has most commonly drawn from theory on organizational justice, which has a variety of historical and scholarly origins (Rupp, Shapiro, Folger, Skarlicki, & Shao, 2017). Although debates about the structure of organizational justice remain, there has been general convergence on at least three dimensions of justice in organizations, namely *distributive* justice, *procedural* justice, and *interactional* justice.

Distributive justice refers to the fairness of pay and other valued outcomes, and is heavily influenced by principles of equity (Adams, 1965), which suggest that rewards should be distributed in a manner proportionate to one's value. Procedural justice refers to fairness of the procedures by which decisions in the organization are made. Procedural justice incorporates factors such as the control that workers have over decision-making processes, the consistency, lack of bias, and ethics in decision-making processes, and the opportunity to correct inappropriate decisions (Leventhal, 1980; Thibaut & Walker, 1975). Interactional justice refers to the disclosure of information and explanations to workers about decision-making processes as well as the treatment of employees with respect and dignity (Bies & Moag, 1986). Interactional justice has also been empirically differentiated into *informational* justice, which refers to the sharing of information, and *interpersonal* justice, which refers to treatment with respect and dignity (Colquitt, 2001).

Distributive ( $r = .39$  to  $.46$ ), procedural ( $r = .40$  to  $.51$ ), and interactional ( $r = .44$ ) justice have all been found to be strong correlates of job satisfaction (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Regarding affect, recent meta-analyses have found correlations of procedural, distributive, interpersonal, and informational justice with positive affect of  $.39$ ,  $.34$ ,  $.29$ , and  $.32$ , respectively, and correlations with negative affect of  $-.30$ ,  $-.32$ ,  $-.27$ , and  $-.23$ , respectively (Colquitt et al., 2013). Other meta-analyses found similar relationships between perceived unfairness and stress ( $r = .27$ ), burnout ( $r = .30$ ), and negative affective states ( $r = .31$ ) (Robbins, Ford, & Tetrick, 2012). Still, individual longitudinal studies on the effects of fairness on subsequent changes in SWB have resulted in mixed findings. In one study, low SWB (depressive symptoms) predicted subsequent reductions in fairness perceptions, but fairness did not predict subsequent changes in SWB (Lang, Bliese, Lang, & Adler, 2011). However, two other studies (Elovainio et al., 2015; Ybema & van den Bos, 2010) found the opposite, with perceived fairness having stronger effects on subsequent changes in SWB.

Interpersonal mistreatment from others at work has also been studied as a predictor of SWB. This research can generally be divided into three broad and related constructs: workplace aggression, incivility, and harassment (sexual or otherwise), although there is still some debate about this structure (Herscovis & Barling, 2010). Aggression refers to intentional efforts by individuals in organizations to harm others in the organization (Neuman & Baron, 1998). Aggression from supervisors is a stronger predictor of job satisfaction ( $r = -.32$ ) than is coworker aggression ( $r = -.20$ ) (Herscovis & Barling, 2010), although both are predictive. Supervisor and coworker aggression also predict distress ( $r = -.28$  and  $-.21$ , respectively) and depression ( $r = .24$  and  $.18$ , respectively) (Herscovis & Barling, 2010). Workplace incivility refers to behavior that is disrespectful but unclear in its intent (Anderson & Pearson, 1999; Cortina, Magley, Williams, & Langhout, 2001). There has not been a meta-analysis of cumulative findings on incivility and SWB, but coworker antagonism, which combines incivility and aggression, shows effects similar to those for aggression ( $r = -.23$ ) (Chiaburu & Harrison, 2008). Destructive leadership, which encompasses a variety of related constructs involving leader behavior that is harmful to followers such as abusive supervision, social undermining, and petty tyranny, is negatively related to follower job satisfaction ( $r = -.34$ ) and is also related to positive affect ( $r = -.09$ ), negative affect ( $r = .34$ ), stress ( $r = .24$ ), and overall

well-being ( $r = -.35$ ) (Schyns & Schilling, 2013). Other reviews have found that workplace harassment, which has been defined as rather similar to workplace aggression and refers to interpersonal behavior that intentionally harms another at work, is related to job satisfaction ( $r = -.32$ ), life satisfaction ( $r = -.18$ ), anxiety ( $r = .25$ ), depression ( $r = .28$ ), positive emotions ( $r = -.21$ ), and negative emotions ( $r = .38$ ) (Bowling & Beehr, 2006), while sexual aggression has been found to also predict lower job satisfaction ( $r = -.32$ ). Research has suggested that some types of civility training can improve job satisfaction and reduce burnout (Leiter, Laschinger, Day, & Gilin-Oore, 2011), but longitudinal research on interpersonal mistreatment and SWB has been relatively uncommon (Cole, Shipp, & Taylor, 2016).

Table 3  
Summary of Meta-Analytic Correlations between Fairness and Mistreatment Variables and Subjective Well-being Measures

Correlations	Job Satisfaction	Positive Affect	Subjective Psychological Well-being	Life Satisfaction	Negative Affect	Emotional Exhaustion	Stress	Depression
Distributive justice	.39 to .46	0.34			-0.32			
Procedural justice	.40 to .51	0.39			-0.3			
Interactional justice	0.44							
Interpersonal justice		0.29			-0.27			
Informational justice		0.32			-0.23			
Perceived unfairness					0.31		0.27	
Supervisor aggression	-0.32							0.24
Coworker aggression	-0.2							0.18
Coworker antagonism (incivility and aggression)			-0.23					
Destructive leadership	-0.34	-0.09	-0.35		0.34		0.24	
Workplace harassment	-0.32	-0.21		-0.18	0.38			0.28
Sexual aggression	-0.32							

Note. All correlation coefficients presented are uncorrected and at the individual level, unless noted otherwise.

In summary, experiences by workers that violate norms of fairness, respect, and the avoidance of harm tend to trigger dissatisfaction and negative emotions, and thus represent a significant contributor to SWB when they occur. These experiences can include unfair pay and procedures as well as various forms of interpersonal mistreatment. Still, longitudinal research in this area has been relatively uncommon and has yielded some mixed findings on the temporal precedence of mistreatment and SWB.

### The Work Context- The Organization

Some work experiences are driven by policies, procedures, and practices that originate at the organizational level. These include more formal human resource (HR) policies, practices, and procedures, as well as those that are more informal in the organization. These policies, practices, and procedures give rise to employee perceptions about the organization's climate and priorities. Furthermore, experiences that are attributed to the organization at large influence attitudes and beliefs about the organization that also predict well-being.

Human resources practices that are relevant for employee SWB include training adequacy, compensation level, grievance processes, performance appraisal systems, reward and incentive systems, participation in decision-making, employment security, and the sharing of information with employees (Combs, Liu, Hall, & Ketchen, 2006). These practices influence the extent to which workers have the knowledge, skill, ability, and motivation to perform their work at a high level (Combs et al., 2006), and have been found to correlate with indicators of SWB at the collective level ( $r = .25$  to  $.33$  with a combination of motivation, commitment, and job satisfaction) (Jiang, Lepak, Hu, & Baer, 2012). Another meta-analysis found a similar relationship between HR practices and job satisfaction at the individual level ( $r = .27$ ) (Kooij, Jansen, Dijkers, & de Lange, 2010), although there has been little longitudinal research on these effects. Job insecurity alone has been found to predict job satisfaction ( $r = -.32$ ) and mental health ( $r = -.19$ ) as well (Sverke, Hellgren, & Naswall, 2002). One study also found that job insecurity predicted increases in mental health complaints over time (Hellgren & Sverke, 2003). Family-friendly HR practices have also been studied more extensively and will be discussed later in the context of the work-family interface.

Other research has focused on organizational or group climate, which refers to shared perceptions of the organization's (or group's) policies, practices, and priorities (Schneider, Ehrhart, & Macey, 2013). These perceptions can emerge as a function of HR practices, shared experiences, leader behavior, and interactions among workers (Gonzalez-Roma, Peiro, & Tordera, 2002; Rogg, Schmidt, Shull, & Schmitt, 2001; Zohar, 2000). Organizational climates usually have a referent such that organizations have a climate

“for” something. Some referents are broad (e.g., social relations, empowerment) while others are more specific (e.g., safety, customer service, mistreatment, justice). Organizational or group climate variables can be operationalized at the collective level by taking the average of individual perceptions, or at the individual level by using each worker’s individual ratings as a predictor or outcome. The latter of these is sometimes referred to as psychological climate because it technically is not an organizational-level variable. Accordingly, climate can be studied as a predictor and determinant of SWB at the individual or collective level, dependent on the study’s level of analysis.

Research has found that climate for broad factors such as positive social relationships, involvement in employees in organizational processes, employee development and autonomy, rewards, and freedom from organizational formality and constraints correlate strongly with job satisfaction ( $r = .33$  to  $.46$ ), but not as strongly with direct indicators of well-being ( $r = .07$  to  $.17$ ) (Carr, Schmidt, Ford, & DeShon, 2003). More specific climate dimensions also predict indicators of SWB. Climate for civility ( $r = .53$ ) and climate against mistreatment/aggression ( $r = .43$  to  $.52$ ) are strong predictors of job satisfaction (Yang & Caughlin, 2017). Climate for employee safety also predicts job satisfaction ( $r = .34$ ) and general well-being ( $r = .30$ ) (Clarke, 2010), while climate for customer service has been found to be a strong predictor of job satisfaction at the unit (i.e., work group) level ( $r = .51$ ) (Hong, Liao, Hu, & Jiang, 2013). It should be noted that unit-level correlations tend to be stronger than those at the individual level. There has been very little longitudinal research on organizational climate and SWB from an individual or group level of analysis.

Beliefs about and toward one’s employer, which theoretically are in part the result of work experiences and policies, are more proximal predictors of worker SWB. Perceived organizational support, which reflects one’s descriptive belief about the extent to which the organization values employee contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986), is a strong predictor of job satisfaction ( $r = .57$ ) as well as stress ( $r = -.38$ ) and emotional exhaustion ( $r = -.42$ ) (Kurtessis et al., 2017). Affective commitment toward the organization, which refers to an emotional attachment to one’s employer, is a very strong predictor or correlate of job satisfaction as well ( $r = .65$ , corrected), and a weaker but significant predictor of stress ( $r = -.21$ ) (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). By contrast, organizational cynicism is a strong negative predictor of job satisfaction ( $r = -.50$ ) (Chiaburu, Peng, Oh, Banks, & Lomeli, 2013). There has been very little longitudinal research on the relationship between these variables and SWB, perhaps in part because they are often both considered outcomes of the working conditions described earlier.

Correlations	Job Satisfaction	Positive Affect	Subjective Psychological Well-being	Life Satisfaction	Negative Affect	Emotional Exhaustion	Stress	Depression
Job insecurity	-.32							
Human resource practices	.27		.25 to .33					
Positive Organizational Climate (including positive social relationships, employee involvement, development, autonomy, freedom from formality and constraints)	.33 to .46		.07 to .17					
Climate for civility	.53							
Climate against mistreatment/aggression	.43 to .52							
Climate for employee safety	.34		.30					
Climate for customer service	.51 (unit level)							
Perceived organizational support	.57					-.42	-.38	
Affective commitment toward the organization	.65 (corrected)						-.21	
Organizational cynicism	-.50							

Note. All correlation coefficients presented are uncorrected and at the individual level, unless noted otherwise.

In summary, the perceptions of and beliefs about the organization that employees develop tend to be strong predictors of job satisfaction and in turn significant predictors of SWB. The quality of the job itself and the social context of work, which were discussed earlier, help to inform these perceptions and beliefs. Thus, beliefs and feelings about the organization represent potentially more proximal factors of job satisfaction and SWB, helping to explain the influence of more distal factors. Still, there has been very little longitudinal research on relationship between perceptions of the organization and SWB.

### **The Work-Family Interface**

The interface between work and other areas of life, especially family, contributes to worker SWB beyond what happens at work. Work and family are to some degree mutually incompatible for many workers. The hours spent at work detract from the time workers can spend at home, and stressful work experiences can spill over and influence the quality of family life. At the same time, work can provide positive affective experiences, skills, and self-beliefs that are instrumental toward a better family life. Therefore, via the work-family interface, work can influence both job satisfaction *and* family satisfaction, thus further contributing to overall SWB.

Work-family conflict, which refers to the mutual incompatibility of work and family (Greenhaus & Beutell, 1985), has been theorized and shown to be bidirectional, with work stressors and demands making family life more difficult (i.e., work interference with family or WIF) and family stressors and demands making work life more difficult (family interference with work or FIW) (Frone, Russell, & Cooper, 1992). Role stressors from work such as workload, long hours, and stressful social situations, predict higher levels of WIF, whereas family stressors and demands such as childcare responsibilities or marital discord predict higher levels of FIW (Byron, 2005). Furthermore, support from coworkers, supervisors, and the organization predicts lower levels of WIF, while that from family members predicts lower FIW (Byron, 2005).

Work-interference with family in turn predicts lower family satisfaction ( $r = -.18$  to  $-.20$ ) and job satisfaction ( $r = -.25$  to  $-.26$ ), as does family interference with work ( $r = -.21$  to  $-.22$  for family satisfaction and  $-.11$  to  $-.14$  for job satisfaction) (Amstad, Meier, Fasel, Elfering, & Semmer, 2011; Ford, Heinen, & Langkamer, 2007; Shockley & Singla, 2011). Furthermore, WIF and FIW predict life satisfaction, with the effects of WIF ( $r = -.30$ ) stronger than those of FIW ( $r = -.20$ ) (Michel et al., 2009). Work-family conflict also predicts the affective components of SWB, including psychological strain ( $r = .35$  for WIF and  $.21$  for FIW), depression ( $r = .23$  for WIF and  $.22$  for FIW), stress ( $r = .54$  for WIF and  $.39$  for FIW), and anxiety ( $r = .14$  for WIF and  $.19$  for FIW) (Amstad et al., 2011). Interestingly, WIF has been shown to predict life satisfaction independent of its relationships with job and family satisfaction (Michel et al., 2009), suggesting the work-family interface predicts overall SWB beyond satisfaction with specific life domains. Individual analyses have also found work-family conflict to predict life satisfaction over a 9-year period after controlling for baseline life satisfaction, with these effects mediated by job and marital satisfaction (Cho & Tay, 2016).

The positive spillover among work and family, often labeled as work-family enrichment (Greenhaus & Powell, 2006), is also bidirectional. Theory on the work-family interface suggests that skills, knowledge, self-beliefs, social capital, and material resources gained from each life domain benefit other life domains, giving rise to work-family and family-work *enrichment* (Greenhaus & Powell, 2006). Research has shown that work-to-family enrichment predicts higher job satisfaction ( $r = .27$  to  $.37$ ), family satisfaction ( $r = .11$  to  $.18$ ), and overall life satisfaction ( $r = .26$ ), while family-to-work enrichment also has significant effects on job satisfaction ( $r = .16$  to  $.22$ ) and family satisfaction ( $r = .31$  to  $.34$ ) (McNall, Nicklin, & Masuda, 2010; Shockley & Singla, 2011). In the longitudinal study cited earlier (Cho & Tay, 2016), family-to-work enrichment was also found to predict life satisfaction 9 years later after controlling for baseline levels.

Given the apparent importance of the work-family interface, results have accumulated from studies on supportive work-family policies in organizations. Such policies include flexible work arrangements, dependent care assistance, and family-supportive supervision and organizational climates. It has been found that flexible work arrangements (e.g., flextime, telework availability) are only modestly related to lower work interference with family ( $r = -.11$ ) and unrelated to family interference with work ( $r = -.03$ ) (Allen, Johnson, Kiburz, & Shockley, 2013). Work-family policy availability is also significantly, but modestly, related to job satisfaction ( $r = .13$ ) (Butts, Casper, & Yang, 2013). The extent to which the organization is perceived to support one's family life is a stronger predictor of job satisfaction ( $r = .36$ ) (Butts et al., 2013). This perceived organizational support for family life reflects the informal policies and norms that signal whether people and the organization care about one's life at home.

In summary, workers' perceptions of the work-family interface predict job satisfaction and family satisfaction. The effects of work-family interface variables on job satisfaction tend to be weaker than the

effects of variables within the work domain covered earlier. However, perceptions of the work-family interface appear to be stronger predictors of life satisfaction than those work domain-specific variables discussed earlier. Research also suggests that perceptions of informal organizational support from the organization are stronger predictors of job satisfaction than are the availability of formal family-friendly policies, although both do contribute to higher job satisfaction. On the whole, these findings indicate that the extent to which work fits with family life seems to be uniquely important for SWB among workers.

## **Unanswered Questions and Emerging Research Findings in Work and SWB**

Beyond the content covered thus far, there are some notable areas of recent growth in empirically-based knowledge about work, the work-family interface, and SWB. Furthermore, there remain some important unanswered questions that have been addressed to some degree in individual studies but for which cumulative, robust knowledge is not currently established. Here we summarize some of these areas with new and emerging questions and findings relevant to work and SWB.

### **Causal Inferences and Multilevel, Dynamic Perspectives on the Work-SWB Relationship**

Aside from references to a few individual longitudinal studies, most of the correlations described thus far in this chapter are based on studies that report correlations between self-reported working conditions and experiences and subjective well-being, with all variables measured at the same time. This of course raises questions about the extent to which actual working conditions cause levels of subjective well-being. It could also be that a) subjective well-being causes the perceived working conditions, and/or b) a third variable such as affect at the time of the survey influences responses to all questions, thus resulting in misleading or artifactual correlations.

While it is not possible to randomize people across working conditions, one approach to address the order of causality among work and SWB is to conduct longitudinal studies that assess the extent to which work variables predict SWB over time. Cumulative knowledge on these effects is still emerging, although two meta-analyses have addressed aspects of this issue. One review (Ford et al., 2014) examined the relationships between work stressors and psychological strain (e.g., exhaustion/fatigue, anxiety, depression, distress) in which work stressors and psychological strain were measured at one point in time and psychological strain was measured again at a later point in time. Controlling for time 1 levels of psychological strain, the average standardized effect of stressors at time 1 predicting strains at a later point in time, or the “cross-lagged effect”, ranged from .05 to .08, with the strongest effects for lags of 2-3 years and weaker effects for longer or shorter lags. The reciprocal or “reverse causation” effects ranged from .03 to .09, with stronger effects for longer time lags. A similar review of studies on work-family conflict and strain (Nohe, Meier, Sonntag, & Michel, 2015) found that the average lagged effect of work interference with family on psychological strain was .08, whereas the average lagged effect of family interference with work on psychological strain was .03.

The weakness with this approach to assessing causal effects is that it only assesses effects of work on SWB that a) have not yet occurred, and b) have a delayed onset. If an individual has a job that they perceive as autonomous or a supervisor that they perceive as fair, this may have an immediate influence on satisfaction and affective well-being. Lagged effects only capture the effects on well-being beyond this immediate concurrent effect. Unfortunately, theoretical and empirical approaches to work and SWB are not well established to account for the *development* of SWB as a function of work. As we know from other research, SWB has considerable stability over time, suggesting individual personality variables and dispositions explain some of SWB and could also contribute to spurious correlations with perceived work characteristics. Random intercept cross-lagged models may help to address this issue (Hamaker, Kuiper, & Grasman, 2015).

Research on stability in SWB should also take into account that work situations have stability as well, and so the stability in SWB may in part have a situational explanation. Furthermore, individuals may adapt to unfavorable work situations such that their SWB improves after initial exposure and stabilizes. Is the observed stability in SWB a function of individuals adapting to their work situations, underlying personality or dispositions, or the fact that work situations often do not change much over time? The answers to this question in the work domain are currently not clear. Recent research has begun to incorporate latent change score models to account for reciprocal effects among work and SWB that also incorporate adaptation (Ritter, Matthews, Ford, & Henderson, 2016), but this is an area that needs further empirical and theoretical development.

Relatedly, most of the research findings that have accumulated over the years have addressed

correlations between *chronic* work situations and SWB. Many individual studies in recent years have investigated daily events and the extent to which these correlate with changes in affect or job satisfaction. While no published research to date has quantitatively synthesized these findings, a recent and currently unpublished meta-analysis (Pindek, Arvan, & Spector, 2017) analyzed correlations from diary studies that differentiated between- and within-person effects. Between-person correlations are those that are based on the *mean* of daily reports of stressors (e.g., demands, conflict) and the *mean* of daily reports of psychological strain (usually an indicator of affective well-being). Within-person correlations are those based on daily deviations from each person's mean on each variable being correlated. Results suggest that between-person correlations ( $r = .29$ ) are stronger than within person correlations ( $r = .23$ ), although not dramatically so; interestingly, this analysis found that within-person effects on affect were stronger than those on other indicators of strain, which included work attitudes. These results suggest that within-person daily experiences have a stronger influence on daily variations in affective SWB than on daily variation in job or life satisfaction, which if true would be consistent with Affect Events Theory as discussed earlier (Weiss & Cropanzano, 1996).

Daily work experiences also likely give rise to chronic perceptions of the work situation, in turn influencing chronic levels of job satisfaction and SWB. The time course and contingencies on which this process occurs are currently unknown. For example, do repeated daily experiences of an abusive supervisor cause a lasting perception of that supervisor? Does this perception and/or any effect on SWB go away after the stressor is removed, or is there some semi-permanent effect? Answers to these questions are needed in order to determine when and why SWB may or may not change as a function of changes in work experiences.

A final issue that falls within this general domain of causal inferences is the use of self-reported measures of working conditions and experiences. The use of self-reported measures raises questions about the extent to which self-reports of the work situation are biased by SWB, thus inflating observed correlations. Alternatives to self-reported working conditions or questionnaires have limitations as well, but they do exist. For example, the Occupational Information Network (O\*NET) (Peterson et al., 2001) includes publicly available ratings on a variety of important dimensions related to SWB, including job autonomy, several types of job demands, and occupational values. Other methods are available to analyze jobs that deviate from traditional survey instruments. Examples of alternative methods include the collection of task statements in which people describe what they do at work, observations that allow observers to rate jobs on relevant dimensions, interviews with workers to build deeper knowledge about the context and processes involved in SWB at work, and critical incident questionnaires in which people describe in their own words situations and events that influenced their SWB. These alternative approaches have promise to advance our knowledge of how work influences SWB.

### **Work-Family Boundary Characteristics and Recovery**

A burgeoning area of interest among researchers studying employee well-being involves the boundaries that individuals maintain, or fail to maintain, between work and nonwork. Also of interest in this work is what individuals do with their off-work time. Technological changes that have blurred traditional work-nonwork boundaries along with the work intensification that has been driven by competition and globalization have likely inspired much of this research. Two important sets of variables in this domain are a) work-family role integration, and b) recovery and leisure experiences.

Work-family role integration is the extent to which people construe aspects of their work and family life as part of the same domain or of separate life spheres (Allen, Cho, & Meier, 2014). Work-family boundaries refer to factors such as time and place that limit a person to a particular role, whether it be one's work or family role. Boundaries can vary in their permeability and flexibility, which influence the extent to which a worker might have to switch life roles from work to family or family to work without crossing a temporal or physical boundary (Ashforth, Kreiner, & Fugate, 2000). There have been a number of individual studies on work-family role integration and boundary characteristics and these have produced some notable results. First, role integration and permeable boundaries tend to be associated with more work-family conflict (Kossek, Ruderman, Braddy, & Hannum, 2012). Furthermore, integrated roles tend to increase the relationship between work-related mental states (e.g. thoughts and emotions) and those experienced outside of work (Ilies, Wilson, & Wagner, 2009). Thus, permeable work-nonwork boundaries and highly integrated work and family roles should increase the *similarity* in satisfaction specific to these domains, for better or worse. So, for example, someone with highly integrated work and family roles and that has high (low) job satisfaction will be more likely to have high (low) family satisfaction than would someone with more segmented roles. Furthermore, research suggests there are meaningful individual differences in preference for work-family role integration, and that people often take action to manage these boundaries to their liking (Kossek & Lautsch, 2012).

Recent years have also spurred an interest in telecommuting (i.e., working from home at least some of the time), which has been found to have mixed associations with factors relevant for SWB. For instance, telecommuting has been found to be associated with less work interference with family but more family interference with work (Golden, Veiga, & Simsek, 2006). People who telecommute tend to have slightly higher job satisfaction ( $r = .09$ ) and lower role stress ( $r = -.11$ ) than those who do not, but these bivariate relationships are relatively weak (Gajendran & Harrison, 2007). Other work suggests that this relationship is curvilinear such that small-to-moderate amounts of telecommuting, up to 15 hours per week, are associated with higher job satisfaction, but telecommuting beyond this length of time has little benefit for SWB, perhaps because of the professional isolation that ensues among high-intensity telecommuters (Allen, Golden, & Shockley, 2015).

An additional related factor that has received considerable attention in recent years as a determinant of well-being is *recovery* from work. There is considerable variance in what people do during their time away from work, and this contributes to how satisfied people are with their work and family life as well as how they feel and think about their life overall. Important off-work recovery experiences include relaxation, psychological detachment from work, and off-job mastery experiences such as exercising or performing challenging mental tasks (Sonnentag, Binnewies, & Mojza, 2008). Although no quantitative meta-analysis has been published on these recovery experiences, a sizeable literature has developed suggesting that psychological detachment from work during off-work time (e.g., not thinking about work) is associated with lower levels of stress and fatigue and higher levels of life satisfaction, whereas relationships with positive emotions and affect are less consistent (Sonnentag & Fritz, 2015). These effects have generally held up in cross-sectional, longitudinal, and diary or experience sampling studies. A related area of study looks at leisure engagement, which captures some of these same recovery experiences. A recent meta-analysis suggests that engagement in leisure activities is related to life satisfaction ( $r = .22$ ) and positive affect ( $r = .29$ ), and less so to negative affect ( $r = -.10$ ), with significant longitudinal effects on SWB as well (Kuykendall, Tay, & Ng, 2015). More recently, the concept of *telepressure*, or a felt obligation to respond to work-related interruptions while at home, has also emerged. Telepressure is an impediment to detachment from work and may have an additive effect on SWB (Barber & Santuzzi, 2015).

Correlations	Subjective Psychological Well-being						
	Job Satisfaction	Positive Affect	Life Satisfaction	Negative Affect	Emotional Exhaustion	Stress	Depression
Work-interference with family (WIF)	-.25 to -.26		-.30			.54	.23
Family-interference with work (FIW)	-.11 to -.14		-.20			.39	.22
Work-family enrichment	.27 to .37		.26				
Family-work enrichment	.16 to .22						
Supportive work-family policies availability	.13						
Perceived organizational support for family life	.36						

Note. All correlation coefficients presented are uncorrected and at the individual level, unless noted otherwise.

In summary, there is a growing body of literature suggesting that boundaries, work-family role integration, and recovery experiences outside of work have potential for additive effects on SWB beyond the work-domain factors discussed earlier, and may in some instances moderate the relationship between work-domain stressors and SWB by influencing the opportunity to recover from work. With the continuing pressure for workers to be available and flexible, we can expect more cumulative findings and questions on the implications of work-nonwork boundaries and recovery activities for SWB to emerge in the coming years.

### A Global Perspective

As in many research areas of psychology and organizational behavior, the vast majority of the

research on work and SWB has been conducted in traditionally Western settings and in relatively wealthy economies such as the U.S., Canada, Western Europe, and Australia. This raises questions as to whether the observed effects generalize across the world, particularly to workers in developing economies and more traditionally non-Western cultures. There have been a number of review papers describing theoretical frameworks and models for comparing the effects of work on SWB across nations and cultural settings (e.g., Powell, Francesco, & Ling, 2009), but individual studies and empirical evidence have been relatively sporadic, perhaps because of the practical difficulties in conducting and publishing cross-cultural research. Thus, cumulative evidence is still emerging. Nonetheless, there have been some meta-analyses that have included cross-national comparisons, and we report on some of these here.

In a few instances, empirical results from meta-analyses have suggested differential effects of work-related factors on SWB across national settings. For example, in one analysis, the relationship between perceived unfairness and worker distress was found to be stronger in the U.S. ( $r = .36$ ) than outside of the U.S. ( $r = .25$ ) (Robbins et al., 2012). A narrative review of the cross-cultural work-family conflict literature found some individual studies that hypothesized a stronger relationship between work-family conflict and attitudinal work outcomes in individualist than in collectivist countries (Shockley, Douek, Smith, Yu, Dumani, & French, 2017), but it is not clear if these differences are large or reliable. Individuals from collectivist nations have also been found to report higher levels of family interference with work (Allen, French, Dumani, & Shockley, 2015). And organizational identification has been found to be a better predictor of job satisfaction in collectivist than in individualist countries (Lee, Park, & Koo, 2015).

Some relationships have been found to be similar across national or cultural settings. In one analysis, the quality of the leader-member (subordinate) exchange relationship was found to be similarly associated with job satisfaction in individualist ( $r = .46$ ) and collectivist ( $r = .42$ ) countries (Rockstuhl, Dulebohn, Ang, & Shore, 2012). An analysis of mean differences across studies found no mean differences in work interference with family between individualist and collectivist nations (Allen et al., 2015). Abusive supervision was also found to have similar relationships with job satisfaction, job tension, emotional exhaustion, and depression within and outside of the U.S. (Mackey, Frieder, Brees, & Martinko, 2017). Furthermore, work interference with nonwork had similar relations with emotional exhaustion and other burnout symptoms across regions of the world (Reichl, Leiter, & Spinath, 2014).

Despite this sampling of findings, questions remain about robust differences or similarities across the world in the direct relationships between work-related variables and SWB. Several individual multinational studies have compared effects of work-related variables on SWB across nations and cultures. Furthermore, a large number of studies in the past 15 years have been conducted outside of traditionally Western or developed countries and could be assembled and compared in future meta-analyses across a number of cultural and economic variables at the national or regional level. Constructs that are indigenous to different parts of the world might shed light on new predictors of SWB as well. Thus, there is further work to be done on the work-SWB relationship from a global perspective.

### **Precarious Employment and Unemployment**

Changes in employment arrangements, job insecurity, and unemployment rates in recent years have also generated increased interest in the implications of these arrangements for well-being. In particular, there has been considerable growth in part-time, nontraditional, temporary and/or contingent work with low levels of job security. Such work arrangements offer employers flexibility but result in jobs that are not permanent and often do not offer the benefits of more traditional permanent employment. Some have labeled this type of nontraditional or contingent work *precarious employment* and have identified it as a social determinant of health (Benach et al., 2014).

There has been some meta-analytic work relevant to precarious employment as it relates to SWB. As noted earlier in our discussion of human resource practices, job insecurity is a significant predictor of job satisfaction and mental health (Sverke et al., 2002). Beyond the effects of job insecurity, unemployed workers also have significantly poorer mental health ( $d = .52$ ), life satisfaction ( $d = .44$ ), and family satisfaction ( $d = .20$ ) than do employed workers (McKee-Ryan, Song, Wanberg, & Kinicki, 2005). Reemployment among workers who were previously unemployed has been shown to substantially improve mental health ( $d = .82$ ) and life satisfaction ( $d = 2.79$ ), while job loss has the reverse effect on mental health, although the size of the effect is not as strong ( $d = .35$ ) (McKee-Ryan et al., 2005). It has even been found that unemployment *rates* are negatively related to job and life satisfaction (Tay & Harter, 2013). Contingent workers (e.g., contractors, temporary workers, direct-hire workers) also tend to report lower job satisfaction than permanent workers ( $d = .21$ ), although this difference is primarily found for temporary workers ( $d = .37$ ), whereas the satisfaction deficit for contractors or direct hires has been found to be much smaller or nil (Wilkin, 2013). Perhaps surprisingly, little difference has been found in job satisfaction between part- and full-time workers (Thorsteinson, 2003), although this may be in part because many part-

time workers choose such an arrangement.

As precarious employment arrangements continue to be increasingly prevalent, more work will be needed on the implications for subjective well-being over time. Some of this work can likely be informed by related research on the relationship between income and SWB, but precarious employment goes beyond income in its influence on security, benefits, control, and power over one's work and life situation, rendering it a potentially important variable in social gradient approaches to health and well-being.

## Conclusion

In this review, we provided information about the structure of empirical models linking work to SWB, well-established research findings on the relationship between work and SWB, and findings from more recently emerging areas of scholarly and societal concern. Together these results show that work-related variables, particularly the work people do, their interactions with others, the perceptions they form about their employers, and the work-family interface contribute significantly to SWB. The effects of work on SWB are likely primarily through job satisfaction and affective states experienced at work, but may also occur via spillover to family life. Still, more work is needed on causal relationships and dynamics among work and SWB, the relationship between SWB and precarious work over time, and SWB among workers from a more global perspective than has traditionally been taken in the literature. As the science of SWB moves forward, a consideration of work and the work-family interface will continue to inform our understanding of the situational factors that contribute to SWB among workers and their families throughout the world.

## References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology, Volume 2* (pp. 267-299). New York: Academic Press.
- Allen, T. D., Cho, E., & Meier, L. L. (2014). Work-family boundary dynamics. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 99-121.
- Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2015). Meta-analysis of work-family conflict mean differences: Does national context matter? *Journal of Vocational Behavior, 90*, 90-100.
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest, 16*, 40-68.
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. (2013). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology, 66*, 345-376.
- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology, 16*, 151-169.
- Anderson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review, 24*, 452-471.
- Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review, 25*, 472-491.
- Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology, 20*, 172-189.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.
- Benach, J., Vives, A., Amable, M., Vanroelen, C., Tarafa, G., & Muntaner, C. (2014). Precarious employment: Understanding an emerging social determinant of health. *Annual Review of Public Health, 35*, 229-253.
- Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewick, B. H., Sheppard, & M. H. Bazerman (Eds.), *Research on negotiations in organizations, Volume 1* (pp. 43-55). Greenwich, CT: JAI Press.
- Bowling, N. A., Alarcon, G. M., Bragg, C. B., & Hartman, M. J. (2015). A meta-analytic examination of the potential correlates and consequences of workload. *Work & Stress, 29*, 95-113.
- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology, 91*, 998-1012.

- Bowling, N. A., Eschleman, K. J., & Wang, Q. (2010). A meta-analytic examination of the relationship between job satisfaction and subjective well-being. *Journal of Occupational and Organizational Psychology*, *83*, 915-934.
- Bowling, N., & Kirkendall, C. (2012). Workload: A review of causes, consequences and potential interventions. In J. Houdmont, S. Leka, & R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice, Volume 2* (Vol. 2, pp. 221-238). Chichester: John Wiley & Sons.
- Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies? A meta-analytic investigation of their effects on employee outcomes. *Journal of Applied Psychology*, *98*, 1-25.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*, 169-198.
- Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Climate perceptions matter: A meta-analytic path analysis. *Journal of Applied Psychology*, *88*(4), 605-619.
- Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*, 1082-1103.
- Chiaburu, D. S., Peng, A. C., Oh, I-S., Banks, G. C., & Lomeli, L. C. (2013). Antecedents and consequences of employee organizational cynicism: A meta-analysis. *Journal of Vocational Behavior*, *83*, 181-197.
- Cho, E., & Tay, L. (2016). Domain satisfaction as a mediator of the relationship between work-family spillover and subjective well-being: A longitudinal study. *Journal of Business and Psychology*, *31*, 445-457.
- Clarke, S. (2010). An integrative model of safety climate: Linking psychological climate to work attitudes to individual safety outcomes using meta-analysis. *Journal of Occupational and Organizational Psychology*, *83*, 553-578.
- Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (2009). Balance in leader and follower perceptions of leader-member exchange: Relationships with performance and work attitudes. *Leadership Quarterly*, *20*, 452-465.
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, *86*, 278-321.
- Cole, M. S., Shipp, A. J., & Taylor, S. G. (2016). Viewing the interpersonal mistreatment literature through a temporal lens. *Organizational Psychology Review*, *6*, 273-302.
- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, *86*, 386-400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, *86*, 425-445.
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology*, *98*, 199-236.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, *59*, 501-528.
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, *6*, 64-80.
- de Jonge, J., Dormann, C., Janssen, P. P. M., Dollard, M. F., Landeweerd, J. a., & Nijhuis, F. J. N. (2001). Testing reciprocal relationships between job characteristics and psychological well-being: A cross-lagged structural equation model. *Journal of Occupational and Organizational Psychology*, *74*, 29-46.
- de Lange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D., & Bongers, P. M. (2004). The relationships between work characteristics and mental health: Examining normal, reversed and reciprocal relationships in a 4-wave study. *Work & Stress*, *18*, 149-166.
- Diener, E. (2013). The remarkable changes in the science of subjective well-being. *Perspectives on Psychological Science*, *8*, 663-666.

- Dormann, C., & Zapf, D. (1999). Social support, social stressors at work, and depressive symptoms: Testing for main and moderating effects with structural equations in a three-wave longitudinal study. *Journal of Applied Psychology, 84*, 874-884.
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management, 38*, 1715-1759.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.
- Elovainio, M., Heponiemi, T., Jokela, M., Hakulinen, C., Penseau, J., Aalto, A-M., & Kivimäki, M. (2015). Stressful work environment and well-being: What comes first? *Journal of Occupational Health Psychology, 20*, 289-300.
- Erdogan, B., Bauer, T. N., Truxillo, D. M., & Mansfield, L. R. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management, 38*, 1038-1083.
- Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., & Levin, K. Y. (1991). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *Leadership Quarterly, 2*, 245-287.
- Ford, M. T., Heinen, B. A., & Langkamer, K. L. (2007). Work and family satisfaction and conflict: A meta-analysis of cross-domain relations. *Journal of Applied Psychology, 92*, 57-80.
- Ford, M. T., Matthews, R. A., Wooldridge, J. D., Mishra, V., Kakar, U. M., & Strahan, S. R. (2014). How do occupational stressor-strain effects vary with time? A review and meta-analysis of the relevance of time lags in longitudinal studies. *Work & Stress, 28*, 9-30.
- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology, 40*, 187-322.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology, 77*, 65-78.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology, 92*, 1524-1541.
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology, 91*, 1340-1350.
- Gonzalez-Roma, V., Peiro, J. M., & Tordera, N. (2002). An examination of the antecedents and moderator influences of climate strength. *Journal of Applied Psychology, 87*, 465-473.
- Gottfredson, R., & Aguinis, H. (2016). Leadership behaviors and follower performance: Deductive and inductive examination of theoretical rationales and underlying mechanisms. *Journal of Organizational Behavior*. Published online ahead of print.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Management Department Faculty Publications*. Retrieved from: <http://digitalcommons.unl.edu/managementfacpub/57>
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76-88.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review, 31*, 72-92.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250-279.
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the Conservation of Resources Model. *Journal of Applied Psychology, 91*, 1134-1145.
- Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods, 20*, 102-116.
- Hellgren, J., & Sverke, M. (2003). Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modeling. *Journal of Organizational Behavior, 24*, 215-236.
- Hershcovis, M. S., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: A meta-

- analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior*, 31, 24-44.
- Holman, D., & Axtell, C. (2016). Can job redesign interventions influence a broad range of employee outcomes by changing multiple characteristics? A quasi-experimental study. *Journal of Occupational Health Psychology*, 21, 284-295.
- Hong, Y., Liao, h., Hu, J., & Jiang, K. (2013). Missing link in the service profit chain: A meta-analytic review of the antecedents, consequences, and moderators of service climate. *Journal of Applied Psychology*, 98, 237-267.
- Hulin, C. L., & Judge, T. A. (2003). Job attitudes. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology* (pp. 255–276). Hoboken, NJ: Wiley.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92, 1332-1356.
- Ilies, R., & Judge, T. A. (2002). Understanding the dynamic relationships among personality, mood, and job satisfaction: A field experience sampling study. *Organizational Behavior and Human Decision Processes*, 89, 1119-1139.
- Ilies, R., Wilson, K. S., & Wagner, D. T. (2009). The spillover of daily job satisfaction onto employees' family lives: The facilitating role of work-family integration. *Academy of Management Journal*, 52, 87-102.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55, 1264-1294.
- Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: A study of their relationship at work and at home. *Journal of Applied Psychology*, 89, 661-673.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36-51.
- Kahn, R. L., Wolfe, D. M., Quinn, r. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford, England: John Wiley.
- Kooij, D. T. A. M., Jansen, P. G. W., Dikkers, J. S. E., & de Lange, A. H. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31, 1111-1136.
- Kossek, E. E., & Lautsch, B. A. (2012). Work-family boundary management styles in organization. *Organizational Psychology Review*, 2, 152-171.
- Kossek, E. E., Ruderman, M. N., Braddy, P. W., & Hannum, K. M. (2012). Work-nonwork boundary management profiles: A person-centered approach. *Journal of Vocational Behavior*, 81, 112-128.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43, 1854-1884.
- Kuykendall, L., Tay, L., & Ng, V. (2015). Leisure engagement and subjective well-being: A meta-analysis. *Psychological Bulletin*, 141, 364-403.
- Lang, J., Bliese, P. D., Lang, J. W. B., & Adler, A. B. (2011). Work gets unfair for the depressed: Cross-lagged relations between organizational justice perceptions and depressive symptoms. *Journal of Applied Psychology*, 96, 602-618.
- Lee, E-S., Park, T-Y., & Koo, B. (2015). Identifying organizational identification as a basis for attitudes and behaviors: A meta-analytic review. *Psychological Bulletin*, 141, 1049-1080.
- Leiter, M. P., Laschinger, H. K. S., Day, A., & Gilin-Oore, D. G. (2011). The impact of civility interventions on employee social behavior, distress, and attitudes. *Journal of Applied Psychology*, 96, 1258-1274.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of*

- industrial and organizational psychology* (pp. 1297–1347). Chicago: Rand McNally.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology, 70*, 280-289.
- Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2017). Abusive supervision: A meta-analysis and empirical review. *Journal of Management, 43*, 1940-1965.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*, 149-171.
- McGregor, D. (1960). *The human side of enterprise*. New York: McGraw-Hill.
- McKee-Ryan, F. M., Song, Z., Wanberg, C. R., & Kinicki, A. J. (2005). Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology, 90*, 53-76.
- McNall, L. A., Nicklin, J. M., & Masuda, A. D. (2010). A meta-analytic review of the consequences associated with work-family enrichment. *Journal of Business and Psychology, 25*, 381-396.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52.
- Michel, J. S., Mitchelson, J. K., Kotrba, L. M., LeBreton, J. M., & Baltes, B. B. (2009). A comparative test of work-family conflict models and critical examination of work-family linkages. *Journal of Vocational Behavior, 74*, 199-218.
- Montano, D., Reeske, A., Franke, F., & Huffmeier, J. (2017). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. *Journal of Organizational Behavior, 38*, 327-350.
- Morgeson, F. P., & Campion, M. A. (2002). Minimizing tradeoffs when redesigning work: Evidence from a longitudinal quasi-experiment. *Personnel Psychology, 55*, 589-612.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management, 24*, 391-419.
- Nielsen, K., & Munir, F. (2009). How do transformational leaders influence followers' affective well-being? Exploring the mediating role of self-efficacy. *Work & Stress, 23*, 313-329.
- Nielsen, K., Randall, R., Yarker, J., & Brenner, S-O. (2008). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress, 22*, 16-22.
- Nixon, A. E., Mazzola, J. J., Bauer, J., Krueger, J. R., & Spector, P. E. (2011). Can work make you sick? A meta-analysis of the relationships between job stressors and physical symptoms. *Work & Stress, 25*, 1-22.
- Nohe, C., Meier, L. L., Sonntag, K., & Michel, A. (2015). The chicken or the egg? A meta-analysis of panel studies of the relationship between work-family conflict and psychological strain. *Journal of Applied Psychology, 100*, 522-536.
- Peterson, N. G., Mumford, M. D., Borman, W. C., Jeanneret, P. R., Fleishman, E. A., Levin, K. Y. . . . Dye, D. M. (2001). Understanding work using the Occupational Information Network (O\*NET): Implications for practice and research. *Personnel Psychology, 54*, 451-492
- Pindek, S., Arvan, M., & Spector, P. (2017). *A meta-analysis of stressor-strain relationships in diary studies*. Paper presented at the Southern Management Association conference.
- Powell, G. N., Francesco, A. M., & Ling, Y. (2009). Toward culture-sensitive theories of the work-family interface. *Journal of Organizational Behavior, 30*, 597-616.
- Reichl, C., Leiter, M. P., & Spinath, F. M. (2014). Work-nonwork conflict and burnout: A meta-analysis. *Human Relations, 67*, 979-1005.
- Ritter, K-J., Matthews, R. A., Ford, M. T., & Henderson, A. A. (2016). Understanding role stressors and job satisfaction over time using adaptation theory. *Journal of Applied Psychology, 101*, 1655-1669.
- Robbins, J. M., Ford, M. T., & Tetrick, L. E. (2012). Perceived unfairness and employee health: A meta-analytic integration. *Journal of Applied Psychology, 97*, 235-272.
- Rockstuhl, T., Dulebohn, J. H., Ang, S., & Shore, L. M. (2012). Leader-member exchange (LMX) and culture: A meta-analysis of correlates of LMX across 23 countries. *Journal of Applied Psychology, 97*, 1097-1130.
- Rogg, K. L., Schmidt, D. B., Shull, C., & Schmitt, N. (2001). Human resource practices, organizational

- climate, and customer satisfaction. *Journal of Management*, 27, 431-449.
- Rupp, D. E., Shapiro, D. L., Folger, R., Skarlicki, D. P., & Shao, R. (2017). A critical analysis of the conceptualization and measurement of organizational justice: Is it time for reassessment? *Academy of Management Annals*. Published online ahead of print.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64, 361-388.
- Schyns, B., & Schilling, J. (2013). How bad are the effects of bad leaders? A meta-analysis of destructive leadership and its outcomes. *Leadership Quarterly*, 24, 138-158.
- Shockley, K. M., Douek, J., Smith, C. R., Yu, P. P., Dumani, S., & French, K. A. (2017). Cross-cultural work and family research: A review of the literature. *Journal of Vocational Behavior*, 101, 1-20.
- Shockley, K. M., & Singla, N. (2011). Reconsidering work-family interactions and satisfaction: A meta-analysis. *Journal of Management*, 37, 861-886.
- Sonnentag, S., Binnewies, C., & Mojza, E. J. (2008). "Did you have a nice evening?" A day-level study on recovery experiences, sleep, and affect. *Journal of Applied Psychology*, 93, 674-684.
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36, S72-S103.
- Sverke, M., Hellgren, J., & Naswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7, 242-264.
- Tafvelin, S., Armelius, K., & Westerberg, K. (2011). Toward understanding the direct and indirect effects of transformational leadership on well-being: A longitudinal study. *Journal of Leadership and Organizational Studies*, 18, 480-492.
- Tay, L., & Harter, J. K. (2013). Economic and labor market forces matter for worker well-being. *Applied Psychology: Health and Well-Being*, 5, 193-208.
- ter Doest, L., & de Jonge, J. (2006). Testing causal models of job characteristics and employee well-being: A replication study using cross-lagged structural equation modeling. *Journal of Occupational and Organizational Psychology*, 79, 499-507.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Thorsteinson, T. J. (2003). Job attitudes of part-time vs. full-time workers: A meta-analytic review. *Journal of Occupational and Organizational Psychology*, 76, 151-177.
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Volmer, J., Niessen, C., Spurk, D., Linz, A., & Abele, A. E. (2011). Reciprocal relationships between leader-member exchange (LMX) and job satisfaction: A cross-lagged analysis. *Applied Psychology*, 60, 522-545.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*, 18, 1-74.
- Wilkin, C. L. (2013). I can't get no job satisfaction: Meta-analysis comparing permanent and contingent workers. *Journal of Organizational Behavior*, 34, 47-64.
- Yang, L-Q. & Caughlin, D. E. (2017). Aggression-preventive supervisor behavior: Implications for workplace climate and employee outcomes. *Journal of Occupational Health Psychology*, 22, 1-18.
- Ybema, J. F., & van den Bos, K. (2010). Effects of organizational justice on depressive symptoms and sickness absence: A longitudinal perspective. *Social Science & Medicine*, 70, 1609-1617.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9, 15-32.
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *Leadership Quarterly*, 12, 451-483.
- Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, 85, 487-596.



2018 Ed Diener. Copyright Creative Commons: Attribution, noncommercial, no derivatives