

---

## 8 Affect, satisfaction, and performance

*Timothy A. Judge and John D. Kammeyer-Mueller*

---

### **Introduction**

Historically, the study of mood and emotions in organizational settings has not been well-received. Researchers trained in either behaviorism or the rational-actor tradition steered away from the more subjective, emotional side of human experience (Brief & Weiss, 2002; Härtel et al., 2005). Emotions at work were also ignored because the traditional research designs for organizational behavior are also poorly matched to the investigation of transient mood states. Methodological difficulties include finding ways to capture each individual's subjective experience of a situation in real time, collecting data that represent within-person variability, and difficulties in the analysis of repeated measures data. Recently, however, researchers have recognized both theoretically and empirically that many of the most important aspects of the experience of work cannot be adequately explained without appealing to affect. As this review will show, even rational models of human behavior, such as expectancy theory and decision making, are substantially influenced by emotional experiences.

Based on the premise that dispositions and situations influence attitudes and behavior as mediated through the day-to-day process of affect (Lord & Kanfer, 2002), we provide a conceptual overview of the research of affect and work outcomes in Figure 8.1. There are five primary linkages in our model. Path A represents the influence of affective traits, especially dispositional positive and negative affect, on affective states, such as moods and emotions. Path B represents the direct influence of affective traits on job satisfaction and performance. Path C represents the influence of moods and emotions on satisfaction and performance. Path D represents the influence of situational factors on moods and emotions. Finally, Path E represents the process of emotion regulation. In this review, we summarize the growing body of research on these relationships between affect and work outcomes and provide suggestions throughout the chapter for how future research can strengthen our understanding of these links.

### **Path A: affective traits and affective states**

A key question for organizational psychologists interested in the study of affect and work is how dispositional affects lead to specific moods. Dispositional affects are tendencies to experience similar affective states over time. As such, they are conceptually related to personality trait measures. According to Watson et al. (1988) positive affectivity (PA) is characterized by high energy, enthusiasm, and pleasurable engagement, whereas negative affectivity (NA) is characterized by distress, unpleasurable engagement, and nervousness. Traits PA and NA are moderately negatively correlated ( $\rho = -0.36$ ; Thoresen et al., 2003) and evince different patterns of relationships with other variables (Watson, 2000). The general trend seems to be that PA more strongly relates to positive outcomes whereas NA is more strongly associated with negative outcomes.

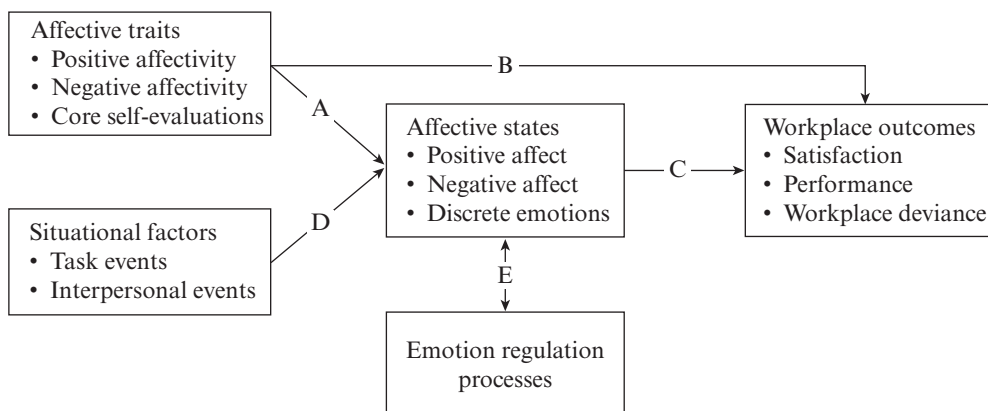


Figure 8.1 A conceptual model of affect, satisfaction, and performance

Watson and Clark (1992) found that there were significant relationships between neuroticism and trait NA across four samples, with correlations ranging from  $r = 0.52$  to  $r = 0.65$ . Correlations between extraversion and trait PA were also strong, ranging from  $r = 0.48$  to  $r = 0.64$ . This same study found that when the facets of neuroticism and extraversion were factor analyzed with measures of PA and NA, two interpretable factors appeared with the facets of neuroticism and NA loading on one factor and the facets of extraversion and PA loading on another. As with personality, there is a body of evidence suggesting that these dispositional affects are influenced to a large degree by genetic factors (e.g., Pedersen et al., 1988).

Although the Big Five traits are not necessarily affective in nature, extraversion and neuroticism are related to specific affective states. One of the key issues here is the extent to which conventional personality measures are related to specific positive and negative affects. One of the first diary studies to combine both personality data with more situational data found that even after accounting for life events, neuroticism was significantly correlated with average NA ( $r = 0.43$ ) and PA ( $r = -0.25$ ), and extraversion was significantly correlated with PA ( $r = 0.20$ ) (David et al., 1997). Ilies and Judge (2002) found that there was a negative relationship between neuroticism and PA ( $r = -0.36$ ), and a positive relationship between extraversion and PA ( $r = -0.40$ ) in an experience sampling study of 27 employed individuals. There is also evidence showing that in customer service encounters, extraversion is positively related to displayed positive emotions and neuroticism is negatively related to displayed negative emotions (Tan et al., 2003).

There are several mechanisms by which dispositional affect can be related to affective states. Personality also can be related to one's situational appraisals of situations that can lead to positive or negative affective states. Studies investigating long-term psychological distress find that those who are high in neuroticism tend to experience more life problems overall, and show greater reactivity to negative events (Ormel & Wohlfarth, 1991). A diary study in an academic setting found that perceived challenge stress was positively related to extraversion and negatively related to neuroticism, whereas perceived threatening stress was positively related to neuroticism and negatively related to extraversion (Gallagher, 1990). Laboratory studies have shown that affect induction efforts cause different

### 138 *Research companion to emotion in organizations*

reactions based on personality. Individuals who are high in neuroticism experience especially strong changes in their moods when exposed to negative mood induction, whereas individuals who are high in extraversion experience especially strong changes in their moods when exposed to positive mood inductions (Larsen & Ketelaar, 1991).

Taken in total, there is good evidence that dispositional affect is related to the experience of specific emotional states. Because comparatively few of these studies have been performed in the organizational domain, it is not entirely clear exactly how strong the influence of dispositional affect is for mood and emotion at work. Research exploring how organizational contexts moderate the importance of dispositions as predictors of mood states would be a welcome contribution to this area.

#### **Path B: affective traits and work outcomes**

Having demonstrated that dispositions are linked to affective states overall, we now turn our attention to studies from the organizational literature that show dispositions are related to work outcomes. These direct-effects studies show that affective dispositions can explain variations in attitudes and behavior at work.

#### *Satisfaction*

One area of considerable dispute within the literature on job attitudes, which must precede our discussion of affect and satisfaction, is the extent to which satisfaction scales represent measures of pure cognition or pure affect. If job satisfaction is an emotional reaction to the job, then we can be said to have an extensive research literature on emotions at work already. In part, this question is difficult to answer because affect influences cognition and cognition influences affect over time. As such, simple manipulation of question wording in surveys to more completely reference only affective or only cognitive reactions to the job will not be particularly effective if surveys are taken at a global level. Even event-based surveys will have difficulty separating these affective and cognitive appraisals if they rise nearly simultaneously, which is likely given the extensive overlap between cognitive and affective processing systems (Damasio, 1994).

Although the hypothesis that job satisfaction is rooted in individuals' personality is relatively new as a concerted area of research, there has been recognition of individual differences in job satisfaction for as long as the topic of job satisfaction has been studied (e.g., Hoppock, 1935). It was not until the 1980s, though, beginning with the publication of two influential studies by Staw and colleagues (Staw & Ross, 1985; Staw et al., 1986), that the dispositional source of job satisfaction came into its own as a research area. Staw and Ross (1985), for example, inferred a dispositional source of satisfaction by observing that measures of job satisfaction were reasonably stable over a two- ( $r = 0.42, p < 0.01$ ), three- ( $r = 0.32, p < 0.01$ ), and five- ( $r = 0.29, p < 0.01$ ) year interval, even when individuals changed both employers and occupation (over the five-year interval,  $r = 0.19, p < 0.01$ ). Another indirect study, by Arvey et al. (1989), found significant similarity in the job satisfaction levels of 34 pairs of monozygotic (identical) twins reared apart from early childhood.

Although these studies were intriguing, they do not permit strong inferences regarding the source of job satisfaction, because stability in attitudes toward work can be due to other factors, such as a tendency to have similar jobs over time (Gerhart, 1987; Gutek & Winter, 1992). Similarly, since babies have no jobs they obviously cannot be born with job satisfaction. However, even when objective indices of job characteristics are taken into

account, there is still a significant genetic contribution to job attitudes (Arvey et al., 1989). Nonetheless, evidence showing similarity in twins' job satisfaction levels does not indicate which dispositions are important.

More recent research has directly linked affective traits to job satisfaction. The specific traits that have been investigated have varied widely across studies. Staw et al. (1986), for example, utilized clinical ratings of children with respect to a number of adjectives assumed to reflect affective disposition ('cheerful', 'warm', and 'negative'). Judge and Hulin (1993) used a measure, adapted from Weitz (1952), assessing employees' reactions to neutral objects common to everyday life (e.g., 8½" × 11" paper, today's cars). One group of studies has focused on traits PA and NA. Counter to the theory that PA is more strongly related to positive outcomes than NA, Thoresen et al.'s (2003) meta analysis revealed that trait NA was somewhat more strongly related to job satisfaction than was trait PA ( $\rho = -0.37$  and  $\rho = 0.33$ , respectively). Judge et al. (2002) found that neuroticism and extraversion each displayed moderate, nonzero relationships with job satisfaction: neuroticism,  $\rho = -0.29$ ; extraversion,  $\rho = 0.25$ . These results are quite similar to those reported by Thoresen et al. (2003): neuroticism,  $\rho = -0.28$ ; extraversion,  $\rho = 0.22$ .

Core self-evaluations (Judge et al., 1997a), which are fundamental premises that individuals hold about themselves and their functioning in the world, also appear to be relevant dispositions for explaining work attitudes. Brief (1998) has argued that core self-evaluation is not an affective concept because the items mostly reflect cognitions, but we are somewhat agnostic as to whether such strict delineations between affect and cognition would prove productive, especially given the evidence cited previously showing that neuroticism (one of the key traits in core self-evaluations) is related to dispositional negative affect and negative affective states. Several primary studies have related core self-evaluations to job satisfaction (e.g., Judge et al., 1998), and a meta-analysis by Judge and Bono (2001) showed that the four core traits were similarly related to job satisfaction; when the four meta-analyses were combined into a single composite measure, the overall core trait correlated 0.37 with job satisfaction. More recently, Judge et al. (2003) developed a 12-item measure of core self-evaluations and, in two samples, showed that it was related to job satisfaction ( $r_c = 0.59$  and  $r_c = 0.49$ ,  $p < 0.01$ ).

In sum, research suggests that affective traits are relevant to job satisfaction. It appears that both PA and NA are relevant, as well as core self-evaluations. It would be a worthwhile exercise for future research to integrate these systems into one coherent personological explanation of job satisfaction. Would NA and/or PA be subsumed under core self-evaluations? Or, would PA/NA mediate the link between core self-evaluations and job satisfaction? Or, as a third alternative and as suggested by Brief's (1998) argument that PA/NA are affective whereas core self-evaluations are cognitive, do these concepts make independent contributions to job satisfaction? Although we have made great progress toward understanding that people's dispositional outlook does affect their judgments of job satisfaction, further integrative work is needed.

### *Performance*

Given the evidence already presented regarding the influence of affect on job satisfaction, it seems eminently plausible to propose a similar association between affect and job performance. Emotions have been described at the interface between the environment in behavior, generating action tendencies and energizing individuals to behave. There are

140 *Research companion to emotion in organizations*

several theories that posit a strong relationship between affect and goal cognition (e.g., Higgins et al., 1997). Meta-analytic evidence on dispositional affect supports these theories, showing that trait NA is negatively correlated with goal setting motivation ( $\rho = -0.29$ ), expectancy motivation ( $\rho = -0.29$ ), and task self-efficacy ( $\rho = -0.35$ ) (Judge & Ilies, 2002). This same meta-analysis showed that extraversion is positively correlated with goal-setting motivation ( $\rho = 0.10$ ), expectancy motivation ( $\rho = 0.10$ ), and task self-efficacy ( $\rho = 0.33$ ). This trait-based information would seem to suggest that dispositional NA exerts a stronger influence on performance than does dispositional PA, but that both are relevant.

However, the evidence regarding the relationship between job performance and NA is not strong at a global level; meta-analytic estimates of the correlation between NA and job performance are weak, with corrected correlations across multiple meta-analyses between supervisor ratings of job performance and emotional stability being only  $\rho = 0.13$  (Barrick et al., 2001). The relationship between objective job performance and extraversion is even weaker. Although global relationships between task performance and dispositional affect are not terribly strong, stronger relationships appear when more nuanced conceptions of performance are taken into consideration. Task performance is typically conceived of as activities such as processing data and information, operating machines or equipment, or coordinating plans. None of these has a very strong emotional or affective content. Since the majority of supervisory ratings can be explained by task performance (Rotundo & Sackett, 2002), it is again not especially surprising to see weak relationships between global performance scores and affect.

Interpersonal interactions are likely to be more emotionally loaded than typical task performance. As such, it is not surprising that emotionality is more related to performance in interpersonal settings. On an episodic level, there is evidence that individuals who are in positive mood states will be more likely to help others in most contexts (Isen, 1970), so it makes sense to suppose that those who are dispositionally more likely to be in positive mood states will likely be more helpful toward others. Neuroticism is also negatively related to prosocial organizational behavior in meta-analysis ( $r = -0.14$ ), whereas PA is positively related to prosocial organizational behavior ( $r = 0.18$ ) (Borman et al., 2001). Self-reported PA at work has consistently been shown to be related to citizenship behavior more strongly than a variety of other central job attitudes (e.g., Lee & Allen, 2002).

Trait PA may be related to job performance for a specific subset of jobs involving extensive interpersonal interaction. A study involving a sample of managerial employees found that extraversion was related to superior performance ratings, and that the relationship was especially strong when the manager's job was high in autonomy (Barrick & Mount, 1993). However, any conclusions about the implications of this study for affectivity must be tempered by the fact that agreeableness, which is also related to PA, was *negatively* related to rated job performance. Extraverts are seen as exerting greater influence in group settings, and groups with more extraverts perform somewhat better (Barry & Stewart, 1997). Meta-analytic evidence also suggests that the relationship between extraversion and sales performance at an aggregate level is fairly weak  $\rho = 0.13$  (Barrick et al., 2001). This same study estimated a correlation between neuroticism and teamwork performance of  $\rho = 0.22$ .

Physical and psychological health are also potentially related to affectivity, which in turn may be reflected in a number of performance-relevant constructs – sick and

depressed employees are not likely to be great performers. NA shows persistent relationships with stress and somatic complaints (Watson & Pennebaker, 1989). Stress is negatively related to some indices of immune system functioning (Cacioppo, 1994), whereas dispositional hostility is related to cardiac problems (Smith, 1992). Both of these results suggest that physical symptoms (and not just personal perceptions of physical distress) represent at least part of the relationship between affect and health. There is also evidence that higher levels of dispositional PA are related to reductions in symptoms of illness (Watson, 2000).

Employee absence and other signs of work withdrawal are conceptually related to physical and psychological health, and also to employee attitudes, so one might expect that there would also be a relationship between dispositional affects and these outcomes. It is even possible that absence is used by employees as a mechanism to repair negative mood states, giving them an opportunity to recharge their emotional batteries, so to speak (Martocchio & Jimeno, 2003). Research evidence linking dispositional affects to withdrawal, however, is not entirely conclusive. One study found that extraversion was positively related to absence, whereas neuroticism was not significantly related to absence (Judge et al., 1997b). Another study, however, found that neuroticism was significantly related to employee withdrawal behaviors but extraversion was not (LeBreton et al., 2004).

Affective traits may also be related to counterproductive work behavior. Because affect energizes behavior in a certain direction (Lord & Kanfer, 2002), it seems likely that negative affect will energize behavior in a negative direction, although the exact nature of 'negative' will vary based on the person and circumstances. Self-reported trait hostility and anger have been shown to be positively related to workplace deviance in several studies (Lee & Allen, 2002; Judge et al., 2006). It is possible that individuals can engage in problem-solving approaches to addressing strong negative affects (such as attempting to avoid sources of negative affect or taking actions to eliminate those who cause stress from the organization). Open-ended interview data suggest that employees who experience anger toward a co-worker often feel a need to leave the workplace to 'cool down', or may engage in aggression such as yelling insults, or throwing things (Glomb, 2002).

In summary, the evidence to date suggests that dispositional affectivity is not strongly related to global ratings of job performance. However, there are more specific dimensions of performance that are related to affect. One application of this knowledge that has not been explored extensively is the understanding how the match between dispositional affectivity and job demands can be used in a selection context (Arvey et al., 1998). For example, the evidence described above suggests that in jobs with heavy interpersonal demands will require higher trait PA and lower trait NA. Providing applicants with information about interpersonal demands may induce self-selection out of the applicant pool by those who will not be well suited to work that is inconsistent with their personalities. Alternatively, organizations may seek to find new ways to assess dispositional affectivity through simulations and 'emotional interviews' that engage an employee's affective system, to assess their responses *in vivo*.

### **Path C: affective states and work outcomes**

In this section, we shall examine how affective states are related to work outcomes. Most job attitude scales ask respondents to indicate how they feel over long periods or in general, performance ratings typically represent the average of behaviors taken over the

## 142 *Research companion to emotion in organizations*

course of several months. The process of aggregation means that intrapersonal fluctuation in moods over time will eventually cancel each other out; as such, it is hardly surprising to see little relationship between global performance and affects in some studies. Because affects are, by their nature, transitory, it is theoretically appropriate to consider them as predictors of within-person variability. At the same time, gathering theory-based time-variant measures of performance and attitudes is a difficult undertaking. If there is an answer to this apparent methodological stalemate (Larson & Csikszentmihalyi, 1983), it is breaking the work day into discrete elements or performance episodes (Beal et al., 2005). As such, most of these studies examine very time-limited emotional episodes.

### *Satisfaction*

At a general level, one would expect that affective states (moods, emotions) would mediate the effect of affective traits on job satisfaction. Although such a hypothesis seems nearly self-evident, there is surprisingly little data on the role of moods and emotions in job satisfaction in general, and on their possible mediating mechanism in particular. Thoresen et al. (2003) investigated PA and NA as mood states; however when one compares their results for state PA and NA with those for trait PA and NA, a confusing story emerges. State PA is somewhat more strongly correlated with job satisfaction ( $\rho = 0.44$ ) than trait PA ( $\rho = 0.33$ ). However, state NA ( $\rho = -0.36$ ) is not more highly correlated with job satisfaction compared to trait NA ( $\rho = -0.37$ ). It is difficult to know what to make of these results.

One possible interpretation is that state mood is too blunt an instrument to explain job affect. Affective events theory (AET; Weiss & Cropanzano, 1996) emphasizes links between job events and job affect. Because AET focuses on episodic (versus chronic) affect, as Hulin and Judge (2003) note, it might be argued to better represent how an individual feels *on* the job as opposed to how an individual feels *about* their job. If affective events are ephemeral, then the affective states that we study must be commensurate; it is not clear to us that mood states – as mid-range variables between affective traits and emotions – are ideally suited to this context. If, as Hulin and Judge argue, job affect is inherently dynamic, then the events that influence job affect, as well as the emotions that may mediate the link between job events and job affect, are similarly dynamic.

What does this mean from the standpoint of conceptualizing and studying affective states in job satisfaction research? First, given the dynamic nature of job affect (Weiss et al., 1999; Ilies & Judge, 2002), we must use research designs that are sensitive to temporal dynamics. Second, and related, we must utilize multi-level designs where emotions and job attitudes would be expected to vary between and within persons. In short, if we believe that affective states are critical to job satisfaction, then we must study those affective states in 'real time' (or as close as is practicable) and model those sources of variance in such a way that allows affect and satisfaction to vary within and between people.

Some recent experience sampling studies are informative. Focusing on broad mood states, Judge and Ilies (2004) found that state PA positively predicted, and state NA negatively predicted, within-individual variation in job satisfaction and, moreover, that state PA mediated part of the effect of trait PA on job satisfaction (trait NA was not significantly related to between-individual variation in job satisfaction). Fuller et al. (2003) also found that within-individual variation in positive mood was associated with

job satisfaction. Judge et al. (2006) found that state hostility negatively predicted within-individual variation in job satisfaction and that when both state hostility and state NA were used to predict job satisfaction, hostility remained significant but NA did not. Scott and Judge (in press) also found that hostility negatively predicted within-individual variation in job satisfaction. Moreover, they found that two positive emotions – joviality and attentiveness – positively predicted within-individual variation in job satisfaction. In perhaps the most comprehensive analysis to date, Fisher (2000) found that various positive (e.g., enthusiasm, contentment) and negative (e.g., anger, disappointment) emotions were associated with within-individual variation in job satisfaction, and further found that these relations held when the emotions were aggregated into general positive and negative mood factors.

In sum, broad mood factors and specific emotions are associated with within-individual variation in job satisfaction. Because this line of research is at a nascent stage, it is difficult to make deeper generalizations than that. One might wonder, for example, whether specific emotions or broad mood factors are more proximal to job satisfaction. Although some evidence favors the former (Judge et al., 2006), it is far too early to make generalizations. One may also wonder about the duration of the effects. Some evidence suggests that mood/emotion effects decline over time, such that by the next day, the effect of the previous day's mood is much smaller (e.g., Fisher, 2000; Judge & Ilies, 2004). Finally, if specific emotions are linked to job satisfaction, the question of which emotions (of the many that might be relevant) are most important is a question yet to be answered.

### *Performance*

Compared to research on contemporaneous measures of affect and satisfaction – which we have already described as being in a nascent stage of development – the literature on affect and performance is even sparser. There is almost no research that has linked within-individual variation in specific emotions to within-individual variation in performance, despite evidence that performance does exhibit considerable within-individual variation over time (Henry & Hulin, 1987). Although measuring within-individual variations in performance on a day-to-day basis is not a small challenge outside the confines of the lab, what is difficult is not impossible. For example, one can envisage a study measuring between- and within-individual variation in mood and emotions, and linking these measures to daily measures of service performance as judged by customers. Recently, Thoresen et al. (2004) studied individual growth trajectories in sales performance over time. Although the time frame in that study was longer (one year), with longer time periods between intervals (quarterly), than we have in mind here, it is the type of design that would allow studying the role of affective traits and states in performance growth curves.

Those examining within-person variation of performance have approached the topic from the perspective of resource allocation theory, based on the presumption that NA can serve to deplete regulatory resources and make one especially prone to being distracted and unable to cope with work problems (Beal et al., 2005). Evidence suggests that individuals in an experimentally induced negative mood will tend to be more sensitive to negative feedback, which in turn generates an increasingly negative mood (Cervone et al., 1994). Negative mood states lead to lower levels of expectancy, instrumentality, and valence for rewards, which translates into less-effective performance (Erez & Isen, 2002).



## 144 *Research companion to emotion in organizations*

Because unmotivated individuals will perform poorly, the depressive cycle of failure to negative mood states will be self-reinforcing and may have increasingly strong negative impacts on performance over repeated performance events.

In the same way that NA can deplete psychological resources, positive moods can increase resources. Experimentally induced PAs appear to have cognitive consequences that can improve performance on cognitive tasks. Those who are in positive moods generate more cognitive associations among affectively neutral constructs and are also more flexible in the manner in which they think about problems (e.g., Isen et al., 1985). As a result, it is likely that those in a positive mood will be more effective at creative problem-solving tasks (Isen et al., 1987). Positive mood states have been shown to increase intrinsic motivation (Estrada et al., 1994), which is explained by the tendency for individuals in positive affective states to enjoy themselves more when engaged in relatively pleasant activities (Kraiger et al., 1989).

Performance in managerial jobs often hinges on critical decision-making episodes, and the rise of behavioral decision-making perspectives has fueled research on the question of how emotions can influence decision accuracy. Behavioral neuroscientists have shown that damage to the emotional processing centers of the brain can result in severe deterioration of decision-making ability even when the rational, deliberative portions of the mind are left intact (Damasio, 1994). Because decisions often involve intuition, assessing the motives and intentions of others, and assessing one's own desires and needs, behaving as a completely emotionless decision maker is not only unattainable, but probably also undesirable. Unlike the other research on affect and performance, which nearly universally suggests that positive mood states improve performance, the research on affect and decision making is more mixed. Consistent with the depressive realism hypothesis, which suggests that those in negative moods are more likely to consider negative aspects of a situation, both dispositional negative affect and negative affective states are related to less susceptibility to escalation of commitment (Wong et al., 2006).

Like the relationship mentioned earlier between dispositional NA and deviance, there are also studies showing that state NA is related to deviance. Negative discrete emotions at work have been significantly related to deviant behavior in many instances (Glomb et al., 2002). Judge et al. (2006) found that momentary hostility explained a large portion of the within-person variance in workplace deviance. A three-year longitudinal study of health service workers found a significant positive relationship between negative mood states and absence (Hardy et al., 2003). LeBreton et al. (2004) found that negative work affect was significantly related to more withdrawal behaviors.

Although there are some promising studies described above related to emotions and behavior at work, there is still much to be done. Most significantly, there is no comprehensive theoretical or empirical model that compartmentalizes situations. Much of the research described earlier that investigated the relationship between affect and attention, decision making, and creativity was conducted in a laboratory setting where artificial constraints can be placed on the task environment to circumscribe observations. One obvious direction for the examination of motivation and performance events is the increased use of diary studies that contrast how various affective states influence facets of performance in field settings as a means to developing a typology of emotional episodes (Beal et al., 2005). Unlike research so far, it may be necessary to give performance diaries to supervisors or other third-person observers to achieve external measures of behavior. The role of

emotions and affects in the motivational and attention processes is also not fully understood. This begs the question of how emotions are related to goal-setting processes (e.g., selected goal difficulty), goal commitment, and goal cognition (e.g., appraisal of progress toward desired goal states, determining when goal pursuit termination should occur).

#### **Path D: situations and affective states**

Although we have primarily concentrated on the influence of dispositions on experienced affective states, even a person-centered perspective on affect must recognize that situations have strong effects on affective states as well. There is a sizeable research literature in social, personality, and clinical psychology addressing the general categories of events that are likely to produce negative mood states. On a broad level, it appears that stress is particularly related to negative affective states and social interactions are particularly related to positive affective states (Watson, 2000). One study found that on a global level, aggregated positive mood was significantly related to aggregated desirable work events ( $r = 0.42$ ) but was not significantly related to undesirable work events, whereas aggregated negative mood was significantly related to aggregated negative work events ( $r = 0.34$ ), but was not significantly related to desirable work events (David et al., 1997). It is worth noting that these relationships for work events were somewhat higher than the relationships found between mood states and family or social events. Among air-traffic controllers, higher levels of workload are related to increased negative mood states and decreased positive mood states (Repetti, 1993).

A basic premise in the mood/emotions literature in organizational behavior, and as formulated by AET, is that emotions mediate the relationship between the environment and behavior. Latham (2007, p. 224) notes, 'Emotions mediate environmental events and the person's subsequent behavior'. However, there is a paucity of data testing this premise in organizational contexts. What work events precipitate particular emotions, and how is this emotional experience then manifested in performance (if at all)? We suspect that jobs differ in both the emotions experienced (e.g., the dominant felt emotions for a youth camp leader or Starbucks' barista are likely quite different from a hospice nurse or bartender) and those expected to be expressed (e.g., humor may be better attempted by a Southwest Airlines employee than a funeral home director or grief counselor). Although O\*Net is a rich source of information on the nature and skill requirements of myriad jobs, it does not describe in specific detail the emotions that may be experienced, or must be managed, on the job. It would be informative and important to delineate emotional factors by occupation or task features. One might well find that such delineation has important implications for the interrelationships among emotional labor concepts of display rules, surface and deep acting, felt emotions, and so forth.

Besides studies examining how situations affect the emotions or moods *experienced* at work, there is also interest in the ways that situations affect the emotions or moods *displayed* at work. Although it might seem intuitive to suggest that experienced and displayed emotions will be closely linked, the literature on emotional labor proposes that in a large number of situations, individuals will alter their affective displays based on organizational display rules. During very busy periods, customer service representatives display fewer positive emotions, and customer service representatives display more positive emotions when engaging in more-demanding (i.e., complex, time-consuming) interactions with customers (Raefeli & Sutton, 1990; Tan et al., 2003), but it is not clear from the research how

## 146 *Research companion to emotion in organizations*

this relates to how the employees feel. Moreover, Rafaeli and Sutton proposed that during busy periods, customers expect less individualized attention and might even prefer brief, informal interactions, but during complex interactions, more emotional displays may be appropriate. Both of these premises suggest that the display of positive versus negative interactions in a customer service setting is based on the perceived situational demands. Studies that examine how such social pressures outside of customer service interactions might be informative for understanding the substantial role of social interactions on affective displays.

Another area for future research is on situational interventions that may influence mood, emotions, and affect. In organizational behavior research, the dominant means by which mood and emotions are investigated is through an observational approach, where moods and emotions are reactively observed (versus proactively influenced). This stands in stark contrast with the literature on PA (Isen, 2004), which manipulates PA through humor, gifts, or other inventions. Similarly, there is an emerging literature on gratitude which has induced this affective state by simply instructing individuals (Emmons & McCullough, 2003, p. 379): 'There are many things in our lives, both large and small, that we might be grateful about. Think back over the past week and write down on the lines below up to five things in your life that you are grateful or thankful for'. Individuals so instructed appear to report greater well-being and higher levels of PA as a result of the manipulation. Gratitude, or almost any other emotion, has not been manipulated in work settings, but there is no reason beyond logistics why such investigations could not take place (for an exception with PA, see Brief et al., 1995). It is true that such interventions are manipulative, but they are not necessarily exploitative and, of course, no one can be put in a good mood against his/her will.

However, in laboratory settings it may be possible to tease apart this process by directly inducing either affects or cognitions. Verbal protocols, used frequently in cognitive psychology studies of problem solving, could also supplement this approach by having participants directly describe how they are thinking and regulating their emotions. Besides the theoretical interest in understanding how individuals think about their emotions, it is of practical import to understand effective (and ineffective) emotion regulation techniques so people may be trained to better regulate their emotions.

### **Path E: emotional regulation processes**

A related topic for future research is to better understand how employees gain control over their emotions. Heckhausen and Schulz (1995) argue that individuals use two processes to control their environment. The most logical approach (primary control) is to change the situation – 'bringing the environment into line with one's wishes' (ibid., p. 285). For example, both of the authors' offices open up to a large, crowded, and noisy public area. Moreover, next to one of these offices is a break room that at one time contained a microwave oven that often magically emitted the most disgusting smells known to cooking. How is one to cope with distraction, irritation, and disgust? One natural response is to close one's door, and indeed that is what we have done. However, in some cases and for some jobs people cannot take actions to remove the emotional cue (if I worked in a cubicle I could not shut my door). Heckhausen and Schulz argue that in such cases we engage in secondary control through cognitive processes. For example, if one is plagued by an irritating customer or co-worker, one might try to ignore the behavior, focus

on something else, try to see the humor in the situation, and other rational emotive processes.

Perhaps the central premise of the emotional labor literature is that display rules (the requirement to display certain organizationally desired emotions) are stressful to employees because they force dissonance between expressed and experienced emotions. Although clearly there is some evidence, collapsed across jobs and employees, that this is the case (Bono & Vey, 2005), we know little about *why* this might be the case – is it really the dissonance that produces strain, or is it merely the inner experience of negative emotions? This is a critical point because if the actual display of emotions is irrelevant to subsequent strain, then the entire premise of emotional labor, and the importance of display rules, might be called into question. This is an interesting and, we think, important area for future research.

The foregoing examples also suggest that coping with emotion work is a complex process that will likely vary by the episode (dealing with an angry customer is likely a different process from dealing with a co-worker who made *you* angry), by the job (and the personal control one can exert over one's emotion work), and by the person (some people characteristically cope differently from others, e.g., would someone high in need for cognition – or 'an individual's tendency to engage in and enjoy thinking' (Cacioppo & Petty, 1982, p. 116) – cope more inwardly?). Although evidence generally suggests that emotional responses are similar across cultures, the process of emotion regulation varies widely (Mesquita & Frijda, 1992). For example, in response to shame, Dutch employees showed more evidence of withdrawal, and Filipino employees showed more prosocial behavior and relationship building (Bagozzi et al., 2003). The points here are: (a) we can define emotional labor more broadly, to include managing emotions in a work context, (b) coping with emotions that is part of the emotional labor process is multifaceted and can include internal and external acts, and (c) there is likely within- and between-individual variation in these acts. We think that Heckhausen and Schulz's (1995) concept of primary and secondary control, Gould's (1999) criticisms notwithstanding, might be an effective means by which to study the processes by which individuals cope with emotion work.

One question that has not been extensively examined in the emotion regulation literature is the variability in how individuals attempt to manage the emotions of others. The literature on the importance of social interactions for mood states is quite strong, as indicated previously. Impression management techniques mention specific behaviors such as smiling and complementing others, which ostensibly will improve the moods of others. The use of presents and granting favors to others as an attempt to induce a good mood is described anecdotally, but there is little research investigating the systematic use of these mood induction techniques in organizational settings. Finally, research suggests that emotional displays can be very effective strategically in negotiations (Kopelman et al., 2006). By bringing these literatures together, it seems likely that some individuals will be especially aware of the ways in which their behavior influences others' moods/emotions, and that they will use this information strategically. Research possibilities include investigating how individuals use affective feedback from others to direct their own influence tactics – if one finds that a supervisor appears pleased by flattery, for example, one may repeat this influence tactic. Research also might examine how the moods of the influence target mediate the relationship between influence tactics and work behavior.

## Conclusion

As our review indicates, in recent years the tendency for organizational behavioral researchers to ignore the affective aspects of work in the past has been redressed by newer studies. Methodological developments that facilitate interpretation of data that closely correspond to the experience of emotions in the workplace means that we are now able to state definitively that both trait affectivity and state affect are related to certain aspects of job performance and job satisfaction. On this foundation, numerous columns of research can be established. This review suggests only a few of the many possible directions for future research.

## References

- Arvey, R.D., T.J. Bouchard, N.L. Segal and L.M. Abraham (1989), 'Job satisfaction: environmental and genetic components', *Journal of Applied Psychology*, **74**, 187–92.
- Arvey, R.W., G.L. Renz and T.W. Watson (1998), 'Emotionality and job performance: implications for personnel selection', in G.R. Ferris (ed.), *Research in Personnel and Human Resources Management*, vol. 16, Stamford, CT: JAI Press, pp. 103–47.
- Bagozzi, R.P., W. Verbeke and J.C. Gavino, Jr (2003), 'Culture moderates the self-regulation of shame and its effects on performance: the case of salespersons in the Netherlands and the Philippines', *Journal of Applied Psychology*, **88**, 219–33.
- Barrick, M.R. and M.K. Mount (1993), 'Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance', *Journal of Applied Psychology*, **78**, 111–18.
- Barrick, M.R., M.K. Mount and T.A. Judge (2001), 'Personality and performance at the beginning of the new millennium: what do we know and where do we go next?', *International Journal of Selection and Assessment*, **9**, 9–30.
- Barry, B. and G.L. Stewart (1997), 'Composition, process, and performance in self-managed groups: the role of personality', *Journal of Applied Psychology*, **82**, 62–78.
- Beal, D.J., H.M. Weiss, E. Barros and S.M. MacDermid (2005), 'An episodic process model of affective influences on performance', *Journal of Applied Psychology*, **90**, 1054–68.
- Bono, J.E. and M.A. Vey (2005), 'Toward understanding emotional management at work: A quantitative review of emotional labor research', in C.E. Härtel, W.J. Zerbe and N.M. Ashkanasy (eds), *Emotions in Organizational Behavior*, Mahwah, NJ: Lawrence Erlbaum, pp. 213–33.
- Borman, W.C., L.A. Penner, T.D. Allen and S.J. Motowidlo (2001), 'Personality predictors of citizenship performance', *International Journal of Selection and Assessment*, **9**, 52–69.
- Brief, A.P. (1998), *Attitudes In and Around Organizations*, Thousand Oaks, CA: Sage.
- Brief, A.P., A.H. Butcher and L. Roberson (1995), 'Cookies, disposition and job attitudes: the effects of positive mood inducing events and negative affectivity on job satisfaction in a field experiment', *Organizational Behavior and Human Decision Processes*, **62**, 55–62.
- Brief, A.P. and H.M. Weiss (2002), 'Organizational behavior: affect in the workplace', *Annual Review of Psychology*, **53**, 279–307.
- Cacioppo, J.T. (1994), 'Social neuroscience: autonomic, neuroendocrine, and immune response to stress', *Psychophysiology*, **31**, 112–28.
- Cacioppo, J.T. and R.E. Petty (1982), 'The need for cognition', *Journal of Personality and Social Psychology*, **42**, 116–31.
- Cervone, D., D.A. Kopp, L. Schaumann and W.D. Scott (1994), 'Moods, self-efficacy, and performance standards: lower moods induce higher standards for performance', *Journal of Personality and Social Psychology*, **67**, 499–512.
- Damasio, A.R. (1994), *Descartes' Error*, New York: Grosset/Putnam.
- David, J.P., P.J. Green, R. Martin and J. Suls (1997), 'Differential roles of neuroticism, extraversion, and event desirability for mood in daily life: an integrative model of top-down and bottom-up influences', *Journal of Personality and Social Psychology*, **73**, 149–59.
- Emmons, R.A. and M.E. McCullough (2003), 'Counting blessings versus burdens: an experimental investigation of gratitude and subjective well-being in daily life', *Journal of Personality and Social Psychology*, **84**, 377–89.
- Erez, A. and A.M. Isen (2002), 'The influence of positive affect on the components of expectancy motivation', *Journal of Applied Psychology*, **87**, 1055–67.
- Estrada, C., A.M. Isen and M.J. Young (1994), 'Positive affect influences creative problem solving and reported source of practice satisfaction in physicians', *Motivation and Emotion*, **18**, 285–99.

- Fisher, C.D. (2000), 'Mood and emotions while working: missing pieces of job satisfaction?', *Journal of Organizational Behavior*, **21**, 185–202.
- Fuller, J.A., J.M. Stanton, G.G. Fisher, C. Spitzmüller, S.S. Russell and P.C. Smith (2003), 'A lengthy look at the daily grind: time series analysis of events, mood, stress, and satisfaction', *Journal of Applied Psychology*, **88**, 1019–33.
- Gallagher, D.J. (1990), 'Extraversion, neuroticism and appraisal of stressful academic events', *Personality and Individual Differences*, **11**, 1053–57.
- Gerhart, B. (1987), 'How important are dispositional factors as determinants of job satisfaction? Implications for job design and other personnel programs', *Journal of Applied Psychology*, **72**, 366–73.
- Glomb, T.M. (2002), 'Workplace anger and aggression: informing conceptual models with data from specific encounters', *Journal of Occupational Health Psychology*, **7**, 20–36.
- Glomb, T.M., P.D.G. Steel and R.D. Arvey (2002), 'Office sneers, snipes, and stab wounds: antecedents, consequences, and implications of workplace violence and aggression', in R.G. Lord, R.J. Klimoski and R. Kanfer (eds), *Emotions in the Workplace: Understanding the Structure and Role of Emotions in the Workplace*, San Francisco, CA: Jossey-Bass, pp. 227–59.
- Gould, S.J. (1999), 'A critique of Heckhausen and Schulz' life-span theory of control from a cross-cultural perspective', *Psychological Review*, **106**, 597–604.
- Gutek, B.A. and S.J. Winter (1992), 'Consistency of job satisfaction across situations: fact or framing artifact?', *Journal of Vocational Behavior*, **41**, 61–78.
- Hardy, G.E., D. Woods and T.D. Wall (2003), 'The impact of psychological distress on absence from work', *Journal of Applied Psychology*, **88**, 306–14.
- Härtel, C.E.J., W.J. Zerbe and N.M. Ashkanasy (2005), 'Organizational behavior: an emotions perspective', in Härtel, Zerbe and Ashkanasy (eds), *Emotions in organizational behavior*, Mahwah, NJ: Erlbaum, pp. 1–8.
- Heckhausen, J. and R. Schulz (1995), 'A life-span theory of control', *Psychological Review*, **102**, 284–304.
- Henry, R.A. and C.L. Hulin (1987), 'Stability of skilled performance across time: some generalizations and limitations on utilities', *Journal of Applied Psychology*, **72**, 457–62.
- Higgins, E.T., J. Shah and R. Friedman (1997), 'Emotional responses to goal attainment: strength of regulatory focus as a moderator', *Journal of Personality and Social Psychology*, **72**, 515–25.
- Hoppock, R. (1935), *Job Satisfaction*, New York: Harper.
- Hulin, C.L. and T.A. Judge (2003), 'Job attitudes', in W.C. Borman, D.R. Ilgen and R.J. Klimoski (eds), *Handbook of Psychology*, Hoboken, NJ: Wiley, pp. 255–76.
- Ilies, R. and T.A. Judge (2002), 'Understanding the dynamic relationships among personality, mood, and job satisfaction: a field experience sampling study', *Organizational Behavior and Human Decision Processes*, **89**, 1119–39.
- Isen, A.M. (1970), 'Success, failure, attention, and reactions to others: the warm glow of success', *Journal of Personality and Social Psychology*, **15**, 294–301.
- Isen, A.M. (2004), 'Some perspectives on positive feelings and emotions: positive affect facilitates thinking and problem solving', in A.S.R. Manstead, N. Frijda and A. Fischer (eds), *Feelings and Emotions: The Amsterdam Symposium*, Cambridge and New York: Cambridge University Press, pp. 263–81.
- Isen, A.M., K.A. Daubman and G.P. Nowicki (1987), 'Positive affect facilitates creative problem solving', *Journal of Personality and Social Psychology*, **52**, 1122–31.
- Isen, A.M., M.M.S. Johnson, E. Mertz and G.F. Robinson (1985), 'The influence of positive affect on the unusualness of word associations', *Journal of Personality and Social Psychology*, **48**, 1413–26.
- Judge, T.A. and J.E. Bono (2001), 'Relationship of core self-evaluations traits – self-esteem, generalized self-efficacy, locus of control, and emotional stability – with job satisfaction and job performance: a meta-analysis', *Journal of Applied Psychology*, **86**, 80–92.
- Judge, T.A., A. Erez, J.E. Bono and C.J. Thoresen (2003), 'The Core Self-Evaluations Scale (CSES): development of a measure', *Personnel Psychology*, **56**, 303–31.
- Judge, T.A., D. Heller and M.K. Mount (2002), 'Five-factor model of personality and job satisfaction: a meta-analysis', *Journal of Applied Psychology*, **87**, 530–41.
- Judge, T.A. and C.L. Hulin (1993), 'Job satisfaction as a reflection of disposition: a multiple-source causal analysis', *Organizational Behavior and Human Decision Processes*, **56**, 388–421.
- Judge, T.A. and R. Ilies (2002), 'Relationship of personality to performance motivation: a meta-analytic review', *Journal of Applied Psychology*, **87**, 797–807.
- Judge, T.A. and R. Ilies (2004), 'Affect and job satisfaction: a study of their relationship at work and at home', *Journal of Applied Psychology*, **89**, 661–73.
- Judge, T.A., E.A. Locke and C.C. Durham (1997a), 'The dispositional causes of job satisfaction: a core evaluations approach', *Research in Organizational Behavior*, **19**, 151–88.
- Judge, T.A., E.A. Locke, C.C. Durham and A.N. Kluger (1998), 'Dispositional effects on job and life satisfaction: the role of core evaluations', *Journal of Applied Psychology*, **83**, 17–34.

150 *Research companion to emotion in organizations*

- Judge, T.A., J.J. Martocchio and C.J. Thoresen (1997b), 'Five-factor model of personality and employee absence', *Journal of Applied Psychology*, **82**, 745–55.
- Judge, T.A., B.A. Scott and R. Ilies (2006), 'Hostility, job attitudes, and workplace deviance: test of a multilevel model', *Journal of Applied Psychology*, **91**, 126–38.
- Kopelman, S., A.S. Rosette and L. Thompson (2006), 'The three faces of Eve: strategic displays of positive, negative, and neutral emotions in negotiations', *Organizational Behavior and Human Decision Processes*, **99**, 81–101.
- Kraiger, K., R.S. Billings and A.M. Isen (1989), 'The influence of positive affective states on task perceptions and satisfaction', *Organizational Behavior and Human Decision Processes*, **44**, 12–25.
- LeBreton, J.M., J.F. Binning and A.J. Adorno (2004), 'Importance of personality and job-specific affect for predicting job attitudes and withdrawal behavior', *Organizational Research Methods*, **7**, 300–325.
- Larsen, R.J. and T. Ketelaar (1991), 'Personality and susceptibility to positive and negative emotional states', *Journal of Personality and Social Psychology*, **61**, 132–40.
- Larson, R. and M. Csikszentmihalyi (1983), 'The experience sampling method', in H.T. Reis (ed.), *Naturalistic Approaches to Studying Social Interaction*, vol. 15, San Francisco, CA: Jossey-Bass, pp. 41–56.
- Latham, G.P. (2007), *Work Motivation: History, Theory, Research, and Practice*, Thousand Oaks, CA: Sage.
- Lee, K. and N.J. Allen (2002), 'Organizational citizenship behavior and workplace deviance: the role of affect and cognitions', *Journal of Applied Psychology*, **87**, 131–42.
- Lord, R.G. and R. Kanfer (2002), 'Emotions and organizational behavior', in Lord, R.J. Klimoski and Kanfer (eds), *Emotions in the Workplace: Understanding the Structure and Role of Emotions in the Workplace*, San Francisco, CA: Jossey-Bass, pp. 5–19.
- Martocchio, J.J. and D.I. Jimeno (2003), 'Employee absenteeism as an affective event', *Human Resource Management Review*, **13**, 227–41.
- Mesquita, B. and N.H. Frijda (1992), 'Cultural variations in emotions: a review', *Psychological Bulletin*, **112**, 179–204.
- Ormel, J. and T. Wohlfarth (1991), 'How neuroticism, long-term difficulties, and life situation change influence psychological distress: a longitudinal model', *Journal of Personality and Social Psychology*, **60**, 744–55.
- Pedersen, N.L., R. Plomin, G.E. McClearn and L. Friberg (1988), 'Neuroticism, extraversion, and related traits in adult twins reared apart and reared together', *Journal of Personality and Social Psychology*, **55**, 950–57.
- Rafaeli, A. and R.I. Sutton (1990), 'Busy stores and demanding customers: how do they affect the display of positive emotion?', *Academy of Management Journal*, **33**, 623–37.
- Repetti, R.L. (1993), 'Short-term effects of occupational stressors on daily mood and health complaints', *Health Psychology*, **12**, 125–31.
- Rotundo, M. and P.R. Sackett (2002), 'The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: a policy-capturing approach', *Journal of Applied Psychology*, **87**, 66–80.
- Scott, B.A. and T.A. Judge (in press), 'Insomnia, emotions, and job satisfaction: a multilevel study', *Journal of Management*.
- Smith, T.W. (1992), 'Hostility and health: current status of a psychosomatic hypothesis', *Health Psychology*, **11**, 139–50.
- Staw, B.M., N.E. Bell and J.A. Clausen (1986), 'The dispositional approach to job attitudes: a lifetime longitudinal test', *Administrative Science Quarterly*, **31**, 56–77.
- Staw, B.M. and J. Ross (1985), 'Stability in the midst of change: a dispositional approach to job attitudes', *Journal of Applied Psychology*, **70**, 469–80.
- Tan, H.H., M.D. Foo, C.L. Chong and R. Ng (2003), 'Situational and dispositional predictors of displays of positive emotions', *Journal of Organizational Behavior*, **24**, 961–78.
- Thoresen, C.J., J.C. Bradley, P.D. Bliese and J.D. Thoresen (2004), 'The Big Five personality traits and individual job performance growth trajectories in maintenance and traditional job stages', *Journal of Applied Psychology*, **89**, 835–53.
- Thoresen, C.J., S.A. Kaplan, A.P. Barsky, C.R. Warren and K. de Chermont (2003), 'The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration', *Psychological Bulletin*, **129**, 914–45.
- Watson, D. (2000), *Mood and Temperament*, New York: Guilford.
- Watson, D. and L.A. Clark (1992), 'On traits and temperament: general and specific factors of emotional experience and their relation to the five-factor model', *Journal of Personality*, **60**, 441–76.
- Watson, D., L.A. Clark and A. Tellegen (1988), 'Development and validation of brief measures of positive and negative affect: the PANAS scales', *Journal of Personality and Social Psychology*, **54**, 1063–70.
- Watson, D. and J.W. Pennebaker (1989), 'Health complaints, stress, and distress: exploring the central role of negative affectivity', *Psychological Review*, **96**, 234–54.

*Affect, satisfaction, and performance* 151

- Weiss, H.M. and R. Cropanzano (1996), 'Affective events theory: a theoretical discussion of the structure, causes, and consequences of affective experiences at work', in B.M. Staw and L.L. Cummings (eds), *Research in Organizational Behavior*, vol. 18, Greenwich, CT: JAI Press, pp. 1-74.
- Weiss, H.M., J.P. Nicholas and C.S. Daus (1999), 'An examination of the joint effects of affective experiences and job beliefs on job satisfaction and variations in affective experiences over time', *Organizational Behavior and Human Decision Processes*, **78**, 1-24.
- Weitz, J. (1952), 'A neglected concept in the study of job satisfaction', *Personnel Psychology*, **5**, 201-5.
- Wong, K.F.E., M. Yik and J.Y.Y. Kwong (2006), 'Understanding the emotional aspects of escalation of commitment: the role of negative affect', *Journal of Applied Psychology*, 282-97.