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The Role of Workplace Control in Positive Health and Wellbeing

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Introduction

Control both inside and outside the workplace has long played a prominent role in research and thinking about stress and health. The focus on job control has been largely on how its lack can contribute to ill-health, as often it is low job control that has been shown to relate to disease and impaired wellbeing, and how it might buffer the adverse effects of stressful job conditions (i.e., stressors). Indeed low levels of job control have been linked to both physical illness such as cardiovascular disease (Bosma, Stansfeld, & Marmot, 1998; Karasek, 1979) and psychological distress (Spector, 1986). Certainly job control would be important if it merely buffered the ill-effects of adverse environmental conditions and events. However, job control also has the potential to contribute to positive health and wellbeing beyond the mere absence of physical or psychological disorder or illness. In this chapter we will explore the potential role job control plays in positive happiness, health, and wellbeing, as well as occupational adjustment and success.

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The Nature of Control

Control can be conceptualized as both an environmental condition (e.g., one has the authority to purchase needed items from a department account) and a perception about those conditions, with both being important. Heckhausen and Schulz (1995) noted that humans are motivated to achieve behavior-event contingencies, and that the loss or even threat of loss of that ability is stressful. From the perceptual side, control is the belief that one can achieve desired outcomes and avoid undesirable ones (Thompson, 2009). In both cases, control is defined in terms of the connection between one's efforts and the results, both positive and negative, with the latter being the main focus of control-health research. For example, Thompson (1981) provided an in-depth analysis of the connection between control and response to aversive events. Her review suggested that the ability to avoid aversive events, most notably pain, results in less aversiveness and greater tolerance for the event. She concludes that the most likely explanation can be found in Miller's (1979) minimax hypothesis, which suggests that control allows the person the ability to minimize the maximum danger or discomfort. According to Miller, the person with control can attribute the cause of relief from the aversive event to a stable internal source, the self, rather than a less stable external source. Having perceptions of control provides more certainty that the severity of the aversive event can be kept within tolerable limits.

Another important distinction is between primary and secondary control (Rothbaum, Weisz, & Snyder, 1982). Primary control, both environmental and perceived, is the extent to which people can or believe they can affect the environment as defined in the previous paragraph. Secondary control is the extent to which an individual can control his or her response to the environment, for example, by enhancing the ability to predict what will happen in the future or by associating with powerful others to vicariously enhance feelings of control (Rothbaum et al., 1982). Whereas primary control is directed toward the external environment and involves mainly direct action, secondary control is directed toward the self and involves more cognitive activity (Heckhausen & Schulz, 1995).

In addition to perceptual control over the specific environment, there are personality characteristics that reflect people's predispositions to believe they have control across situations. Locus of control is the tendency to believe in control, with internal control beliefs reflecting personal control and external control beliefs reflecting control by luck, fate, or powerful others (Rotter,

1966). Spector (1988) developed the work locus of control construct to reflect locus of control specific to the workplace.

Self-efficacy is the extent to which individuals believe they are capable of performing well on specific classes of tasks, such as being good at fixing computers or writing papers (Bandura, 1977). Although focused toward self-appraised abilities, self-efficacy is considered a form of control (Thompson, 2009) in that the belief in one's ability to accomplish tasks is a belief in one being able to control certain aspects of the work environment.

In the workplace there are different ways in which control can manifest. Employee autonomy concerns control over how, when, and where job tasks are performed. Breaugh (1999) distinguished method autonomy (control over how job tasks are done), schedule autonomy (control over the hours worked), and criteria autonomy (control over goals and which tasks are done), although in most studies autonomy is measured globally (e.g., Hackman & Oldham, 1975; Spector, Dwyer, & Jex, 1988). Other forms of employee control include participation in decision making, which concerns allowing employees input into organizational decisions that might or might not affect them (Mikkelsen & Gundersen, 2003), and empowerment, which concerns enhancing employee feelings of competence and ability to impact the workplace (Spreitzer, Kizilos, & Nason, 1997). Although there are distinctions among these constructs, they all reflect employee perceptions of control.

Lack of Control and Stress

Low levels of control at work have been associated with adverse effects on employees, generally thought to be the result of reactions to stressful job conditions. If we accept that people are highly motivated to seek and maintain control (Heckhausen & Schulz, 1995; Thompson, 2009), perceptions of not having control are likely to be stressful themselves. Thus it is not surprising that lack of control has been found to relate to a variety of physical and psychological measures of poor health and wellbeing. For example, in a cross-sectional survey study, Spector et al. (1988) found that perceptions of low control at work were associated with feelings of anxiety when control was assessed by employees (perceived control) or by their supervisors (environmental control). Lack of control has also been associated with emotional distress and physical symptoms such as digestive distress and headache (see meta-analysis by Spector, 1986). In 5-year prospective studies,

Ganster, Fox, and Dwyer (2001) linked lack of control to use of medical services, and Bosma, Stansfeld, and Marmot (1998) linked lack of control to cardiovascular disease.

In addition to additive effects, Karasek's (1979) control–demand model posits that control can buffer the adverse effects of stressful job conditions on health and wellbeing. According to the theory, under conditions of low control job stressors will lead to ill-health. Although there have been many tests of this model, evidence for buffering has been inconsistent (Terry & Jimmieson, 1999), with some studies finding support and others failing to do so. A number of methodological issues, however, have been noted as contributing to the inconsistent support, such as inadequate statistical power to detect moderator effects in many studies, and the lack of correspondence between job stressors and control of those stressors (Spector, 2009).

Taken together, the evidence clearly supports a connection between low levels of work control, in all its forms, and high levels of physical and psychological symptoms of ill-health, as well as disease itself. What this line of research does not demonstrate, however, is that high control will do anything beyond helping to protect from ill-health. Equally important is the question of whether having control contributes to positive outcomes for employees in terms of better work happiness and satisfaction at work and beyond, as well as career and personal success.

Control and Positive Outcomes at Work

Control over work is undoubtedly an important precursor to positive outcomes for employees. Researchers have recognized the importance of control in employee wellbeing and satisfaction for many decades. Indeed, the literature has confirmed that a sense of control is a robust predictor of wellbeing and positive outcomes (Skinner, 1996). The theoretical notions as to why it could be expected that control at work relates to positive employee outcomes is an important discussion. First, we focus on why control may impact positive feelings such as work and life satisfaction, next we briefly mention the control–health outcome link, and finally we explore why control may be tied to employee motivation and career success-related outcomes.

Satisfaction with work may be related to amount of control on the job both directly and indirectly. First, control may directly relate to positive work attitudes because with control, in particular with autonomy, comes

the ability to structure one's schedule and environment to personal liking and preferences. For example, when high levels of autonomy are given to employees, they may be able to set their own work schedules according to personal choice or determine the exact hours of the day in which they are at work. One can imagine an employee who is able to elect to go in to work at a time which allows him or her to drop their children off at school, leave work midday to run an errand, and schedule tasks during the day in order to complete them in the most time-efficient manner. These types of freedoms may accumulate to significant reductions in daily hassles and inefficiencies, and enhancements to typical non-work life domains such as social life or family life. In other words, when high levels of control are afforded, individuals may be able to achieve a better work–life or work–family balance, an idea that has indeed been supported in research (Geurts, Beckers, Taris, Kompier, & Smulders, 2009; Jang, Park, & Zippay, 2011; Parris, Vickers, & Wilkes, 2008; Valcour, 2007).

Furthermore, having control over the physical work space, such as ability to adjust the lighting, temperature, and décor to personal liking or display personal photos or art, may be aspects of the work environment that can directly lead to more positive feelings while at work and when reflecting upon work. In sum, power over personal schedule and environment may directly impact job satisfaction and life satisfaction by allowing employees simply to maximize the amount of satisfaction that can be derived from their daily lives and their environment.

In fact, the prominent job characteristics theory (Hackman & Oldham, 1975) suggests that high control can lead to positive employee wellbeing indicators such as job satisfaction. The theory also suggests that high levels of autonomy at work can translate into choice over job tasks and/or the structure of the actual work, and this kind of autonomy or control cultivates a sense of responsibility over job outcomes. When individuals have an experienced responsibility for the outcomes of their job, such as the quality or quantity of the work produced, accomplishing that work leads to greater job satisfaction. Perceptions of the characteristics of the job, such as level of job autonomy, are thought to precede affective states, a notion that has been well supported in research (Champoux, 1991; Fried & Ferris, 1987; Hackman & Oldham, 1976; Loher, Noe, Moeller, & Fitzgerald, 1985). Thus, the idea that autonomy or control on the job is tied to employee wellbeing, specifically job satisfaction, is not a stranger to theoretical or empirical study and has received substantial support.

Second, control may be indirectly related to positive psychological or physical outcomes. It may be associated with health outcomes simply based on the human physiological response to unfavorable or uncontrollable conditions in the environment. For example, when control at work is high, stress-related hormones such as catecholamines and cortisol are lower than when control is low (Frankenhaeuser & Johansson, 1986). Prolonged exposure to high levels of these hormones can result in impaired immune systems (Stephen, 2003). Furthermore, control may allow individuals to take necessary breaks or obtain appropriate equipment to prevent injuries or illness. Some work has found that control at work is associated with fewer work-related musculoskeletal complaints (Eatough, Way, & Chang, 2012), perhaps because control allows employees to take self-directed breaks from repetitive movement. Autonomy at work may also allow individuals to care for their personal health. For example, control over daily work schedule may allow an employee to leave work to have a doctor's visit, which prevents physical or psychological health needs from being neglected. When a person is deprived of such liberty with their time, options for scheduling or attending appointments may be much more limited. These reasons may in part be responsible for the linkages between low control and poor health found in the literature, such as with somatic complaints and cardiovascular disease (Landsbergis, Schnall, & Dobson, 2009; van der Doef & Maes, 1998). The experience of poor health is associated with negative feelings that adversely affect satisfaction and general happiness.

Career and personal success may also be associated with high control. Several explanations for this are possible. High control may simply lead to more effectiveness on the job. For example, when control is high an employee may be better able to find innovative ways to complete job tasks, seek assistance, or delegate tasks, and may be able to manage their time in a way that maximizes efficiency. Warr (1987) suggests the possibility that jobs that do not provide sufficient opportunities for task control will also rob employees of opportunities to use their full range of skills. Reduced opportunity for skill utilization can in turn prevent employees from developing new work capabilities or expertise. In fact, job control has been shown to relate to the concept of work engagement. In a recent study, job control was related to increased engagement (vigor, dedication, and absorption) in work (Parker, Jimmieson, & Amiot, 2010). Similarly, as described in Karasek's job demands–control model (1979), high control may lead to learning and an expansion of one's knowledge on how to predict, cope with, and maintain high performance during high job demands. Even

more, job control may actually improve one's home life via increased work–family facilitation. Using a daily diary design, Butler, Grzywacz, Bass, and Linney (2005) found daily job control promoted more work–family facilitation, perhaps by allowing the job to be a resource that employees could draw upon at home. Thus, through these various mechanisms, job control may lead to increased effectiveness and, potentially, career and personal success outcomes.

In addition, control in the forms of personal characteristics such as locus of control and self-efficacy are likely to coincide with success indicators. It is probable that possessing a general sense of control over one's life and one's ability to succeed at meeting goals leads an individual to make more success-prone decisions. For example, when goals are thought to be achievable, the actual occupations or jobs selected may be appropriately matched to the upper bound of one's skill level, allowing for full use of one's potential. A highly self-efficacious individual may also feel more inclined to choose a job in line with personal interests. Appropriate or well-suited vocational choices may directly relate to positive feelings about work (Mount & Muchinsky, 1978). In addition, it may not only be that individuals that have a high sense of personal control select occupations in which the opportunity for high career success is likely, but they may also be more able to successfully secure a job offer when seeking employment. For example, high internal work locus of control can lead to more favorable interview impressions (Silvester, Anderson-Gough, Anderson, & Mohamed, 2002) and interview outcomes (Cook, Vance, & Spector, 2000).

Control in the form of participation in decision making may also be important for positive career outcomes. Career and personal success may be better achieved when participation in decision making is high as this signals that employees have more instrumental control over the conditions, functions, or requirements of their own job. Having influence over actual job tasks or the specifics of one's role at work may allow an employee to shape their job tasks, evaluation metrics, and performance standards in such a way that they are achievable for them, creating an environment where career success is more likely.

Furthermore, career and personal success may arise from job control because high control encourages intrinsic motivation to work (Barney & Elias, 2010). Being afforded personal freedoms at work may make work more appealing and lead to more effort on job duties. When work is more intrinsically driven and more effort is expended, success indicators such as performance evaluations, goal attainment, and pay raises are likely to follow.

In other words, performance at work (Dodd & Ganster, 1996) and higher quality work (Kauffeld, Jonas, & Frey, 2004) may emerge from employees with high control. Moreover, employees with high job control may also be given the opportunities to perform above and beyond their formal job requirements (Morgeson, Delaney-Klinger, & Hemingway, 2005), which may be another mechanism by which control prompts rewards on the job such as promotions (Allen, 2006). Thus, several explanatory pathways are possible when thinking about control–positive outcome relationships.

Perceived Control and Objective Control

When discussing the role of control in wellbeing, it is natural to think of the actual control an individual has over the environment, their schedule, their demands, or their job tasks. However, in empirical research, it is often difficult to measure the objective or actual control an individual has. Rather, researchers tend to measure perceptions of control as a proxy of true or objective control. This raises the question of whether perceptions of control are as powerful as actual control, or if perceived and actual control are similar predictors of wellbeing. Some research addressing the issue has suggested that perceived control may actually be a stronger predictor of outcomes than actual control (e.g., Spector & Fox, 2003). Spector and Fox (2003) compared the relationship between a measure of control specifically geared to tap into actual control, the Factual Autonomy Scale (FAS), and a popular measure of control that tends to capture more subjective assessments, the autonomy subscale of the Job Diagnostic Survey (JDS; Hackman & Oldham, 1975). While the FAS asks about things such as needing permission to change the hours one works, the JDS includes perception-based items such as "The job gives me a chance to use my personal initiative . . .." In fact, the perception-based scale was more strongly correlated with job satisfaction than was the fact-based scale and self-reports converged more with coworker and supervisor reports on the FAS, illustrating that perceptions can be quite an individual experience that may or may not be totally tied to reality, and that these perceptions about control may be the more meaningful factor in predicting employee wellbeing.

Thus, because perceived control tends to be the construct measured in research and may be just as, if not more important than actual control, the focus of the rest of this chapter is primarily on the impact of perceptions of control in positive employee wellbeing. Theoretically, perceptions

should be quite important antecedents to wellbeing. As mentioned, the minimax hypothesis suggests that individuals strive to maintain their ability to minimize the maximum possible aversiveness of outcomes of demands or stressors. Along these lines, researchers (e.g., Spector, 1998; Terry & Jimmieson, 1999) have discussed perceptions of control as a mechanism for reducing the damage of high demands. Avoiding aversive outcomes can transpire by allowing the individual to both sense control over the amount of exposure to the stressor (e.g., feeling able to control the completion of tasks regarding deadline in order to keep stressor level manageable) or eliminate the demand if the strain becomes too great (e.g., feeling able to decline tasks, delegate to others, or even quit the job). However, it may also be the sheer knowledge (or perception) of being able to manage or terminate an aversive stimulus that can in and of itself reduce the strain response and promote positive wellbeing.

Evidence for Control–Positive Outcome Relationships

The importance of perceptions of control on the job has been studied in relation to positive feelings about work, positive feelings about life, motivation, and career success. In general, findings have pointed toward perceptions of control leading to greater employee wellbeing. However, the complete nomological network of control and positive psychology-related outcomes has been far from comprehensively examined. For example, as of the beginning of 2012, searching the keywords "job control" and "happiness" returned only three relevant studies on a PsychInfo literature search, highlighting the need for research examining broader personal wellbeing outcomes related to control at work. Nevertheless, a brief summary of a selection of control–positive outcome relationships discovered to date follows. Both perceived control (from here on the terms "perceived control" and "job control" represent a general construct representing autonomy, participation in decision making, and empowerment when self-rated unless otherwise specified) and personal characteristics associated with control (namely locus of control and self-efficacy) will be discussed.

Perceptions of control tend to be related to positive feelings such as job satisfaction, life satisfaction, and happiness. Job satisfaction is the most widely studied positive outcome related to perceived control. Perceived control tends to be robustly associated with job satisfaction levels, both when job

satisfaction is approached globally and when individual job satisfaction facets are considered. In fact, in a meta-analysis by Spector (1986), 101 samples were used to examine the overall relationship between job control and job satisfaction. Control was found to be related to general job satisfaction (mean $r = .30$), and facets of job satisfaction (mean r between .19 and .49), with growth, work, and supervision facets showing the largest relationships. Interestingly, similar patterns of relationships between control and job satisfaction were found when autonomy at work and participation in decision making were analyzed separately, suggesting each form of control has meaning for job satisfaction levels. In a more recent study by Liu, Spector, and Jex (2005), perceptions of control were related to job satisfaction, but nonsignificant relationships were reported when independent raters provided control ratings for that job or the O*NET ratings of autonomy were used, underscoring the potential importance of *perceptions* themselves in positive outcomes like job satisfaction. Furthermore, the control–job satisfaction relationship seems to be quite robust over time. For example, in a 3-year longitudinal study, perceptions of job control stably predicted job satisfaction across three time points (Mansell, Brough, & Cole, 2006). Some work has sought to better understand the mechanisms by which job control may lead to satisfaction and has found support for the idea that perceptions of control may lead to great use of one's skills at work and this leads to more positive job attitudes (Morrison, Cordery, Girardi, & Payne, 2005).

Broader measures of employee wellbeing may also be particularly relevant to perceived job control. Specifically, life satisfaction and happiness have received support as outcomes linked to perceived control. For example, in a study of fashion models, Meyer, Enström, Harstveit, Bowles, and Beevers (2007) found that autonomy needs satisfaction, or the degree to which an individual's preferences for control are satisfied at work, was related to life satisfaction (.53) and happiness (.48). In one study using a large Canadian organization, reports of job control was the only factor to account for unique variance in life satisfaction when included in a model with other role-related job characteristics (Day & Jreige, 2002). This study underscores the uniqueness and importance of control at work as a contributor to overall life satisfaction. Similarly, in a large study of office workers perceptions of control at work were related to employee reports of happiness (Piotrkowski, Cohen, & Coray, 1992).

As mentioned earlier, motivation may also be an important positive outcome of job control. Specific work investigating perceptions of control

and motivation at work have received considerable research attention. In a study of public sector employees, perceptions of control predicted job satisfaction as well as an outcome termed "work wellbeing," a construct which included emotions (such as tension at work) and motivation at work (Mansell & Brough, 2005). In Spector's meta-analysis (1986), perceptions of job control were related to motivation at work, in this case conceptualized as how important an employee feels it is to do their job well, at a .29 level, similar to the meta-analytic relationship between job control and job satisfaction.

Furthermore, as one might expect given the theoretical discussion above, perceived control has also been found to predict career-related outcomes. In a study using a random sample of individuals in the welfare system, Sullivan (2005) found perceived control predicted whether individuals were employed and if employed, whether the job was high paying or not. In a large Dutch sample, control at work has been shown to also lead to personal growth and development opportunities (Van Ruysseveldt, Verboon, & Smulders, 2011). Thus, employment status, pay, and growth and development opportunities at work have been demonstrated to be relevant potential outcomes of job control.

Control-Related Personality Variables

Finally, personality characteristics related to control are predictors of positive employee outcomes. Undoubtedly, personal factors such as locus of control and self-efficacy interact with the environment to influence perceptions of control (Spector, 1998) and thus the impact of control perceptions is not a process independent from individual differences. However, we can think about the importance of these personal factors as meaningful precursors themselves as research has shown that they also have direct relationships with outcomes. As discussed, personality characteristics—specifically locus of control and self-efficacy—are conceptualized somewhat differently than actual job control or perceptions of job control, as they represent individual difference factors rather than situational or contextual factors. Research aimed specifically at these personal characteristics has also explored the resulting impact on positive employee outcomes of locus of control and self-efficacy. Similar to the state of the literature regarding perceptions of job control, holistically, research suggests high internal locus of control and high self-efficacy are beneficial for positive wellbeing.

Meta-analytic research has demonstrated internal work locus of control to be related to job satisfaction at a mean level of .33 and to be related to life satisfaction at a mean level of .35 (Ng, Sorensen, & Eby, 2006). Ng et al. (2006) also demonstrated that mental ($r = .36$) and physical ($r = .26$) health have relationships with work locus of control. Spector and O'Connell (1994) used a longitudinal design in which they showed that locus of control assessed in college students prior to employment predicted job satisfaction approximately a year after graduation. Noor (1995) examined locus of control in relation to happiness. Happiness was measured by the combined score on the Oxford Happiness Inventory subscales "positive cognition" and "positive affect" and the relationship between this score and locus of control was .47. In addition, Noor demonstrated that when support at work was high, internal locus of control served to protect the happiness of employees by preventing challenges on the job from degrading positive affect levels. Self-efficacy has demonstrated similar relationships. For example, self-efficacy has positively predicted life satisfaction and positive thinking (Caprara & Steca, 2006). While these studies serve only as examples, locus of control and self-efficacy are linked to a positive outlook, expectations of the future, job and life satisfaction, and general happiness.

Interestingly, research also supports the notion that greater overall career success may be in part determined by locus of control and self-efficacy. The greater success achieved by internally oriented or highly self-efficacious individuals may be in part due to their expectation of effort to outcome relationships. For example, individuals with high self-efficacy tend to do more job search planning and job search behaviors (Fort, Jacquet, & Leroy, 2011). Furthermore, aligning personal interests with work may be more likely when a sense of personal control is high. Some work shows that individuals with high internal locus of control make vocational choices more in line with their career interests. For example, Luzzo and Ward (1995) demonstrated that locus of control can predict the congruence between career aspirations and the current occupation of college students. Werbel, Landau, and DeCarlo (1996) similarly showed that locus of control and reports of person–job congruence were significantly related in a sample of employees from a financial institution. Thus, recognizing and obtaining well-fitting jobs are more likely when these personal characteristics are present. In addition, procuring an employment offer may be more likely. When an internal locus of control is displayed during job interviews, interviewers are more likely to leave with a positive impression of the candidate (Cook et al., 2000; Silvester et al., 2002). Similarly, more internal, controllable attributions for

negative events or information lead to more successful graduate recruitment interview outcomes (Silvester, 1997). Thus, possessing high internal locus of control or high self-efficacy can have meaningful impacts on career success via behaviors associated with identifying and attaining worthy vocations.

It is perhaps in part a result of these beneficial vocational behaviors that locus of control and self-efficacy have also been shown to translate into objective and subjective career success markers. For example, in a meta-analysis by Ng, Eby, Sorensen, and Feldman (2005), locus of control was found to significantly predict salary (mean $r = .06$) and career satisfaction (mean $r = .47$). In addition, internal locus of control has been associated with better promotion opportunities (Sharma & Chaudhary, 1980). Furthermore, some longitudinal evidence points to the notion that self-efficacy can predict salary, hierarchical status, and career satisfaction well into the future of recent graduates (Abele & Spurk, 2009). Thus, individual characteristics representing a personal sense of control are significant correlates of positive outcomes relevant to the satisfaction and success of employees.

Conclusions and Future Directions

Although the literature we have reviewed suggests clear linkages between control and positive health and wellbeing, there are a number of unanswered questions that deserve attention; we note three here. First, how much perceived control is sufficient to potentially impact positive outcomes, and do people vary in their optimal level of control? Under many of the current frameworks such as the job characteristics theory (Hackman & Oldham, 1976) and the job demand–control theory (Karasek, 1979), complex nonlinear relationship patterns have yet to be incorporated. However, future investigations might be able to refine these theories by considering more complex patterns of relationships. For example, although enhancing job characteristics like autonomy may in general be quite beneficial for employee satisfaction, perhaps there is a point of diminishing returns after an optimal level of control is reached. Furthermore, individual differences, such as growth need strength, certainly play a moderator role when it comes to positive wellbeing (Spector, 1985), so that the ideal level varies between people.

Second, and relatedly, is there a point at which too much control becomes a burden and begins to degrade wellbeing? It may be that when demands are high and these high demands are coupled with extreme levels of control

(perhaps to the point of lack of guidance or support), control's expected buffering effects as outlined in the job demand–control model (Karasek, 1979) may be reversed. In other words, when the pressure is high and autonomy in managing the demands leaves an employee feeling overwhelmed, control may no longer be so appealing. Indeed, Narayanan, Menon, and Spector (1999) showed how too little direction (having too much autonomy) was considered a stressor in a sample of Indian employees. Gaining a better understanding of the linear or perhaps nonlinear relationship between control and positive outcomes could result in more specific recommendations for managers and supervisors to maximize the benefits of offering autonomy to employees.

Third, how do employees develop their perceptions of control; perhaps via idiosyncratic internal standards (Spector & Jex, 1991) or perhaps via social comparison (Salancik & Pfeffer, 1978)? At this time, it is not well understood whether perceptions of control are formed independent of comparative others or if control is sensed by examining and comparing the autonomy levels of relevant others. If perceptions of control are in fact formed in part via social comparison, it would be interesting to know who the comparative others often are. For example, comparisons may be localized to others at one's own workplace, expand to others outside the organization in similar jobs, or even apply to spouses or individuals in one's social network. Understanding the process by which control perceptions are formed could have important practical implications. For example, if social comparison to others at work is one primary input for forming control perceptions, managers may be urged to evaluate procedures used to distribute autonomy at work so fairness is preserved. Or, if perceptions of control are quite independent of social comparison, perhaps effort should simply be allocated to highlighting and enhancing the true realms of autonomy individuals possess in the workplace. Whereas these questions may be left generally unrequited at this point, future work is expected to begin to unravel some of these more complex questions regarding how perceptions of control develop and influence positive outcomes.

In sum, workplace control plays an important role in positive employee outcomes and wellbeing. It is important to keep in mind that the concept of "workplace control" as discussed in this chapter has been referred to at different times as actual job control, job autonomy, participation in decision making, perceived control, locus of control, self-efficacy, and empowerment. Each has important theoretical and empirical contributions to the discussion of control as a precursor of positive employee outcomes and wellbeing,

topics that were explored here. As detailed, it is expected and supported that control at work has established ties to positive feelings, job satisfaction, life satisfaction, motivation, and career and personal success. Continued efforts toward a more complete understanding of the theory, process, and positive outcomes associated with work control are encouraged and anticipated.

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