

CHAPTER 1

HIGH-INVOLVEMENT WORK PROCESSES AND SYSTEMS: A REVIEW OF THEORY, DISTRIBUTION, OUTCOMES, AND TENSIONS

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ABSTRACT

High-involvement work processes (HIWPs) are associated with high levels of employee influence over the work process, such as high levels of control over how to handle individual job tasks or a high level of involvement at team or workplace level in designing work procedures. When implementations of HIWPs are accompanied by companion investments in human capital – for example, in better information and training, higher pay and stronger employee voice – it is appropriate to talk not only of HIWPs but of “high-involvement work systems” (HIWSs). This chapter reviews the theory and practice of HIWPs and HIWSs. Across a range of academic perspectives and societies, it has regularly been argued that steps to enhance employee involvement in decision-making create better opportunities to perform, better utilization of skill and human potential, and better employee motivation, leading, in turn, to various improvements in organizational and employee outcomes.

However, there are also costs to increased employee involvement and the authors review the important economic and sociopolitical contingencies that help to explain the incidence or distribution of HIWPs and HIWSs. The authors also review the

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research on the outcomes of higher employee involvement for firms and workers, discuss the quality of the research methods used, and consider the tensions with which the model is associated. This chapter concludes with an outline of the research agenda, envisaging an ongoing role for both quantitative and qualitative studies. Without ignoring the difficulties involved, the authors argue, from the societal perspective, that the high-involvement pathway should be considered one of the most important vectors available to improve the quality of work and employee well-being.

Keywords: High-involvement work processes; high-involvement work systems; worker participation; high-performance work systems; employee autonomy; job quality; employee well-being

High-involvement work processes (HIWPs) are concerned with the way in which people carry out their work in organizations. They are associated with high levels of employee influence over the work process, such as high levels of control over how to handle individual job tasks or a high level of involvement at team or workplace level in designing work procedures (e.g., Felstead & Gallie, 2004; Lawler, 1986). In such approaches, employees participate more fully in decision-making than is observed when work practices are heavily controlled by technologies, by bureaucratic rules or by managerial supervision. When implementations of HIWPs are accompanied by improved investments in human capital, such as better two-way communication, greater training and higher pay – we can talk not only of HIWPs but of “high-involvement work systems” (HIWSs). Fostering a high-involvement model of working is widely regarded as an important pathway to better workplace performance and employee well-being although these claims need careful assessment against the available evidence.

The goal of this chapter is to provide a comprehensive review of the literature on HIWPs/HIWSs. We begin by defining our terminology and then outline the evolution of this philosophy of working, both in terms of its industrial history and the intellectual traditions or theories that have argued a case for it. We then review the research on the contingencies that help to explain the distribution of HIWPs/HIWSs. Many theorists can marshal an argument in favor of higher employee involvement in decision-making but a key question we still face is this: if there is so much to gain, why is there not a greater uptake of such work systems? This leads into a section that reviews the evidence on the outcomes of HIWPs/HIWSs for firms and workers. In this section, we also review issues in research methods. We then present a section that summarizes and discusses key tensions associated with high-involvement working before we reach our final conclusions, including our claim that this model is one of the most important ways in which we can improve the quality of work and well-being in our societies.

HIWPs AND HIWSs: TERMINOLOGY

In defining what we mean, let us begin by locating HIWPs within the wider literature on human resource management (HRM) and employment relations. It helps

to contrast HIWPs with another commonplace term: that of “high-performance work systems” (HPWSs), a notion that originated in the United States, gaining prominence in the debate over the post-war decline of US manufacturing competitiveness. Cappelli and Neumark (2001) trace the term’s popularity to an influential public report, *America’s Choice: High Skills or Low Wages!* (Commission on the Skills of the American Workforce, 1990). The term was given significant impetus by Appelbaum, Bailey, Berg, and Kalleberg (2000), whose book, *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*, generated major interest in how reforms in work organization could revive the fortunes of US manufacturing.

While the initial focus was on the way that production work is organized in manufacturing, the topic of HPWSs became part of a larger agenda concerned with human performance right across manufacturing and services, including in the public sector (e.g., Knies & Leisink, 2018; Leggat, Bartram, & Stanton, 2011). The term garnered wide appeal in the policy and practitioner communities and is deployed well beyond the United States. It is used in an analysis of workplace learning across countries and industries conducted for the International Labour Organization (Ashton & Sung, 2002). It is used in major studies of management practice in the European Union (EU) where there are concerns, similar to those in the United States, about how to simultaneously enhance business competitiveness and improve employee outcomes (e.g., Eurofound, 2013; Pot & Koningsveld, 2009). Similarly, it is popular in China, where the HPWS research stream involves large numbers of firms and focuses on both employee and organizational outcomes (e.g., Chang & Chen, 2011; Gong, Chang, & Cheung, 2010; Zhang & Morris, 2014).

However, definitional issues have dogged the notion of HPWSs from the outset (Boxall & Macky, 2009). As early as the mid-1990s, Becker and Gerhart (1996) illustrated the diversity of conceptions of the relevant HR practices involved in a table of five leading HPWS studies in the United States. These studies listed as many as 11 and as few as four practices, with no one practice common to all five and with some disagreement as to whether particular practices, such as performance-related pay, had positive or negative effects. What might be meant by the term only becomes more complex when we move from any one national context and recognize the significant variations in how HR practices are designed, understood, and implemented in different societies, regions, and cultures (e.g., Paaauwe & Boselie, 2003, 2007). Reviews and studies of HPWSs have regularly observed that “little consensus exists among researchers regarding the specific practices to be included in the configuration of high-performance human resource practices” (Sun, Aryee, & Law, 2007, p. 558).

It is time to admit that this is neither surprising nor a problem over which we should be losing sleep. Two points ought to be clear. First, in every context, organizations need some suitable blend of HR practices to achieve any kind of performance (Boxall & Steeneveld, 1999). In order to survive and grow, every organization needs some kind of “human resourcing” process (Watson, 2005). It needs to bring people on board and manage them in some appropriate way in order to generate performances. This process is initiated by the founding

entrepreneur(s), whose actions ignite it. Second, what will be highly performing in each context is inevitably going to depend on a range of contingencies. As Kaufman and Miller (2011, p. 553) conclude from their empirical analysis of US firms: firms' choices of HR practices are "systematically linked to a variety of economic, technological, organizational, and management characteristics." Similarly, Stavrou, Brewster, and Charalambous (2010) identified 21 distinct bundles of HRM practices in the European private sector, with 10 of these related to business performance, while Chow, Huang, and Liu's (2008) study of 241 businesses in Guangzhou identified four distinct HR configurations predicting performance and employee turnover. In reality, with all the diversity and complexity of the organizational world, there can be no final determination of a set of highly performing HR practices – and it is time to stop lamenting the fact. We can, however, help managers to identify the principles that will assist them to develop a view of what will be highly performing in their particular context (Boxall & Purcell, 2016). The important task that should energize us as researchers is identifying which models of HRM emerge in which contexts, why they do so (i.e., which actors and contingencies help to shape them?), describing how they work (the "black box" problem), testing how they affect the outcomes of the parties and, finally, making arguments for how they might do so more effectively (Boxall, Purcell, & Wright, 2007).

With this mission in mind, our goal is to focus on one model of working that may lead to better outcomes: the high-involvement model, which connotes a philosophy or a theme in management action that fosters greater employee participation in workplace decision-making. High-involvement working can be defined as "an ongoing experience of high levels of influence over the decisions that affect the work process, identified through worker perceptions of their jobs and their working environment" (Boxall & Winterton, 2018, p. 30). The high-involvement pathway signifies a redistribution of decision-making about work practices inside organizations. Our main concern is with non-managerial workers who are employed in a production process of some kind, either making a product or serving a customer. For example, the high-involvement pathway could be applied to the decision-making powers of an operator in a manufacturing process, a retail assistant in a supermarket or an academic in a lecture room.

To be fair, a significant number of HPWS researchers have used the HPWS term to signify a high-involvement route to better performance. Most notably, Appelbaum et al. (2000, pp. 7, 39–40) envisage more empowering work design as the starting point for developing a high-performance system. They investigated its manifestation across three different kinds of manufacturing, including modular manufacturing in apparel where they measured a move away from management control of individualized tasks to teams of machinists working in a semi-autonomous way (Appelbaum et al., 2000, pp. 74–75). However, others simply adopted the approach of copying a preexisting list of practices in order to establish authority for a study, which is one well-worn path for getting through the review process at academic journals. For example, many have drawn on Huselid's (1995) list of 13 "high performance work practices (HPWPs)," itself a somewhat modified version of the items considered to represent "sophistication" in HRM by Delaney,

Lewin, and Ichniowski (1989). This list has the weight of high-cited work behind it but only has one item in the 9-item measure of “employee skills and organizational structures” ($\alpha = 0.67$) that might conceivably relate to high-involvement working (“What is the proportion of the workforce who participate in quality of work life programs, quality circles (QC) and/or labor-management participation teams?” (Huselid, 1995, p. 646). We cannot really say that a high aggregate score on this 9-item scale signifies a high-involvement workplace because a low score on the one relevant item may be swamped by higher scores on the others.

We consider that talking about a high-involvement model of working has two obvious virtues (Boxall & Macky, 2009). First, it is clearer what we mean. We mean a pathway to performance that involves a high degree of employee influence in work-related decisions, although we still need to take care with the degree of variety that this can imply within and across organizations, industries, and societies. The second virtue is that we are not assuming that the approach is “necessarily performance-enhancing” (Bryson, Forth, & Kirby, 2005, p. 460). Whether organizational performance is enhanced by implementing a HIWP has to be demonstrated in the specific context, not asserted in a generalized way. As far as management is concerned, the benefits of implementing higher involvement may not exceed the costs, as we will explore further in this review.

If we go down this road, a key issue is how we discern high-involvement working in practice. While some studies of the diffusion of participative practices rely on management reports (e.g., Osterman, 1994, 2000), like Vandenberg, Richardson, and Eastman (1999), we argue that the acid test is the level of influence that employees report based on their experience (Boxall & Macky, 2009; Boxall & Winterton, 2018). In the case of a complex practice such as teamwork, for example, how much worker control does management intend and how much is enacted? The risks of treating teamwork as a homogenous practice are shown in Gallie, Zhou, Felstead, and Green’s (2012) analysis of the British Skills Surveys, which describes the range from externally controlled to self-directed forms of teamwork and confirms that the benefits for learning and employee well-being are heavily weighted in favor of the latter (see also Felstead, Gallie, Green, & Zhou, 2010). The differential impact teams have on those that work within them has also long been recognized (e.g., Barker, 1993; Wright & Barker, 2000). Teamwork is actually very diverse: in what is envisaged for it, in how it is experienced, and in whether managers and workers find it appropriate to their circumstances.

Given the prevalence of this kind of issue, we use the term HIWP, or high-involvement working (Felstead & Gallie, 2004), to place the emphasis on how employees actually experience their work, irrespective of what managerial respondents say, or academics assume, about particular practices (Boxall & Winterton, 2018). In this view, high-involvement working is an ongoing experience of high levels of influence over the decisions that affect the work process, identified through individuals’ perceptions of their jobs and their working environment. Workers with a high level of influence feel highly empowered at work. For example, this may include influence over the nature of working methods or procedures, over issues of work scheduling, pacing, and sequencing, and over the criteria used to evaluate performance (Breugh, 1985; Gallie, Felstead, & Green, 2004).

Like Gallie et al. (2004), we distinguish between control or autonomy at the level of the individual's job and worker involvement in the design of the productive system in which their jobs are embedded. This is similar to the definitions developed by Wood, Van Veldhoven, Croon, and de Menezes (2012), who contrast involvement at the level of the role with involvement in wider organizational decision-making, and is reflected in the typology utilized by Eurofound (2013) and in the European research of Dhondt, Pot, and Kraan (2014). The distinction is important because worker control can be improved in some jobs without negative consequences for the performance or well-being of others while other jobs are deeply embedded in an interdependent productive system in which high levels of individual autonomy can be counter-productive (e.g., Langfred, 2005). Managers may use the two types of involvement in different combinations and for different purposes as the business context changes (e.g., Wood & Ogbonnaya, 2018). In what follows, the importance of distinguishing these two levels of involvement will become apparent, particularly when we discuss the controversy over the nature and impacts of lean production.

HIWPs AND HIWSs: EVOLUTION AND THEORY

The High-involvement Model in Industrial History

In terms of workplace history, talking of HIWPs signals a shift away from the low-involvement characteristics of the "industrial model" of HRM (Jacoby, 2004; Osterman, 1987), which was "characterised by jobs that are low in discretion, responsibility and scope and with workers subservient to a hierarchy of management authority" (Boxall & Purcell, 2016, p. 185). This model was fostered by the Industrial Revolution of the eighteenth and nineteenth centuries and was reinforced by the techniques of "scientific management" developed by Taylor (1911). Formal processes, such as "time-and-motion study," were used to investigate the informal methods workers had developed on the job, quantifying how long it took them to carry out their tasks and how they moved within the work space, interacting with materials, tools, and machines. Work procedures were then redesigned by a management expert to make human activities more efficient and to create a basis for identifying normal output and for linking pay incentives to higher levels of output. Henry Ford's contribution was to adopt the moving assembly line in conjunction with Taylorist work-study techniques.

It is wrong to suggest that Taylorist–Fordist practices permeated all manufacturing industries or all manufacturing jobs because craft production and craft work, in which qualified tradespeople or artisans exercised a high level of control, remained important (Burawoy, 1979; Littler, 1982). This was the case in small-scale industries, in highly specialized tasks within mass production (such as tool-making), and in highly mechanized industries with continuous-flow production in which workers with a strong capacity for problem-solving were needed to oversee complex processes (Blauner, 1964). However, much work in assembly-line industries, such as automobiles, became subject to a process of "de-skilling" or "work simplification" in which core operating jobs were reduced to executing a simple set of tasks that were constantly

repeated while the more important conceptual tasks were reserved to managers (e.g., Bélanger, Giles, & Murray, 2002; Clegg, 1984).

As capitalist economies expanded, Taylorist work practices spread into mass, standardized services, creating a “scripted model” of HRM (Boxall & Purcell, 2016). Employee training in fast-food outlets, chain stores, supermarkets, contact centers, and cinema complexes, for example, often includes scripting in an attempt to ensure that customers are processed in a standard way. Front-line workers are required to follow a standardized set of steps in how they greet and sell services to a customer in a queue, much like an assembly line, as well as regulate and “act out” their emotions in prescribed ways when dealing with customers (Grandey & Gabriel, 2015). Managers use the scripted model of HRM to process large volumes of customers as rapidly and as consistently as possible, which enhances profitability. In this way, the scripted model of HRM mirrors the industrial model of HRM, and an equivalent of the manufacturing “speed-up” can occur, increasing stress levels and leading to high levels of employee turnover (Cordery & Parker, 2007; Deery, Iverson, & Walsh, 2002).

HIWPs, then, represent an attempt to make a discernible shift in the locus of decision-making, unwinding Taylorist work design or returning greater workplace control to the production/service workforce (Boxall & Macky, 2009). They are not about an absolute shift in power, which is hardly likely, but about a relative shift in the balance of decision-making through decentralizing greater control over work practices to individual workers or teams. This shift can be manifested in a variety of ways but it should represent a reversal of the Taylorist drive to give managers power over the “thinking, coordinating, and controlling” processes in the workplace (Lawler, 1986, p. 6).

In terms of the stimulation to consider such reforms, the threat to Western manufacturing associated with Japanese production systems in the 1970s and 1980s is credited with forcing a rethinking of work organization in key industries (e.g., Appelbaum & Batt, 1994; Lawler, 1986; Piore & Sabel, 1984). Out of this rethinking, a reformed version of the industrial model of working emerged, one that places greater emphasis on tapping into the skills and underlying potential of production workers (i.e., “working smarter” rather than “working harder”). Such a model was seen as necessary to improve quality and the capacity to respond more flexibly to markets, including through higher levels of innovation in products and processes (Boxall & Purcell, 2016). Greater employee involvement in decision-making is not, of course, likely to be the only way in which management responds to competitive pressure. Management moves to reform production systems have often started with investments in advanced technologies (Boyer, Keong Leong, Ward, & Krajewski, 1997; Challis, Samson, & Lawson, 2005). The combination of investments in new technologies *and* in related work practices and employee skills is often argued to bring the greatest productivity benefits (Black & Lynch, 2001; Brynjolfsson & Hitt, 2000).

The High-involvement Model: Theoretical Development

Various intellectual traditions have argued for this kind of empowering change at work, including the pioneering theorization of participative management in

the Wisconsin School of institutional economics, led by John Commons in the 1910–1920s (Kaufman, 2001). More recent influences include the job characteristics model (Hackman & Oldham, 1980; Oldham & Hackman, 2010) in which “job enrichment” through a process of enhancing autonomy (among other factors) is argued to foster employee motivation, learning, and satisfaction. These benefits of employee autonomy are also emphasized in the action theory of work psychology, which argues that greater control allows employees to develop strategies to deal with specific situations, helps people to develop their skills, and assists the general growth of the human personality (Frese & Zapf, 1994; Hacker, 2003). They are also central to the demand-control model of work strain (Karasek, 1979). According to Karasek and Theorell (1990), “high-strain jobs,” which combine low control and high pressure, have serious consequences for employee health, such as increased risk of cardiovascular disease, while “active jobs,” in which employees experience high demands but have a high level of control, foster learning and a better ability to cope with stress. The initiative to make jobs more active may come from management but can also emerge from workers through “job crafting,” the process through which individuals make adjustments to their work to enhance personal satisfaction and/or productivity (Oldham & Hackman, 2010; Wrzesniewski & Dutton, 2001). Employee control is increasingly understood as a type of job resource in the job demands-resources (JD-R) model of employee engagement and burnout (Bakker & Demerouti, 2014; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands require effort and incur psychological and physiological costs, while resources foster engagement and buffer the impact of demands on well-being. Where the resources available (e.g., in work autonomy, training, supervisor support) are overwhelmed by the demands of the job, negative employee outcomes such as stress, fatigue, and burnout can be expected.

Another vector to enhance employee involvement is to give greater power to a team of workers who then have greater control over their part of the production process, as in autonomous or semi-autonomous work groups, also known as self-managing or self-directed teams. This is emphasized in the theory of sociotechnical systems (STS), which developed from British studies of coalmining in the 1950s (Trist & Bamforth, 1951; Trist, Higgin, Murray, & Pollock, 1963). STS models of work organization are concerned with jointly optimizing the technical and social systems of an organization. They encourage the growth of “responsible autonomy” (Trist & Bamforth, 1951; Winterton, 1994) through “minimal critical specification” of how work should be done (Cherns, 1976). The idea that managers and engineers have a degree of choice in designing technology and work organization was at the heart of STS design (Klein, 2014) and is central to the notion of “anthropocentric work,” in the sense of designing work fit for humans. Such work organization, in contrast to Taylorism, is conducive to greater worker autonomy and skill utilization (Winterton & Winterton, 1997). It creates a greater need for training and development and greater opportunities for them. Brödner (1990) suggested that the choice between anthropocentric and technocentric approaches hinges fundamentally on the extent to which work is designed to support or eliminate human skill, a

position also taken by [Lehner \(1992\)](#) in arguing for the superiority of anthropocentric production systems.

European traditions of sociotechnical design have been particularly important, including groups in Scandinavia and in the Netherlands. The Work Research Institute in Oslo worked with Emery and Trist from the Tavistock Institute to promote forms of work organization that stimulate the collective ability to learn, cooperate, and adapt, and thereby create a better working environment (e.g., [Gustavsen, 2007, 2011](#)). The Centre for Working Life at Stockholm University developed a similar philosophy from the mid-1970s, arguing that individual and collective control over the work process was essential for social democracy (e.g., [Gardell, 1977](#)). In the Netherlands, the STS movement placed emphasis on the design of “whole-task groups,” in which substantial control over the production process was passed to teams of workers (e.g., [De Sitter, den Hertog, & Dankbaar, 1997](#); [Van Der Zwaan & Molleman, 1998](#)).

The general outline of these theories is depicted in [Fig. 1](#), which begins with a set of practices designed to enhance the opportunities for individuals or teams to participate in making the workplace decisions that concern them. A variety of work-design practices could manifest this intention, depending on the particular context. There is, however, an argument that greater employee involvement in work-related decisions will only reach its maximum potential when it is well supported in a synergistic way: when there is strong “bundling” in [MacDuffie’s \(1995\)](#) terms. [MacDuffie \(1995\)](#) argues that firms that wish to adopt a more flexible form of work design require workers who can handle “the unexpected by developing a capability for learning” ([MacDuffie, 1995](#), p. 202). In his view, higher involvement in work decision-making implies companion investments in employment practices that foster greater knowledge and skill and that provide performance incentives, enabling workers to participate more fully and ensuring they feel rewarded for doing so. The strength of the overall system is claimed to be greater than its component parts.

The same argument is used by [Appelbaum et al. \(2000, pp. 40–42\)](#) through what has become known as the ability-motivation-opportunity (AMO) model of

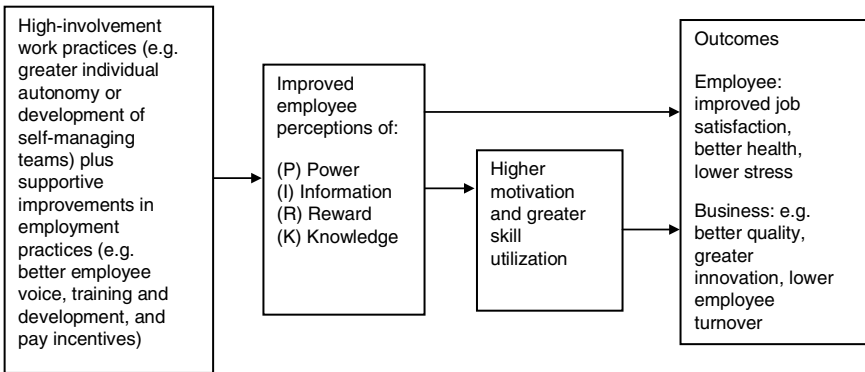


Fig. 1. High-involvement Work Systems: Envisaged Linkages and Impacts.

performance (e.g., [Boxall & Purcell, 2016](#); [Delery & Shaw, 2001](#); [Lepak, Liao, Chung, & Harden, 2006](#)). In the AMO model, the impact of improvements in the opportunity to perform through greater empowerment is reinforced by steps to enhance the abilities and motivation of the workforce. As [Delery and Gupta \(2016, p. 141\)](#) express it, each of the AMO characteristics “is a necessary condition for performance, but by itself is not a sufficient condition.” These arguments around synergy form an important connection between HRM and the resource-based view (RBV) of the firm in strategic management theory, which is concerned with how firms can create rare sources of value and defend them against imitation or substitution ([Boxall & Purcell, 2016](#); [Delery & Roumpi, 2017](#)). The argument can be made that the development of HIWPs equates to an investment in valuable firm-specific human capital that brings risks in terms of the freedom of workers to leave the firm in response to more attractive offers. The damage to the firm’s performance can be expected to be greater when firms making high investments in their human capital experience an increase in employee turnover than it is among firms making a much lower investment in human capital ([Shaw, Park, & Kim, 2013](#)). Thus, greater investment in human capital needs to be protected, including through ways in which it becomes embedded in socially complex teamwork ([Delery & Roumpi, 2017](#)) or is defended by stronger HR incentives, such as greater security, pay, and employee promotion ([Arthur, 1994](#); [Guthrie, 2001](#); [Lepak & Snell, 1999](#)). Where we observe systemic investments of this nature in reality, it becomes possible to talk of an HIWS. That is, when high-involvement *work* practices, such as greater individual autonomy or self-managing teams, are systematically allied to supportive changes in employment practices, such as better channels for employee voice, greater training and development, and performance-contingent rewards, the notion of an HIWS is a fair description ([Boxall & Macky, 2009](#)).

[Lawler \(1986\)](#) incorporates a systemic argument in his model of “high-involvement management,” as recognized in [Fig. 1](#). For Lawler, this is a philosophy in which steps to involve workers more fully in decision-making are reinforced by practices that open up channels of communication (in both directions), that reward employees for their improved contributions and that ensure they have the skills they need to participate effectively. If successful, these practices improve employee perceptions of their Power (P), Information (I), Rewards (R), and Knowledge (K), the four high-involvement processes that define his PIRK model, giving it “consistency and congruence” ([Lawler, 1986, p. 214](#)). HIWPs create a climate in which workers feel that they are involved in the decisions that affect their work, have the information and voice-opportunities they need, the rewards that reflect their contributions, and the access to the training and development that they want. The PIRK rubric can readily be related to the AMO model (e.g., one would expect greater power to improve both motivation and the opportunity to perform, better information should enhance the opportunity to perform, better reward should foster motivation, and greater knowledge should enhance ability).

Subsequent theorization has argued that the PIRK processes improve employee outcomes through two pathways relating to employee motivation and ability ([Boxall, Hutchison, & Wassenaar, 2015](#); [Vandenberg et al., 1999](#)). The

motivational pathway rests on the argument that greater involvement helps to fulfill employee needs, such as those for “challenge, independence, responsibility, support and recognition,” and is thus more motivating (Vandenberg et al., 1999, p. 304). The other pathway is cognitive, resting on improvements to skill utilization, the extent to which workers can “learn and apply skills on the job” (Morrison, Cordery, Girardi, & Payne, 2005, p. 59). Thus, HIWPs are expected to improve both the motivational and intellectual experience of work. Workers should find work more intrinsically interesting and also find that they are able to use more of their potential at work. These important mediating variables account for how HIWPs transmit their effects into better outcomes for employees although there may also be direct links from the PIRK variables to employee outcomes, such as greater job satisfaction (Boxall et al., 2015; Macky & Boxall, 2008).

There is generally a win-win or “mutual gains” (Kochan & Osterman, 1994) argument in HIWP/HIWS models (Wood & Ogbonnaya, 2018). In terms of RBV theory, they have the potential to create sustained advantage through the way in which greater employee involvement, and a strong process of aligning employer–employee interests, can build hard-to-replicate forms of human and social capital (Boxall & Purcell, 2016). As shown in Fig. 1, there is an expectation that the mediating variables of motivation and skill utilization will lead to business benefits in terms of outcomes such as better productivity and quality, greater innovation, and lower employee turnover (e.g., Batt, 2002; Høyrup, 2010; Lawler, 1986). We examine below what research has to say on the evidence for these claims of beneficial outcomes for workers and firms. However, much of the research claiming benefits for models of HIWPs/HIWSs, particularly to business organizations, does not acknowledge or assess the related costs (Gerhart, 2007; Kaufman, 2010; Kaufman & Miller, 2011; Sels et al., 2006) or does not highlight the boundary conditions or contingent factors that influence their adoption or chances of success. Fig. 1 does not depict any of these but we cannot ignore them and we turn now to their consideration.

THE DISTRIBUTION OF HIGH-INVOLVEMENT WORKING

A theory of high-involvement working needs the arguments we have just outlined, which we will test against the research in the next section, but it also needs to tackle the question of when and why managers will adopt, foster or cooperate with such processes (Boxall & Winterton, 2018). Why is this so? It stems from observation of the actual incidence or distribution of HIWPs. Extensive research in Europe, for example, using the European Working Conditions Survey 2010, finds that 38% of workers in EU countries, the largest group, report that they are in “low-involvement work organizations,” characterized by low levels of task discretion and low levels of worker influence over the organization of work (Eurofound, 2013, p. 23). Some 27% report being in “high-involvement organizations,” in which high task discretion is combined with high levels of influence over work organization, while 20.2% are in “discretionary organizations” (high task

discretion, low influence over work organization) and 14.5% are in “consultative organizations” (low task discretion, high influence over work organization). Analysis of trends in European working conditions does not provide reassurance that the proportion experiencing high involvement will easily outpace the other groups. Average levels of task discretion rose slightly across Europe between 2005 and 2010, but the most likely explanation is the effect of the Great Recession in southern and eastern Europe where the workers made redundant tended to have roles that were very limited in discretion (Eurofound, 2013, p. 66). We have, then, some explaining to do.

Managers and the Evolution of Production Systems

To understand the incidence of HIWPs, we must make some initial comments on managerial roles and the ways that managers frame the context for participation in decision-making by non-managerial employees (Boxall & Winterton, 2018). Organizations rely on managers, including the advanced specialists in areas such as marketing, finance, technology, and HR who support them, to interpret their environment, evolve strategies, coordinate with other groups, and respond to change (e.g., Thompson, 1967). Many of these tasks are collective (handled by the “management team”) and imply the need to think creatively about the firm’s environment and the ways to respond to, or construct, it. Because of this, managers are more fully involved in organizational decision-making and enjoy greater role autonomy. Involvement levels vary in organizations but the highest levels are typically found in the management team. This is hardly controversial and is regularly confirmed by large-scale, national, and cross-national surveys (e.g., Dobbin & Boychuk, 1999; Gallie et al., 2004; Harley, 1999; Ortega, 2009).

The point, of course, needs some qualification because there are degrees of discretion across the levels of the managerial hierarchy and, over time, there are often “discretion wars” among managers in multi-layered firms who seek to enlarge their freedom to make decisions (Boxall & Winterton, 2018). In the public sector, there are varying pressures on managerial discretion from politicians (Knies & Leisink, 2018). However, it stands as a general premise and the major challenge for understanding the evolution of high-involvement working is one of explaining how the actions of the management team shape the firm’s production systems and, thus, the organization of the work of non-managerial employees. As a rule, these managerial choices in production systems are heavily conditioned, but not determined, by a set of (a) economic and (b) sociopolitical factors.

This introduces the concept of the “production system,” which is important in our analysis of the dispersion of HIWPs. We define a production system as “a set of choices around the technologies and know-how to use, the way the work should be organized, and the way people should be employed to do the work,” a definition that applies to both manufacturing and services and which can be applied to all types of work in the firm (Boxall & Winterton, 2018, p. 32). To understand the scope for employee involvement, we need to recognize the systemic issues associated with organizing production in business units and workplaces. While academics may place a high value on particular types of work design, such

as job enrichment or autonomous work groups, the merits of these designs are not likely to be treated in isolation by managers but considered as an element in constructing the wider production system (Fenton-O'Creevy, 1998). For example, management will not necessarily support a high level of individual autonomy if it undermines performance in a highly interdependent team (Langfred, 2005), nor will management necessarily support autonomous groups if they create problems for inter-group coordination, depressing the efficiency and flexibility of the larger productive unit (Ingvaldsen & Rolfsen, 2012; Van der Zwaan & Molleman, 1998). The level of interdependence within a production system has major implications for the kind of employee involvement that management will consider useful (Boxall & Winterton, 2018). When interdependency is at a high level in a production system, it is unhelpful to imagine that management will be thinking about work design primarily on the level of the individual job. Armed with this understanding of managerial motives, we can now outline the research on the conditions favoring the adoption of high-involvement models of working.

Economic Conditions Favoring High-involvement Working

As Kaufman and Miller (2011) argue, managerial choices in developing the firm's production systems are fundamentally economic, reflecting a concern with what will be profitable, which depends on a set of complementary investments that create and maintain a viable business (e.g., Pil & MacDuffie, 1996; Porter & Siggelkow, 2008). This implies that we must recognize the relationship between costs and benefits, and not simply ignore the former. A decision to adopt HIWPs, and certainly full-blown HIWSs, is likely to create costs in a variety of ways, including (a) the costs of consultation and/or negotiation around change and of ongoing commitment to supportive voice channels; (b) the costs of greater employee training; (c) the costs of greater incentives; and (d) a greater investment in developing and supporting a more participative management style (Boxall & Macky, 2009; Gerhart, 2007; Godard, 2004; Pil & MacDuffie, 1996; Sels et al., 2006). Some of this may be offset if there is a reduction in layers of supervision and we can anticipate that the level of these costs will tend to vary across industry contexts. For example, we might contrast the extensive investment in multi-layered voice arrangements at Delta Air Lines to generate employee involvement in diverse occupational groups (Kaufman, 2003) with the simpler forms of employee involvement that Jones, Kalmi, and Kauhanen (2010) describe in a Finnish retail chain that simply fostered a process of letting front-line employees make decisions about item display. However, whatever the context, we can anticipate that management will weigh up the costs of HIWPs against the likely benefits or will learn about these costs as they emerge. The issue of when they will consider the nature and level of these costs tolerable in relation to the benefits is what we must consider (Godard, 2004; Kaufman & Miller, 2011).

Technology, Uncertainty, and Plant Strategy in Manufacturing

In terms of the adoption of HIWPs in manufacturing, one line of reasoning relates to the technological characteristics of the industry in which the firm

operates. It argues that managers favor high levels of employee involvement in capital-intensive, rather than labor-intensive, industries. In these contexts, the firm's core workers are critical to making complex technologies operate safely and reach their potential (e.g., [Oliver & Wilkinson, 1988](#)). Profitability in these production environments is compromised unless the down-time of expensive machinery is minimized, and is positively enhanced when workers creatively exploit the productive possibilities of the technologies they are using. This makes the expensive investment in HIWPs worthwhile. An early observation of these conditions was contained in [Blauner's \(1964\)](#) analysis of continuous-process technology in a Californian chemical plant and a more recent case is the Canadian aluminium plant described by [Bélanger, Edwards, and Wright \(2003\)](#).

A second argument is based on the degree of uncertainty that production entails (e.g., [Brass, 1985](#); [Clegg, 1984](#); [March & Simon, 1958](#); [Van der Zwaan & Molleman, 1998](#)), suggesting that managers favor greater levels of worker autonomy when uncertainty cannot be engineered out of the production process. For example, the analysis of worker empowerment in a firm using advanced manufacturing technology by [Wall, Corbett, Martin, Clegg, and Jackson \(1990\)](#) shows performance gains if operators have higher levels of control, but only in conditions of high production uncertainty. Further support comes from [Cordery, Morrison, Wright, and Wall's \(2010\)](#) longitudinal study of self-managing teams in Australian waste-water plants, which shows that performance gains are greater when the level of team autonomy is matched to the level of uncertainty in the operating environment. In other words, greater instability in production processes enhances the need for operators to exercise discretion to deal with the causes of performance-threatening variability. Whether the uncertainty stems from market, material or technological factors is a moot point ([Wall, Cordery, & Clegg, 2002](#)); the key issue is the existence of a high level of "operational uncertainty," making it desirable to decentralize control to the level of the worker or work group to deal with unanticipated or evolving problems. This could be taken to imply that work design might not become more empowering in an unstable product market (one with a high level of economic uncertainty) if operating processes are, in fact, highly certain once orders are received ([Boxall & Winterton, 2018](#)).

At this juncture, we should note that production systems in some manufacturing plants are more oriented to experimentation or innovation than others, which are used to ratchet up production volumes once uncertainties have been minimized ([McGrath, 2001](#)). This idea is advanced in the literature on the "international division of labour," using [Kenney, Goe, Contreras, Romero, and Bustos's \(1998\)](#) distinction between "learning factories" and "reproduction factories." [Wilkinson, Gamble, Humphrey, Morris, and Anthony \(2001\)](#), for example, in a study of two Japanese multinationals, show that the Japanese plants are used to foster product innovation (i.e., "learning factories") while the Malaysian plants ("reproduction factories") are used to mass-produce standardized products once problem-solving by highly trained Japanese workers has played its part. In the Malaysian plants, less skilled and lower paid workers assemble what are essentially pre-designed and quality-engineered products. Similarly, in the strategic HRM literature, there is research to suggest that companies adopt more HIWPs

when their competitive strategy is oriented to differentiation (e.g., in quality, in range of features or innovation) and that this greater investment pays off in such firms rather than in those oriented to cost leadership (Guthrie, Spell, & Nyamori, 2002). Consistent with this view, Kehoe and Collins (2008) make the argument that decentralization of authority and employee empowerment in organizations pursuing exploratory strategies, which require collaborative experimentation and risk-taking, will be linked to greater rates of innovation. In contrast, more bureaucratic or autocratic models of HRM are more consistent with organizations pursuing an exploitation or efficiency-oriented strategy.

Overall, the research suggests that plants for which management has a settled product that is amenable to standardized production processes are among the least conducive environments for high-involvement working (e.g., Wood, Nolte, Burridge, Rudloff, & Green, 2015). Historically, this is the setting for Fordist mass production and job simplification through the Taylorist separation of conception and execution, as discussed above. In such contexts, operator-level jobs have little uncertainty about them, enabling managers to pursue efficiency gains through specifying work methods, reducing the training required, and making individuals more replaceable (Slocum & Sims, 1980).

Involvement in Lean Production?

Because of its growing dominance in manufacturing, a key question is whether lean production (Womack, Jones, & Roos, 1990) stimulates high-involvement working. As Shah and Ward (2003, 2007) explain, lean production can be understood on two levels. On one level, it is a managerial philosophy specifying guiding principles and goals for production, such as continuous improvement and waste elimination. On the other, it encompasses a set of operating tools and techniques, such as those associated with total quality management (TQM), just-in-time inventory control, and work standardization. Although there are continuities with mass production, lean methods imply a shift in work practices and in what is expected of the workforce. In a quantitative comparison of lean plants with traditional plants, Forza (1996, p. 59) found that the

lean production plants seem to use more teams for problem solving, to take employees' suggestions more seriously, to rely more heavily on quality feedback both for workers and supervisors, to document production procedures more carefully and to have employees able to perform a greater variety of tasks including statistical process control.

A key question among academic observers, particularly sociologists, has been whether lean production heralds a post-Fordist or a neo-Fordist world (e.g., Hughes, 2008; Vidal, 2007b)? Post-Fordism evokes a working environment of growing skill and discretion while neo-Fordism implies a continuation of Fordist techniques, albeit heightened. The central issue is this: while lean production involves workers in problem-solving groups, it reduces work buffers and leads to higher levels of standardization of work processes, closing down the space for individual workers to vary their working methods and creating the risk of greater work intensity (e.g., Danford, Richardson, Stewart, Tailby, & Upchurch, 2004; Pruijt, 2003; Wood, 1993). A key factor here, as signaled earlier, is the high level

of interdependence in lean production systems (e.g., Cullinane, Bosak, Flood, & Demerouti, 2013; Niepce & Molleman, 1996; Oliver & Wilkinson, 1988).

According to Klein (1991), the answer to the question of whether lean production will lead to greater involvement depends on the starting position. On the one hand, studies suggest that management's objectives in a lean implementation may be largely achieved in a technical way, with limited empowerment of workers (e.g., Vidal, 2007a) or with a reduction in skills and autonomy (e.g., Parker, 2003). On the other hand, a lean implementation may enhance opportunities for involvement where these have, in fact, been more restricted under Fordist production. Adler (1993), based on his analysis of the Toyota production system in the NUMMI plant, argues that worker involvement in developing operating standards can create genuine possibilities for influence and learning. This is what Procter and Radnor (2014, p. 2993), writing about lean methods in the British public sector, call "an indirect form of autonomy" through "input into improvement and problem-solving activities." Overall, the question of whether employee involvement will be enhanced in lean production is not predetermined simply by its adoption. Conti, Angelis, Cooper, Faragher, and Gill (2006) and Hasle, Bojesen, Langa Jensen, and Bramming (2012) argue that we need to understand the context and strategies of each lean implementation and avoid generalizations about its impacts. A key ongoing tension, which we will explore further below, surrounds the accompanying rise in work intensity that is often associated with lean production (Cullinane et al., 2013; Huo & Boxall, 2017; Neirotti, 2018).

Skill, Quality, and Complexity in Services

We now need to continue the analysis into services. Over time, the process of Taylorist work standardization has spread from manufacturing into a huge range of service industries, such as telecommunications, retail, hospitality, healthcare, and entertainment (e.g., Batt, 2000; Korczynski, 2001). Where there are low levels of uncertainty in the customer interaction (e.g., the processing of purchases at a fast-food counter) or in labor-intensive support activities (e.g., the cleaning of hotel rooms), work can be standardized and workers trained in a script or in a strict routine that diminishes the scope for discretion (Boxall & Purcell, 2016). Bailey and Bernhardt's (1997) analysis of the US retail sector remains very relevant on this point: for many firms in retail, there are "efficient alternatives" to a high-involvement model of working. These alternatives often combine a high use of information technology with low wages, low training, and low levels of employee control (i.e., a "low-road" model of employment relations). Teamwork and empowerment may be espoused but they do not amount to any "fundamental changes in decision-making power and autonomy" (Bailey & Bernhardt, 1997, p. 190).

Like manufacturing, however, services represent a varied picture. At the low-skilled end, in some simple services, such as home-based care of the elderly or the cleaning of private homes, there is significant variability and uncertainty in what front-line workers may encounter (e.g., Sørensen, Ramioul, & Naujanienė, 2015). In such conditions, close supervision by management is not possible, creating jobs

that have a higher level of autonomy than those in standardized, low-skill services (Boxall & Purcell, 2016). In general terms, the firm's incentives to foster employee involvement in the service sector grow when its managers target higher value-added segments in which customers will pay a higher price for higher quality but expect greater responsiveness (e.g., Batt, 2000; Hunter, 2000). In these conditions, front-line workers are often trained to a higher level of skill and a greater degree of empowerment enables them to tailor the service offering to individual needs, and respond with discretion when service failures occur (Boxall & Purcell, 2016). The highest degree of involvement in decision-making typically occurs in professional or expert services in which the problems of clients contain a high level of complexity, demanding the application of advanced knowledge acquired from specialist education and experience (e.g., Gallie et al., 2004; Molleman, 1998; Rafiq & Ahmed, 1998). Research shows that these sorts of tasks call for relatively high levels of self-management (e.g., Green, 2008; Zoghi & Mohr, 2011). It is at the higher skilled end of services that we also see the highest investments by firms in training and levels of pay, accompanying the higher levels of involvement (Boxall & Purcell, 2016).

There is, of course, variation in this picture because professional roles vary in levels of qualification and responsibility, as in the distinction between full and associate or para professionals (e.g., Harley, 1999). In addition, professional discretion is likely to be higher when the degree of innovation (rather than repetition) is greater in a firm's strategy or in an individual's role (e.g., Doorewaard & Meihuizen, 2000). There are also dynamic questions around professional autonomy. In the United Kingdom, for example, governments since the 1980s have increased bureaucratic controls over professional work, engendering a process of "de-professionalization," characterized by falling levels of discretion and job satisfaction (Gallie et al., 2004; Green, 2006; Lloyd & Payne, 2013). Lean production has also grown into the public sector, including in public health and public services, bringing into play the same concerns around autonomy and workload as are raised in manufacturing (Bamber, Stanton, Bartram, & Ballardie, 2014; Procter & Radnor, 2014) and to which we will return below.

Firm Size

We should pause here to acknowledge that much of our discussion has presumed we are talking about large firms and does not address the production environments of small ones. Here, Fordism and Taylorism were rarely economic (e.g., Bélanger et al., 2002), creating greater scope for workers to choose their own methods. Jobs are often non-routine in these environments, as confirmed in large-scale research showing that the average level of employee discretion is higher in small firms (e.g., Delbridge & Whitfield, 2001; Ortega, 2009). This is positive for the incidence of employee involvement. However, small firms are typically characterized by "resource poverty" (Kroon, Van de Voorde, & Timmers, 2013; Sels et al., 2006) and offer limited pathways for promotion (Frese & Zapf, 1994; Susman, 1975). This means that although jobs in small firms may offer greater scope for discretion, the ability of small firms to pay high wages and to support extensive

career development is limited, as demonstrated in Dutch research (Kroon et al., 2013). Although we can envisage high-involvement models in high-tech small firms pursuing innovation, such models, particularly the more expensive employment practices, are less likely in resource-poor small firms not characterized by innovation.

Socio-political Factors Conditions Favoring High-involvement Working

We now turn to the major point that management choices in production systems and employee involvement are not simply driven by economics. The second major set of factors is sociopolitical and research demonstrates that these exercise significant influence (Boxall & Winterton, 2018).

Management Capabilities and Politics

Starting with management itself, the ability to conceive and carry through a work redesign is variable. Managers in large organizations often have the relevant expertise, and the ability to allocate funding and time (e.g., Eurofound, 2012), but the situation is more variable in small and medium-sized enterprises (SMEs). While they may provide greater scope for employee discretion, managers are often time-poor and cash-strapped in SMEs, restricting their scope to invest in training (Kroon et al., 2013; Sels et al., 2006). However, it is not simply a question of management capabilities but whether a work reform is politically desirable from the management perspective. Particular work designs tend to be adopted when management considers them both economically viable and politically safe (e.g., Eurofound, 2012). As Gospel (1973) argues, management has both a profit and a security objective, seeking to minimize threats from powerful groups, such as well-placed workers and activist trade unions. This creates a mental counterweight to work reforms that shift the balance of power toward workers. We consider, more fully, political issues within management in the section “Tensions Associated with HIWPs/HIWSs.”

Worker Interests, Strategies, and Representation

On the other side of the equation, management must reckon with the reality that worker interests and strategies are an essential part of internal politics (Gallie, 2013; Gardell, 1977; Molleman, 1998). Workers make a major impact, bringing their own perceptions of whether the opportunities for control in a work reform are meaningful (e.g., Wright & Cordery, 1999) and, if so, whether they feel competent, safe, and motivated to act. A new work system may offer greater work-group autonomy but at the cost of diminishing the space that the previous work system offered for individual autonomy (Klein, 1991). Furthermore, a shift to self-managing teamworking might actually heighten control over individuals: what Barker (1993) has described as “concertive control.”

Various strands of research recognize that there may be important individual differences in how employees respond to greater opportunities for involvement. Those with a high level of self-efficacy may take a more proactive approach to

their opportunities for control (Ashforth & Saks, 2000) while others may prefer the predictability of Fordist work practices over greater empowerment (Procter & Radnor, 2014; Vidal, 2007a). Individual employees differ in the extent to which they want greater involvement. Such variability reinforces the importance of studying employee experiences of, and responses to, different forms of work organization. As Billett (2001) argues, it is important to distinguish between what the workplace affords, or offers, in terms of participation, and what the worker chooses to take up, recognizing that while managerial and worker interests overlap, conflicts of interest are always present (e.g., Cafferkey, Harney, Dundon, & Edgar, 2017). Consistent with this view, Shin, Jeong, and Bae (2018) show that the relationship between HIWPs and worker creativity is greater among workers with a stronger orientation toward learning new things. It is likely that dispositions of this nature play a greater role in explaining attitudes to involvement than demographic variables, such as gender and age, but we need more studies that assess both dispositional and demographic influences (e.g., Felstead, Gallie, Green, & Inanc, 2015).

Worker interests and strategies may be felt through the formal agency of a trade union or works council, as in the case where a works council supports team-working but only on the basis that team-based bonuses are not used to “push out weaker workers” (Pruijt, 2003, p. 92). As this example suggests, institutions of employee voice are often critical in shaping the work system and employment strategy associated with a production reform that management seeks (e.g., Bélanger et al., 2003). Worker interests can also make their impact through less formal organizational structures or through informal negotiation (e.g., Edwards & Ram, 2006; Townsend, Wilkinson, & Burgess, 2013). Informal bargaining by workers can occur inside organizations of any size, and it can do so in ways consistent with, or in contradiction of, formal agreements.

This raises the interesting question of whether unions have a positive impact on the incidence of worker involvement. The answer to this is less straightforward than is often assumed (Boxall & Winterton, 2018). In their analysis of large-scale surveys, Zoghi and Mohr (2011) find that the presence of unionized employees has either an insignificant or a negative association with decentralized decision-making and Gallie et al. (2004, p. 257) find that “both union representation and membership” are “negatively associated with task discretion.” In Anglophone societies, this may reflect the heritage of the Fordist compromise in which unions traded a high degree of management control over work organization for greater levels of pay and security (Bélanger et al., 2002, p. 25), but this generalization should be avoided for Scandinavia where union strength may have transmitted itself into higher levels of task discretion (e.g., Gallie, 2007a, p. 135; Ingvaldsen & Rolfsen, 2012). At the micro level of the individual firm, the key issue is likely to be the quality of the industrial relations climate that a union cocreates with management (e.g., Deery & Iverson, 2005; Edwards & Wright, 2001). This is sensitive to how the trade-offs associated with workplace reform have been handled historically (Bélanger et al., 2002). A heritage of low-trust relationships between management and unions is likely to raise the costs of change in ways that deter the adoption of high-involvement styles of working (Pil & MacDuffie, 1996)

while a heritage of good management-union relations is conducive to them (Gill & Meyer, 2013).

The quantitative research we have is valuable in measuring workers' responses to employee-initiated work reforms but it tends not to highlight worker-led strategies of involvement or the ways in which workers change the character of their involvement. Qualitative case studies developed by industrial relations' scholars are a valuable source of studies in this respect. Guy (2003), for example, depicts the way in which an employer-driven involvement program strengthened the bargaining power of the workers who organized a strike, and elicited customer support, when their employment conditions were threatened. Another interesting example is the study by McBride (2008) of worker strategies in the shipbuilding and maintenance industry in northeast England. Her work shows that these workers are active in the development of work practices rather than passive recipients of management initiatives, and are highly engaged in union-management negotiations and in inter-union politics. In these shipyards, workers help to shape what work quality means and how they will achieve it. McBride (2008) makes the point that we should avoid casting workers as acquiescent by depicting involvement as something that is done to them rather than something that is forged with, or by, them.

Societal Contexts: "Employment Regimes"

It seems that the question of union impacts cannot safely be tackled without considering the broader context of the society, and its system of employment institutions, in which they are embedded (Dobbin & Boychuck, 1999). Cross-national studies regularly confirm that there are major societal influences on the degree of employee involvement (e.g., Doellgast, Holtgrewe, & Deery, 2009; Eurofound, 2013; Holman, Frenkel, Sorensen, & Wood, 2009; Zoghi & Mohr, 2011), suggesting that societies are characterized by relatively stable "employment regimes" that affect key features of job quality (Gallie, 2007a, 2007b; Gallie & Zhou, 2013). While there is some support for differences between "coordinated" and "liberal-market" economies (Hall & Soskice, 2001), more nuanced groupings distinguish different continental models (Scandinavian, central European, and southern European) (Amable, 2003) and, since the major enlargement of the EU in 2004, transition economies (Goergen, Brewster, & Wood, 2009). In comparative studies of job quality using such country groupings (e.g., Holman et al., 2009), what clearly stands out in respect of the extent of job autonomy is the "Nordic effect": surveys consistently show a Scandinavian advantage in employee discretion (Gustavsen, 2011). In addressing why this is so, Dobbin and Boychuk (1999) examine "conceptual job autonomy": the individual's role in designing important aspects of their job or in non-routine problem-solving. Using a multi-country data-set, they ask how much of this remains across countries after a range of variables are controlled. Their analysis reveals that both managers and workers in Scandinavia enjoy greater discretion than those in Anglophone countries, as do both unionists and non-unionists. This is not to say, of course, that the Scandinavian advantage overrides other difficulties with the quality of work.

Other research finds that while the Nordic countries have the highest proportion of jobs that are high in discretion, they also have the highest proportion of “saturated jobs,” which combine high discretion with high workload and antisocial hours (Holman, 2013). However, the significant difference between Scandinavia and other groups of countries in work autonomy undermines the argument that high-involvement working is solely determined by employer responses to the economic signals in their productive environment (Dobbin & Boychuk, 1999; Gallie, 2007b).

Summary: Understanding the Distribution of High Involvement

We see, then, that a range of economic and sociopolitical factors impacts on the distribution of HIWPs and HIWSs. In manufacturing, management is more likely to be disposed toward high-involvement working when the production system is capital-intensive, when uncertainty cannot be engineered out of the productive process, or when experimentation to create innovative products or processes is being encouraged in a particular plant. Where the level of operational uncertainty is low, management is typically more inclined to processes of work standardization, which drive efficiency, and the economic incentives for employee involvement become much weaker. In services, research suggests that the potential for employee involvement grows as managers target higher-quality market segments or as advanced knowledge becomes more critical to the service offer, making employee involvement more important. More highly skilled services are not, however, immune to forces that reverse high-involvement working. Strategies to restrict autonomy through bureaucratization and greater management control over work targets and methods are an increasing issue in professional work in countries such as the United Kingdom (e.g., Green, 2006).

While economic incentives are critical, the research also shows that sociopolitical conditions play a major part in the evolution of production systems and the opportunities for involvement. These include management capabilities and internal politics along with worker interests and strategies, including how they interpret their opportunities for control and whether they want the expectations that go with it. This includes the way in which participation is affected by social learning processes in organizations, which peers and employee representatives, such as trade unions, help to shape. At the highest level, sociopolitical conditions include the web of societal forces that creates different “employment regimes” in different countries (Gallie, 2007a, 2007b). What Gustavsen (2007, 2011) argues has been achieved in Scandinavia is a greater awareness of the possibilities for innovation in work design, propelled along by trust-enhancing networks of employers, unions, and state agencies that improve the shared learning of enterprises in regions and industrial districts. The ongoing existence of these societal differences suggests that economically unattractive environments do not necessarily lack opportunities to enhance worker well-being through greater involvement (Boxall & Winterton, 2018). The sheer complexity of this picture suggests that there are many fruitful lines of enquiry for future research, as we shall note in our conclusions.

OUTCOMES OF HIWPs/HIWSs FOR FIRMS AND EMPLOYEES

What, then, does the research say about the outcomes of HIWPs for firms and workers and what is the quality of the research in terms of methods? There are some qualitative, case-study evaluations, but the vast majority of the research is quantitative and survey-based. In appraising this research, we must take steps to ensure we are comparing apples with apples, or closely enough, because the range of measures used by different researchers is extensive. We begin with firms.

Outcomes for Firms

In terms of the history of evaluating business outcomes, leading early studies were conducted by [MacDuffie \(1995\)](#) in automobile manufacturing and [Appelbaum et al. \(2000\)](#) in steel making, clothing manufacturing, and medical electronics manufacturing. Importantly, these studies were all conducted at the plant level using productivity indices relevant to the production processes concerned, so they offer us an assessment of the economic impacts of a particular production system ([Boxall & Macky, 2009](#)). [MacDuffie \(1995\)](#) used a complex index to measure employee participation, including the percentage of the workforce in employee involvement groups and the extent to which assembly workers were involved in quality-related tasks. [Appelbaum et al. \(2000\)](#) allowed for variety across industries but sought to assess the extent of employee autonomy, the degree of open communication, and the incidence of self-managing teams and off-line problem-solving groups (pp. 103–104). These studies were generally supportive of associations between high-involvement working and the operating performance in these industries. In the case of apparel manufacturing, however, [Appelbaum et al. \(2000\)](#) note that while the modular (team-based) work systems they studied were valuable for throughput time and, thus, fast-response manufacturing capability, they did not, on average, improve cost performance. This helps to make the point that operating performance is often multi-dimensional: improvements in one area can be undermined by deterioration in another and management must consider whether the overall profile is beneficial for the plant's strategic direction.

A stiffer test of the business benefits would consider only longitudinal, not cross-sectional, data in which we see a positive change in performance *after* the work reforms are implemented and controlling for other sources of performance variation. On this basis, we can look to [Ichniowski, Shaw, and Prenzushi's \(1997\)](#) longitudinal studies in the steel industry, which identify a range of HRM systems from low to high involvement, and show positive impacts on productivity of the high-involvement systems in a sample of US steel finishing lines. This finding is reinforced by a subsequent study by [Ichniowski and Shaw \(1999\)](#), which compares the operating performance of US and Japanese steel finishing lines. This study finds that Japanese plants – all characterized by participative work practices – and US plants using high-involvement processes have equivalent productivity levels and outperform US plants with traditional (Fordist) or partially reformed work systems. The finding is also supported by [Appelbaum et al. \(2000\)](#), whose three-industry dataset includes some longitudinal data on steel manufacturing (see pp. 130–137).

On the other hand, [Cappelli and Neumark \(2001\)](#), using a national probability sample of US manufacturing establishments and examining work practices and outcomes in firms in 1977 and then again some 20 years later, conclude that high-involvement work reforms raise labor costs and that this implies that employees benefit through above-average remuneration rises, a picture reinforced by [Osterman's \(2006\)](#) study of the wage impacts of "high-performance work organization" in US manufacturers. However, the statistical case for productivity benefits is weaker and the effects on profitability are unclear. British studies mirror these findings with survey analysis indicating that "high-involvement management" is associated with a wage premium ([Forth & Millward, 2004](#)). While also associated with a productivity benefit in unionized firms, no association is shown with financial performance in either unionized or non-unionized contexts ([Bryson et al., 2005](#)). In terms of important contingent factors, a study of some 3,000 small US firms (less than 100 employees) by [Way \(2002\)](#) also calls for caution, indicating that the benefits may not outweigh the costs in small organizations.

[Table 1](#) provides an up-to-date record of the studies examining the business outcomes of HIWPs. Studies were included based on one of two criteria. The first is that the study does focus on HIWPs or HIWSs as the independent variable, and has some way of measuring it. The second criterion for inclusion is that the terminology is different (e.g., HPWS) but the underlying orientation of the practices measured in the study is to promote high levels of employee involvement. Researchers have either used Likert-type scale scores (measuring the degree of use of HR practices) or index scores (a count of HR practices) for the independent variable. A few have comprehensively covered all four HIWP components (power/autonomy, information, reward, and knowledge) in the [Lawler \(1986\)](#) model. As a general rule, researchers have considered the degree of usage of HR practices a more useful measure of HIWPs than the reported presence of HR practices ([Marchington, Wilkinson, Donnelly, & Kynighou, 2016](#); [Van De Voorde, Paauwe, & Van Veldhoven, 2012](#)). There are more studies that model HIWPs/HIWSs as an overall bundle than those that operationalize them at the individual-practice level.

In terms of overall impact, a majority of the studies in [Table 1](#) shows a positive effect of HIWPs/HIWSs on an organizational performance variable, such as labor productivity (e.g., [Arthur, 1994](#)), financial performance (e.g., [Guerrero & Barraud-Didier, 2004](#)), and product quality (e.g., [Ichniowski & Shaw, 1999](#)), or show a beneficial outcome under certain conditions (e.g., [Guthrie et al., 2002](#)). The others show mixed or more complex results (e.g., [Cappelli & Neumark, 2001](#); [Way, 2002](#)). Overall, while there is a basis to be positive about business benefits, we cannot make an unequivocal or unqualified claim for them. Generally speaking, the examination of how contingent and intervening variables affect the outcomes is not nearly as extensive as it could be. We also note that cross-sectional research dominates while the predictive (i.e., HIWP measurement precedes performance measurement) and longitudinal (i.e., repeated measures of HIWPs and performance) research designs are limited. This makes it difficult to infer causality in the relationship between HIWPs/HIWSs and organizational performance.

Table 1. Summary of Quantitative Studies Linking HIWPs/HIWSs to Organizational Performance.

| References | IV: Measure of HIWPs/HIWSs | DV: Measure of Performance | Findings: HIWPs/HIWSs-Performance Relationship | Overall Impact | Research Design |
|-----------------------------|----------------------------|---|---|----------------|-----------------|
| Arthur (1994) | Scale score | Labor efficiency, scrap rate, and turnover over the year before the survey. | The mills with HIWS have higher productivity, lower scrap rates and lower employee turnover than those with control systems. | Positive | Cross-sectional |
| Bae and Lawler (2000) | Scale score | A single, global measure of organizational performance that includes public image and goodwill, growth rate of sales or revenues, product/service quality, long-run profitability, financial strength, and employee productivity. | HIWS-organizational performance (+). | Positive | Cross-sectional |
| Bryson et al. (2005) | Index score | Labor productivity, financial performance. | Teamwork-productivity (+); functional flexibility-productivity (+); HR training-productivity/financial performance (+); financial participation-financial performance (+); additive index of HIWPs-productivity/financial performance (+). | Positive | Cross-sectional |
| Cappelli and Neumark (2001) | Scale score | Sales per worker, labor costs, labor efficiency. | Computer use by workers is the only high-involvement practice significantly and positively related to sales per worker; job rotation-sales per workers (-); computer use, benchmarking, meetings, TQM, team training, and profit sharing are positively related to labor costs; no high-involvement practice is significantly and positively related to labor efficiency. | Mixed | Longitudinal |

| | | | | | |
|--|-------------|--|---|----------|-----------------|
| Camps and Luna-Arocas (2009) | Scale score | Perceived firm performance. | HIWP-firm performance (0). | Neutral | Cross-sectional |
| Guerrero and Barraud-Didier (2004) | Scale score | Financial performance (i.e., economic profitability); organizational performance (i.e., quality of products and services and employee productivity); social performance (i.e., work climate, and employee attendance). | Empowerment/communication/training-financial performance (+); compensation-financial performance (0); first order HIWP latent factor-financial performance (+, mediated by organizational performance and social performance). | Positive | Predictive |
| Guthrie (2001) | Scale score | Sales per employee as the measure of productivity; employee retention rate. | Main effects: HIWP-retention rate (+); HIWP-productivity (+); interaction effects: employee turnover is associated with decreased productivity when use of HIWP is high and with increased productivity when use of these practices is low. | Positive | Cross-sectional |
| Guthrie et al. (2002) | Index score | Sales per employee as the measure of productivity. | HIWS is positively associated with productivity in firms competing based on differentiation and shows no relationship in firms pursuing a strategy of cost leadership. | Positive | Cross-sectional |
| Harmon, Scotti, Behson, and Farias (2003) | Scale score | Standardized cost per patient served. | HIWP-service costs (+). | Negative | Cross-sectional |
| Ichniowski et al. (1997) | Index score | Production-line uptime as the measure of productivity. | HIWP-production uptime (+). | Positive | Longitudinal |
| Ichniowski and Shaw (1999) | Index score | Production-line uptime and product quality. | HIWP-production uptime (+); HIWP-product quality (+). | Positive | Longitudinal |
| O'Neill, Feldman, Vandenberg, DeJoy, and Wilson (2011) | Scale score | Gross margin return on investment for business-units. | HIWS-gross margin return (+). | Positive | Predictive |

Table 1. (Continued)

| References | IV: Measure of HIWPs/HIWSs | DV: Measure of Performance | Findings: HIWPs/HIWSs-Performance Relationship | Overall Impact | Research Design |
|----------------------------------|----------------------------|---|---|----------------|-----------------|
| Vandenbergh et al. (1999) | Scale score | Turnover, return on investment. | HIWP-composite performance variable (+). | Positive | Predictive |
| Way (2002) | Index score | Workforce turnover, labor productivity. | HIWP-workforce turnover (-); HIWP-labor productivity (0). | Positive | Cross-sectional |
| Wickramasinghe and Gamage (2011) | Scale score | Quality results (e.g., customer complaints, scrap percentage). | Teamwork/skill development/communication/performance evaluation/rewards and recognition/empowerment-quality results (+). | Positive | Cross-sectional |
| Wood and de Menezes (2008) | Index score | Labor productivity, change in labor productivity, labor turnover. | The vast majority of employee involvement (EI) practices (tested individually) are not associated with the level of labor productivity or its rate of change; none of the two- or three-way interactions of work enrichment practices or flexible work practices are significantly related to any economic outcome; there are no significant two- or three-way interactions of EI practices associated with labor turnover; the high involvement orientation (i.e., composite variable) is positively associated with labor productivity and change in labor productivity; the high involvement orientation is not associated with labor turnover but it is positively associated with absenteeism. | Mixed | Cross-sectional |

| | | | | | |
|----------------------------|-------------|---|---|----------|-----------------|
| Wood et al. (2012) | Index score | Financial performance, labor productivity, quality, and absenteeism. | High-involvement management-financial performance (+); HIM-labor productivity (+); HIM-quality (+); HIM-job satisfaction-financial performance (-); HIM-job satisfaction-labor productivity (-); HIM-job satisfaction-quality (-). | Positive | Cross-sectional |
| Wood and Ogbonnaya (2018) | Scale score | Economic performance (including profit, labor productivity, and quality). | Role-involvement management-economic performance (0); role-involvement management-job satisfaction-economic performance (+); role-involvement management-well-being-economic performance (0); organizational involvement management-economic performance (+); organizational involvement management-job satisfaction-economic performance (0); organizational involvement management-well-being-economic performance (0). | Mixed | Cross-sectional |
| Zatzick and Iverson (2006) | Index score | Revenues minus expenditures per employee as the measure of productivity. | The relationship between HIWS and productivity is negative at a high layoff rate whereas the relationship is positive when the layoff rate is low. | Mixed | Longitudinal |

Another observation is that regression-based statistical analyses have been used more frequently than structural equation modeling (SEM). However, the latter yields more accurate results because it enables researchers to estimate and partition out the measurement error inherent in the measures (Kline, 2011). Last but not least, most of the studies assume a linear relationship between HIWPs and organizational performance. The possibility of a curvilinear relationship due to the increased costs of the implementation of HIWPs is generally omitted.

Outcomes for Workers

As with tests of the business outcomes, we face the issue that researchers have used various measures of employee involvement. In our view, the most valid quantitative measures are multi-item scales such as those developed by Vandenberg et al. (1999) from Lawler's (1986) PIRK concepts (Boxall & Macky, 2009, 2014). In this set of scales, the *power-autonomy* variable (seven items) measures the extent to which employees feel they can control how they do their job and can participate in relevant decisions, the *information* variable (11 items) measures the extent to which employees feel there is effective communication with management, the *rewards* variable (nine items) taps the extent to which employees feel rewarded for their effort and performance, and the *knowledge* variable (eight items) is concerned with the extent to which employees feel they are provided with the training and development opportunities they need. Using this comprehensive measure, Vandenberg et al. (1999) find in a study of 49 North American life insurance companies that HIWPs do act positively through both (indirect) motivational and (direct) cognitive paths, leading to better employee morale.

Positive associations with worker well-being are also found in other surveys of worker responses to higher involvement using Vandenberg et al.'s (1999) measures. In a study of 573 full-time workers in a US health-care site, Mackie, Holahan, and Gottlieb (2001) show benefits for employee mental health – lower levels of depression – from greater exposure to employee involvement processes. In a telephone survey of 775 New Zealand employees, Macky and Boxall (2008) find that greater experience of HIWPs is associated with higher job satisfaction. Pressures to work harder, without improvements in employee autonomy and rewards, are, however, likely to be experienced as negative intensification. Then, in a subsequent telephone survey of 1,016 New Zealand employees, Boxall and Macky (2014) show that HIWPs are associated with greater satisfaction and better work–life balance and have no relationship with fatigue and stress while work intensification, particularly through role overload, is associated with greater fatigue, stress, and work–life imbalance. Their results suggest that workers clearly distinguish between processes that foster their involvement in decision-making and those that intensify their working life.

Table 2 provides an up-to-date record of studies of the worker outcomes of HIWPs. They are included because they explicitly specify employee involvement as the underlying orientation for the HR practices under examination. Most of the studies model HIWPs as an overall bundle rather than individual practices and more studies measure HIWPs with scale scores than with an index.

Table 2. Summary of Quantitative Studies Linking HIWPs/HIWSs to Worker Outcomes.

| References | IV: Approach to Measuring HIWPs/HIWSs | DV: Measures of Employee Outcomes | HIWPs/HIWSs-Employee Outcomes Relationship | Overall Impact | Design |
|---|---------------------------------------|--|--|----------------|-----------------|
| Bacon and Blyton (2001) | Index score | Job insecurity. | HIWP-employee perceived job insecurity (0). | Neutral | Cross-sectional |
| Böckerman, Bryson, and Ilmakunnas (2012) | A number of dummy variables | Sickness absence, job satisfaction, working capacity, self-assessed health, tiredness at work and pain felt at work. | HIM-short-term absences (+); HIM-long-term absences (0); HIM-job satisfaction (+); HIM-feeling tired at work (mixed results); HIM-feeling pain at work (mixed results); HIM-work capacity (mixed results); and HIM-self-assessed health (mixed results). | Mixed | Cross-sectional |
| Boxall and Macky (2014) | Scale score | Job satisfaction, job stress, fatigue, work-life imbalance. | Power/rewards/development-job satisfaction (+); power/information/rewards/development-fatigue/stress (0); and power/information/rewards-work/life imbalance (-). Voice-turnover (-); information sharing/training-turnover (0). | Positive | Cross-sectional |
| Cottini, Kato, and Westergaard-Nielsen (2011) | Index score | Voluntary turnover. | | Positive | Cross-sectional |
| Forth and Millward (2004) | Index score | Gross hourly earnings. | HIMP-hourly earnings (+). | Positive | Cross-sectional |
| Harmon et al. (2003) | Scale score | Employee satisfaction. | HIWS-satisfaction (+). | Positive | Cross-sectional |
| Mackie et al. (2001) | Scale score | Sense of coherence, work-related stress, and depression. | HIMP was related to sense of coherence (+) and depression (-); increased exposure to employee involvement practices was indirectly associated with lower levels of depression through both perceived work stress and sense of coherence. | Positive | Cross-sectional |
| Macky and Boxall (2008) | Scale score | Job satisfaction, fatigue, job-induced stress, work-life imbalance. | Power/information/reward/knowledge/teamworking-job satisfaction (+); power-job stress/fatigue (-); rewards-work/life imbalance (-). | Positive | Cross-sectional |
| Mendelson, Turner, and Barling (2011) | Scale score | Job satisfaction, affective commitment, continuance commitment. | HIWS-satisfaction (+); HIWS-affective commitment (+); HIWS-continuance commitment (-). | Mixed | Cross-sectional |

Table 2. (Continued)

| References | IV: Approach to Measuring HIWPs/HIWSs | DV: Measures of Employee Outcomes | HIWPs/HIWSs-Employee Outcomes Relationship | Overall Impact | Design |
|--|---------------------------------------|---|---|----------------|-----------------|
| Mohr and Zoghi (2008) | Index score | Job satisfaction. | Suggestion program-job satisfaction (+); job rotation-satisfaction (+); informed about workplace changes-satisfaction (+); task team-satisfaction (+); QC-satisfaction (+); self-directed workgroup-satisfaction (+); additive index HIWS-job satisfaction (+). | Positive | Predictive |
| Paré and Tremblay (2007) | Scale score | Procedural justice, affective and continuance commitment, OCB-helping behaviors, turnover intentions. | Recognition/competency development/fair reward/info sharing are negatively and directly related to turnover intentions; procedural justice, affective and continuance commitment; and OCB partially mediate the effects of HIWP on turnover intentions. | Positive | Cross-sectional |
| Rondeau and Wagar (2006) | Index score | Magnet strength, nurse satisfaction, and resident satisfaction. | Non-significant for all the effects of HIWP. | Neutral | Cross-sectional |
| Richardson and Vandenberg (2005) | Scale score | Organizational citizenship behavior, absenteeism, voluntary turnover. | Involvement climate-OCB (+); involvement climate-absenteeism (-); involvement climate-turnover (-). | Positive | Cross-sectional |
| Shih, Chiang, and Hsu (2010) | Scale score | Job satisfaction, work-family conflict, job performance. | HIWS-job satisfaction (+); HIWS-job performance (+); HIWS-work/family conflict (+) | Mixed | Cross-sectional |
| Searle et al. (2011) | Scale score | Employee trust in employer. | HIWP-employee trust in employer (+); procedural justice matters more for trust when adoption of HIWP practices is low | Positive | Cross-sectional |
| Vandenberg et al. (1999) | Scale score | Job satisfaction, organizational commitment, turnover intention. | HIWS-composite well-being variable (+) | Positive | Predictive |
| Wallace, Butts, Johnson, Stevens, and Smith (2016) | Scale score | Thriving, innovation. | High involvement climate-thriving (+); high-involvement climate-innovation (+, mediated by thriving) | Positive | Predictive |

| | | | | | |
|----------------------------|-------------|--|--|----------|-----------------|
| Wood and de Menezes (2008) | Index score | Absenteeism. | Suggestion schemes-absenteeism (+); all the other individual HIWP are unrelated to absenteeism; the interaction of QCs and training in human relations is negatively associated with absenteeism. | Mixed | Cross-sectional |
| Wood and de Menezes (2011) | Index score | Job satisfaction, anxiety-contentment. | HIM-job satisfaction (0); HIM-job anxiety-contentment (-). | Negative | Cross-sectional |
| Wood et al. (2012) | Index score | Job satisfaction, job anxiety-comfort. | HIM-job satisfaction (-); HIM-job anxiety-comfort (-). | Negative | Cross-sectional |
| Wood and Ogbonnaya (2018) | Scale score | Job satisfaction, well-being. | <i>Direct effect:</i> Role-involvement management-job satisfaction (+); role-involvement management-well-being (+); organizational involvement management-job satisfaction (-); organizational involvement management-well-being (-). <i>Interaction effects:</i> Role-involvement management × recessionary actions-job satisfaction (-); role-involvement management × recessionary actions-well-being (-); organizational involvement management × recessionary actions-job satisfaction (+); organizational involvement management × recessionary actions-well-being (+). | Mixed | Cross-sectional |
| Yang (2012) | Scale score | Affective commitment, loyalty component of OCB, participation component of OCB, service delivery component of OCB. | Recognition/empowerment/competence development/fair rewards/information sharing-affective commitment (+); recognition/empowerment/competence development/fair rewards/information sharing-loyalty OCB/participation OCB/service delivery OCB (+, mediated by affective commitment). | Positive | Cross-sectional |
| Zatzick and Iverson (2011) | Index score | Employee satisfaction, absenteeism. | HIEWS-satisfaction (+); HIEWS-absenteeism (0); HIEWS moderates employee involvement-to-absenteeism nexus. | Positive | Cross-sectional |

A majority shows a positive overall impact on employee outcomes, such as job satisfaction and affective commitment (Boxall et al., 2015), job performance (Shih et al., 2010), organizational citizenship behavior, reduced turnover intention (Paré & Tremblay, 2007) and decreased absenteeism (Richardson & Vandenberg, 2005). Some studies include moderators and/or mediators in testing the relationship between HIWPs and employee outcomes. For example, Searle et al. (2011, p. 1085) find that “procedural justice matters more for employees’ trust when there are fewer HIWP in place” while Boxall et al. (2015) demonstrate the role of intrinsic motivation and skill utilization as mediators between HIWPs and employee outcomes, as envisaged by Vandenberg et al. (1999). However, the outcomes of HIWPs for workers are not uniformly positive. As with the business results, there are also mixed, neutral, and negative results. Some qualification of the general premise that there is a positive relationship between HIWPs and employee well-being is required, a thought we take further in the section below on the tensions associated with HIWPs/HIWSs.

As with the research on business outcomes, most studies are cross-sectional in nature, and predictive and longitudinal research designs are less common. However, traditional regression techniques and SEM are more evenly utilized, suggesting that the latter has been gaining dominance for examining employee outcomes. Lastly, all of the studies postulate a linear relationship between HIWPs and employee outcomes and the presence of non-linear relationships remains unreported. The presence of such relationships can, in part, account for the typically small effect sizes for observed statistically significant relationships. Furthermore, the possible presence of non-linear relationships, such as inverted-U curves, is far from non-obvious.

Improving Research Methods

As this review indicates, there is a variety of methodological issues with the studies on HIWPs/HIWSs. One concerns the inconsistency in the constitution and measurement of HIWPs/HIWSs, which challenges our ability to compare results across studies. Our own view is that the scales developed by Vandenberg et al. (1999) provide some of the most valid and reliable measures yet developed for gauging the extent to which employees experience involvement in decision-making and are supported and incentivized to participate (Boxall & Macky, 2009). Richardson and Vandenberg (2005) offer an 8-item shortened version of these measures, whose comprehensiveness of domain coverage may need further testing. However, as noted earlier, many studies simply follow existing well-cited papers without a clear theoretical justification for the inclusion or exclusion of specific practices. There is also great variability in the proxies used to gauge HR practices (Marchington et al., 2016) with indicators ranging from presence/absence questions, depth of implementation, and employee coverage by a particular HR practice (Boselie, Dietz, & Boon, 2005). In addition, problems arise when compiling scores of high-involvement practices. Approaches to calculating such scores include index scores, scale scores, first-order latent variables, and second-order latent variables. Given that the SEM approach with latent variables

produces more accurate parameter estimates than the regression approach with observed variables (Kline, 2011), we suggest that future studies should model HIWPs as latent variables via SEM analyses.

There is also a wide range of indicators used to measure organizational performance with some having a more direct connection to the management of work and people than others. Because financial performance indicators are often too distant from HR practices, and can be influenced by some very important non-HR variables, such as interest and exchange rates, there is a strong argument for adopting more proximal measures of performance, either at the individual or at work-group/collective levels (Kehoe & Wright, 2013; Purcell & Kinnie, 2007). We need to locate proximal outcome measures that are not provided by the source used for the independent and mediating variables and that are measured subsequent to them (Wright, Gardner, Moynihan, & Allen, 2005).

As noted in our reviews of outcomes, another issue is the need for a greater body of longitudinal studies. For example, there is a problem on the employer side where the conventional argument is that HIWPs lead to organizational performance. However, the reverse is also a plausible explanation (Fabling & Grimes, 2010; Marchington et al., 2016). That is, HIWPs are more likely to be adopted among high-performing organizations that have greater financial resources to invest in human capital. In testing relationships on the employer side, we also need further control variables. Fabling and Grimes (2010), for example, argue that it is important to ensure that studies of management practices have adequate controls for capabilities outside the HR area, such as strategic planning abilities that may be correlated with HR practices. This is endorsed by Guest (2011), who notes that the positive effects of HRM on performance may be attributed to good leadership. Greater longitudinal studies are also needed on the employee side. Here, the problem may be less of a concern because job and organizational characteristics are likely to have a heavier impact on employee outcomes than the other way round (Boxall & Macky, 2014). In recent longitudinal research on job quality, Felstead, Gallie, Green, and Henseke (2016) argue that their results are supportive of much that has been found in cross-sectional studies. However, we still need to confirm this in a much more extensive way.

Another issue noted earlier is that the relationship between HIWPs and organizational performance/employee outcomes needs to be examined for the possibility of curvilinear relationships. Prior research has predominantly modeled this relationship as a linear one. However, Brännmark and Holden (2013) suggest that greater employee involvement may create role overload, which offsets some of the benefits acquired via increased involvement. Similarly, Marchington et al. (2016) argue that there is a limit to the performance gains derived from HIWPs utilization due to increased labor costs associated with implementation. Both arguments point to an inverted U-shaped relationship between HIWPs and outcomes that needs to be examined.

An important issue that is growing in concern is the need to unbundle HIWPs in order to test how different aspects of the bundle interact with each other and relate to relevant mediators, moderators and outcomes. Despite the original arguments for modeling HIWPs as a bundle (MacDuffie, 1995), studies testing the

effects of individual HR practices show that not all of the constituent practices may be related to organizational and employee outcomes (Macky & Boxall, 2008; Wood & de Menezes, 2008). Some aspects may actually work, through different variables, to produce mixed effects. As mentioned above, Wood et al. (2012) distinguish between role-based involvement or “enriched job design” and wider, organizational involvement. In an analysis of British data, they find that greater organizational involvement has a negative effect on organizational performance, via lower job satisfaction, which actually undermines its positive, direct effects.

Lastly, apart from these issues with quantitative studies, it is important that we make better use of qualitative research (Guest, 2011), which is especially valuable for understanding the effectiveness of the implementation of HIWPs. A case in point is the study by Kaufman (2003) on the development, structure, operation, business goals, and associated benefits and costs of the employee involvement program adopted by Delta Air Lines. Such studies can explain the ideological and political development of a work system, including the roles played by the various actors involved, in the kind of way that is not possible in quantitative research.

TENSIONS ASSOCIATED WITH HIWPs/HIWSs

As our discussion has indicated, HIWPs are likely to entail both benefits and costs, something that is true for both parties involved. The pathway toward greater employee involvement can engender various tensions.

Security Versus Involvement

The first set of tensions that is widely recognized concerns the prospect of trade-offs between employer and employee interests. Early concerns on the worker side of the equation were often related to whether the ideas and improvements generated by greater involvement would lead to reductions in employment security (Kaufman, 2001). Why cooperate with a process that could generate efficiency gains that eliminate your job? Steps to minimize lay-offs were therefore often seen as a component of a well-designed HIWS (Appelbaum et al., 2000; Pil & MacDuffie, 1996). This is consistent with the concept of “internal” or “horizontal” fit in strategic HRM theory, which was first developed by Baird and Meshoulam (1988), or “bundling” in MacDuffie’s (1995) terms, as noted above. The idea of internal fit places value on coherence or “powerful combinations” among HR practices and the avoidance of “deadly combinations” in which practices work in opposite directions (Becker, Huselid, Pickus, & Spratt, 1997). On this basis, greater involvement, which means a greater contribution from the worker to the firm, and poorer job security, which means lower commitment from the employer in return, could be seen as a deadly combination or a breach of the HIWS psychological contract (Wood & Ogbonnaya, 2018) and therefore likely to create conflict or dysfunctional outcomes.

While there is certainly an argument that greater internal consistency in HRM could help to create a human-capital based form of competitive advantage

(Boxall & Purcell, 2016; Delery & Roumpi, 2017), observation of corporate reality over the last 20–30 years has shown that management does not necessarily behave in a way that is consistent with the theory of internal fit. Research suggests that management often “wants it both ways.” For example, in their study of the international iron and steel industry, Bacon and Blyton (2001) show that new work systems designed to increase employee involvement in decision-making were introduced at the same time as firms introduced more contingent employment contracts (fixed-term contracts and subcontracting of jobs) and as they continued to carry out redundancy programs. This climate of insecurity did not prevent management in these firms from seeking higher involvement from the remaining workforce. Management can be caught in a tension between needing more skilful, more creative work while not being able to hold traditional staffing levels and offer traditional levels of employment security (Boxall & Purcell, 2016). In facing the challenge of renewing an organization that has lost competitiveness, Walton, Cletcher-Gershenfeld, and McKersie (1994) observe that management often needs a blend of “forcing” and “fostering” behavior.

Given the ongoing reality of globalization and economic uncertainty, we are likely to continue to observe a tension around involvement and security in the contemporary workplace. An analysis that describes this tension very effectively is Thompson’s (2003, 2013) “disconnected capitalism” thesis, which highlights the way that the finance sector has greatly expanded in influence and that business leaders have increasingly been pursuing profits through the sourcing and structuring of financial investments and the trading of currencies and financial securities (i.e., the “financialization” of contemporary capitalism). Accompanied by the possibility of private-equity buyouts, this has increased the risk of regular restructuring, downsizing and outsourcing to enhance shareholder value. As a result, while managers within these corporations may seek greater employee involvement to improve business outcomes, they can only offer a weakened commitment to their workforces in return: “any employer promises are purely conditional” (Thompson, 2003, pp. 364–365). This tension, then, is something that we are likely to continue to witness. An interesting question arises as to the consequences that flow from management actions that provoke this tension. A comprehensive study by Wood and Ogbonnaya (2018) addresses this question using the British Workplace Employment Relations Survey 2011 (i.e., following the 2008–2009 financial crisis). It suggests that management can ameliorate the negative effects of “recessionary actions” on job satisfaction and well-being through better organizational involvement (e.g., through information sharing or training that enhances the general understanding of why changes are occurring).

Involvement Versus Intensification

For workers, a second fundamental tension concerns the fact that greater employee involvement is often associated with greater fatigue and stress (Godard, 2004; Eurofound, 2012; Stewart, Danford, Richardson, & Pulignano, 2010). Where a work reform seeks more in the way of “discretionary effort” than it does in terms of untapped intellectual potential, it entails risks of work intensification

(Boxall & Macky, 2014). Not all increases in work intensity are bad but studies in the sociology of work have underlined the risks associated with excessive pressure. In the Employment in Britain survey, for example, Gallie, White, Cheng, and Tomlinson (1998, pp. 42–43, 79–80) found that up-skilling and greater levels of task discretion were associated with higher levels of work intensity, with mixed impacts on employee well-being. Kalleberg, Nesheim, and Olsen (2009) and Gallie et al. (2012) have reported greater stress or pressure in self-managing teams.

As noted above, the issue of the balance between involvement and intensification is often of concern when organizations implement lean production. In such situations, levels of interdependence among workers are typically high and it is not easy to insulate particular individuals or work groups to give them high levels of autonomy (Cullinane et al., 2013; Niepce & Molleman, 1996). While a lean management process may invite workers to participate in team meetings to address issues of production quality and efficiency, and thus improve their involvement in work-related decisions, it operates by reducing waste, including inventory buffers and production downtime. Greater participation in eliminating waste leads to higher levels of standardization of work procedures, which diminishes the space for individual workers to vary their working methods and typically increases the pace of work (Lorenz & Valeyre, 2005; Parker, 2003; Pruijt, 2003). Thus, greater participation in decision-making on one level (team meetings) can diminish employee autonomy at the level of the individual job and can heighten work pressures for everyone, including the supervisors (Anderson-Connolly, Grunberg, Greenberg, & Moore, 2002). The risk to employee well-being is greatest in implementations where “excessive leanness” (de Treville & Antonakis, 2006) takes over and the opportunities to participate in decisions are crowded out by rising work pressure. Pressures in lean production are frequently heightened by the use of rigorous quality and efficiency metrics associated with stretch targets (Neirotti, 2018; Procter & Radnor, 2014).

Helping the individual employee to cope in these circumstances often involves better support from their team leaders or front-line managers, who in turn need better support from higher-level managers and from HR specialists (Huo & Boxall, 2017). Rather than seeing the front-line manager as having a high degree of freedom in this situation, it is more accurate to see them as working within a larger set of constraints (Boxall & Macky, 2016; Procter & Radnor, 2014; Sterling & Boxall, 2013). Both line-managers and team members face increased job demands in lean production environments and therefore both groups are at risk of poorer well-being outcomes (Huo & Boxall, 2017). In addition to increased support, both the team leader and their team members would benefit from a greater experience of control, as Fenton-O’Creivy (1998) argues. Better training and development for managers in these conditions, including support for how to help their team cope with high pressure levels, could enhance their sense of control and self-efficacy (Boxall & Macky, 2016; Huo & Boxall, 2017). This, in turn, could help them improve the skills, the quality of involvement and the physical health of their team members (Cafferkey et al., 2017; Sterling & Boxall, 2013).

If these issues are understood, it would be unwise to suggest that lean production will always lead to inferior job quality. In a case in a Chinese manufacturer, for example, [Huo and Boxall \(2018\)](#) tested [Cullinane et al.'s \(2013\)](#) argument that problem-solving demands in lean production, which some have interpreted as intensification, could be positive challenges that are motivational for employees. Their results confirmed this view, showing that employee involvement in lean-related problem-solving in this company had positive consequences for engagement and that greater involvement in decision-making strengthened this link. As noted above, rather than being uniformly positive or negative, we need to recognize the major variations that can occur in how lean production is implemented that will lead to whether it is more or less empowering ([Conti et al., 2006](#); [Hasle et al., 2012](#)). [Neirotti \(2018\)](#) argues that as implementation of lean production matures, and support mechanisms are refined, workers may come to make sense of it as a “gestalt,” becoming more accepting of the blend of changes that it entails. As his analysis implies, there is a need to recognize the ongoing risk of an involvement-intensification tension in lean production and understand the resources and strategies that can make it more sustainable in particular contexts. In terms of understanding how a particular implementation is affecting employee interests, including both operating workers and line managers, the JD-R framework is a valuable analytical tool ([Cullinane et al., 2013](#); [Huo & Boxall, 2017](#)).

The Degree and Nature of Involvement: Too Much or the Wrong Kind?

As noted in our comments on quantitative research methods, most of the research on the high-involvement pathway has assumed a linear relationship between greater involvement and employee well-being. We have just highlighted the tension between involvement and intensification, as if the former is always good and the latter is always bad. While we fully endorse the view that greater involvement is generally better for individuals and that intensification runs the risk of undermining well-being, as confirmed by the research we have cited, we need to confront the possibility of a curvilinear relationship between involvement and well-being. In [Warr's \(2007\)](#) “vitamin model,” a positive job feature can become negative if it becomes “too much of a good thing.” This suggests that there is some optimal level for all of us in terms of the involvement, and corresponding responsibilities, we find healthy and tolerable.

In some situations, workers have a strong preference for greater involvement at the level of their job but are resistant to greater involvement at other levels. For example, management may want greater involvement in teamwork or in wider coordination across the organization while most of the workforce would prefer greater individual autonomy ([Bauer, 2004](#); [Gallie, 2013](#); [Wood & Ogbonnaya, 2018](#)). As noted above, a shift to self-managing teams may increase the level of control over individuals, generating greater pressure to perform when compared with traditional supervision ([Barker, 1993](#)). An aspect of this tension is the situation where workers object to the type or character of involvement being proposed by management. For example, research shows that team members may resist taking on the responsibility of managing poorly performing members of

the team because it is laden with uncomfortable kinds of inter-worker conflict (Pruijt, 2003). Handling these sorts of conflicts are “what managers are paid to do,” so it is not unusual for there to be resistance to the delegation of this kind of responsibility. There may also be uncomfortable forms of conflict with customers. For example, in home-based care of the elderly, some workers encounter highly demanding clients with unreasonable demands. As Sørensen et al. (2015) explain, in such situations it can reduce the potential for exploitation of workers if the employer (or a collective agreement) constrains their autonomy by imposing some standardization (e.g., as to which tasks can and cannot be demanded).

Political Tensions within Management

We turn now to the internal tensions that management may face. As explained above, managers are heavily influenced by the economics of whether a high-involvement model of working will pay off. The contingent factors we have discussed in terms of the distribution of HIWPs underline the importance of this issue. In many market contexts, managers decide, in effect, that lower forms of involvement will be more economic (Bailey & Bernhardt, 1997). If, however, management does decide to develop or reform a production system in a way that aims to enhance employee involvement in decision-making, this does not rule out political tensions within management itself.

Greater employee involvement may split management between disciplines and across levels of the hierarchy (Boxall & Purcell, 2016). For example, if marketing executives seek to personalize the customer encounter in a service business, which implies greater employee involvement, this may be resisted by operations executives whose discipline tends to favor using technology to standardize the service offer and increase efficiency (Batt, 2007). In terms of managerial conflict across hierarchical levels, Batt (2004) provides a case study of how the senior management of a company sought to introduce self-managing teams to enhance productivity but supervisors and middle managers successfully resisted the initiative, which would bring radical change to their roles. Without their willing cooperation, implementation became impossible because they are key to creating a positive climate for worker involvement. Whether they were irrational to resist is a good question. It is easy to paint lower-level managers as villains in such a story but they are vital to making work reforms succeed and this can bring a significant level of extra pressure (Boxall & Macky, 2016; Huo & Boxall, 2017), as we note above. Are they, in turn, provided with better support from senior managers and HR specialists to help them do a better job of managing their team (Purcell & Hutchinson, 2007)?

Internal tensions can also be produced by the accounting systems of multi-divisional firms, which can generate misaligned incentives that have the effect of undercutting employee involvement. For example, Taplin's (2001) study of the implementation of team-based sewing in a multi-plant clothing manufacturer in the United States is an excellent illustration of the way in which centralized accounting measures can attribute the positive results of change (e.g., greater production flexibility) to the corporate level and leave the negative ones (e.g., set-up

costs and efficiency losses) at the plant level, reducing the bonuses of operating managers and misaligning their incentives. His comments on the responses of plant managers to this predicament are instructive: “they refocused the goals of teams away from flexibility issues and concentrated instead upon cost savings” (Taplin, 2001, p. 20). Research such as this underlines the importance of learning about the actual impacts of a work reform inside complex corporate hierarchies, and reinforces the need for longitudinal case studies of the political dynamics of work reorganization in terms of management itself.

CONCLUSIONS

HIWPs are associated with high levels of employee influence over the work process, such as high levels of control over how to handle individual job tasks or a high level of involvement at team or workplace level in designing work procedures. The high-involvement pathway can be embarked on to improve the decision-making powers of a range of workers in or near front-line roles in organizations. The acid test of whether greater involvement is occurring is whether these workers discern it and consider it genuine. When accompanied by companion investments in human capital – in training and development, in pay and other rewards, and in employee voice mechanisms – it is appropriate to talk not only of HIWPs but of an “HIWS.”

This chapter has reviewed the industrial and theoretical evolution of high-involvement working, describing its significance across a variety of academic perspectives and across a range of societies. In theory and in practice, it is often argued that steps to enhance employee involvement in decision-making will lead to better opportunities to perform, better utilization of skill and human potential, and better employee motivation. As envisaged in the AMO model of performance or in Lawler’s (1986) PIRK rubric, these mediating variables, in turn, are expected to lead to better organizational outcomes, such as innovation and productivity, and to better employee outcomes, such as greater job satisfaction and better mental health.

However, there are costs to increased employee participation in decision-making, especially when there are significant investments in human capital, so we must grapple with the reality of its distribution. The important contingencies that help to explain the incidence of HIWPs include a range of economic and sociopolitical factors. In respect of the former, the scope for employee involvement is affected by the ways in which managers construct the wider production system in a workplace. For example, where operational uncertainty is low in a production system, management is likely to use processes of work standardization to propel efficiency, which weakens the economic incentives for employee involvement. We frequently see this in Fordist manufacturing plants and in mass services, such as fast-food and chain-store retail. On the sociopolitical side, management capabilities and internal politics play a part, along with the interests and strategies pursued by workers and their representatives in unions and works councils and, most broadly, the web of societal forces that creates different “employment regimes” in different countries (Gallie, 2007a, 2007b). The “Nordic effect” tells us

that we cannot simply determine the possibilities for employee involvement from economic predictors (Gustavsen, 2011). Even though economic pressures may be severe, we would do well to remember that management has some degree of discretion in how to develop and refine production systems. Even in low-autonomy roles, there is typically some scope for “job crafting” by workers, which can be encouraged (Berg, Wrzesniewski, & Dutton, 2010; Oldham & Hackman, 2010).

This complex set of factors implies an ongoing research agenda (Boxall & Winterton, 2018). In tackling this research, we need to do a better job of studying the interdependencies of production systems and the internal politics of complex, “financialized” corporations (Thompson, 2013). Taplin’s (2001) in-depth, qualitative case study is an exemplar of the kind of research we need to uncover the micro-politics of management attitudes and behaviors in the realm of employee involvement. It is very hard to imagine that the complex story of misaligned managerial incentives that Taplin (2001) portrays could have been uncovered through quantitative research. This should remind us of the need to build the theory of high-involvement through all the research tools at our disposal.

Given its widespread significance across manufacturing and services, we need to understand better the contextual factors that affect the quality of employee involvement in the implementation of lean production with an eye to how win-win outcomes can be built (Conti et al., 2006; Hasle et al., 2012). This includes research in the context of the public sector where there are significant concerns about the combination of lean methods with demanding performance targets but where Procter and Radnor (2014) warn us against taking an exclusively negative view of lean methods. Key concerns in this sector include the “deprofessionalization” of highly educated public-sector workers (Lloyd & Payne, 2013) and the accompanying rise in work intensity (Green, 2006), trends that threaten employee recruitment and retention and, thus, the workforce capacity required to meet high levels of social need. In terms of the wider set of sociopolitical factors, we need a better understanding of the “governance” of involvement in complex contexts, including the impacts of works councils and unions on the climate for involvement, because the results of current studies are much more ambiguous than some imagine (Boxall & Winterton, 2018).

A growing concern is the need to study the implications for employee involvement of advanced digital technologies and the application of artificial intelligence. Coined “Industrie 4.0” in the German literature (Kagermann, Helbig, Hellinger, & Wahlster, 2013), this refers to the conjuncture of

the advances of two transformative revolutions: the myriad machines, facilities, fleets and networks that arose from the Industrial Revolution, and the more recent powerful advances in computing, information and communication systems brought to the fore by the Internet Revolution. (Evans & Annunziata, 2012, p. 3)

As with lean production, there is potential for both greater empowerment, on the one hand, and for a heightening of Taylorism, on the other (Hirsch-Kreinsen, 2016). As Bayo-Moriones, Billon, and Lera-Lopez (2017, p. 572) observe in a recent study of Spanish manufacturers, “in some cases, firms adopting AMT (advanced manufacturing technology) have opted for simplified job designs with routine and repetitive tasks.”

We also need to progress the research on the outcomes of HIWPs for firms and workers and to grapple with the tensions with which it is associated. While a range of studies has found benefits for firms and for workers, there are many definitions of the independent variable (the nature and extent of employee involvement). Greater convergence on the strong measures developed for quantitative studies by Vandenberg et al. (1999) would improve our knowledge base, but we also need to enhance our use of longitudinal quantitative studies and of qualitative case studies. On the business side of the equation, there is limited research that controls for prior performance or that theorizes more fully the variables that may explain management behavior. On the employee side, a large volume of cross-sectional quantitative studies finds benefits for employees in greater involvement, including better skill utilization, job satisfaction, and mental health. However, both quantitative and qualitative research clearly finds risks to employee well-being from rising levels of work intensity, telling us that the employee benefits depend on the blend of involvement and intensification in any particular context.

Finally, let us stand back and take a societal perspective on HRM (Beer, Boselie, & Brewster, 2015; Boxall, 2014). Although the relationship between involvement and employee well-being may be curvilinear (Warr, 2007), and we should not assume that worker interests are uniform, it is fair to say that the high-involvement pathway should be considered one of the most important vectors available to us to improve the quality of work and well-being in a society (Freeman & Kleiner, 2006). When genuinely implemented, it is a direction of change that can open up better utilization of employee skills and create better opportunities for employees to explore their potential. It is likely to make the work itself more intrinsically motivating and satisfying. In most instances, these are benefits to employees in terms of job quality and factors that promote their continued participation in work, benefiting society in both ways. Organizational costs are inevitably going to come into play (Kaufman & Miller, 2011), and these will be more or less severe and will create a range of management responses, both positive and negative (Godard, 2004). Where management clearly sees an economic advantage, as in better innovation or quality without crippling costs, we have a major realm of win/win outcomes, providing the complex tensions we have noted are managed effectively over time. The challenge for societal well-being lies in tackling the difficult economic contexts, such as those in many small firms and in low-wage sectors such as hospitality and retail. However, it is likely that we can do much more to explore the range of low-cost options that may exist in these environments (Jones et al., 2010). Here, the distinction we made between HIWPs and HIWSs is helpful because the way forward may lie in expanding HIWPs, however humble to begin with. Where this generates mutual gains for the parties, including gains in trust, they have a basis to take steps toward stronger HIWSs.

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