High-Involvement Management, Economic Recession, Well-Being and Organizational

**Performance** 

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#### Abstract

High-involvement management was introduced as a means of overcoming economic crises; but it has been argued that the inevitability of cost-cutting measures when organizations face such crises would undermine its efficacy. This paper first presents theories of why tensions may exist between high-involvement management and actions typically taken by management during recessions, such as wage and employment freezes. It then reports research aimed at testing whether the performance effects of high-involvement management were lower in organizations where management took such actions to combat the post-2008 recession, due to their adverse effects on employees' job satisfaction and wellbeing – and even whether high-involvement management still had a performance premium after the recession. Using data from Britain's Workplace Employment Relations Survey of 2011, the research shows that both dimensions of high-involvement management - role- and organizational-involvement management - continued to be positively associated with economic performance as the economy came out of recession. Recessionary actions were negatively related to both employee job satisfaction and well-being, while job satisfaction mediated the relationship between role-involvement management and economic performance, which is consistent with mutual gains theory. However, recessionary action reduced the positive effect that role-involvement management had on job satisfaction and well-being, and thus may have reduced its positive performance effects. In the case of organizationalinvolvement management, it reduced the level of job dissatisfaction and ill-being, suggesting that it may provide workers with more information and greater certainty about the future.

# HIGH-INVOLVEMENT MANAGEMENT, ECONOMIC RECESSION, WELL-BEING AND ORGANIZATIONAL PERFORMANCE

High-involvement management is a term coined by Ed Lawler (1986) to describe an approach to management centred on employee involvement. When first introduced some thirty years ago, it was heralded as a means of overcoming economic crises at both the organizational and national levels; but critics were quick to argue (often in conferences but less so in print) that the inevitability of cost-cutting measures and work intensification when organizations face such crises would undermine high-involvement management (Godard, 2004; Legge, 2005; Thompson & Harley, 2007). It was assumed that such actions in recessionary times conflict with the principle of mutuality underlying high-involvement management. Managers then face a "fundamental dilemma of how to square increasing empowerment with the reduced commitment" and satisfaction induced by the kinds of changes in employment relations that recessionary actions entail (Cappelli, 1999: 46). This may lead managers adopting a high-involvement approach to abandon it (or those contemplating introducing it to postpone this), or alternatively to minimize cost-cutting and reorganizations to avoid undermining it. The argument that recessionary action will undermine high-involvement management, however, does not necessarily assume its abandonment, but rather that such action will reduce the approach's efficacy and perhaps ultimately the depth of its application. High-involvement management may thus co-exist with recessionary actions, meaning the issue becomes the extent to which its assumed performance effects are reduced when recessionary action is taken. It may be that organizations adopting high-involvement management are still outperforming others after recession, as the theory underlying the concept predicts, but that the link between high-involvement management and performance is weakened in workplaces that had adopted cost-cutting counter-recession actions.

The claims for a tension between high-involvement management and recessionary action have been typically asserted with little expansion of the processes involved; it is rather taken for granted that management will sooner or later have to make what Godard & Delaney (2000: 489) call "tough decisions" which mean that the effects of high-involvement management "wear off". Underlying this is a mutual gains perspective on high-involvement management, according to which management approaches can be mutually beneficial to employers and employees (Van De Voorde, Paauwe, & Van Veldhoven, 2012), and in contrast, a conflicting outcomes perspective on recessionary actions as they are seen as typically entailing economic gains for employers at the expense of employees' satisfaction and well-being. It is the likelihood of these negative employee outcomes that is the source of the tension between high-involvement management and recessionary action, and that are likely to limit the mutual gains from the former.

This paper reports a study that is designed to examine whether this tension manifests itself through recessionary action reducing the positive effects of high-involvement management on employee and employer outcomes. As the foundation of the claims about this tension is based on a mutual gains perspective, we introduce this in the first part of the paper, building particularly on Wood, Van Veldhoven, Croon, & De Menezes's (2012) conception of high-involvement management, before introducing the concept of recessionary action. Since the claims for a tension have not been strongly articulated, we next rationally reconstruct the underlying theory, which we take to be underpinned by social exchange theory and associated psychological contract and signalling theories. This theory predicts that there should be an interaction effect between high-involvement management and recessionary action on the employee outcomes that mediate the relationship between high-involvement management and organizational performance.

In the second part of the paper we report the results of our study that was designed to test this prediction as well as the foundation of the theory underlying it: that high-involvement management is positively associated with high performance and employee outcomes while recessionary action is negatively associated with employee outcomes. In so doing, we are also examining whether high-involvement management still has a performance premium following the recession. If it is found that the premium is undermined by the recession then this represents an undermining of the notion that high-involvement management deserves the status of a best-practice model. It implies that any performance benefits are at best contingent on macro-economic circumstances, or at least on how managements react to them, and at worst are short-term or unsustainable at least in the current economic regime. If however this is not the case and high-involvement management is still correlated with organizational performance then it reinforces claims about its unique virtues. Nonetheless, it could still be that the extent of this comparative advantage is reduced through the impact of recessionary action on staff morale. The paper thus contributes to our understanding of high-involvement management and is the first robust empirical testing of a longstanding issue in the human resource management (HRM) discourse relating to the incompatibility of cost-cutting measures and employee involvement.

The study focuses on the recession in Britain following the 2008 financial crisis, which provides a good opportunity to test the interactions between high-involvement management and recessionary action, not least because the recession was severe and relatively long-lasting. It uses the latest British Workplace Employment Relations Survey (WERS) conducted in 2011, which was towards the end of the recession. This enables us to assess the situation as an economy emerged from it. Moreover, the 2011 WERS provides us with a unique opportunity, as questions on the impact of recession and measures taken to combat its effects were included in the WERS series for the first time.

#### THEORETICAL BACKGROUND

# **High-involvement Management**

High-involvement management is an approach, or underlying orientation, on the part of management that is aimed at enhancing the economic performance of organizations. Indeed, Lawler popularized it under the label of "Creating high performance organizations" (Lawler, Mohrman, & Ledford, 1995), and subsequently tended to use this term rather than high-involvement management. Job design for enrichment was the bedrock of its original conception, as well as Walton's (1985) similar high-commitment management concept. The hallmark of high-involvement management was that it would reverse the narrow job specifications and rigid divisions of labor associated with Taylorism which was assumed to be the dominant approach to job design. The results of experimentation in job enrichment suggested that wider changes were required both to make the job redesign process work well and to encourage innovation. Employees needed to be aware of the wider context of their jobs, participate in this wider context, and be trained accordingly, especially if they were to contribute to innovation, including in the design of their jobs and the surrounding work organization. High-involvement management was the result of this recognition of the value of extending participation beyond job discretion.

Using the terminology of Wall, Wood & Leach (2004a), high-involvement management thus entails two dimensions: role-involvement management, which concentrates on an employee's core job, and organizational-involvement management which involves workers participating in decision-making – beyond the narrow confines of the job – in the wider organization. Role-involvement management, also known as empowerment or enriched job design, is an approach to the design of high-quality jobs that allows employees an element of discretion and flexibility over the execution and management of their primary tasks. Organizational-involvement management, in Wood et al.'s (2012) terms, is an approach to

management that encourages greater proactivity, flexibility and collaboration amongst workers through the use of practices that offer opportunities for organizational involvement, either directly – through idea-capturing schemes, team work and flexible job descriptions – or indirectly, through the disclosure of financial information, specific training for involvement, or appraisal systems. Its focus is on the intelligent coordination of actions, through greater understanding and internalization of objectives, in order to overcome the restrictive communication problems that were endemic to Taylorism (Gittell, Seidner, & Wimbush, 2010; Heckscher, 1994).

In the literature on high-involvement management's performance effects the two dimensions are typically discussed in an undifferentiated way, although there has been a trend to neglect role-involvement management, as Wood & Wall (2007) demonstrate. Equally, in discussions of high-involvement management's effects on employee attitudes there is little differentiation. We will use the term high-involvement management when referring to both role- and organizational-involvement management collectively but our analysis will concentrate on differentiating between them. As management orientations that pervade the entire workplace, both dimensions of high-involvement management are conceptualized at the organizational level.

# The Mutual Gains Perspective of High-involvement Management

The mutual gains model of HRM, which underlies the promotion of high-involvement management as a management technology, assumes a 'win-win' situation for both employees and their employers. It is therefore a distinctive management approach as it offers high levels of satisfaction and well-being to employees, encourages positive employee attitudes towards the organization, and produces superior organizational performance. The empirical evidence

thus far tends to support this characterization, as studies of high-involvement management's

effects on employee outcomes have largely revealed benign effects on, for example, job satisfaction (e.g. Appelbaum, Bailey, Berg, & Kalleberg, 2000; Macky & Boxall, 2007, 2008; Mohr & Zoghi, 2008; Wood et al., 2012), while the large volume of research on its (and related concepts') effects on a range of operational (productivity and quality) and financial measures of organizational performance suggests that it has positive consequences (reviews include Combs, Liu, Hall, & Ketchen, 2006; Wall & Wood, 2005; Wood, 1999; Wright & Gardner, 2003).

Expectations about the positive impact of high-involvement management on employee outcomes typically build on the theories of job redesign. The foundation of these theories is the assumed ability of good job design to satisfy employees' need for autonomy and challenge, and hence fulfil intrinsic motivational needs as opposed to extrinsic needs for high wages and job security (e.g., Humphrey, Nahrgang, & Morgeson, 2007; Van Der Doef & Maes, 1999). Similar thinking has been applied to the broader high-involvement management as authors assume that the motivational effects of organizational-involvement management are the same as those associated with role-involvement management. For example, Barling, Kelloway, & Iverson (2003: 277) write that high-involvement management will enhance job satisfaction through creating a "better work environment for employees". The enhanced variety, autonomy, skill utilization and meaningfulness provided by role-involvement management may also apply to organizational-involvement management.

However, as Wood et al. (2012) suggest, the increased satisfaction derived from organizational-involvement management may rather stem from outcomes other than intrinsic satisfaction. These might include increased social contact, heightened understanding of the organizational context and the improved coordination of activities within the organization. Such factors may increase employees' social satisfaction, well-being and self-esteem, and promote feelings that they are valued by the organization, and that their lives are manageable,

comprehensible and coherent (Mackie, Holahan, & Gottlieb, 2001). It is because of such benign effects of both dimensions of high-involvement management on employee satisfaction and well-being that recessionary action, which is assumed to have contrasting negative effects, is thought to clash with it.

The strong mutual gains theory of high-involvement management posits that not only can it produce gains for both employers and employees, but that the positive outcomes for employees account for much of its performance effects (Gardner, Wright, & Moynihan, 2011; Jiang, Lepak, Hu, & Baer, 2012; Macky & Boxall, 2007). We expect this to apply to both dimensions of high-involvement management regardless of possible differences in the sources of satisfaction and well-being associated with each.

Employee outcomes are indeed the most prominent intermediate variables in the recent studies that have gone beyond correlating high-involvement management (or other HRM concepts) with performance outcomes by testing potential mediators of the relationship. The highly correlated job satisfaction and organizational commitment have been especially prominent (Elorza, Aritzeta, & Ayestarán, 2011; Gong, Law, Chang, & Xin, 2009; Katou & Budhwar, 2006; Messersmith, Patel, Lepak, & Gould-Williams, 2011; Paul & Anantharaman, 2003; Wood et al., 2012). Collectively, such mediation studies offer considerable support for the theory that employee outcomes form the mechanism that links high-involvement management to organizational performance. Since such a theory is central to the hypothesis that high-involvement management and recessionary actions conflict, we thus first test a similar mediation hypothesis to that in these studies:

Hypothesis 1: Role- and Organizational-Involvement Management are positively related to the economic performance of an organization and this is mediated by job satisfaction and well-being.

The strong mutual gains theory, however, goes further and assumes a type of mutuality between employers and employees that extends to mutual respect, awareness of overlapping interests and a recognition that employees' contributions will be reciprocated by appropriate behaviors and rewards from employers. It is thus consistent with social exchange theory, the kernel of which is the obligation that people have to reciprocate others' acts and that people are in turn motivated by the returns that their actions can be expected to solicit from others (Blau, 1964). The way in which recessionary actions may violate this norm of reciprocity lies at the heart of concerns that they may clash with high-involvement management. Thompson & Harley (2007: 161) for example write that, "In circumstances where downsizing and perpetual restructuring are the norm..., progressive objectives in work and employment spheres [by which it is clear from their next sentence they mean the pursuit of high performance work systems] are difficult to sustain". Drawing on social exchange theory, we will now develop a more articulated theory of the tension between high-involvement management and recessionary action that goes beyond the blanket concern that has been expressed over the years. We will first introduce further the concept of recessionary action.

### **Recessionary Action**

Recessionary actions are associated with downsizing and short-term cost-cutting measures adopted in response to economic or financial crises. Such actions are generally taken to involve lay-offs and employment moratoriums, intensification of work demands, reorganizations and delayering, wage cuts or freezes, reductions in hours, and changes in employment contracts. All these actions can be seen as part of a cost-reduction approach (see Cascio, 2005; Roche & Teague, 2014) or a retrenchment strategy (Dedee & Vorhies, 1998; Latham & Braun, 2011), which aims to minimize any decline in an organization's financial performance over the course of a turbulent economic period. The primary intention behind

 recessionary action is to reduce costs, but in some cases it may also create revenue – for example, if changes in work organization result in improved quality or wage freezes allow the firm to reduce prices and increase unit sales. Dedee & Vorhies (1998) argue that, at least for small businesses, the use of recessionary or retrenchment actions are almost inevitable if firms are to survive, and later recover from, a recession.

Recessionary actions should in practice reduce some of the organizational slack, or Xinefficiencies (Leibenstein, 1966), in the organization unless the changes are simply adjustments to meet declining demand (re-optimization in economics' terms). As Cascio (2005) stresses, recessionary actions such as downsizing are most likely to increase productivity, but less likely to improve return on assets and other indicators of financial performance - particularly if they entail indiscriminate cost-cutting or are not allied revenue-enhancing measures. Datta, Guthrie, Basuil, & Pandey's (2010) summary of the downsizing literature shows that such productivity gains were found in several but not all studies. However, the downside of recessionary actions that may be hidden in the economic indicators is their potential negative effect on the morale of the workforce, the magnitude of which may be so great as to offset any direct effects they may have on performance and hence explain the negative relationship between downsizing and performance found in some studies. We can expect such recessionary actions – especially if they reduce wages (nominal or real) and increase the intensity of work – to reduce pay and job satisfaction, increase stress and anxiety, and create a greater sense of uncertainty, insecurity and incoherence in employees' minds. This hypothesis is supported by studies of reorganizations and downsizing (Burke & Greenglass, 2007; Cappelli, 1999: 122–128; Grunberg, Moore, & Greenberg, 2001; Quinlan & Bohle, 2009, Sverke, Hellgren, & Näswall, 2002) and more generally by Datta et al.'s (2010) review of downsizing studies. Since the tension between high-involvement management and recessionary action rests on the latter's assumed negative effects, we test:

Hypothesis 2: Recessionary action is negatively associated with job satisfaction and well-being.

# High-involvement Management and Recessionary Action

Discussions of how recessionary actions may limit the sustainability of high-involvement management (or associated concepts like HRM), as we have seen, are based on presenting them as alternatives which in combination will create tensions, with the dissatisfactions generated by recessionary actions reducing or even dominating over the satisfaction employees derive from high-involvement management. Following social exchange theory we expect recessionary action to represent a violation of the specific psychological contract associated with high-involvement management (Elorza et al., 2011; Gould-Williams & Davies, 2015; Van De Voorde et al., 2012: 392), and in so doing, reduce its efficacy.

High-involvement management involves, implicitly or explicitly, a psychological contract between the employer and employee in which employees are asked to be more engaged and involved in their work, and encouraged to use their initiative and creativity, and readily identify with the goals of the organization. To paraphrase managers espousing such a change of policy: "in the past workers were asked to park their brains on the clothes peg as they entered the workplace; now we are asking them to bring them to work". In return, it is anticipated that employees will have more fulfilling jobs, be supported by a caring and fair management, and share in the increased prosperity of the enterprise through, for example, gain-sharing incentive schemes.

Recessionary actions such as wage freezes and increasing workloads may constitute significant changes in employees' effort-reward bargain and hence may be perceived as breaches of the psychological contract implied by high-involvement management. Moreover, recessionary actions are typically instigated without any employee involvement, and any

representative involvement through, for example, trade unions will typically relate to how, rather than whether, they will be implemented. Recessionary actions in a high-involvement regime are thus occasions where employees may believe that the organization has failed to fulfill its promise of involvement or their expectation that involvement will be reciprocated with some degree of job security, high wages, development and promotion opportunities, or a reduction in hindrance stressors. Employees' affective reactions to such contract breaches are typically manifested in dissatisfaction, anxiety and feelings of betrayal (Conway & Briner, 2002).

The situation is compounded by uncertainties created by the messages that emanate management as the success of social exchange depends partly on trust which is heavily influenced by the signals the employer gives employees. According to signalling theory, messages are especially significant because employees have incomplete information. SO employees interpret the information they receive about the organization as signals of the organization's characteristics (Connelly, Certo, Ireland, & Reutzel, 2011; Ehrhart & Ziegert, 2005). The implementation of high-involvement management entails messages that sit alongside the activities that constitute it and, in Erhnrooth and Bjorkman's (2012: 1115) terms, supplement the "technical rationality" of high-involvement management. The signals such messages provide relate to expected behaviors of employees which include being proactive, collaborative and committed to making the organization successful, and how these behaviors will be rewarded and valued if they are enacted. In the absence of recessionary actions, providing employees with opportunities to fulfill their needs for autonomy and participation may in particular be interpreted by employees as a signal that the organization is supportive and cares about its employees' welfare. However, the messages entailed in defensive recessionary actions, or that managers relay when implementing them, may reawaken, or raise afresh, uncertainties in employees' minds about the extent to which

organization values them and the genuineness of management's aspirations for involvement and the possibilities of realising them. The implication is that the efficacy of high-involvement management may be reduced by a clash of signals and by increased uncertainty surrounding the sincerity of the very communications employees are using to overcome information deficits.

On the basis of both psychological contract theory and signalling theory we thus hypothesize that when organizations enact recessionary actions that are perceived to breach the psychological contract, they create dissatisfactions, anxieties and feelings of violation in employees, and uncertainty over the intentions behind the involvement strategy, and these may reduce high-involvement management's impact on performance. The core test of the tension between recessionary action and high-involvement management is thus the effect of such action on the relationships between high-involvement management and job satisfaction and well-being, the first link in the mediation chain of the strong mutual gains theory. We thus test:

Hypothesis 3: The interactions between recessionary action and a) role-involvement management and b) organizational-involvement management are negatively related to job satisfaction and well-being.

Since recessionary actions are significant changes in employees' effort-reward bargain, it may be argued that the second link in the mediation chain, between employee outcomes and economic performance, is also moderated by the degree of recessionary action. Such violations in existing norms have long been associated with employees restricting their output as they compensate for their dissatisfaction with such changes. Such reactions are most vividly portrayed in studies of piecework (Baldamus, 1961; Lupton, 1966: 68). Employees may also be concerned that by increasing their output they may be accentuating an excess

labor situation. Thus, an employee may react to recessionary action by reducing effort or initiative, as a form of tit-for-tat retaliatory action. This implies the following hypothesis:

Hypothesis 4: The interactions between recessionary action and a) job satisfaction and b) well-being are negatively related to the economic performance of the organization.

#### **STUDY**

The study was designed to test the hypotheses using secondary data from the 2011 WERS. As we conceive high-involvement management as a managerial approach or orientation, we measure role- and organizational-involvement management by latent variables based analysis of sets of practices - manifest variables in statistical terms. We operationalize the concept of economic performance through three items available in the 2011 WERS: financial performance (typically profit in private firms), labor productivity, and quality. The first two are used in most studies of the high-involvement management-performance (Wall & Wood, 2005: Table 1), the third to a lesser extent. We operationalize well-being through two variables: job satisfaction and well-being. Job satisfaction is an evaluation of how satisfied people are with their job overall, or with the various facets of their job, while well-being is a psychological state which we measure by combining the two ranges of feelings identified in the circumplex theory of emotions - from anxiety to calmness and depression to enthusiasm (Warr, 2007). These well-being variables are measured at the employee level, while the dimensions of high-involvement management and economic performance are measured at the organizational level. We also measure recessionary action at the employee level, on the basis of the actions experienced by employees.

#### The Data

The data used are from two elements of Britain's 2011 WERS. The organizational-level data are derived from a management survey, based on interviews of managers in workplaces. The individual-level data are from a questionnaire survey of employees, completed in workplaces included in the management survey. The fieldwork for 2011 WERS was carried out between March 2011 and June 2012. For full details of the survey see Van Wanrooy et al. (2013:199–216).

The management survey entails face-to-face interviews with the senior manager at the workplace with day-to-day responsibility for industrial relations, employee relations or personnel matters in the workplace. The majority of these managers are not personnel specialists. Workplace managers act as informants about their workplace, and so the data collected in these interviews relates to the features of their workplace and not their personal viewpoint. The employee-level data for 2011 WERS were collected through a self-completion questionnaire distributed to 25 randomly selected employees at workplaces where management interviews were undertaken.

The 2011 WERS study covered the private and public sectors and workplaces in all industrial sectors except those engaged in primary industries, private households with domestic staff, and establishments with fewer than five employees. However, we confine our analysis to private firms because the reliability of the economic performance measures in the public sector is questionable. The working sample is 11,538 employees nested within 1,119 workplaces. The median number of respondents in sampled workplaces was 12, and the range was from 5 to 24.

Response rates are only available for the whole 2011 WERS sample. The rate for the management survey was 46%, lower than that achieved in 2004 WERS (64%). The 2011 WERS team attribute this to the difficult economic climate and a general long-term decline in responses to business and social surveys, but also note that the "rates for WERS remain

highly creditable, given the prevailing environment and the large scale, complexity, and richness of the survey" (Van Wanrooy et al., 2013:8). Managers gave permission for interviewers to select a sample for the survey of employees in 81% of workplaces where management surveys were conducted. Interviewers then placed a total of 44,371 questionnaires in these workplaces. 21,981 were returned, giving a response rate of 50% among all sampled employees, which compares favorably with the 54% in 2004 when viewed in the context of the fall in the response rate for the management survey.

# The Measures

Role-involvement management. Three job-design practices, adapted from measures of control or autonomy developed at the University of Sheffield's Institute of Work Psychology (Jackson, Wall, Martin, & Davids, 1993), are used to create this measure. These are based on information from the management survey on a typical employee in the largest occupational group within the workplace, and comprise: 1) method control: discretion over how the work is done, 2) timing control: control over the pace at which the work is carried out, and 3) task variety: variety in the work. Respondents were asked to gauge the extent to which individuals in the largest occupational group had: "discretion over how they do their work", "control over the pace at which they work" and "variety in their work", using a four-fold categorical scale: "a lot", "some", "a little", and "none".

**Organizational-involvement management.** Following De Menezes & Wood's analysis of the 1998 WERS data (2006), and consistent with items included in Lawler (1986) and Walton's (1985) frameworks and other studies of high-involvement management, the measure of organizational-involvement is based on nine items. Six items were measured in binary form: 1) quality circles ("Do you have groups at this workplace that solve specific problems or discuss aspects of performance or quality? They are sometimes known as quality

circles or problem-solving or continuous improvement groups"), 2) suggestion schemes (management uses suggestion schemes to consult with employees), 3) induction (a standard induction program designed to introduce new employees in the largest occupational group to the workplace), 4) interpersonal skills training (employees in the largest occupational group have received off-the-job training on one or both of improving communication and team working in the past year), 5) team briefing (the workplace has briefing groups, or team briefings for all workers in a section, where work organization is discussed), and 6) information disclosure (management gives regular information on one or more of the financial position of the establishment, internal investment plans and staffing plans).

Three practices were measured categorically: 1) functional flexibility (the extent to which those in the largest occupational group are formally trained to do jobs other than their own), 2) team work (core occupational groups work in formally designated teams), and 3) appraisal (percentage of the non-managerial staff in the workplace that has its performance formally appraised). The practices were measured by asking the respondent to gauge the extent to which a practice was used on a graded scale: 1) "All (100%), 2) "Almost all" (80–99%), 3) "Most" (60–79%), 4) "Around half" (40–59%), 5) "Some" (20–39%), 6) "Just a few" (1–19%), 7) "None" (0%).

Recessionary Action. This was measured as an index or formative scale of the total number of recessionary actions experienced by the employee that had been taken in the workplace. It is based on a question that asked: "Did any of the following happen to you as a result of the most recent recession whilst working at this workplace?", where respondents ticked all responses that applied to them in a list of actions that comprised: 1) "my workload increased", 2) "my work was reorganised", 3) "I was moved to another job", 4) "my wages were frozen or cut", 5) "my non-wage benefits (e.g. vehicles or meals) were reduced", 6) "my contracted working hours were reduced", 7) "access to paid overtime was restricted", 8) "I

was required to take unpaid leave", 9) "access to training was restricted", and 10) "other". Respondents were also given two other options: "none of the above" to ensure accuracy, and "I was not working at this workplace during the recession" to allow for recent recruits to the workplace.

Respondents tended to only experience one action, as the median and modal score on the index was 1 (24% experiencing one action, 31% two or more with two% experiencing four or more). This reflects the fact that workplaces tended to use only a few actions in response to the recession and the actions can be substitutes for each other; for example an organization can reduce its costs by wage cuts or improving productivity through work reorganizations (which may not be readily achieved if wages are cut). The median total number of the identical actions reported to have been used in a workplace was again 1, and Spearman's rank correlation between this and the scores on the recessionary experience index is 0.29, which adds validity to the latter measure though it also reflects the fact that individuals in the same workplace were not all equally affected by recessionary action and the distribution of both measures is highly skewed towards 0 and 1. An ICC-value of 0.19 for the measure of recessionary experience confirms this as 19% of the variability in it is explained by workplace membership and 81% by individual characteristics. It is partly because of this that we selected the employees' own account of recessionary experience for our study.

**Economic Performance.** This was measured by a composite measure based on the combined scores on three measures: financial performance, labor productivity and quality (Cronbach's alpha = 0.64). These measures are based on a rating made by the managerial respondent during the interview, according to a five-point scale that ranged from "a lot below average" to "a lot better than average" as gauged against the "branch of industry" which the workplace was in. A high value represents high performance.

Job satisfaction. The measure of job satisfaction in WERS is adapted from items from a range of surveys; the rationale behind it is presented in Rose (2007) and it has been used in a number of WERS-based studies including Bryson, Cappellari & Lucifora (2010) and Wood et al. (2012). The measure of job satisfaction is based on respondents' satisfaction with eight facets of work: 1) the amount of influence the person has over their job, 2) the amount of pay received, 3) the sense of achievement obtained from their work, 4) the scope for using initiative, 5) the training received, 6) job security, 7) involvement in decision-making, and 8) the work itself. Respondents rated their satisfaction on a five-point scale: "very dissatisfied", "dissatisfied", "neither satisfied nor dissatisfied", "satisfied" or "very satisfied". Principal component analysis confirmed a single dimension that explains 54% of the variance, for which factor loadings ranged from 0.56 to 0.81. Job satisfaction is measured by the mean of the scores for each item, but when five or more items were not present, the measure was coded as missing. The scale has a Cronbach's alpha of 0.87.

Well-being. This is measured by the three negative items from each of Warr's job-related anxiety-calmness and depression-enthusiasm scales (1990), based on answers to the question: "Thinking of the past few weeks, how much of the time has your job made you feel...[this state]?", for each of six negative states – tense, depressed, worried, gloomy, uneasy and miserable. These are assessed on a five-point scale: "all of the time", "most of the time", "some of the time", "occasionally" or "never". Well-being is measured by the mean of the scores for each emotional state, but the measure was coded as missing where three or more items were not present. The scale has a Cronbach's alpha of 0.91.

**Control Variables.** In testing our hypotheses, we included control variables at the workplace level and the individual employee level, selected in light of theories of organizational performance, employee satisfaction and well-being, and of previous studies

based on the WERS series (e.g. Bryson, Charlwood, & Forth, 2006; Gazioglu & Tansel, 2006).

At the workplace level we included:

Employment size of workplace. The logarithm of the total number of employees in the workplace.

Part of a larger organization. This is 1 where the workplace is part of a larger organization, and 0 for a single site organization.

Trade union recognition. This is 1 in workplaces where at least one trade union is recognized by management for collective bargaining, and is 0 otherwise.

Industry. Eleven industry dummy variables using the Standard Industrial Classification, with wholesale and retail as the reference category.

Impact of the recession. This is a measure of the extent to which the workplace has been adversely affected by the recent recession.

The following controls were included at the employee level: gender (1 for women, 0 for men), whether the respondent has a degree (1) or not (0), age (in bands, 16 to 17, 18 to 21, 22 to 29, 30 to 39, 50 to 59, 60 to 64, and 65 and over, with 40 to 49 as the reference category), workplace tenure, total hours worked, weekly wages, and whether the employee was member of the largest occupational group.

#### **Analysis Procedure**

We tested hypotheses 1 and 2 by a single multilevel path analysis model that estimates simultaneously (a) the direct effects of role- and organizational-involvement management and recessionary action on job satisfaction and well-being, and (b) the indirect effects of role- and organizational-involvement management on economic performance via job satisfaction and well-being. Recessionary action, job satisfaction and well-being were specified as employee Level-1 variables, whereas role- and organizational-involvement management and economic performance were specified as workplace Level-2 variables.

Intra-class correlations for the employee-level variables signified that there was significant variation in responses across workplaces: for job satisfaction, ICC1 = 0.11 and ICC2 = 0.58; for well-being, ICC1 = 0.08 and ICC2 = 0.50; for recessionary action, ICC1 = 0.19 and ICC2 = 0.72. Multilevel analysis was used to allow for such variation. The model was estimated by means of the robust maximum likelihood estimator in the Mplus software program (version 7.1). Indirect effects were calculated based on the product-of-coefficients ( $\alpha\beta$ ) approach (MacKinnon, Fritz, Williams, & Lockwood, 2007), where  $\alpha\beta$  is the product of the regression path between the predictor and the mediator ( $\alpha$ ) and the regression path between the mediator and the outcome ( $\beta$ ). Confidence intervals (95%) for the  $\alpha\beta$  coefficients were generated by the distribution of the product of coefficients method (MacKinnon et al., 2007). This method involves converting  $\alpha$  and  $\beta$  parameters into z-scores, multiplying these z-scores, and comparing the result to a table of critical values to allow statistical inference.

Hypotheses 3 and 4, which involve the moderating effect of recessionary action, were tested by including four sets of interaction terms in the multilevel path model used to test hypotheses 1 and 2. Job satisfaction and well-being were regressed on role- and organizational-involvement management, recessionary actions and the two interactions between the involvement management variables and recessionary action, whereas economic performance was regressed on role- and organizational-involvement management, recessionary action, job satisfaction, well-being, and two interaction terms – one between job satisfaction and recessionary action, and the other between well-being and recessionary action.

#### **RESULTS**

Table 1 shows the means and standard deviations of all the variables included in our analyses and the correlations between them. The results are consistent with expectations except that recessionary action is negatively correlated with economic performance.

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## Insert Table 1

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The proportion of variance explained  $(R^2)$  in our model by the control variables without any predictors was 9% for economic performance, 44% for job satisfaction, and 41% for well-being. After the predictors were included in the model, the  $R^2$  increased substantially for economic performance (by 5%), job satisfaction (by 14%), and well-being (by 16%). The change in  $R^2$  after the interaction terms were added to the job satisfaction model was 3%, while the changes for the economic performance and well-being models were not substantial.

# The Mutual Gains Perspective of High-involvement Management

As presented in Part A of Table 2, which shows standardized regression coefficients for our multilevel path analysis model, role-involvement management is positively associated with job satisfaction, but not significantly associated with well-being or economic performance. Organizational-involvement management, on the other hand, is positively associated with economic performance, but not significantly associated with job satisfaction or well-being.

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# Insert Table 2

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Job satisfaction is related to economic performance, but well-being is not. The mediation analysis revealed that one of the four possible mediation paths is significant – the indirect

effect of role-involvement management on economic performance through job satisfaction. The effect is positive, as expected (Part B of Table 2). This mediation explains the lack of a direct relationship between role-involvement management and economic performance. Job satisfaction, in contrast, does not mediate the relationship between organizational-involvement management and economic performance, while well-being does not mediate the relationship between either role- or organizational-involvement management and economic performance. Thus, the key element of the mutual gains theory, as specified in Hypothesis 1 – that high-involvement management is positively related to employee outcomes, which in turn mediate a positive relationship with the economic performance of the organization – is only supported for the role-involvement management, job satisfaction and economic performance path.

# Recessionary Action and High-Involvement Management

The analysis confirms that recessionary action is significantly negatively related to both job satisfaction and well-being (Part A of Table 2). Thus Hypothesis 2, the foundation of the argument that recessionary action and high-involvement management may conflict, is supported.

The tests of Hypotheses 3 and 4, which examine the interaction effects of high-involvement management and recessionary action on various relationships, revealed significant interaction effects for the involvement—employee outcomes relationships. The interaction between role-involvement management and recessionary action is negatively associated with both job satisfaction and well-being, which is consistent with Hypothesis 3 (Table 3). The interaction between organizational-involvement management and recessionary action is also significant, but positively related to both job satisfaction and well-being. This

does not support Hypothesis 3 as it means that job satisfaction and well-being increase as both recessionary action and organizational-involvement management increase.

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#### Insert Table 3

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To identify the nature of the interactions and facilitate interpretation, we performed simple slopes analysis to determine whether the moderated effects differ significantly from zero for specific values of the moderator (Preacher, Curran, & Bauer, 2003). We examined three conditional values of the moderator, recessionary action – no action, one action and two actions. At no action ( $\beta = 0.20$ , p < .001) and one action ( $\beta = 0.12$ , p < .001), role-involvement management is associated with increased job satisfaction (see Figure 1). However, at two recessionary actions role-involvement management is not significantly associated with job satisfaction ( $\beta = -0.03$ , p > .05). These results indicate that the increase in job satisfaction due to role-involvement management does not occur in workplaces where employees experience multiple recessionary actions.

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## Insert Figure 1

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The analysis also revealed a positive relationship between role-involvement management and increased well-being where recessionary action was not experienced ( $\beta = 0.09$ , p < .05), but the link between role-involvement management and well-being is insignificant when one action ( $\beta = 0.01$ , p > .05) or two actions ( $\beta = -0.07$ , p > .05) were experienced (Figure 2). This means that the relationship between role-involvement management and well-being is only significant where no recessionary action was experienced.

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# Insert Figure 2

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For organizational-involvement management, the simple slopes analysis revealed an association with lower job satisfaction ( $\beta$  = -0.12, p < .05) where there was no recessionary action, but when two actions were experienced ( $\beta$  = 0.11, p < .05), it is associated with higher job satisfaction (Figure 3). No significant relationship was found between organizational-involvement management and job satisfaction when one action was experienced ( $\beta$  = 0.00, p > .05). Thus, organizational-involvement management is more likely to improve employees' job satisfaction where employees' experience of recessionary action is relatively high.

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### *Insert Figure 3*

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Similarly when no action is experienced ( $\beta$  = -0.15, p < .01), organizational-involvement management is associated with lower levels of well-being (see Figure 4). There is no such association when either one action ( $\beta$  = -0.03, p > .05) or two actions were experienced ( $\beta$  = 0.08, p > .05). The implication of these analyses of the interaction effects between organizational-involvement management and recessionary action is that organizational-involvement management is reducing the negative impact of recessionary action on job satisfaction or well-being.

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#### Insert Figure 4

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The interaction between recessionary action and either job satisfaction or well-being is not related to economic performance (Table 3). Hypothesis 4 is thus not supported. Tests to

assess whether the mediating role of job satisfaction or well-being is contingent on the level of recessionary action confirmed it is not. This means that the reduction in the satisfaction associated with role-involvement management as a consequence of recessionary action will reduce its effect on organizational performance. Since well-being is not related to performance the reduction of this associated with recessionary action will not have such adverse effects on performance.

# **Summary of results**

The extent to which the hypotheses are supported is summarized in Table 4. Job satisfaction is a significant factor in explaining the positive relationship between role-involvement management and the economic performance of an organization, and this supports the mutual gains model. The results involving organizational-involvement management indicate that it improves the economic performance of an organization, but that this relationship is explained neither by employees' job satisfaction nor by well-being. The findings for recessionary action show that employees' experience of such action is negatively related to both job satisfaction and well-being.

Insert Table 4

Our central concern — that this negative effect of recessionary action will reduce the impact of high-involvement management on employee outcomes and organizational performance — is supported for role-involvement management. The extent to which job satisfaction and well-being are positively affected by role-involvement management is reduced by recessionary action. However, only job satisfaction mediates the role-involvement—organizational performance relationship. This indicates that the decrease in job

satisfaction's relationship with role-involvement management, which is precipitated by recessionary action, reduces the impact of this type of involvement management on organizational performance. Nonetheless, recessionary action does not moderate the relationship between job satisfaction or well-being and economic performance.

In contrast, neither of the employee outcomes mediates the positive relationship between organizational-involvement management and organizational performance, nor is the positive relationship between organizational-involvement management and these outcomes weakened by recessionary action. The opposite is in fact the case: that the negative effect of recessionary action on job satisfaction and well-being is reduced as organizational-involvement management increases.

#### DISCUSSION AND CONCLUSION

The research has shown that as Britain came out of the recession, both dimensions of high-involvement management continued to yield a performance advantage for those firms using it. However, the performance effects of role-involvement management were reduced, but not totally undermined, by actions taken in response to the recession as these had negative effects on employees' job satisfaction. They also reduced well-being but this did not knock-on to reduce economic performance. There is thus some tension between role-involvement management and recessionary action, as the strongest critics of high-involvement management often implied there would be. All the recessionary actions are capable of increasing the effort-reward ratio for employees, either by reducing rewards or increasing the demands, or of being interpreted as a reduction of the value the organization places on them.

Conversely, the positive performance effects of organizational-involvement management were not reduced by recessionary action. First, the impact of organizational-involvement management had the effect of reducing the negative impact of recessionary action on job

satisfaction and well-being. Second, neither of these employee outcomes mediated relationship between organizational-involvement management and economic performance, as Wood et al. (2012) showed had been the case in 2004.

The research has shown that the two dimensions of high-involvement management behave differently. The mutual gains theory of high-involvement management fits the roleinvolvement-job satisfaction-performance nexus. Moreover the mutual gains theory that recessionary action will reduce the efficacy of high-involvement management on performance is also confirmed for role-involvement management. The study shows that the effects of this tension on job satisfaction are, however, only pronounced when employees experience multiple recessionary actions. In contrast, the tension reduces wellbeing even when a single action is experienced. But in this case, its effect has no knock-on effect to performance. This difference suggests that the pleasure derived from work enrichment, which is what job satisfaction captures, is more significant for performance than any effect it may have on the level of arousal, which is what the well-being measure captures.

In contrast, the results for organizational-involvement management are not consistent with the mutual gains theory. Organizational-involvement management is positively related to organizational performance, but any effects of this type of involvement on job satisfaction and well-being are not moderated by recessionary action in the way the mutual gains theory predicts. Rather, organizational involvement reduces the level of dissatisfaction and ill-being amongst those experiencing high levels of recessionary action, suggesting that it may provide workers with more information and greater certainty about the future.

We can conjecture that this unhypothesized result – that enhanced involvement in the organization attenuates the effect of recessionary action on employee outcomes - reflects the way that information-sharing, participation in training programmes, and other associated with organizational involvement enhance employees' knowledge, and

provide employees with a more realistic appreciation of the organization's strategy and reduce their uncertainty about the future, if not their fears. Part of this effect may be because employees in organizational involvement regimes may have an input to the organizational changes that constitute the recessionary actions affecting them (Probst, 2005: 322), though wholesale direct involvement in downsizing or similar decisions may be rare. In addition, employees being involved more in their jobs or the wider organization may buffer the extent to which any job insecurity they feel will have negative effects on their attitudes and well-being. Some studies have reported such effects (Bussing, 1999; Probst, 2005).

The unexplained positive effect that organizational-involvement management has economic performance may reflect the way it improves work organization, coordination and collective action. To speculate further, perhaps the most telling aspect of organizationalinvolvement management is that it changes how people connect what they do with what others do, develop shared understandings, help each other out and learn from one another. Their ability to relate to each other as internal customers (albeit in most cases implicitly), for example, is enhanced as their appreciation of each other's role increases. This expansion of horizons and shared understandings through greater contact and integration increases the individual and collective human capital of the organization, alongside the social capital. In Wright & McMahan's (2011: 102) terms, it increases the "human capability" of the organization and in turn what Gittell et al. (2010) call the relational coordination of the organization. In this way, organizational-involvement management is diametrically opposed to piecework and other performance-related pay systems, which have long been known to limit people's horizons, thereby leading to tunnel vision and a lack of connection with actions of fellow workers (Klein, 1976: 7). We might speculate that recessionary action may make some employees defensive and put a break on their proactivity and breadth of vision,

but if so, the results of this study might suggest that organizational-involvement management reduces any such effect.

The main strength of our research is that it is based on a distinctive large, matched employer-employee dataset which is part of a WERS series that has a long pedigree and now covers workplaces with more than four employees in all sectors of the British economy, except mining and agriculture. The two involvement-management measures have been used elsewhere (De Menezes & Wood, 2006; Wood et al., 2012), and were taken from a wide range of questions in the survey, reducing the potential for response sets or effects of the ordering of questions. The data were collected at the workplace level, which is most appropriate for measuring practices (Gerhart, Wright, McMahan, & Snell, 2000).

The combined effects of the high-involvement management and recessionary action variables are quite strong, and do not compare unfavourably with the results in the meta-analyses of Subramony (2009), on HRM practices and organizational performance, and of Harter, Schmidt, & Hayes (2002) on job satisfaction and organizational performance. The interaction effects may appear rather small but that involving role-involvement management and recessionary action is sufficient to reveal the tension between the two that will be manifest in psychological contract violations in some workplaces. In extreme cases, recessionary action may move individuals closer to any critical tipping point in their job dissatisfaction, affecting their health and performance or leading to them leaving the organization.

The study has two of the limitations of the majority of research on the human resource management-performance link: its reliance on cross-sectional data and a single management respondent for the practices and performance data. However, the discreteness of the two dimensions of high-involvement management, role- and organizational-involvement management, and the diversity in the results of the tests for the mediating role of employee

outcomes, suggests that common-method variance has not strongly affected our measures or their links to performance. Tests to validate self-reported performance data against apparently more objective audited accounting data have found a high degree of consistency (Wall et al., 2004b). Moreover, our measures of recessionary action and high-involvement management are based on different informants.

A mediation model such as the one used to test the strong mutual gains theory could be consistent with a path model that reverses the direction of the paths we found for role-involvement management. For example, performance may lead to satisfaction, with worker satisfaction consequently encouraging managers to practice role-involvement management. But as Wood et al. (2012) argue, the job redesign case studies do not suggest that management designs jobs with high levels of autonomy only when workers are satisfied, and the adoption of new production methods appears to be a much stronger driver than worker satisfaction behind attempts to increase organizational involvement. However, a potential direction of causality problem is that workplaces with poor economic performance prior to the recession may have higher levels of recessionary action, and hence the experience of recessionary action is not independent of this prior performance. We have though controlled for the intensity of the recession in our analysis.

The implications of the research for theory are that it suggests that the comparative performance advantage of both dimensions of high-involvement management are sustainable over recessions, but in the case of role-involvement management negative effects on employees' satisfaction may reduce its efficacy. As no such effect exists for organizational-involvement management the study reinforces the need to treat role- and organizational-involvement management as distinct approaches and since the mutual gains theory only applies to role-involvement management, further theoretical development is needed on organizational-involvement management. In particular, we need to develop and test further

our speculations about what lies behind organizational-involvement management's benevolent effects on organizational performance and the way in which it may reduce the negative impact of recessionary actions on well-being. We also need to consider whether the theoretical conjectures we have made about how recessionary action cuts across role-involvement management are what actually lies behind its adverse effects.

The starkest implication for organizational policy is that recessionary action should particularly be avoided if a workplace is practising role-involvement management. Indeed, there is some evidence from Europe that some firms have avoided at least one type of action, wage cutting, because of concerns about its effects on employee morale, attitudes and commitment (Du Caju, Kosma, Lawless, Messina, & Rõõm, 2015). As curtailment of recessionary action may not always be an option, we need to think about ways of reducing the negative effects of recessionary action. Our research suggests that organizationalinvolvement management is one such option. In addition, advocates of high-involvement management have often argued that avoiding lay-offs and guaranteeing job security is crucial for its success (Levine, 1995). Signalling that the organization cares about its employees when faced with recessions may in certain circumstances be achieved, at least to some extent, through having voluntary rather than compulsory redundancies once lay-offs have confirmed (Iverson & Zatzick, 2007). However, greater participation in the organizational changes that may form part of any recessionary action could also help.

Management's initial motivation for introducing high-involvement management may well be important for the impact recessionary action has on it. If it is perceived to be based on the employer's genuine desire to increase the participation and fulfillment of employees and, in so doing (in modern stress theory terms), simultaneously accentuate the challenges of work whilst reducing hindrance stressors, then serious participative discussion of how the organization faces the recession may be feasible at all levels. However, the more depth the

role-involvement management has, the greater the danger that recessionary action will cut across it. The need to address such issues highlights a more general problem within HRM. All too often, the focus is on processes rather than on content in delivery. For example, relating to involvement, such processes might include whether the information was disclosed to all people at the same time, whether appraisals were done on time, or whether the interpersonal skills training course went smoothly. In the case of recessionary action, the focus is similarly often confined to whether the information about the actions was given on time and whether the law was being followed. The focus should rather be on what actually happened in the course of these processes.

For policy makers within governments, unions and other representative groups, the study offers further grounds for them to encourage such practices and put job quality high on their agendas. They might also encourage the more radical rethink of HRM mentioned above, so that the performance effects of organizational involvement are realized and any adverse effects on well-being are avoided.

While our research has been conducted in one country, Britain, a country in which the 2008 recession was particularly strong, further work in other institutional contexts is required. It would be particularly interesting to replicate the study in coordinated economies such as Germany and the Scandinavian countries, as it has been argued that the conditions for high-involvement management are more favorable in these places (Godard, 2004). The effect of recessionary action on high-involvement management's impact on well-being and performance could go either way: these conditions could facilitate the participative handling of responses to the recession or provide the basis for intense pressure between involvement and recessionary actions.

#### References

- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. 2000. *Manufacturing Advantage:*Why High Performance Work Systems Pay Off. Ithica, NY: Cornell University Press.
- Baldamus, W. 1961. Efficiency and Effort. London: Tavistock Publications.
- Barling, J. E., Kelloway, K., & Iverson, R. D. 2003. High-quality work, job satisfaction, and occupational injuries. *Journal of Applied Psychology*, 88: 276–283.
- Blau, P. M. 1964. Exchange and Power in Social Life. New York: Wiley.
- Bryson, A., Cappellari, L., & Lucifora, C. 2010. Why so unhappy? The effects of unionization on job satisfaction. *Oxford Bulletin of Economics and Statistics*, 72: 357–380.
- Bryson, A., Charlwood, A., & Forth, J. 2006. Worker voice, managerial response and labour productivity: an empirical investigation. *Industrial Relations Journal*, 37: 438–455.
- Burke, R. J., & Greenglass, E. R. 2007. Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychological Health*, 16: 583–594.
- Bussing, A. 1999. Can Control at Work and Social Support Moderate Psychological Consequences of Job Insecurity? Results from a Quasi Experimental Study in the Steel Industry. *European Journal of Work and Organizational Psychology*, 8: 219–242.
- Cappelli, P. 1999. The new deal at work. Boston: Harvard Business School Press.
- Cascio, W. F. 2005. Strategies for responsible restructuring. *Academy of Management Executive*, 19: 39–50.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. 2006. How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance.

  \*Personnel Psychology\*, 59: 501–528.
- Connelly, B.L., Certo, T., Ireland, R. D., & Reutzel, C.R. 2011. Signaling Theory: A Review and Assessment. *Journal of Management*, 37: 39–67.

- Conway, N., & Briner, R. B. 2002. A daily diary study of affective responses to psychological contract breach and exceeded promises. *Journal of Organizational Behavior*, 233: 287–302.
- Datta, D. K., Guthrie, J. P., Basuil, D., & Pandey, A. 2010. Causes and effects of Employee downsizing: A review and synthesis. *Journal of Management*, 36: 281–348.
- Dedee, J.K., & Vorhies, D.W. 1998. Retrenchment activities of small firms during economic downturn: an empirical investigation. *Journal of Small Business Management*, 36: 46–61.
- De Menezes, L. M., & Wood, S. J. 2006. The reality of flexible work systems in Britain.

  International Journal of Human Resource Management, 17: 106–138.
- Du Caju, P., Kosma, T., Lawless, M., Messina, J., & Rõõm, T. 2015. Why firms avoid cutting wages: Survey of evidence from European Firms. *Industrial and Labor Relations Review*, 68: 862–888.
- Ehrhart, K. H., & Ziegert, J. C. 2005. Why are individuals attracted to organizations? *Journal of Management*, 31: 901–919.
- Elorza, U., Aritzeta, A., & Ayestarán, S. 2011. Exploring the black box in Spanish firms: the effect of the actual and perceived system on employees' commitment and organizational performance. *Journal of Human Resource Management*, 22: 1401–1422.
- Erhnrooth, M., & Bjorkman, I. 2012. An Integrative HRM Process Theorization: Beyond Signalling Effects and Mutual Gains. *Journal of Management Studies*, 49: 1109–1135.
- Gardner, T., Wright, P., & Moynihan, L. 2011. The impact of motivation, empowerment, and skill-enhancing practices on aggregate voluntary turnover: the mediating effect of collective affective commitment. *Personnel Psychology*, 64: 315–350.
- Gazioglu, S., & Tansel, A. 2006. Job satisfaction in Britain: Individual and job related factors. *Applied Economics*, 38: 1163–1171.

- Gerhart, B., Wright, P. M., McMahan, G. C., & Snell, S. A. 2000. Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates? *Personnel Psychology*, 53: 803–834.
- Gittell, J.H., Seidner, K., & Wimbush, J. 2010. Relational Model of How High-Performance Work Systems Work. *Organization Science*, 21: 490–506.
- Godard, J. 2004. A critical assessment of the high-performance paradigm. *British Journal of Industrial Relations*, 42: 349–378.
- Godard, J., & Delaney, J. T. 2000. Reflections on the 'High Performance' Paradigm's Implications for Industrial Relations as a Field. *Industrial and Labor Relations Review*, 53: 482–502.
- Gong, Y., Law, K.S., Chang, S., & Xin, K. R. 2009. Human Resources Management and Firm Performance: The Differential role of managerial affective and continuance commitment. *Journal of Applied Psychology*, 94: 263–275.
- Gould-Williams, J., & Davies, F. 2005. Using social exchange theory to predict the effects of HRM practice on employee outcomes. *Public Management Review*, 7: 1 24.
- Grunberg, L., Moore, S. Y., & Greenberg, E. 2001. Differences in psychological and physical health among layoff survivors: The effect of layoff contact. *Journal of Occupational Health Psychology*, 6: 15–25.
- Harter, J.K., Schmidt, F. L. and Hayes, T. L. 2002. Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87: 268–279.
- Heckscher, C. 1994. Defining the post-bureaucratic type. In C. Heckscher, & A. Donnellon (Eds.) The Post-Bureaucratic Organization: 14-62. Thousand Oaks, CA: Sage Publications.

- Humphrey, S.E., Nahrgang, J.D., & Morgeson, F.P. 2007. Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92: 1332–1356.
- Iverson, R. D., & Zatzick, C.D. 2007. High-commitment work practices and downsizing harshness in Australian workplaces. *Industrial Relations*, 46: 456–480.
- Jackson, P. R., Wall, T. D., Martin, R., & Davids, K. 1993. New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology*, 78: 753–762.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. 2012. How Does Human Resource Management Influence Organizational Outcomes? A Meta-analytic Investigation of Mediating Mechanisms. Academy of Management Journal, 55: 1264–1294.
- Katou, A. A., & Budhwar, P. S. 2006. Human resource management systems and organisational performance: A test of a mediating model in the Greek manufacturing context. *International Journal of Human Resource Management*, 17: 1223–1253.
- Klein, L. 1976. New Forms of Work Organization. Cambridge: Cambridge University Press.
- Latham, S., & Braun, M. 2011. Economic recessions, strategy, and performance: a synthesis.

  \*\*Journal of Strategy and Management, 4: 96 115.\*\*
- Lawler, E. E. 1986. High Involvement Management. San Francisco: Jossey-Bass.
- Lawler, E. E., Mohrman, S. A., & Ledford, G. E. 1995. Creating high performance organizations: Practices and results of employee involvement and total quality management in Fortune 1000 companies. San Francisco: Jossey-Bass.
- Legge, K. 2005. *Human Resource Management: Rhetorics and Realities*. Basingstoke: Palgrave Macmillan.
- Leibenstein, H. 1966. Allocative Efficiency vs. X-Efficiency. *American Economic Review*, 56: 392–415.

- Levine, D.L. 1995. Reinventing the Workplace. Washington D.C.: Brookings Institute.
- Lupton, T. 1966. Management and the Social Sciences, London: Hutchinson.
- Mackie, K.S., Holahan, C. K., & Gottlieb, N. H. 2001. Employee involvement management practices, work stress, and depression in employees of a human services residential care facility. *Human Relations*, 54: 1065–1092.
- MacKinnon, D., Fritz, M., Williams, J., & Lockwood, C. 2007. Distribution of the product confidence limits for the indirect effect: Program PRODCLIN. *Behavior Research Methods*, 39: 384–389.
- Macky, K., & Boxall, P. 2007. The relationship between 'high performance work practices' and employee attitudes: An investigation of additive and interaction effects.

  International Journal of Human Resource Management, 18: 537–567.
- Macky, K. & Boxall, P. 2008. High-involvement work processes, work intensification and employee well-being: A study of New Zealand worker experiences. *Asia Pacific Journal of Human Resources*, 46: 38–55.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. 2011. Unlocking the black box: exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96: 1105–1118.
- Mohr, R.D., & Zoghi, C. 2008. High involvement management work design and job satisfaction. *Industrial and Labor Relations Review*, 61: 275–296.
- Paul, A. K., & Anantharaman, R. N. 2003. Impact of People Management Practices on Organizational Performance: Analysis of Causal Model. *International Journal of Human Resource Management*, 14: 1246–1266.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. 2003. Simple intercepts, simple slopes, and regions of significance in MLR 2-way interactions. Retrieved from <a href="http://www.quantpsy.org/interact/mlr2.htm">http://www.quantpsy.org/interact/mlr2.htm</a> 5.31.15.

- Probst, T. M. 2005. Countering the Negative Effects of Job Insecurity through Participative Decision Making: Lessons from the Demand–Control Model. *Journal of Occupational Health Psychology*, 10: 320–329.
- Quinlan, M., & Bohle, P. 2009. Overstretched and unreciprocated commitment: Reviewing research on the occupational health safety effects of downsizing and job insecurity.

  International Journal of Health Services, 39: 1–42.
- Roche, W. K., & Teague, P. 2014. Do recessions transform work and employment? Evidence from Ireland. *British Journal of Industrial Relations*, 52: 261–285.
- Rose, M. 2007. Job satisfaction. In K. Whitfield, & K. Huxley (Eds.), *Innovations in the 2004*Workplace Employment Relations Survey: 162–174. Cardiff: Cardiff University.
- Subramony, M. 2009. A meta-analytic investigation of the relationship between HRM bundles and firm performance. *Human Resource Management*, 48: 745–768
- Sverke, M., Hellgren, J., & Näswall, K. 2002. No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7: 242–264.
- Thompson, P., & Harley, B. 2007. HRM and the worker: Labor process perspectives. In P. Boxall, J. Purcell, & P. Wright (Eds.), *The Oxford Handbook of Human Resource Management*: 147–165. Oxford & New York: Oxford University Press.
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. 2012. Employee well-being and the HRM-organizational performance relationship: a review of quantitative studies.

  International Journal of Management Reviews, 14: 391–407.
- Van Der Doef, M., & Maes, S. 1999. The job demand–control (–support) model and psychological well-being: A review of 20 years of empirical research. *Work and Stress*, 13: 87–114.

- Van Wanrooy, B., Bewley, H., Bryson, A., Forth, J., Freeth, S., Stokes, L., & Wood, S. 2013.

  \*\*Employment Relations in the Shadow of the Recession.\*\* Basingstoke: Palgrave Macmillan.
- Wall, T. D, Wood, S. & Leach, D. 2004a. Empowerment and performance. In I. Robertson, &C. Cooper (Eds.), *International Review of Industrial and Organizational Psychology*,Volume 19: 1–46. London: Wiley.
- Wall, T., Michie, J., Patterson, M., Wood, S., Sheehan, M., Clegg, C., & West, M. 2004b. On the validity of subjective measures of company performance. *Personnel Psychology*, 57: 95–118.
- Wall, T. D., & Wood, S. J. 2005. The Romance of Human Resource Management and Performance, and the Case for Big Science. *Human Relations*, 58: 429–462.
- Walton, R. E. 1985. From 'control' to 'commitment' in the workplace. *Harvard Business Review*, 63: 77–84.
- Warr, P. 1990. The measurement of well-being & other aspects of mental health. *Journal of Occupational Psychology*, 63: 193–219.
- Warr, P. 2007. Work, happiness, and unhappiness. Mahwah, NJ: Lawrence Erlbaum.
- Wood, S. 1999. Human resource management and performance. *International Journal of Management Reviews*, 1: 367–413.
- Wood, S., & Wall, T.D. 2007. Work enrichment and employee voice in human resource management-performance studies. *International Journal of Human Resource Management*, 18: 1335–1372.
- Wood, S., Van Veldhoven, M., Croon, M., & De Menezes, L.M. 2012. Role involvement, high involvement management and organizational performance: The mediating roles of job satisfaction and well-being. *Human Relations*, 65: 419–446.

Wright, P. M., & Gardner, T.M. 2003. The human resource-firm performance relationship: Methodological and Theoretical Challenges. In D. Holman, T. D. Wall, C. W. Clegg, P. Sparrow, & A. Howard (Eds.), *The Essentials of the New Workplace: A Guide to the Human Impact of Modern Working Practices*: 197-217. London: Wiley.

Wright, P. M., & McMahan, G. C. 2011. Exploring human capital: putting human back into strategic human resource management. *Human Resource Management Journal*, 21 (2): 93–104.

Table 1 Means, Standard Deviations (SD), Cronbach's alpha (α), and Correlations of Study Variables

Variables	Means	SD	α	1	2	3	4	5	6
1 Job satisfaction	3.55	0.74	0.87	1					
2 Well-being	4.00	0.87	0.91	0.50*	1				
3 Economic performance	3.77	0.58	0.64	0.08*	0.03*	1			
4 Role-involvement management	-0.06	0.45	-	0.10*	0.01	0.08*	1		
5 Organizational-involvement management	0.02	0.34	-	0.01	-0.01	0.15*	0.07*	1	
6 Recessionary action	1.13	1.350	-	-0.29*	-0.28*	-0.07*	-0.02	0.00	1

p < .01

## High-involvement management and recession

Table 2

Two-level direct and indirect effects model: Paths and standardized regression coefficients

PART A: Direct effects	Beta	s (β)		Errors	
Role-involvement management $\rightarrow$ job satisfaction	0.21	***		0.04	
Role-involvement management → well-being	0.0	)4		0.04	
Role-involvement management → economic performance	-0.	05		0.06	
Organizational-involvement management → job satisfaction	-0.	03		0.04	
Organizational-involvement management → well-being	-0.	07		0.04	
Organizational-involvement management → economic performance	0.14	1**		0.04	
Recessionary action→ job satisfaction	-0.52	-0.52***		0.04	
Recessionary action→ well-being	-0.48	}***		0.05	
Job satisfaction → economic performance	0.5	0*		0.20	
Well-being → economic performance	-0.	33		0.19	
			95% Con	fidence intervals	
PART B: Indirect effects	Betas (β)	Errors	L <del>ower limit</del>	Upper limit	
Role-involvement management → job satisfaction → economic performance	0.10*	0.05	0.02	0.20	
Role-involvement management $\rightarrow$ well-being $\rightarrow$ economic performance	-0.01	0.01	-0.05	0.01	
Organizational-involvement management $\rightarrow$ job satisfaction $\rightarrow$ economic performance	-0.02	0.02	-0.06	0.02	
Organizational-involvement management $\rightarrow$ well-being $\rightarrow$ economic performance	0.02	0.02	-0.01	0.07	

Proportion of variance explained:  $R^2$  economic performance = 0.14;  $R^2$  job satisfaction = 0.58;  $R^2$  well-being = 0.57

## High-involvement management and recession

Table 3

Two-level interaction effects model: Paths and standardized regression coefficients

PART A: Direct effects	Betas (β)	Errors
Role-involvement management → job satisfaction	0.29***	0.06
Role-involvement management → well-being	0.13*	0.06
Role-involvement management → economic performance	-0.05	0.05
Organizational-involvement management $\rightarrow$ job satisfaction	-0.14*	0.06
Organizational-involvement management → well-being	-0.19**	0.07
Organizational-involvement management → economic performance	0.13*	0.06
Recessionary action→ job satisfaction	-0.52***	0.04
Recessionary action→ well-being	-0.49***	0.05
Job satisfaction → economic performance	0.44*	0.21
Well-being → economic performance	-0.29	0.19
PART B: Interaction effects	Betas (β)	Errors
Role-involvement management*Recessionary action → job satisfaction	-0.16*	0.06
Role-involvement management*Recessionary action → well-being	-0.15*	0.07
Organizational-involvement management*Recessionary action → job satisfaction	0.18**	0.06
Organizational-involvement management*Recessionary action → well-being	0.19*	0.07
Job satisfaction*Recessionary action → economic performance	0.35	0.55
Well-being*Recessionary action → economic performance	-0.38	0.55

 $Proportion \ of \ variance \ explained: \ R^2 \ economic \ performance = 0.13; \ R^2 \ job \ satisfaction = 0.61; \ R^2 \ well-being = 0.58$ 

<sup>\*</sup> p < .05; \*\* p < .01; \*\*\* p < .001

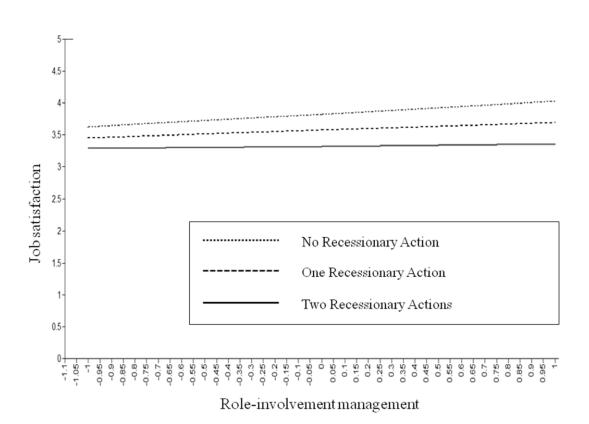
## High-involvement management and recession

Table 4
Summary of Hypotheses

Hypothesis 1				
Role- and Organizational-Involvement Management are positively related	Support for role-involvement management increases job satisfaction and this			
to the economic performance of an organization and this is mediated by job satisfaction and well-being.	increases economic performance			
job satisfaction and wett-being.				
Hypothesis 2	Total support as Support for recessionary action decreases job satisfaction and			
Recessionary action is negatively associated with job satisfaction and	Support for recessionary action decreases well-being.			
well-being.	support for recessionary action decreases well being.			
Hypothesis 3	Support for role-involvement management as its interaction with recessionary			
The interactions between recessionary action and a) role- and b)	action decreases job satisfaction and well-being.			
rganizational-involvement management are negatively related to job	[The interactions involving organizational-involvement management are			
satisfaction and well-being	significant but increase job satisfaction and well-being.]			
Hypothesis 4				
The interactions between recessionary action and a) job satisfaction and				
b) well-being are negatively related to the economic performance of the	Not supported			
organization				

Figure 1

Effect of the interaction between role-involvement management and recessionary action on job satisfaction



 $\label{eq:Figure 2} Figure \ 2$   $\label{eq:Figure 2} Effect\ of\ the\ interaction\ between\ role-involvement\ management\ and\ recessionary\ action\ on\ well-being$ 

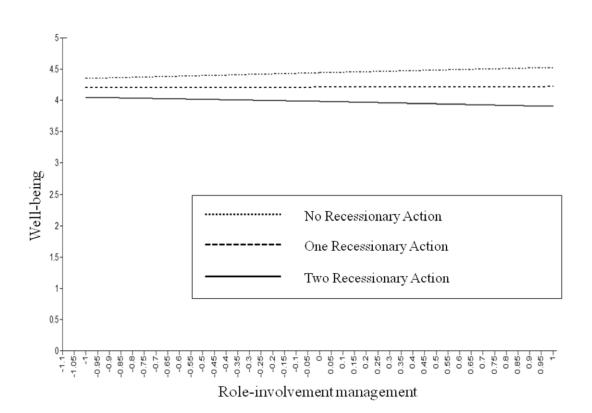


Figure 3

Effect of the interaction between organizational-involvement management and recessionary action on job satisfaction

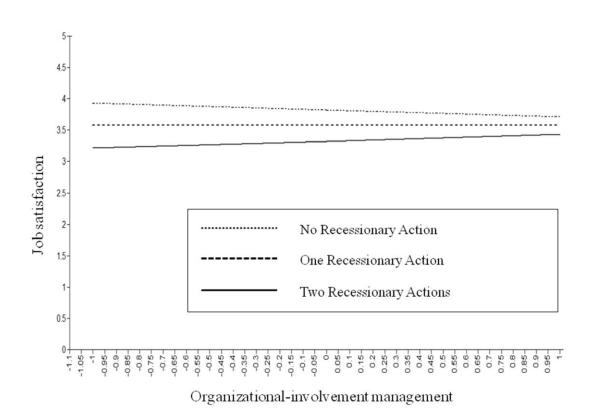


Figure 4

Effect of the interaction between organizational-involvement management and recessionary action on well-being

