

**Recession, Employee involvement, Well-being and Organizational Performance**

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## **INTRODUCTION**

If high-involvement management is a high-performance system, we might expect organizations that use direct-involvement methods to have fared better in the recent recession than those that do not. Alternatively, might the effects of the recession have been so universally strong that any relationship between direct-involvement methods and performance has been broken? Or did the recession have effects on the factors underlying these relationships so their performance effects were stronger or weaker in those organizations most affected by the recession? This paper reports a study of a representative sample of workplaces designed to address these questions.

Expectations about the answers to these questions will depend on our theory of the relationship between involvement and performance. The most common theory of these relationships is the mutual-gains one, according to which the effects of involvement on performance are explained by involvement's positive effects on employees' well-being (the term we will use when referring to job satisfaction, anxiety–contentment and depression–enthusiasm collectively). It may be that in recession these positive effects are reduced as, for example, satisfaction with job security diminishes. At least three other theories exist: (1) the “conflicting-outcomes” perspective, which is associated with labor intensification and management-by-stress theses (Ramsey, Scholarios & Harley, 2000), (2) Wood, Van Veldhoven, Croon & De Menezes's (2012) “counteracting-outcomes” model, according to which involvement can have negative (side) effects on employees' trust and well-being that reduce the effects it has on performance, and (3) what we term the “divergent-outcomes” theory, according to which involvement could have two unrelated effects, a positive one on performance and a negative one on well-being.

Under the mutual-gains model we might expect well-being levels to fall in the recession, and that this would reduce performance, while in the conflicting-outcomes perspective similar falls would increase effort and performance. However the underlying hypothesized relationships amongst involvement, well-being and performance might not change, although there may be grounds for thinking that the recession may intensify some of these. From the perspective of the counteracting-outcomes and divergent-outcomes theories the possibility that the recession enhances the negative relationship between involvement and well-being – for example through increasing anxiety or dissatisfaction – seems more likely.

Since the competing theories of the involvement–performance relationship offer different predictions about the impact of recession, we will first outline these theories, before presenting their predictions about the effect of recessions. We then introduce the study and the data, before reporting and discussing the results and drawing out their implications.

The study is based on data from Britain’s Workplace Employee Relations Series (WERS), focusing on the most recent survey conducted in 2011–2 (2011 WERS). This survey covers the whole economy, public and private, with the exception of agriculture and mining. It has two main elements: 1) an interview-based survey completed by managers on the workplaces’ characteristics and practices, and 2) a questionnaire completed by some of the employees in the workplaces covered by the managers’ survey. The managers’ survey contains four standard measures of organizational performance – financial performance, labor productivity, quality and absenteeism – and a fifth about measuring how organizations fared in the post-2008 recession; while the employee survey includes three measures of well-being – job satisfaction, anxiety–calmness and depression–enthusiasm.

The results reveal that employee involvement had a positive effect on how workplaces fared in the recession, but that the recession had little effect on the fundamental relationships between involvement, well-being and organizational performance, which largely conformed

to those revealed in Wood et al.'s (2012) analysis of 2004 WERS. Their analysis showed that the behaviour of one dimension of employee involvement, role involvement, conformed to the mutual-gains thesis, while the counteracting-effects thesis fitted the organizational involvement–satisfaction–performance relationship and the divergent–outcomes model fitted the organizational involvement–anxiety–performance nexus. The main effect of the recession is that amongst employees who were most exposed to management's actions to combat the recession (aside from being made redundant), as their anxiety increased so absenteeism declined in their workplaces – that is, presenteeism increased. In contrast, amongst employees who were less affected by the recession, as their level of depression increased (or enthusiasm decreased), absence in the workplace increased. Economic outcomes are thus largely unaffected but the singular human resource outcome – absenteeism – is, though its relationship with organizational involvement still fits the divergent–outcomes model.

## **THEORY AND HYPOTHESES**

High-involvement management is centred on direct employee involvement which can take two forms: role involvement and organizational involvement. Role involvement focuses on the delegation of responsibility to individuals for the execution and management of their own primary tasks (Wall, Wood & Leach, 2004a). Organizational involvement encompasses the involvement of individuals in decision-making within the wider organization. The two types of involvement may be weakly correlated and have different antecedents and effects. Analysis of data from the UK Commission's Employer Skills Survey of 2011 (Author1) and 2011 WERS (De Menezes & Wood, 2006; Wood et al., 2012) confirms their low correlation. While analysis from the former showed that their antecedents may vary, though some may be shared, and analysis from 2004 WERS revealed that their outcomes may vary.

Role involvement concentrates on the employee's core job, while organizational involvement entails workers participating in decision-making beyond the narrow confines of

the job to the “business as a whole” (Benson & Lawler, 2003:156). Role involvement, often termed 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 how they execute and manage their primary tasks. Organizational involvement, 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. As Wood et al. say (2012: 421), organizational involvement “is thus concerned with the development of broader horizons amongst all workers, so that they can think of better ways of doing their jobs, connect what they do with what others do, and react effectively to novel problems”.

Both role and organizational involvement may offer employees scope to generate ideas, make suggestions and increase the breadth of their roles. But the principal effect of role involvement is through increasing autonomy, which is widely assumed to increase well-being and satisfaction, a relationship that is supported by extensive research (Boxall, Hutchinson & Wassenaar, in press; De Jonge, Van Breukelen, Landaweerd & Nijhuis, 1999; De Lange, Taris, Kompier, Houtman & Bongers, 2003; Hackman & Oldman, 1980; Humphrey, Nahrgang & Morgeson, 2007; Boxall, Hutchinson & Wassenaar, in press). This is the basis of the mutual-gains model, in which involvement can have positive outcomes for both employers and employees, as it is argued that the positive outcomes for workers will have positive effects on their performance. It is thus a variant of the happy-worker thesis (Wright & Cropanzano, 2007). In contrast, organizational involvement’s effects on employees’ well-being and satisfaction may stem more from factors outside of the intrinsic satisfaction afforded by high-quality job design. For example, it may increase their social contact,

knowledge of the organization, sense of being valued by the organization and the felt coherence of their work and organizational life (Wood et al., 2012). Treating well-being as entailing three dimensions – job satisfaction and (following the circumplex model of affect (Russell, 1980; Warr, 2007:19–49; Watson & Tellegen, 1985)) anxiety–calmness and depression–enthusiasm, we can formulate the mutual-gains model thus:

***Hypothesis 1:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance, and these positive associations are mediated through job satisfaction, anxiety–calmness and depression–enthusiasm.*

The most prominent contrasting view to the mutual-gains argument, termed the conflicting-outcomes perspective by Wood et al. (2012), is based on the idea that high-involvement management is concerned with the intensification of work (Parker & Slaughter, 1988; Kelly, 1992; Ramsey et al., 2000). Role involvement may increase workers' discretion and organizational involvement may increase workers' participation, at least marginally, but their aim is to increase productivity and overall system control. The involvement induces stress, but more importantly the arousal of this stress is largely responsible for enhancing organizational performance. Hypothesis 2 summarises this:

***Hypothesis 2:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance and are negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, and these mediate the positive relationship between the two forms of involvement and organizational performance.*

Drawing on the arguments of Godard (2004, 2010) and Thompson (2011), Wood et al. (2012) constructed a third potential theory, the counteracting-effects perspective. In this model, involvement is thought to have positive effects on organizational performance, but these positive effects may be offset by negative effects on employee well-being and job satisfaction (Godard, 2001). Role and organizational involvement might lead to greater work

responsibilities for employees, but employees do not sufficiently trust that management will reciprocate its demands on employees by offering job security, wage increases or a sense of genuine development and promotion opportunities. Employees may then exercise lower effort. Such distrust may in fact be based on employees actually experiencing a lack of *quid pro quos*. This “counteracting-effects thesis”, can be encapsulated in the following:

***Hypothesis 3:*** (a) *role involvement and (b) organizational involvement are positively associated with organizational performance and negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, and the negative relationships reduce the overall benefit of the two forms of involvement for organizational performance.*

When testing the theories using 2004 WERS, Wood et al. (2012) found that the theory with which the data was consistent depended on the dimension of involvement and well-being. Both role involvement (in their terms enriched job design) and organizational involvement (in their terms high-involvement management) were related to various organizational performance measures. The role involvement–performance relationship was mediated by job satisfaction, and hence the mutual-gains theory was supported. However, organizational involvement reduced job satisfaction and detracted from its performance gains, a result that is consistent with the counteracting-effects thesis. Finally, organizational involvement was negatively related to anxiety–calmness, but this relationship neither mediated nor affected the involvement–performance relationship. (Wood et al.’s results were confined to job satisfaction and anxiety–calmness, as depression–enthusiasm was not measured in 2004 WERS.)

Wood et al. (2012) speculate that the last, non-hypothesized negative relationship between organizational involvement and anxiety–calmness may reflect the way the demands on employees to be more engaged, which are entailed in organizational involvement, may engender feelings of being pressurized and raise anxieties amongst employees about their

competencies, relationships with others and psychological security. Organizational-involvement initiatives may decrease the employees' sense of coherency or even feelings that the organization values them, as the environment appears more pressurized, perhaps ever more so. Also, we might conjecture that the content of the involvement processes may increase anxiety and other expressions of ill-being, as they may be the conduit of distressing, ambiguous or uncertain information and diminish employees' sense of the comprehensibility and meaningfulness of their work and workplace. These effects may be especially associated with team briefing, information disclosure and appraisals. Such effects are less likely to arise from role involvement, which Wood et al. (2012) suggest might even provide individuals with some psychological protection, as the intrinsic pleasure derived from having autonomy may furnish pleasurable feelings that contrast with those generated by the pressured environment in which organizational involvement may sit. Nonetheless, it is possible to apply to role involvement the arguments about how organizational involvement reduces well-being through affecting people's self-esteem and security. As those with high role involvement are held more responsible for their work, and may get more exposure to the uncertainties surrounding the organization, their anxieties and concerns may increase. We translate this line of reasoning to a formal hypothesis thus:

***Hypothesis 4:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance and negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, but the relationships with organizational performance and with well-being are independent.*

We will call this the “divergent-outcomes thesis”.

Employee involvement, and particularly organizational involvement, aims to harness the creativity of people so they exercise their initiative and become more proactive. Since organizational performance is not a direct outcome of employee satisfaction or well-being

under the counteracting-effects and divergent-outcomes theses, it may be that the proactivity and creativity of workers accounts for some of the variation in organizational performance. The literature on the human resource management–performance relationship widely assumes a connection between such behavior and organizational performance, whether focused on involvement or the resource-based theory of the firm (Wood & Wall, 2007). However, no studies directly assess this connection, though there is evidence that organizational citizenship, which is associated with initiative, has strong performance effects (Podsakoff & MacKenzie, 1997; Sun, Aryee & Law, 2007). We might conjecture that proactivity may play a role in explaining the organizational involvement–organizational performance relationship, if the mutual-gains model does not apply, as Wood et al. (2012) found. We might also, however, anticipate that proactive behavior is a concomitant of role involvement, and this may either complement or dominate over any increased satisfaction it may evoke. In the case of role involvement there is considerable evidence that it is associated with proactivity, creativity, and idea generation (Cai, Song & Zhao, 2013; Oldham & Cummings, 1996; Parker, Williams & Turner, 2006; Wang & Netemeyer, 2002). We thus posit the following hypothesis:

***Hypothesis 5:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance and employee proactivity mediates these relationships.*

### **Recession, Employee Involvement and Performance**

The recession following the financial crisis of 2008 was associated in most countries with increasing public debt. This was certainly the case in the country of our study, Great Britain, so we take its recent recession to mean the lengthy period of economic malaise that followed the onset of the financial crisis in late 2008 and the associated rising public debt and austerity policies pursued by government to combat this. Three questions concerning employee

involvement and the recession stand out. First, did the degree of involvement have a beneficial effect on the ability of organizations to withstand the recession, as one would expect if it is associated with high performance? Second, did it alter the relationships between involvement, well-being and performance such that if one of the above competing hypotheses applied before the recession, another fits better after 2008? For example, if the mutual-gains model worked well pre-2008, did the recession mean that involvement was used more readily for the intensification of effort and hence the conflicting-outcomes model applied better after 2008? Or did the recession break any links between involvement and performance as effective responses to the recession were dominated by measures other than involvement? Third, if organizations were not equally affected by the recession, or did not respond to it in the same way, did the extent of actions taken by an organization in response to recessionary effects moderate the relationships between involvement, well-being and performance? We might suppose that the expected moderations would vary between the theories we have presented. We now outline in more depth these three questions.

**Did involvement aid the ability of the workplace to withstand the recession?** To examine the first question, whether involvement aided the organization's ability to withstand the recession, we can treat how the workplace fared in the recession as a specific performance measure; thus we can apply the four theories of the involvement–performance relationship to this question. Testing whether employee involvement had a positive effect on an organization's resilience during the recession is then a matter of testing the Hypotheses 1–5 using a measure of the organization's state following the recession. We specifically test this state using a measure of the extent to which the organization was weaker as a consequence of the recession. We therefore test the following five hypotheses:

***Hypothesis 1R:** (a) role involvement and (b) organizational involvement are negatively associated with the extent to which the organization was weakened by the recession, and*

*these negative relationships are mediated through job satisfaction, anxiety–comfort and depression–enthusiasm.*

**Hypothesis 2R:** *(a) role involvement and (b) organizational involvement are negatively associated with the extent to which the organization was weakened by the recession, and with job satisfaction, anxiety–calmness and depression–enthusiasm, and the associations between the two forms of involvement and the extent to which the organization was weakened by the recession are mediated by job satisfaction, depression–enthusiasm and anxiety–calmness.*

**Hypothesis 3R:** *(a) role involvement and (b) organizational involvement are negatively associated with the extent to which the organization was weakened by the recession and negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, and the associations with job satisfaction, anxiety–calmness and depression–enthusiasm reduce the overall benefit of the two forms of involvement on the extent to which the organization was weakened by the recession.*

**Hypothesis 4R:** *(a) role involvement and (b) organizational involvement are negatively associated with the extent to which the organization was weakened by the recession and negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, but the relationships with the extent to which the organization was weakened by the recession and those with well-being are independent.*

**Hypothesis 5R:** *(a) role involvement and (b) organizational involvement are positively associated with the extent to which the organization was weakened by the recession, and employee proactivity mediates these relationships.*

**Did the recession alter the relationships between involvement, well-being and performance?** The data set we are using, 2011 WERS, is part of a series of studies, the penultimate one of which was conducted in 2004. We can use the results of Wood et al.’s

(2012) analysis of 2004 WERS as a benchmark to compare the results of identical tests using the 2011 data. Specifically: in 2004 the mutual-gains theory fitted the role involvement–satisfaction–performance nexus, the counteracting-effects model is supported by the organizational involvement–satisfaction–performance nexus, and the divergent-outcomes model is supported by the organizational involvement–contentment–performance nexus.

However, since the recession began in the middle of the period between the 2004 and 2011 surveys, we cannot directly evaluate the recession’s effect through observing changes from 2004 to 2011, as any changes might be due to factors before the recession in 2008. This would create an attribution problem, although any changes in this period may be suggestive of recessional effects, since the economic crisis was probably the most telling event in this period. Employment relations legislation and institutions were relatively stable (Van Wanrooy, et al., 2013: 2–5). But if we find the same models apply to the data in 2011 as they did in 2004 then we would have grounds to conclude the recession had not had a major effect on the involvement–well-being–performance nexus.

**Did the actions taken in the workplace in response to the recession moderate any of the relationships between involvement–well-being–performance?** As 2011 WERS was conducted in a period of recession, we can examine, for example, whether being affected by the recession moderated any of the relationships amongst involvement, performance and well-being. Questions were included in the management survey – alongside the question on how the workplace had fared as a consequence of the recession – that were concerned with a) how the recession had impacted on the workplace, and b) the actions that management had specifically taken to meet recessional threats, and in the employee survey on whether the respondent had experienced actions taken in the light of the recessions, such as a wage freeze.

Recessions may reduce overall levels of satisfaction and enthusiasm while increasing anxiety, especially if satisfaction with security is included in satisfaction levels and is a factor

underlying any depression and anxiety. However, whether recessions impact on the relationships amongst our triad of concepts – involvement, well-being and organizational performance – will depend, we posit, on the actions taken by management to cope with recessionary pressures. More specifically, we expect that any changes in these relationships will be greatest amongst those employees who directly experience actions such as wage freezes, recruitment embargos or work-organization changes. The different theories for the effect of involvement on organizational performance that we have outlined imply different predictions about how employees' experience of the recession affects the involvement–wellbeing–performance nexus.

First, under the mutual-gains model, we might expect that the intrinsic satisfaction, contentment and enthusiasm that involvement may generate will be lowered amongst employees directly affected by the recession (in ways other than being made redundant), but the strength of this link would be unaffected by the recession. However, if the actions are perceived negatively and have costs to employees, we might expect some reduction of the strength of the relationship between well-being and performance, as their identification with the organization may be reduced. This might also reduce the link between organizational involvement and well-being. We thus formulate the following:

***Hypothesis 6:** (a) role involvement and (b) organizational involvement are positively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, and these mediate the positive relationships of the two forms of involvement with organizational performance, but the strength of this mediated relationship will be reduced by the extent to which the employee is affected by a recession.*

We might expect that the effect role involvement has on well-being is less affected by recession-driven actions than is the organizational involvement–well-being relationship, since

employees' perception of management's approach to job design may not change greatly on the basis of how management had reacted to recessionary pressures.

Second, under the conflicting-outcomes thesis, we might again assume that actions to help combat recessionary pressures are perceived negatively by employees, but also assume that they are viewed as indicative of a need to intensify their efforts. We would then expect the effect of involvement on well-being to be stronger amongst employees most directly affected by management's reactions to a recession. In the case of the link between well-being and performance, there are a variety of conjectures consistent with the theory. Since stress drives performance, we might expect the link between well-being and performance to be unaffected by the extent to which the employee is directly affected by the recession. However, those most directly affected may feel that their actions could affect the survival of the organization to a greater extent than those who are not so directly affected. Alternatively, they may fear that failure to put more effort into their work will cause the workplace to close, or their own redundancy. A final possibility is that when stress reaches excessively high levels, employees begin to develop a fatalistic or "couldn't-careless" mentality and are not prepared to put up with things any longer, and the impact of stress on performance is suppressed when employees become victims of actions induced by the recession. The precise form any moderation takes is thus an open matter, and so we formulate the hypothesis in general terms:

***Hypothesis 7:** (a) role involvement and (b) organizational involvement are negatively associated with job satisfaction, anxiety–calmness and depression–enthusiasm, and these mediate a positive relationship between the two forms of involvement and organizational performance, but this mediated relationship will be moderated by the extent to which the employee is affected by a recession*

In contrast to the mutual-gains theory, we do not expect the strength of these effects to be less for role involvement than for organizational involvement.

Third, under the counteracting-effects thesis, we might expect the employees' distrust of management's involvement orientation, and unease that the fruits of their involvement will not be reciprocated, to intensify as actions are taken to offset recessions. Moreover, actions taken to counter recessionary pressures may increase the effect that involvement has on workers' anxiety and sense of incoherency. Since well-being is not the main driver of performance in this theory, we might, on the one hand, not expect its link to performance to be moderated by the extent to which the employee is affected by the recession. However, it may be that employees react to the actions that directly affect them with tit-for-tat behavior, and reduce the intensity of their effort. For example, in the face of wage cuts they may attempt to restore the effort-reward bargain by decreasing their effort, rather than increasing effort out of a sense of fear. Thus we can summarize the counteracting-effects theory of the effect of recession with the following proposition:

***Hypothesis 8:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance and negatively associated with job satisfaction, anxiety-calmness and depression-enthusiasm, and the negative relationships reduce the overall benefit of the two forms of involvement for organizational performance, and this reduction is stronger for employees directly affected by a recession.*

Fourth, the divergent-outcomes thesis might predict that employees' direct experience of the recession will moderate both its posited relationships. The effects of involvement on performance may be greater amongst those affected directly by recessionary actions, while insecurities and uncertainty about the future may be greater amongst this group, which may accentuate the negative impact of involvement on job satisfaction, anxiety and depression. Thus we formulate:

***Hypothesis 9:** (a) role involvement and (b) organizational involvement are positively associated with organizational performance and negatively associated with job*

*satisfaction, anxiety–calmness and depression–enthusiasm, and these independent relationships are stronger for employees directly affected by a recession.*

Finally, as a supplement to Hypotheses 8 and 9, we might hypothesize that employees directly affected by a recession will respond more readily to opportunities for involvement, by making suggestions and behaving proactively, than will those less affected by the recession. We do not expect that such behaviors will have any greater impact on organizational performance amongst those directly affected by the recession. We express this as:

***Hypothesis 10:*** *The positive relationships between (a) role involvement and (b) organizational involvement and employee proactivity are stronger for employees directly affected by a recession.*

## **THE STUDY**

The study aims to test the first two sets of five hypotheses (1–5 and 1R–5R) using a single model to assess: a) whether the association between role involvement or organizational involvement and well-being is positive or negative, and b) the role well-being plays in explaining or reducing a positive association between role involvement or organizational involvement and organizational performance. The model for testing the hypotheses is depicted in Figure 1. Since we have both employer and employee data, it is a two-level mediation model. Hypotheses 6–10 are tested with the same model but with the inclusion of a measure of the extent to which the individual was affected by the recession and the interactions between this and a) well-being and b) outcome measures.

– *Insert Figure 1* –

### **The Data**

The data used are from two elements of Britain’s 2011 WERS: the management survey, which involves interviewing managers in workplaces, and a questionnaire survey of

employees, which was completed in workplaces included in the management survey. The fieldwork for 2011 WERS was carried out between March 2011 and June 2012.

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 were not personnel specialists. Workplace managers act as informants about their workplace, and so the vast majority of the data collected in these interviews related to the features of their workplace and not their personal viewpoint. Interviews were conducted with managers in 2,680 workplaces. This sample, though larger than in 2004, was achieved through a lower response rate than in 2004 (2011 46%, 2004 64%). The 2011 WERS team attribute this to the difficult economic climate and a general long-term decline in response 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).

The employee-level data for 2011 WERS were collected through a self-completion questionnaire distributed to 25 randomly selected employees at workplaces where the management interviews were undertaken. The questionnaire concentrated on employees’ characteristics, experiences and attitudes to work. The median number of respondents in sampled workplaces is 12, and the range is 5–24. Managers gave permission for interviewers to select a sample for the Survey of Employees in 2,170 workplaces (81 per cent of those where manager surveys were conducted). Interviewers then placed a total of 44,371 questionnaires in these workplaces. 21,981 were returned, 19,272 by post and 2,709 (12 per cent) online, giving a response rate of 50 per cent among all sampled employees. In 2004 the proportion of managers allowing the employee survey was 86 per cent and the response

among employees was 54 per cent. Response rates were thus lower than in 2004, but the changes were less pronounced for the employee survey than for the management one.

The sample covers workplaces in both the private and public sectors, including all industries except those engaged in primary industries. Private households with domestic staff are also excluded. In total, data were obtained for 7% of all workplaces. Establishments with fewer than five employees were excluded. The sample was taken from the Inter-Departmental Business Register, maintained by the UK's Office for National Statistics.

## **The Measures**

### **The Management Practice Measures**

**Role involvement.** The following job design practices are used, based on information from the management survey on a typical employee in the largest occupational group within the workplace: 1) task variety: variety in the work, 2) method control: discretion over how the work is done, 3) timing control: control over the pace at which the work is carried out. Originally ordinal, the distributions of the variables are skewed, and thus we follow De Menezes and Wood (2006: 115–6) and recode them into binary variables, using the median proportion of usage as the cut-off point. A latent trait model confirmed that job design practices are reducible to a one-dimensional scale (87% of the log-likelihood ratio statistic ( $G^2$ ) is explained). The scores from this model are used as our measure of role involvement.

**Organizational involvement.** Following De Menezes and Wood's (2006) analysis of the 1998 WERS data, the organizational involvement items are: 1) functional flexibility (20% or more of the core occupational group are formally trained to do jobs other than their own), 2) 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"), 3) suggestion schemes (management uses suggestion schemes to consult with employees), 4) team work (80% or more of the core

occupational group work in formally designated teams), 5) induction (a standard induction programme designed to introduce new employees in the largest occupational group to the workplace), 6) 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), 7) team briefing (the workplace has briefing groups, or team briefings for all workers in a section, where work organization is discussed), 8) information disclosure (management gives regular information on one or more of: the financial position of the establishment, internal investment plans or staffing plans), and 9) appraisal (80% or more of the non-managerial staff in the workplace have their performance formally appraised). The majority of these practices are measured as binary in 2004 WERS. The exceptions are functional flexibility, team work and appraisal, whose distributions are either skewed or bimodal and thus were recoded as binary variables using the median proportion of usage as a cut-off point. A one-factor latent trait model fits the data well (71%  $G^2$  is explained). The measure of organizational involvement is based on the scores from this model.

A one-factor model of the combined set of role involvement and organizational involvement practices could not fit the data (18% of  $G^2$  was explained), which confirms that they are separate constructs. The correlation between our measures of role involvement and organizational involvement is insignificant ( $r=-0.06$ ,  $p= 0.41$ ), reconfirming their independence.

### **The Well-being Measures**

**Job satisfaction.** 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) their 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 53% of the variance, for which factor loadings ranged from 0.54 to 0.81. Job satisfaction is measured by the mean scores on all eight items, but when five or more items were not present, the measure was coded as missing. The scale has a reliability statistic of 0.86, measured by Cronbach’s alpha.

**Job-related anxiety–calmness.** This is measured by three items from Warr’s anxiety–calmness scale (1990), which is based on answers to the question: “Thinking of the past few weeks, how much of the time has your job made you feel...?”, for each of three negative items – tense, worried, and uneasy. The survey adopts a five-point scale: “all of the time”, “most of the time”, “some of the time”, “occasionally” or “never”. Anxiety–calmness is measured by the mean scores on the emotional states (Cronbach’s alpha = 0.84).

**Job-related depression–enthusiasm.** Akin to anxiety–calmness, this is measured by three items from Warr’s depression–enthusiasm scale (1990), which is based on answers to the question: “Thinking of the past few weeks, how much of the time has your job made you feel...?”, for each of three negative items – depressed, gloomy and miserable. The survey adopts a five-point scale: “all of the time”, “most of the time”, “some of the time”, “occasionally” or “never”. Depression–enthusiasm is measured by the mean scores on the emotional states (Cronbach’s alpha = 0.90).

**Proactivity.** This is based on the question: “To what extent do you agree or disagree with the following statement: Using my own initiative I carry out tasks that are not required as part of my job”. Respondents were given a five-point scale which ranged from “strongly agree” to “strongly disagree”, and responses were reversed coded to create our measure.

## **The Performance Measures**

**Financial performance, labor productivity and quality.** Each measure is 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 for our branch of industry”.

**Weakened by the Recession.** This measures how the workplace fared through the recession and is based on the question: "To what extent do you agree or disagree with the statement that this workplace is now weaker as a result of its experience during the recent recession". It is coded as 1 = Strongly disagree, 5 = Strongly agree.

**Absenteeism.** The percentage of work days lost through employee sickness or absence is available for every workplace. Since the distribution of this measure is skewed and long-tailed, we took its logarithm and adjusted the few workplaces that had zero percentage.

High values of the first three performance measures, financial performance, labor productivity and quality represent high performance, while low values of the weakened by the recession and absenteeism measures represent high performance. Thus, for example, for the mutual gains theory, we expect the first three to be positively correlated with well-being and involvement measures, and the other two to be negatively correlated with these.

## **The Moderator Measure**

**Employee’s recessionary experience.** This was measured as an index of the total number of actions that had been taken in the workplace that the employee had experienced. 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 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”, 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.

### **Control Variables**

In testing our hypotheses, we included control variables at the workplace level and at the individual employee level, selected in light of previous studies based on the WERS series (e.g. Bryson, Charlwood and Forth, 2006; Gazioglu & Tansel, 2006; Wood et al. 2012; Author 2).

At the workplace level we considered:

**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.

**Private sector workplace.** This is 1 where the workplace is in the private sector, and 0 if it is in the public or voluntary sector.

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

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

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, tenure, hours worked, and weekly wages.

## **Analysis Procedure**

We test our hypotheses using a two-level mediation model, as employees are nested within workplaces and observations at the employee level are not statistically independent of each other. Our independent and outcome variables are both workplace-level variables, while the mediators are individual-level variables, and thus the model we use is a 2-1-2 multilevel mediation model (MacKinnon, 2008; Preacher, Zyphur & Zhang, 2010). The Mplus software program (version 7.1; Muthen and Muthen, 2010) was used to estimate the model, following a one-stage procedure that estimates simultaneously the unique contributions of direct (from involvement) and indirect (through well-being) pathways in explaining organizational performance outcomes. While this approach is similar to Baron & Kenny's (1986) traditional mediation test, their first step, which involves establishing a significant relationship between the causal and outcome variable, is omitted as even if there is no relationship between the two, mediation effects may exist.

Hypotheses 6–8, concerned with the moderating effects of employee's recessionary experience on the involvement–well-being–performance relationships, are moderated mediations in Baron & Kenny's (1986) terms. To test them, we use a two-level moderated mediation model (Bauer, Preacher & Gil, 2006), also known as a conditional indirect-effects model (Preacher, Rucker & Hayes, 2007). These hypotheses are cases where both paths in the model (from involvement to well-being and from well-being to performance) are moderated by the same variable, employee's recessionary experience (Model 5 in Preacher, Rucker & Hayes, 2007: 198). Two sets of interaction terms were created: one between each involvement variable and employee's recessionary experience, and the other between employee well-being variables and employee's recessionary experience. In the case of Hypotheses 6 and 7, we thus test whether the indirect effect is less for those with high employee's recessionary experience for the role involvement–satisfaction–performance results,

and whether one or both of the two elements of the paths are affected. For Hypothesis 8, we assess whether the reduction in the effects of involvement on performance resulting from its negative effects on job satisfaction or anxiety–calmness is greater for employees with a high recession experience – again we test if the indirect effect is conditional on employee’s recession experience, and which paths are affected. For Hypotheses 9 and 10, we simply evaluate whether the interaction between the dependent variables, involvement measures and employee’s recession experience, is significantly related to the independent variables (the well-being and performance variables in Hypothesis 9 and proactivity in Hypothesis 10).

## **RESULTS**

### **The Relationships Amongst Role Involvement, Organizational Involvement, Well-being and Performance**

The individual-level measures of job satisfaction, anxiety–calmness and depression–enthusiasm are moderately correlated:  $r$  equals 0.39 between job satisfaction and anxiety–calmness, and 0.53 between job satisfaction and depression–enthusiasm. Anxiety–calmness and depression–enthusiasm are more highly correlated (0.74). Workplace-level organizational performance variables are also moderately correlated with each other. The positive coefficients are 0.48 between financial performance and labor productivity, 0.29 between financial performance and quality and 0.40 between labor productivity and quality. These economic outcomes are not strongly correlated with absenteeism:  $-0.28$  with quality,  $-0.24$  with labor productivity and  $-0.18$  with financial performance. Being weakened by the recession is negatively correlated with the main economic performance variables thus:  $-0.23$  with financial performance,  $-0.19$  with labor productivity, and  $-0.15$  with quality, and positively correlated with absenteeism (0.02).

Proactivity is moderately correlated with job satisfaction (0.21), weakly correlated with depression–enthusiasm (0.06) and not significantly correlated with anxiety–calmness.

Proactivity is also weakly correlated with financial performance (0.01), labor productivity (0.02) and quality (0.02), negatively correlated with absenteeism (-0.02), and not significantly correlated with being weakened by the recession.

Intra-class correlations (ICC1 and ICC2) were tested to assess if multilevel models were needed. ICC1 was used to measure the proportion of variance that could be expected if the ratings supplied by a single rater, selected randomly from a given population of raters, are different from the estimated true score from the overall sample of raters (LeBreton and Senter, 2008). ICC1 is 0.13 for job satisfaction, 0.06 for anxiety–calmness, 0.07 for depression–enthusiasm and 0.05 for proactivity. A second intra-class correlation test (ICC2) was performed to measure reliability of between-workplace comparisons in employee outcomes. ICC2 is 0.64 for job satisfaction, 0.45 for anxiety–comfort, 0.49 for depression–enthusiasm and 0.37 for proactivity. All intra-class correlation test values are consistent with the proposed standards (Klein et al., 2000; LeBreton & Senter, 2008). An ICC1 value of 0.01 is considered a “small effect”, 0.10 is considered a “medium effect”, and above 0.25 a “large effect” (LeBreton & Senter 2008: 838). There is no acceptable cut-off point for ICC2, though values closer to 1.0 provide more justification for the reliability of ratings.

The results of our analyses are reported in Table 1, and summarized for role involvement in Figure 2 and for organizational involvement in Figure 3. The upper portion of Table 1 (Part A) shows standardized estimates for direct effects of role involvement, organizational involvement and job-related well-being on organizational-performance measures, including whether the workplace was weakened by the recession.

– *Insert Table 1 here* –

– *Insert Figure 2 here* –

– *Insert Figure 3 here* –

Role involvement is not directly associated with any performance measure, but is positively related to job satisfaction, depression–enthusiasm and proactivity, although not with anxiety–calmness. In contrast, organizational involvement is directly related to all indicators of organizational performance. The direction is as expected, positively for financial performance, labor productivity and quality, and, negatively for the extent to which the workplace was weakened by the recession. However it is positively related to absence when the predicted relationship is negative. Organizational involvement is not significantly related to depression–enthusiasm, but has negative associations with job satisfaction, anxiety–calmness and proactivity.

Of the hypothesized mediators, job satisfaction has direct positive relationships with financial performance, productivity and quality, and a negative relationship with being weakened by the recession. It is not related to absenteeism. Thus, higher job satisfaction increases financial performance, higher labor productivity and better quality, and reduces the adverse effects of the recession. Anxiety–calmness has direct positive relationships with only labor productivity and quality, whereas depression–enthusiasm is not associated with any organizational performance indicator, including the weakened by the recession measure. Proactivity is also not related to any of the five performance measures.

The lower portion of Table 1 (Part B) shows standardized estimates for the mediated or indirect effects of role involvement and organizational involvement through employee well-being and proactivity on organizational performance and the weakened by the recession measure. The paths for role involvement through job satisfaction are significant and positive on three performance measures: financial performance, labor productivity, and quality. Role involvement also has a negative indirect relationship with the weakened by the recession measure, mediated through job satisfaction. Organizational involvement has no significant indirect relationship with organizational outcomes, except with quality, for which it has a

negative indirect relationship through job satisfaction. None of the hypothesized indirect effects for either role involvement or organizational involvement through anxiety–calmness, depression–enthusiasm or proactivity are significant.

Some control variables have significant effects on organizational performance including the extent to which organizations were weakened by the recession (see Table 1 in the Appendix). The industry dummies, for example, are negatively associated with financial performance and the weakened by the recession measure, whereas workplace size and union representation are negatively related to quality. Also, being part of a larger organization and workplace size are positively related to absenteeism. At the employee level, being 18 to 21 years of age, being 60 years of age or above and having a degree are positively associated with employee well-being and proactivity, whereas number of hours worked, being male and tenure are negatively related to employee well-being and proactivity (see Table 2 in Appendix).

### **The Moderating Effect of Employee’s Experience of Recession on the Relationships amongst Role Involvement, Organizational Involvement, Well-being and Performance**

Tests for interaction effects revealed that no moderation of any of the indirect relationships we have observed so far. The only significant effects related the results that conform to the divergent outcomes theory.

First, the interaction between organizational involvement and employees’ recession experience moderates the organizational involvement–anxiety–calmness relationship ( $\beta = 0.373, p < 0.001$ ). For those not directly affected by the recession, the relationship was as in the general model, that is calmness decreases with the level of organizational involvement; while for those directly affected the relationship is very weak and in the opposite direction, calmness slightly increases with organizational involvement. The level of calmness is significantly lower for those who directly experienced the recession. The implication is that

this experience dominates over the level of organizational (and role) involvement in determining people's anxiety. It may also be that where there organizational involvement, management handles the recessionary pressures in a more involving way, for example shares more information, and workers' anxieties surrounding the recession are somewhat reduced.

Second, the employee's recessionary experience affects the relationship between organizational involvement and absenteeism. The direct relationship is not significant nor is there an indirect relationship between them involving any well-being measures; but the indirect relationship between organizational involvement and absenteeism via anxiety–calmness is moderated by the employee's experience of the recession ( $\alpha\beta = 0.050$ ,  $p < 0.05$ ). The effect of the recession, then, is where employees were most exposed to management's actions to combat the recession, as employees' anxiety increased so absenteeism declined in those workplaces, or presenteeism increased. In contrast, where employees were most affected by such actions, high levels of depression were associated with high levels of absence. In other words, as enthusiasm lowered, absence increased.

In addition, proactivity has no significant direct relationship with labor productivity (as shown in Table 1), but this path is moderated by actions taken in response to recession ( $\beta = 0.139$ ,  $p < 0.05$ ): the effect of proactivity on labor productivity is lower where employees' experience has not been heavily affected by recession. This implies there is an effect of the recession on how proactivity increases labor productivity.

## **Interpretation**

### **The involvement–well-being–performance nexus**

The implications of the results for our hypotheses are threefold. First, that job satisfaction mediates the relationship between role involvement and all economic outcomes, including the recessionary one, but not the human resource variable absence, which supports Hypothesis 1. Thus the mutual-gains thesis is supported for one dimension of high-involvement

management, role involvement, with job satisfaction as the mediator. Second, that organizational involvement reduces employees' job satisfaction at the expense of some of its overall positive direct effects on quality, supports Hypothesis 3. Thus the counteracting-outcomes thesis is supported in the case of organizational involvement, job satisfaction and quality. Third, since organizational involvement is related to all performance variables, as predicted with the exception of absenteeism, and negatively related to anxiety–calmness, and these two sets of relationships are discrete, there is support for Hypothesis 4, the divergent-outcomes thesis in the case of the relationship between organizational involvement and anxiety-calmness. With the exception of quality, the results for the organizational involvement–satisfaction relationship also support this theory. Organizational involvement is good for all economic performance indicators, but it can increase dissatisfaction, anxiety and absenteeism.

In contrast, there is no support for Hypothesis 2. Neither role involvement nor organizational involvement has positive indirect effects on any measure of organizational performance through negative associations with job-related well-being.

Hypothesis 5 is also not supported. Role involvement has a direct positive relationship with proactivity, but organizational involvement has a direct negative relationship with proactivity. However, these relationships do not explain any indirect effects of involvement on organizational performance outcomes.

Finally, depression–enthusiasm plays no mediating role in terms of indirect relationships between either form of involvement and organizational performance outcomes. Role involvement is positively related to depression–enthusiasm, but organizational involvement is not associated with it.

## **The Recession, Employee Involvement and Performance**

The extent to which the workplace was weakened by the recession is associated with organizational involvement and job satisfaction, but these are discrete; and job satisfaction mediates the negative relationship between role involvement and the extent to which organizations were weakened by the recession. The relationship between organizational involvement and the weakened by the recession measure was not mediated by job satisfaction. Thus, Hypothesis 1R, and hence mutual-gains theory, were supported for the role involvement–satisfaction–recession relationships. In contrast, the results for organizational involvement support Hypothesis 4R, the divergent-outcomes model, as it is negatively related to both the weakened by the recession measure and both job satisfaction and anxiety–calmness, but these relationships are independent.

The pattern of results for the performance measures other than the weakened by recession measure are largely similar to those in our benchmark study, Wood et al.'s (2012) analysis of 2004 WERS. Table 2 contains a comparison of their support for the various theories, and shows one main divergence. In the 2004 analysis Hypothesis 3, the counteracting-outcomes model, was supported by the data on the relationship between organizational involvement and financial performance, labor productivity and quality; but in 2011 it was only supported for the quality outcome. The picture in 2011 for financial performance and labor productivity is consistent with Hypothesis 4, the divergent-outcomes model.

Additionally, the absence results have changed. Role involvement is unrelated to absence in both surveys, but job satisfaction is unrelated to absenteeism in 2011, despite being positively associated with it in 2004. Nonetheless, in neither year was satisfaction mediating a role involvement–absence relationship. Organizational involvement was unrelated to absenteeism in 2004, but in 2011 was positively related to it. The latter relationship is not mediated by any well-being indicator. However, it does not support the divergent-outcomes

model, as organizational involvement is negatively associated with employees' well-being but positively related to absenteeism.

– *Insert Table 2 here* –

The analysis of the moderating effect of employees' experience of recession confirms its limited impact on the nature and effects of organizational involvement. Employees' experience of the recession did however weaken the relationship between organizational involvement and anxiety–calmness as heavily affected anxiety–calmness. Similarly its Employees' experience of the recession interactions with anxiety–calmness and depression–enthusiasm moderated the relationship between organizational involvement and absenteeism. Economic outcomes are thus unaffected by employees' recessional experience, but the effect on the singular human resource outcome, absence, is affected by this.

## **DISCUSSION**

We have focused on direct employee involvement as the core of the high-involvement model and one of the three elements of the AMO (Ability + Motivation + Opportunity to Participate) theory of human resource management (Appelbaum, Bailey, Berg & Kalleberg, 2000); Boxall & Purcell, 2003; Gerhart, 2007: 318–322). Lawler's high-involvement management (1986), and Walton's (1985) similar concept of high-commitment management, both grew out of their earlier concern with work enrichment, as it was realised that for successful job redesign the wider context needed to be changed to support these management concepts, and successful employee involvement entailed participation beyond the narrow confines of the job. Though the prescription is that role and organizational involvement should be used together, they may not be, as indeed both this study and earlier analyses of WERS have found to be the case (De Menezes and Wood, 2006; Wood et al., 2012). Labels such as high-involvement management aim to capture what Boxall and Macky (2009:8) call the “dominant theme” underlying management's orientation to human resources and guiding

their actions. However, our research suggests that this orientation may in practice be dominated by one or other of role or organizational involvement, while integrated use is rare.

Both types of involvement have positive effects on key economic performance measures, but the route through which this is achieved may differ. We have thus added to the evidence that employee involvement may be beneficial for performance and to our understanding of it. The mutual-gains model, with its emphasis on employee satisfaction, explains much of the positive relationship between role involvement and performance, but organizational involvement's positive effect is not explained by this thesis. Its negative effects on job satisfaction and anxiety–calmness may reduce some of the overall performance effects, but these remain unexplained by our study. The similarity in the results of this analysis of 2011 WERS with those for 2004 WERS adds to our confidence in their robustness. This confidence is enhanced by the fact that the WERS series is based on large nationally samples of workplaces in Great Britain.

Our study has added an interesting novel performance measure: how workplaces fared in a recession. Other similar measures could be developed around other shocks or developments, such as how workplaces fare after a country has joined a currency union or common market, but this is a particularly good general one, at least in the context of 2011 WERS. Moreover, we have shown that both types of involvement are positively related to how workplaces came out of the recession, and that the results of mediation tests for explaining these links were consistent with those found for other economic outcomes.

This is the first study to explore, theoretically and empirically, how recessions might affect the involvement–performance relationship or, more generally, human resource management. The similarity in the results between the 2004 and 2011 studies not only adds to our trust in them but also suggests that the recession has had limited impact on the involvement–well-being–performance nexus. Two changes were observed. First, that role involvement is not

related to performance, which reflects the fact that it is mediated by job satisfaction, and implies that the extent of this mediation has increased between 2004 and 2011. Second, in 2004 organizational involvement's negative relationship with job satisfaction was reducing its positive effects on financial performance and labor productivity, but in 2011 this was no longer the case. The negative effect of job satisfaction remains, but is independent of the effect of organizational involvement on these performance measures. The effects on economic outcomes and job satisfaction remain in conflict, but only in the case of quality does the job dissatisfaction reduce organizational involvement's effect on performance. That the dissatisfaction is only affecting quality may reflect some concerns about the recession. However, since these relationships are not moderated by employees' experience of the recession, it would appear to be an effect of the general recessionary climate and not specific to those workplaces where actions were taken directly to deal with it. We examined whether these or other relationships were moderated by the employees' degree of job insecurity, and found this not to be the case.

The analysis of the moderating role of the employee's recessionary experience showed that the majority of relationships were not affected by the recession. That involvement. The moderating effect on the organizational involvement –anxiety–calmness relationship largely revealed that the experience of recession over the level of involvement, though this may have reduced the recession's impact on anxiety. The distinctive role of the employee's recessionary experience on the organizational involvement–absenteeism relationship may be because absenteeism is a human resource outcome and is more proximal to employees' outcomes. The diversity in the results between anxiety and depression is consistent with the expectation that depression is more strongly related to absenteeism, as it entails low arousal and leads to passive and withdrawal behaviors, while anxiety involves more activated states, minimum

levels of which are required for people to attend work. This relationship has been found in other studies (Hardy, Woods & Wall, 2003).

Our overall conclusions on the recession are consistent with the more general finding in the analysis of 2011 WERS by the survey team, who write (Van Wanrooy et al., 2013: 195) that “the recession has not fundamentally shifted the employment relations system”. In the employee-involvement area, such a shift might be a move to integrated use of role and organizational involvement. However, this did not happen. The actions taken in response to the recession that were observed from 2011 WERS were primarily aimed at reducing costs (e.g. wage freezes), and were similar to those reported in Ireland as pragmatic and “unlikely to shift the centre of gravity in work and employment practices” (Roche & Teague 2013: 18).

We can however refine the WERS team’s analysis on how employment relations contributed to how workplaces fared in the recession. This showed that workplaces that introduced performance-related pay or new initiatives to involve employees in the workplace in the two years prior to the survey (Van Wanrooy et al., 2013: 179) fared better than others. However, when we added these indicators of change into our models of the recessionary performance, we found that our involvement measures remained significant, while these additional variables were not. It is the level of involvement not its recent introduction (or that of performance-related pay’s) that is important. A general measure of whether the workplace had introduced any change in that period was also not significant.

The explanation of organizational involvement’s performance effects does not lie – either under all but the mutual-gains thesis or in our results – in its having positive well-being effects. We thus tested to see if the effects were explained by employees being more proactive in an organizational involvement regime. This was not so. Organizational involvement in fact had a direct negative relationship with proactivity. Role involvement, however, was directly positively related to it. In neither case, however, did proactivity play a

significant mediating role in the indirect relationship between involvement and any organizational performance indicators. The fact that proactivity is associated with role involvement perhaps gives some confidence in the measure, as this is consistent with other studies; so perhaps also does the way that workplaces where workers experienced most directly recession were able to get a greater yield in terms of productivity from employee's proactivity. Nonetheless, before dismissing proactivity as a mechanism linking organizational involvement with performance, it should be acknowledged that it is a single-item measure that may not be adequately capturing the kind of orientations or behaviors that underlie theoretical speculations about the roles of proactivity, idea generation and learning in explaining the organizational involvement–performance relationship. Potentially it is primarily a measure of role breadth, and not capturing the extent to which people are responding to calls for ideas or contributing to innovation.

However, if it is the case that proactivity is not the critical ingredient, it may be that the organizational involvement–performance relationships are explained by other aspects of organizational involvement. It may be an increase in the more generic human capital of the organization and not simply reserved to the proactivity this might induce (Ployhart and Moliterno, 2011). This may relate to the broader horizons that we referred to earlier. However, perhaps the most telling aspect of organizational involvement 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. It has long been recognised that an effect of piecework systems was not that they did not incentivise people – in fact they were often very successful at that – but rather they led to tunnel vision and lack of connection with what fellow workers do, even those in close physical proximity, as on an assembly line. As Klein (1976: 7; see also Kohn, 1988) showed in one of her studies of piecework, it narrowed the operators' she studied perceptions of their work to such an extent that this simply meant the immediate job cycle.

As she puts it, “if a man was paid every time he made a half-inch cut, the implication was that this was what the firm considered his job to be - not making a good product or being in any way concerned with the wider objectives of the firm”. In these terms, organizational involvement is the opposite of such a piecework regime. It entails limited involvement and, being goal-directed, curtails any possibilities of the aimless thought that creativity depends on. The expansion of people’s horizons and shared understandings through greater contact and integration with each other may yet be the most beneficial aspect of organizational involvement: it increases both the human capital, individual and collective, of the organization, alongside the social capital. In Wright and McMahan’s (2011: 102) terms it increases the “human capability” of the organization. This might be an area where research should be intensified in future.

The research also highlights the need to treat well-being as multidimensional, and not to assume all employee outcomes – psychological states or otherwise – are determined in the same way. The addition in 2011 WERS of a third well-being measure, depression–enthusiasm, did not add greatly to our understanding, as it was not related to either role or organizational involvement. This is particularly telling, as depression–enthusiasm is strongly associated with job satisfaction and anxiety–calmness. Nonetheless, it did provide additional information on the effects of employees’ recessionary experience on absence.

That the positive relationship between organizational involvement and absenteeism is not explained by well-being may mean that it increases what the absence literature terms voluntary absence. But this is against what we might expect as under organizational involvement we might anticipate that employees have a greater awareness of the impact absenteeism has on the business and one’s colleagues. If absenteeism indicates tit-for-tat behaviour towards management because demands for high involvement are not being reciprocated, as in the divergent-outcomes theory, we might expect it to be related to the

anxiety generated by organizational involvement. Instead, it may be that such behaviour is less prevalent in low-organizational-involvement workplaces as the regimes are more tightly controlled and it is this that largely contributes to the positive organizational involvement–absenteeism relationship. The result is of course nonetheless moderated by the employees’ experience of recession.

The limited impact of involvement on absence levels may partly be explained by the finding that fairness perceptions have a considerably larger effect on absence than job satisfaction or well-being; Johns (2008) reports a corrected correlation across studies between absence and procedural justice of -0.46, and for distributive justice of -0.50. Employee involvement may be interpreted by employees as having little to do with creating a fair environment, but rather as a task-oriented approach, which is consistent with our perspective on it. The motivational supports for high-involvement management, such as practices designed to promote equal opportunities and reduce family–work interference may be more about fairness and may affect absenteeism more directly, their use not being highly correlated with either form of involvement (Wood, Nolte, Burrige, Rudloff & Green, 2014). It should also be stressed that we are predicting levels of absence in the workplace, and the individual-level variables and theorizing may be insufficient. Contagion effects and cultures of absence are known to exist.

The implications of the study for human resource management research include the need for further questioning of blanket terms such as high-performance work systems and the human resource management system. Previous questioning of the term “high-performance work system” has been largely on the grounds that it prejudices its performance effects ahead of the evidence base. The implication of our research is rather that it may deflect attention away from a thorough examination of which critical components of human resource management are contributing most to any performance effects.

Our research has focused on one potential dominant element of a human resource management system, involvement, but even then we have found that its two dimensions, role and organizational involvement, need not go together, and have different outcomes. Similarly, and more broadly, if these components of the opportunities-to-participate element in the AMO model of human resource management are not highly correlated, then relationships across the other elements are equally likely to be weakly correlated, as we and others have found.

Since, in reality practices might be used separately, rather than in conjunction with each other, strikingly different approaches to HRM will exist across the economy. The focus could be on intensive training and development – what Dyer & Holder (1988) call an investment approach to HRM – which would contrast with an approach centred on buying in talent and intensive selection procedures. The high-involvement approach contrasts most with Dyer & Holder's incentives approach, focused on performance-related pay in which the dominant theme is financial rewards and performance management. This means that global indexes may mask important differences between organizations. Indexes may give the same score to highly different organizations; for example, those with three organizational involvement practices, those with three role involvement practices, and those with merit pay, promotion on merit and profit-sharing would all be scored three, when they are in reality very different.

Having confirmed the discreteness of the dimensions of involvement in our study, we have been able to establish the performance effects that emanate from involvement. An associated implication for the study of human resource management is that the increasing tendency not to include role involvement in studies of its links to performance, observed by Wood & Wall (2007), should be reversed. We could follow up studies such as this one by examining the impact when involvement is combined with other dimensions. We did examine whether the effect of each type of involvement, was either weakened when used in combination with

performance-related pay, as Total Quality Management proponents (Deming, 1986; Scherkenbach, 1991; Scholtes, 1987: 8) suggested will be the case, or was in fact strengthened, as some human resource scholars imply and as may be implied by the AMO model (Becker & Huselid, 1998). No such interaction effect existed.

Despite concerns about high-performance terminology, the positive implication of our study is that high-involvement management – in both dimensions – has some claim to be associated with higher economic performance. Even in recession the impact is apparent, and moreover it contributed to helping workplaces withstand the effects of the recession and avoid being weaker coming out the other side. Such strong evidence has not yet been shown for approaches to human resources based on different dominant themes. Indeed, one such approach centred on performance-related pay has often been attributed to the banking crisis that precipitated the recession in 2008.

The main strength of this research is that it is based on a large matched employer-employee dataset that covers workplaces with more than four employees in all sectors of the British economy, with the exception of mining and agriculture, for practical reasons. The two involvement measures have been validated elsewhere (De Menezes & Wood, 2006), and the constituent items were taken from a wide range of questions in the survey, which reduced the potential for response sets or effects of the ordering of questions (Conway & Lance, 2010). The data were collected at the workplace level which is most appropriate for measuring practices (Gerhart, Wright, McMahan & Snell, 2000).

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 varied nature of the results for role and organizational involvement suggests that common-method variance may not have strongly affected our measures, or their link to performance. In fact, the associations in

our study between measures of well-being from employee data and both practices and performance gained from the management survey are stronger than the associations between practices and performance that are both rated by managers. 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).

A statistical model such as the one we test on cross-sectional data could be consistent with a path model that reversed the direction of the paths, so that performance leads to satisfaction, and worker satisfaction consequently encourages managers to practice role or organizational involvement. But as Wood et al. (2012) argue, the job redesign case studies do not suggest that management design 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 behind increasing organizational involvement than worker satisfaction.

For organizational policy, this study implies, firstly, that we need to understand why role involvement is not followed more widely than it is; indeed the evidence from 2011 WERS is that any increase is very limited (Van Wanrooy et al., 2013). Secondly, we need to think about ways of reducing any negative effects of organizational involvement so that job dissatisfaction does not depress its positive effects on performance, and anxiety levels are not increased too strongly. In terms of the recent stress literature which differentiates hindrance from challenge stressors (Podsakoff, LePine & LePine, 2007), this may involve accentuating the challenge element of organizational involvement practices whilst reducing the hindrance stressors that it seems to entail. The content of team briefings and other involvement activities may, as we suggested, be creating ambiguities, role conflict and inter-personal tensions that not only create anxiety but inhibit the positive motivational effects with which challenge stressors are associated. Addressing this may require a change in the approach of human resource managers and CEOs to their monitoring of practices. All too often the focus

is on processes – for example, are appraisals being done on time, was the information disclosed to all people at the same time, or whether the training course went smoothly – rather than on the content in the delivery – what actually happened in the appraisal, dissemination or training activities?

For the policies towards modern management practices of governments, unions and other representative groups, the study offers further grounds for encouraging policy makers as well as managers to put job quality high on their agendas. They might also encourage the more radical rethink of human resource management mentioned above, so that the performance effects of organizational involvement are realised and any adverse effects on well-being are avoided.

## **CONCLUSION**

This study demonstrates, at least for Britain, that various competing theories are relevant to understanding the impact of high-involvement management on organizational performance and job satisfaction and well-being; both mutual-gains and conflict theses can contribute to this understanding. The mutual-gains model is relevant for role involvement, as job satisfaction plays a positive mediating role in its relationship with performance, including how the workplace fared in the recession. Either the counteracting-outcomes model or the divergent-outcomes model applies to the organizational involvement–wellbeing–performance relationships. The conflicting-outcomes perspective associated with labor intensification and management-by-stress is not relevant in explaining the effects of either form of involvement.

We cannot then associate direct employee involvement with a mutual-gains model of employment relations in general. At least in the recent past in Britain, for some workplaces, or for some workers, the achievement of high-involvement management's performance benefits may be at the expense of a degree of satisfaction and comfort, which in the case of quality may detract from its positive performance effects.

While our research has replicated results of the previous study in a British context, further work in different institutional contexts is required. In particular, it may be that organizational involvement's negative association with calmness is typical of liberal market economies, and less likely in coordinated ones such as Scandinavia and Germany.

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**Table 1****Two-level mediation model: paths, coefficients and their significance**

PART A: Direct effects (standardized estimates)	Coefficients	Standard Error
Role involvement → job satisfaction	0.21***	0.03
Role involvement → anxiety-calmness	-0.00	0.04
Role involvement → depression-enthusiasm	0.12**	0.04
Role involvement → proactivity	0.26***	0.04
Organizational involvement → job satisfaction	-0.07*	0.03
Organizational involvement → anxiety-calmness	-0.15***	0.04
Organizational involvement → depression-enthusiasm	-0.06	0.04
Organizational involvement → proactivity	-0.11*	0.04
Role involvement → financial performance	0.05	0.03
Role involvement → labor productivity	0.03	0.03
Role involvement → quality	0.04	0.03
Role involvement → absenteeism	-0.02	0.03
Role involvement → weakened by the recession	-0.03	0.03

Organizational involvement → financial performance	0.11***	0.03
Organizational involvement → labor productivity	0.15***	0.03
Organizational involvement → quality	0.16***	0.03
Organizational involvement → absenteeism	0.07*	0.03
Organizational involvement → weakened by the recession	-0.08**	0.03
Proactivity → financial performance	-0.06	0.05
Proactivity → labor productivity	-0.03	0.05
Proactivity → quality	-0.04	0.05
Proactivity → absenteeism	0.01	0.05
Proactivity → weakened by the recession	0.05	0.05
Job satisfaction → financial performance	0.13**	0.04
Job satisfaction → labor productivity	0.20***	0.04
Job satisfaction → quality	0.26***	0.04
Job satisfaction → absenteeism	-0.02	0.07
Job satisfaction → weakened by the recession	-0.12*	0.05
Anxiety-calmness → financial performance	0.07	0.06

Anxiety-calmness → labor productivity	0.15*	0.06
Anxiety-calmness → quality	0.12*	0.06
Anxiety-calmness → absenteeism	0.10	0.13
Anxiety-calmness → weakened by the recession	-0.07	0.08
Depression-enthusiasm → financial performance	-0.00	0.07
Depression-enthusiasm → labor productivity	-0.12	0.07
Depression-enthusiasm → quality	-0.10	0.06
Depression-enthusiasm → absenteeism	-0.16	0.14
Depression-enthusiasm → weakened by the recession	-0.06	0.08

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PART B: Indirect effects (standardized estimates)	Coefficients	Standard Error
Role involvement → job satisfaction → financial performance	0.00**	0.00
Role involvement → anxiety-calmness → financial performance	0.00	0.00
Role involvement → depression-enthusiasm → financial performance	0.00	0.00
Role involvement → proactivity → financial performance	-0.00	0.00
Role involvement → job satisfaction → labor productivity	0.00***	0.00
Role involvement → anxiety-calmness → labor productivity	0.00	0.00

Role involvement → depression-enthusiasm → labor productivity	-0.00	0.00
Role involvement → proactivity → labor productivity	-0.00	0.00
Role involvement → job satisfaction → quality	0.01***	0.00
Role involvement → anxiety-calmness → quality	0.00	0.00
Role involvement → depression-enthusiasm → quality	-0.00	0.00
Role involvement → proactivity → quality	-0.00	0.00
Role involvement → job satisfaction → absenteeism	0.00	0.00
Role involvement → anxiety-calmness → absenteeism	0.00	0.00
Role involvement → depression-enthusiasm → absenteeism	-0.00	0.00
Role involvement → proactivity → absenteeism	0.00	0.00
Role involvement → job satisfaction → weakened by the recession	-0.00*	0.00
Role involvement → anxiety-calmness → weakened by the recession	0.00	0.00
Role involvement → depression-enthusiasm → weakened by the recession	-0.00	0.00
Role involvement → proactivity → weakened by the recession	0.00	0.00
Organizational involvement → job satisfaction → financial performance	-0.01	0.00
Organizational involvement → anxiety-calmness → financial performance	-0.01	0.01

Organizational involvement → depression-enthusiasm → financial performance	0.00	0.00
Organizational involvement → proactivity → financial performance	0.00	0.00
Organizational involvement → job satisfaction → labor productivity	-0.01	0.01
Organizational involvement → anxiety-calmness → labor productivity	-0.02	0.01
Organizational involvement → depression-enthusiasm → labor productivity	0.01	0.00
Organizational involvement → proactivity → labor productivity	0.00	0.00
Organizational involvement → job satisfaction → quality	-0.01*	0.01
Organizational involvement → anxiety-calmness → quality	-0.01	0.01
Organizational involvement → depression-enthusiasm → quality	0.00	0.00
Organizational involvement → proactivity → quality	0.00	0.00
Organizational involvement → job satisfaction → absenteeism	0.00	0.01
Organizational involvement → anxiety-calmness → absenteeism	-0.01	0.02
Organizational involvement → depression-enthusiasm → absenteeism	0.01	0.01
Organizational involvement → proactivity → absenteeism	-0.00	0.01
Organizational involvement → job satisfaction → weakened by the recession	0.01	0.01
Organizational involvement → anxiety-calmness → weakened by the recession	0.01	0.01

Organizational involvement → depression-enthusiasm → weakened by the recession	0.00	0.01
Organizational involvement → proactivity → weakened by the recession	-0.01	0.01

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*N = 1,923 workplaces, 21,981 employees*

*Significance: \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$  \*\*  $p < .01$*

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**Table 2**

**Summary of Hypotheses, results from WERS 2004 and WERS 2011**

	Results from WERS 2004	Results from WERS 2011
Hypothesis 1 (mutual-gains thesis)	Role involvement → job satisfaction → financial performance Role involvement → job satisfaction → labor productivity Role involvement → job satisfaction → quality	Role involvement → job satisfaction → financial performance Role involvement → job satisfaction → labor productivity Role involvement → job satisfaction → quality
Hypothesis 2 (conflicting-outcomes thesis)	Not supported	Not supported
Hypothesis 3 (counteracting outcomes thesis)	Organizational involvement → job satisfaction → financial performance Organizational involvement → job satisfaction → labor productivity Organizational involvement → job satisfaction → quality	Organizational involvement → job satisfaction → quality

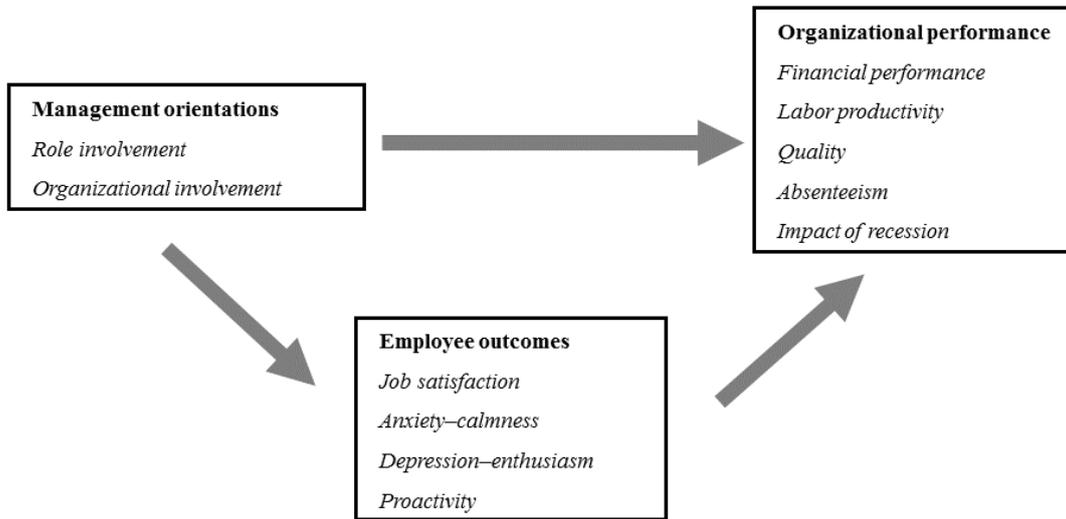
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Hypothesis 4 (divergent outcomes thesis)	Organizational involvement → financial performance, labor productivity, quality, job satisfaction and anxiety- calmness	Organizational involvement → financial performance, labor productivity, absenteeism, job satisfaction, anxiety-calmness and proactivity
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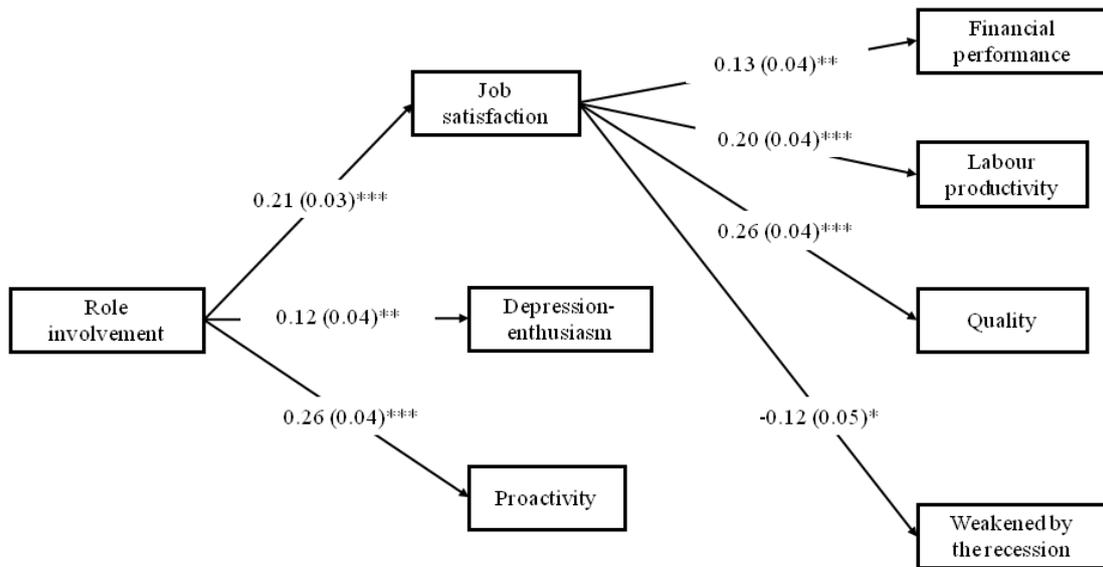
**Figure 1**

A multi-level model of the management orientations–performance relationship, with employee well-being as a mediator



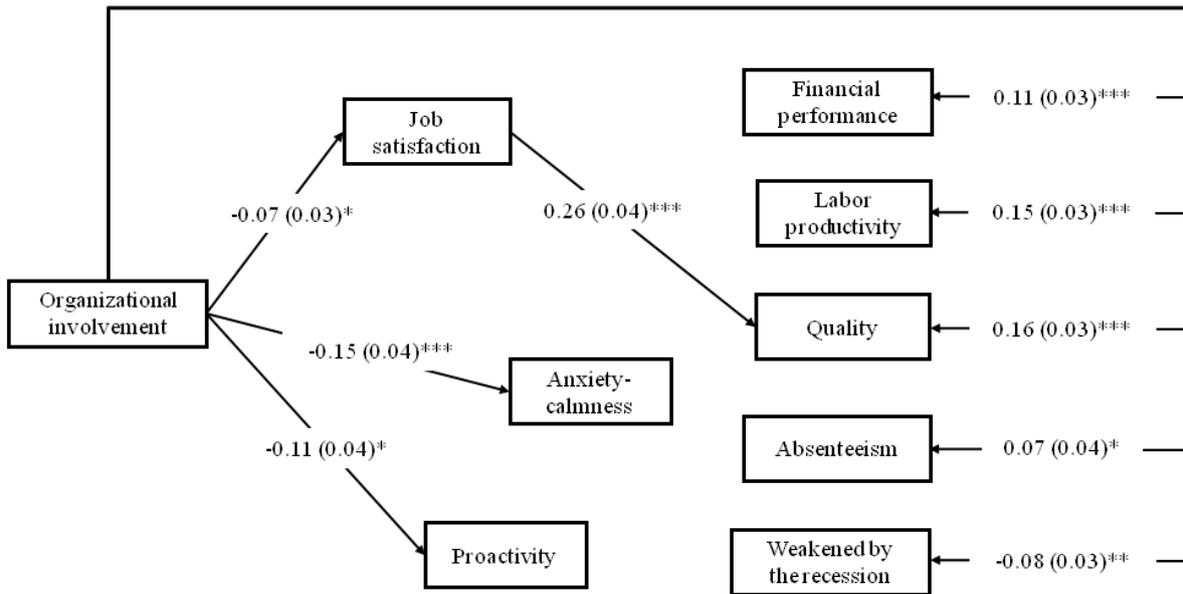
**Figure 2**

Two-level mediation model for role involvement, employee outcomes and organizational performance  
outcomes: Standardized parameters and their standard errors



**Figure 3**

Two-level mediation model for organizational involvement, employee outcomes and organizational performance outcomes: Standardized parameters and their standard errors



## Appendix

**Table 1: Standardized regression coefficients and standard errors for workplace-level controls on organizational performance outcomes**

	<b>Financial performance</b>	<b>Labor productivity</b>	<b>Quality</b>	<b>Absenteeism</b>	<b>Weakened by the recession</b>
Trade union recognition	-0.00 (0.03)	-0.00 (0.03)	-0.07* (0.03)	0.12** (0.03)	0.01 (0.03)
Part of a larger organization	0.05 (0.03)	0.01 (0.02)	-0.00 (0.02)	0.07* (0.03)	-0.03 (0.02)
Size of workplace	0.03 (0.03)	-0.11*** (0.03)	-0.06* (0.03)	0.11*** (0.03)	-0.07* (0.03)
Community services	-0.11*** (0.03)	-0.03 (0.03)	0.04 (0.03)	-0.06 (0.04)	0.02 (0.03)
Manufacturing industry	-0.09** (0.03)	-0.07** (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.02 (0.02)
Electricity industry	-0.07** (0.02)	-0.04 (0.02)	0.00 (0.02)	0.01 (0.03)	0.08** (0.03)

Construction	-0.01	0.06*	0.00	-0.03	0.04
industry	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
Hotels and restaurants	-0.07*	0.01	-0.05	-0.01	-0.01
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
Transport and	0.01	0.03	-0.01	-0.03	-0.00
communication	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)
Financial services	-0.06*	-0.01	0.01	-0.06	0.00
	(0.03)	(0.03)	(0.03)	(0.05)	(0.03)
Other business services	-0.03	0.03	-0.03	-0.07	0.09**
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
Public administration	-0.05	0.04	-0.03	0.02	0.09*
	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)
Education	-0.12***	0.01	0.02	0.02	0.10**
Industry	(0.04)	(0.04)	(0.04)	(0.05)	(0.03)
Health industry	-0.08**	0.00	-0.02	-0.00	0.09**
	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)

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*Significance: \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$*

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**Table 2: Standardized regression coefficients and standard errors for employee-level controls on employee outcomes**

	<b>Job satisfaction</b>	<b>Anxiety- calmness</b>	<b>Depression- enthusiasm</b>	<b>Proactivity</b>
Age 16 to 17	0.04 (0.04)	0.05 (0.04)	0.04 (0.03)	0.02 (0.04)
Age 18 to 21	0.15* (0.07)	0.19** (0.06)	0.15* (0.06)	0.15** (0.06)
Age 22 to 29	-0.02 (0.06)	0.02 (0.06)	-0.03 (0.06)	-0.03 (0.07)
Age 30 to 39	-0.05 (0.08)	-0.09 (0.08)	-0.06 (0.08)	0.04 (0.08)
Age 50 to 59	-0.10 (0.08)	0.01 (0.08)	0.01 (0.08)	-0.06 (0.08)
Age 60 to 64	0.16* (0.07)	0.18* (0.07)	0.17* (0.07)	0.04 (0.08)
Age 65 and above	0.13** (0.05)	0.17 (0.05)	0.10* (0.05)	0.19** (0.06)
Hours worked	-0.12* (0.06)	-0.34*** (0.06)	-0.35*** (0.05)	0.02 (0.07)
Male	-0.24*** (0.04)	0.18*** (0.04)	0.06 (0.04)	-0.31*** (0.05)
Tenure	-0.14** (0.05)	-0.07 (0.05)	-0.13** (0.04)	0.01 (0.05)

Weekly wages	0.12 (0.06)	-0.10 (0.07)	0.12* (0.06)	0.11 (0.07)
Degree	0.09* (0.05)	-0.05 (0.04)	0.12** (0.04)	0.36*** (0.05)

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*Significance: \*\*\* =  $p < .001$ , \*\* =  $p < .01$ , \* =  $p < .05$*

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