Recessionary actions and absence: A workplace-level study

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Actions such as work restructuring and wage and employment freezes taken by organizations in response to recessions are widely assumed to decrease employees' job security and detrimentally affect perceptions of management's trustworthiness. We assess whether these effects occur and if, in turn, they affect workplace absenteeism. Using data from Britain's Workplace Employee Relations Survey 2011, we show that the effects on stress-based absence are limited and not as predicted, but the effects on withdrawal-based absence are strong and as predicted. Reductions in well-being or job security's effect on well-being did not affected absence, and while reduction of trust perceptions' effect was to increase anxiety, anxiety did not increase but reduced absenteeism. The effects on withdrawal absence differ: those of recessionary action through job security reduce absenteeism, while those through trust perceptions increase it, both as predicted. The two effects involving trust perceptions are less pronounced when recessionary actions are accompanied by voluntary layoffs, but not by compulsory layoffs. The implications for management are that they should be more conscious of the effects on absence when planning recessionary actions, and more generally their effects on presenteeism.

1. INTRODUCTION

Research on recessionary actions – actions taken by employers in response to recession or austerity – has looked chiefly at downsizing and organizational restructuring. Often, the actions considered have not been taken as direct responses to recessions, and typically have not included all potential responses to them. Nonetheless, the studies have shown that these actions have negative effects on employees' attitudes and well-being (e.g. Allen, Freeman, Russell, Reizenstein, & Rentiz, 2001; Bennett & Durkin, 2000; Brockner, Greenberg, Brockner, Bortz, Davy, & Carter, 1986; Campbell-Jamison, Worrall, & Cooper, 2001; Chadwick, Hunter & Walston, 2004; Grunberg, Moore, & Greenberg, 2001; Moore, Grunberg, & Greenberg, 2004; Probst, 2003; Quinlan & Bohle, 2009; Van Dierendonck & Jacobs, 2012; Wanberg & Banas, 2000). It is typically assumed that the attitudinal and well-being effects of downsizing will be manifest in behavioral changes, but these changes have been less studied.

The most studied behavior is absenteeism, with most research revealing an increase following downsizing (e.g. Bourbonnais, Brisson, Vézina, Masse, & Blanchetter, 2005; Firns, Travalgione, & O'Neill, 2006; Kivimäki, Vahtera, Pentti, & Ferrie, 2000; Vahtera, Kivimäki, & Pentti, 1997; Vahtera et al., 2004, Westerlund, Ferrie, Hagberg, Jeding, Oxenstieran, & Thoerell, 2004). These studies focus on correlating downsizing with individuals' absenteeism, but this has been at the expense of three issues. First, insufficient attention has been given to absence as a collective phenomenon, affected by organizational policies and norms and employees making joint decisions, and absence may even spread by contagion. Second, the potential for absence to fall as downsizing or other recessionary actions reduce employees' job security has been neglected. Third, little attention has been given to the mediators of the downsizing-absence relationship. Indeed, Johns (2009:12) identified a need, which remains unfulfilled, to examine the mediators of this relationship. This is important if we are to understand the mechanisms through which recessionary actions lead to changes in absence levels and how their effects may differ between mechanisms. For example, we might expect a reduction in job security consequent on recessionary actions to reduce absenteeism, while the associated psychological strain might increase it.

We report a study that confronts these gaps in the literature by focusing on the effect of recessionary actions on absence levels, and examines, both theoretically and empirically, the mediators of this effect. We concentrate on how recessionary actions may reduce employees' perceptions of job security and trustworthiness of management, both of which have been considered as explanations for negative effects on well-being in the downsizing literature (Arshad & Sparrow, 2010; Kalimo, Taris, & Schaufeli, 2003; López-Bohle, Bal, Jansen, Leiva, & Alonso, 2017; López-Bohle, Chambel, & Iriarte, 2018; Sinclair, Sears, Probst, & Zajack, 2010: 13). López-Bohle et al.'s 2017 research confirmed the role of these processes in explaining the effects of downsizing on job performance, while Arshad and Sparrow show similar effects on organizational citizenship behavior. However, their potential role in explaining the links with absenteeism has not been explored. We hypothesize that job security and trust perceptions, independently, may firstly mediate a relationship between recessionary actions and well-being; in turn, well-being influences workplace absenteeism and hence increases what De Boer, Bakker, Syriot, and Schaufeli (2002) call strain- or stress-based absenteeism. Job security and trust perceptions may also, independently, mediate the relationship between recessionary actions and workplace absenteeism, and hence increase De Boer et al.'s contrasting type of absenteeism, withdrawal absenteeism. However, the effects of job security and trust perceptions on withdrawal absenteeism may vary. The effects of recessionary actions solely via trust perceptions may increase absenteeism as a retaliation in response to perceived injustice, and thus be consistent with the increasing absenteeism observed in the downsizing studies. The effects via job security may work in the opposite direction and result in reduced absenteeism as employees feel that being present at work is important even if they are less committed to the organization.

We open with an account of these various routes through which recessionary actions may affect absenteeism. We then report a study, using data from Britain's Workplace Employment Relations Survey of 2011 (2011 WERS), that is designed to assess the hypothesized mediated relationships and the various routes through which recessionary actions may affect the two types of absence, stress-based and withdrawal absence. We conclude by drawing out the implications of the results for theory and policy.

The research makes four main contributions addressing some of the gaps in past research. First, it focuses on unit-level absence, whereas downsizing studies have addressed individual-level absence. Second, we develop a set of complementary hypotheses regarding the mediators of recessionary actions on workplace-level absenteeism. Third, the results make a significant contribution to the evidence base on both workplace absence and the effects of the post-2008 recession, using a large representative sample that covers the full range of private and public workplaces (and occupations) across the British economy. Fourth, it contributes to correcting the imbalance in the stress literature - and perhaps more generally in human resource management scholarship and practice – in which the emphasis is on job-level stressors (excessive workloads and low levels of autonomy and support), which public bodies have highlighted as much as anybody. The USA's National Institute for Occupational Safety and Health (NIOSH, 2002) and the UK's Health and Safety Executive (2009) both emphasized the importance of organizational-level stressors which arise from a mixture of policy, top management leadership style, culture, legislation, bottom-up emergent processes, and events such as downsizing and recessions, and not just job design (Wood, et al. 2020).

The study uses data we use from 2011 WERS, which is a matched employee–employer survey, was collected as the post-2008 recession period was ending (UK Government, 2011), Distinctively,

the data include questions on employers' responses to the recession and employees' exposure to these responses, as well as the intensity of the impact of the recession on the workplace.

2. CONCEPTUAL BACKGROUND AND HYPOTHESES

2.1 Recessionary actions

We define recessionary actions as a specific form of organizational change taken in response either to recession or to austerity policies which are likely to affect employees' experience of work. These may include layoffs, wage freezes, recruitment moratoriums, increasing workloads, reorganizations, cuts in employee benefits, reduced working weeks, and decreases in training expenditure. In stressor–stress theory terms they are stressors, as they alter the demands placed on employees or reduce the resources at their disposal, such that we would expect adverse effects on employees' well-being and, in turn, on their behaviour (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Recessionary actions are typically associated with cost-cutting. They are often perceived by managers to be capable of improving an organization's performance more quickly than is possible through changes targeted at increasing revenue. Downsizing implies reductions in employment levels, and hence layoffs, and generally also entails other changes, such as work reorganizations. Nonetheless, a concerted response to recessionary pressures need not include layoffs – these are just one option – and employment reductions can be achieved by not replacing leavers (natural wastage). As our study is of employees who survived layoffs, we separate layoffs from other recessionary actions on the grounds that employees are directly exposed to recessionary actions but only experience lay-offs indirectly. Both are nonetheless potential organizational-level stressors that affect employees who remain after a process of adjustment to recession.

Prior to the 2008 recession there was little direct discussion of recessionary actions as a set. The focus on downsizing meant an emphasis on reducing staff numbers (Datta, Guthrie, Basuil, & Pandey, 2010). While the studies collectively reveal downsizing's negative association with wellbeing, job security, and perceptions of management's trustworthiness, and positive relationship with absenteeism (e.g. Bourbonnais et al., 2005; Firns et al., 2006; Vahtera et al., 1997; Vahtera et al., 2004), no study has examined empirically the relationships amongst all these variables, aimed to understand the underlying mechanisms shaping employees' reactions to recessionary actions or focused on unit-level outcomes.

Research following the 2008 recession is limited, but again reveals the negative effects of recessionary actions on employees. For example, Burke, Ng, and Wolpin (2015) show how restructuring healthcare in the USA, as part of the government's austerity programme, increased nurses' job insecurity and lessened their psychological well-being. They did not, however, test whether job insecurity mediated the effect of restructuring on the well-being indicators. Giori, Arcangeli, Mucci, and Cupelli (2015) tested a mediation model, using Italian data, in which the independent variable was fear of the economic crisis and the outcome was mental health; both increased job stress and reduced social support mediated this relationship. In a before-and-after study of the recession's effect in Spain, Chaves, Castellanos, Abrams, and Vazquez (2018) found that citizens' depressive symptoms increased, and that this was explained by a reduction in the effect of positive beliefs about society on well-being. Harney, Fu, and Freeney's (2018) study of Irish employees found the experience of restructuring and downsizing increased exhaustion, and that this was mediated by increased work demands. However, the effect was reduced when the workforce was consulted. In a British study, Jones, Sliter, and Sinclair (2016) uniquely covered the effects of a full range of recessionary actions, using 2011 WERS – the same data set that we will use – and found all the actions were related to lower levels of job satisfaction, with the majority related to psychological strain. They emphasize the importance of their results by explaining how these psychological states affect behaviors such as absenteeism and quitting, although they do not empirically assess these effects. We take their work forward by concentrating on absence.

2.2 Our study

Our study focuses on workplace-level absenteeism. This is firstly because individual decisions on absence are not made in a vacuum or necessarily independently. As Gellatly and Luchak (1998: 1086) say, "A common finding has been that individual absence is affected to varying degrees by the collective behaviors of others". There are organizational policies on absence, and norms about absenteeism emerge in organizations, in some cases through employees independently of management (Markham & McKee, 1995; Nicholson & Johns, 1985; Rentsch & Steel, 2003). Contagion effects may also occur as workers respond in a similar fashion to co-workers being absent or alternatively being present when they might legitimately be absent (presenteeism). Employees may also consciously discuss attendance at work and in extreme cases they may collectively use absenteeism as a means of reacting to wage stagnation when for example strikes are illegal. More generally employees may see the permitted number of sickness absences as an entitlement, and so invariably be absent for that number of days.

organizational-level factors, which have been neglected in the stress and well-being literature, may significantly influence absence at both the unit- and individual-levels. In our specific case, recessionary actions are initiated at the organizational level and are part of the collective experience of the workforce, even if not all employees are directly affected by them The constitution of the triad of mediators that we are considering – declining job security, trust perceptions and well-being

- at the workplace level may not only be real but also have more telling effects on collective absenteeism (or even individual absenteeism) than those at the individual level.

In the case of job security, the concept of organizations providing secure jobs for all has been a longstanding feature of employment relations, particularly associated with paternalistic employers and public sector bureaucracies, and is indeed the benchmark against which the discussion of the changing nature of employment has been addressed. Similarly, organizational trust is an established social science term for employees' feeling of confidence that their organization will perform actions that are beneficial, or at least not detrimental, to them, or that it will act and make decisions in relation to their employees which are morally right, just and fair (Greenberg, 1990). Likewise, there is also strong evidence of moods being shared by employees as they may be contagious, and readily apparent to and discussed amongst themselves (Bakker, Emmerik, & Euwema, 2006; Totterdell, Kellett, & Briner, 1998).

Finally, it is the collective level of absence that will have the most impact on the organization's performance. The effects of absence on productivity are widely considered, and even if overtime is used to cover for absent employees, productivity is reduced (Pauly, Nicholson, Xu, Polsky, & Danzon, 2002; Society for Human Resource Management, 2014). Adverse effects on absenteeism may be one of the downsides of recessionary actions that explain why their desired impact is often not achieved. The converse of absenteeism, presenteeism, is also significant at the workplace level, as norms or pressures may dictate attendance. A UK survey of human resource managers found concerns about presenteeism in 86 per cent of organizations (n = 1,021) in 2017, compared with 26 per cent in 2010. Managers attributed this rise to a growth in job insecurity.

Workplace-level absenteeism can, like individual-level absence, be of both De Boer et al.'s (2002) forms - stress-based and withdrawal absence. These are often associated with different degrees of voluntarism; as stress-based absenteeism may reflect mental or physical health problems it is labelled involuntary, while withdrawal absence is considered more voluntary. It is equally commonplace in the absence literature to then associate involuntary absence with the length of spells of absence, and voluntary absence with the number of these spells. For example, Bakker, Demerouti, De Boer, and Schaufeli (2001), in applying the job demands-resources model to individual absence, hypothesize that job demands, which most affect health, will predict the duration of absences, while resources, which affect motivation, will predict the frequency of absences. However, this association of the different measures or dimensions of absenteeism with degrees of voluntarism has been questioned on empirical and theoretical grounds (Darr & Johns, 2008; Johns & Hajj, 2016). Johns and Hajj (p. 473) accord it the status of an "urban research legend", and urge us to not "make undue attributions as to their relative voluntariness". A corollary of this is that De Boer et al.'s stress-based and withdrawal absence should be identified as they are defined, by their cause – whether they reflect stress, or a more voluntary removal or retreat from work. In contrast to Bakker et al.'s (2001) approach, we formulate our model of the recessionary actions-absence relationship in a way that allows the effects of actions on both types of absence to be differentiated directly, thus avoiding using proxy measures based on the association of absence types with dimensions of absence.

More specifically, our study will first examine three routes from recessionary actions that constitute stress-based absence – one simply through well-being and two multiple mediation chains, one from job security through well-being and one from trust perceptions through well-being. Secondly, we examine two routes through job security and trust perceptions to absence that do not

involve well-being, which constitute withdrawal absenteeism. We also differentiate two dimensions of well-being: anxiety and depression. Both reflect low pleasure levels, but anxiety is characterized by high energy and depression by low energy (Warr, 1990, 2007). The next subsection outlines how and why the various routes through recessionary actions and layoffs might affect stress-based and withdrawal absence.

In developing our theory, we assume isomorphism between the individual-level and organizational-level constructs – for example, that the meaning of anxiety at the workplace and individual levels are similar. We also assume homology between individual-level and organizational-level relationships – for example, if stressors are related to anxiety and in turn absence, the assumption is that this holds for both workplaces and individuals. Isomorphism and homology are often twinned, and even conflated. They are, however, distinct (Guenole, 2016). Isomorphism is concerned with the interpretation of constructs across levels of analysis, while homology relates to relationships. Homology depends on isomorphism because "it is a logical prerequisite for homology" (Tay, Woo, & Vermunt, 2014: 80), but isomorphism need not result in homologous relationships. The homology assumption is important as there are no prior studies at the workplace level, so we have to build our theory with support from individual-level studies.

2.3 Mediation paths between recessionary actions and stress-based absenteeism

2.3.1 Stress-based absence via well-being only

Since recessionary actions either increase demands or reduce resources, following theories of stress [e.g. job demands–resources theory (Demerouti et al., 2001; Bakker & Demerouti, 2017) and Karasek's (1979) demand and control theory], we would expect them to directly affect well-being. Both workplace-level job-related anxiety and depression can be directly associated with recessionary actions, as they entail the loss of valued resources or increases in job demands, perhaps to the extent that employees feel overloaded. Such ill-being may generate collective anxiety and depression. For example, if a high proportion of employees are unable to complete all assigned tasks the feelings of being overburdened may extend to individuals who are regularly completing tasks. We expect recessionary actions to affect both dimensions of well-being, and Darr and Johns' (2008) meta-analysis of 153 individual-level studies and 275 effects offers sufficient support to expect these effects to increase absenteeism. We therefore test:

Hypothesis 1: The positive relationship between recessionary actions and absenteeism is mediated by: a) anxiety, and; b) depression. Specifically, recessionary actions have a positive association with anxiety and depression, which have a positive association with absence, resulting in a positive indirect effect.

2.3.2 Stress-based absence via job security and well-being

Following Quinlan and Bohle (2009), we assume that reduced individual-level job security is a major consequence of recessionary actions, and that this process is mirrored at the organizational level. This is, first, because such actions are indicative of how the general economic situation is affecting the organization. Second, there is uncertainty about whether the employer's present use of recessionary actions will be sufficient to withstand the recession, raising questions throughout the workforce about possible further actions, or whether those already taken will need to be supplemented by layoffs – or even whether the actions so far are simply postponing the inevitable closure of the workplace. Such questions may, Brockner (1988: 220) gauges, remain "even if management claims that no additional layoffs [or other recessionary actions] are in the offing". Third, recessionary actions represent direct threats to the manifest and latent benefits of work, and

thus heighten feelings within the workforce that employees lack control over their acquisition of resources or the demands made upon them.

Just as individual-level job security is a key determinant of workers' mental and physical health, (Ferries, Shipley, Stansfeld, & Marmot, 2002; Kinnunen, Mauno, Nätti, & Happonen, 2000), so organizational level security may be associated with workplace well-being. The apprehension of losing one's job can be as great a source of anxiety and other negative emotions as actually being laid off, which is consistent with the general assumptions about stress that the expectancy of an event can have an effect equivalent to the event itself, or even a stronger one (Dekker & Schaufeli, 1995; Devine, Reay, Stainton, & Collins-Nakai, 2003; De Witte, 1999, 2005; López-Bohle et al., 2018; Noer, 1993). Much of the empirical analysis of the effects of job security at the individual level has focused on job satisfaction, of which job security has long been identified as a major determinant (De Witte, 1999; Wilczyńska, Batorski, & Sellens, 2016), but studies of indicators of well-being have found that these too are affected by job security (e.g. Fullerton, Robertson, & Dixon, 2011; Origo & Pagani, 2009). Two meta-analyses have shown strong relationships between job insecurity and both job satisfaction and well-being (Sverke, Hellgren, & Näswall, 2002; Cheng & Chan, 2008). De Witte's (1999) subsequent review of the studies shows how the effects of insecurity on well-being are consistent with those of the actual loss of a job, while Snorradóttir, Tómasson, Vihjálmssson, and Rafnsdóttir (2015) show that the effects on the well-being of survivors of a downsizing exercise in an Icelandic bank were actually greater than those on leavers.

In turn, consistent with Hypothesis 1, we expect that the impact of reduced workplace job security on workplace well-being will be associated with workplace absence. Job insecurity may thus play a mediating role in relation to the effects of recessionary actions, via stress, on workplace absenteeism. Longitudinal research at the individual level has confirmed that the direction of causality is from job insecurity to health problems (Hellgren & Sverke, 2003). Similarly De Witte, Vander Elst, and De Cuyper's (2015) qualitative review concludes that the direction of causality is from job security to well-being. We therefore test:

Hypothesis 2: The positive relationships between recessionary actions and absenteeism are mediated by job security and, in turn: a) anxiety, and; b) depression. Specifically, recessionary actions have a negative association with job security, job security has a negative association with anxiety and depression, and anxiety and depression have a positive association with absence, resulting in a positive indirect effect.

2.3.3 Stress-based absence via trust perceptions and well-being

Recessionary actions taken by the employer may represent *prima facie* cases of breaches of the employee's psychological contract, as employees' expectations of their employer's reciprocal behaviors will be unfulfilled when for example productivity increases are not rewarded with wage increases. This is likely even when the contract is not the extreme job-for-life notion that underpins much of the broader discussion of the changing nature of the psychological contract. Employees' trust in management is generated by the regular discharge of employers' obligations and expansion of benefits for the employee (Whitener, Brodt, Korsgaard, & Werner, 1998), and recessionary actions perform neither function.

As Fevre, Lewis, Robinson, and Jones (2012: 61) argue, recessionary actions, including layoffs, represent a mistreatment by management that breaches "norms of respect and undermine(s) elements of community in the workplace" in the eyes of employees, and lead them, individually and collectively, to reappraise the reliability and trustworthiness of management. While breaches do not automatically result in perceptions of a violation of the psychological contract the breaches

associated with recessionary actions are unlikely to go unnoticed or require high levels of employee vigilance to be detected, which are explanations of why some breaches do not translate to violations (Morrison & Robinson, 2000). Consequently, employees' re-evaluation of their relationship with their employer, consistent with Zhao, Wayne, Glibkowski, & Bravo's (2007) meta-analysis of psychological contract breaches and violation, will be in the direction of increasing mistrust. Given that employees' default position is an expectation that management can be trusted and will treat them fairly, consistently, and respectfully, and reciprocate their commitment, employees' evaluations will go beyond the immediate actions of local decision-makers to a general reassessment of the organization. We thus argue that recessionary actions are likely to generate reductions in employees' perceptions of management's trustworthiness and in turn create anxieties and feelings of betrayal in employees (Chadwick et al., 2004). Reduced trust also creates uncertainty (Luhmann, 1979) – as management is viewed as unreliable – which is a "stressful state in and of itself" (Paulsen et al., 2005: 466). Such prolonged uncertainty reduces the sense of coherence and "environmental clarity" (Warr, 2007: 188) in employees' lives and induces a sense of powerlessness in the workforce (Greenhalgh & Rosenblatt, 1984). Finally, we expect the effects of increased mistrust on well-being to result in absence, and thus test:

Hypothesis 3: The positive relationships between recessionary actions and absenteeism are mediated by trust perceptions and, in turn: a) anxiety, and; b) depression. Specifically, recessionary actions have a negative association with trust perceptions, and trust perceptions have a negative association with anxiety and depression, which have a positive association with absence, resulting in a positive indirect effect.

2.4 Mediation paths between recessionary actions and withdrawal absence

2.4.1 Withdrawal absence via job security

In the case of job security, we hypothesize that the decrease in workplace job security will reduce workplace absence, not increase it. Lower job security leads to increased attendance because employees who are fearful of losing their jobs or promotion opportunities may be concerned about the consequences of being absent, and will curtail voluntary absences as a result, or attend work even when unwell (presenteeism). Such behavior reflects what Shoss (2017: 1927) calls a "job preservation" motivation aimed at avoiding the loss of one's job. The norms of absence may change as pressures to ensure the organization withstands the recession and successfully recovers from it increase the need for a full complement of staff. The evidence of increasing presenteeism in the Chartered Institute of Personnel and Development (Burt, 2018) was attributed by the survey respondents to a growth in job insecurity. In addition, based on an earlier survey of British managers, Simpson (1998) found that restructuring led to increased presenteeism amongst male (but not female) managers, due to fears of being laid off or damaging promotion prospects due to poor attendance records. We therefore test:

Hypothesis 4: The positive relationships between recessionary actions and absenteeism are mediated by job security. Specifically, recessionary actions have a negative association with job security, and job security has a positive association with absence, resulting in a negative indirect effect.

2.4.2 Withdrawal absence via trust perceptions

Managerial trustworthiness is largely outside employees' control, and thus avoiding absence, or being seen to be present, is less likely to be a response to declining trust perceptions towards management than is declining job security. Indeed, we would expect the negative effects of recessionary actions on trust perceptions to lead to greater absences. Employees may reduce their attendance at work as a tit-for-tat response to perceived violations in the psychological contract and the lack of reciprocity on the part of the employer (Wood, Niven, & Braeken, 2016). As Geurts, Schaufeli, and Rutte's research (1999: 263) among healthcare professionals in the Netherlands showed, absence can be a "calculative and direct response" to feelings of resentment over such perceived inequities in the employment relationship – independent of their direct affective effects. Such calculative responses may again develop through employees' shared evaluations of the recessionary actions and resentments and mistrust towards management. Any reduction in perceived trust due to recessionary actions may thus increase working hours lost due to employee absence. In the one study of psychological contract breach that has examined absenteeism at the individual level, the breach did lower trust in the organization, and in turn absenteeism (Deery, Iverson, & Walsh, 2006). We thus test:

Hypothesis 5: The positive relationships between recessionary actions and absenteeism are mediated by trust perceptions. Specifically, recessionary actions have a negative association with trust perceptions, which have a negative association with absence, resulting in a positive indirect effect.

2.5 Interaction effects between recessionary actions and layoffs

Layoffs may be considered the most extreme recessionary action, and for this reason, even though current employees are not, by definition, the victims of them, we expect recessionary actions to have a greater impact on workplace well-being and absence when they occur in conjunction with layoffs. In our study, we differentiate two types of layoff methods, compulsory and voluntary. The employees laid off when jobs are cut are typically decided by the employer, but in some cases "voluntary" methods are used to identify people to be laid off, which introduce an element of selfselection into the process. Their effects may not, however, be significantly different from compulsory layoffs as layoffs are still being made, albeit with a different selection process.

Layoffs, whether compulsory or voluntary, add an extra dimension to feelings of job insecurity and distrust of management, and they are one of the most visible forms of managerial behavior that signal that the organization's interests do not coincide with those of the employees (Wood & Dey, 1983). Management may also be perceived as trying to get more from less, especially if the reduction in the workforce is greater than the reduction in demand for the organization's product or service, or if management has strengthened the performance management system (Worrall & Cooper, 2014). Consequently, we expect the effects of layoffs to heighten the relationships between recessionary actions and workplace well-being, job security, and perceptions of trust. Conversely, in situations where management reacts to a recession without making layoffs, the negative reactions of the workforce are less intense. There is thus a positive interaction between two negative forces on the individual's well-being, and on their perceptions of job security and management's trustworthiness. We thus test how layoffs moderate our three hypotheses related to stress-based absence:

Hypothesis 6a: *The effects of recessionary actions on anxiety and depression will be moderated by layoffs, so the positive indirect effects on absence will be stronger in the presence of layoffs.*

Hypothesis 6b: The effects of recessionary actions on job security will be moderated by layoffs, so the positive indirect effects via anxiety and depression on absence will be stronger in the presence of layoffs.

Hypothesis 6c: The effects of recessionary actions on trust perceptions will be moderated by layoffs, so the positive indirect effects via anxiety and depression on absence will be stronger in the presence of layoffs.

Similarly, the level of workplace withdrawal absenteeism caused by recessionary actions through job security will be affected by layoffs. Employees in organizations that have had layoffs will be even more conscious of the need to display commitment to the job, and may fear that any absenteeism from work will be seen as reflecting a lack of commitment, making them more vulnerable in any further rounds of layoffs. Consequently, we test:

Hypothesis 6d: The effects of recessionary actions on job security will be moderated by layoffs, so the negative indirect effects on absence will be stronger in the presence of layoffs.

However, while we expect that withdrawal absence is positively associated with recessionary actions, as these are negatively associated with trust perceptions, we expect the relationship to be stronger when the organization has made layoffs. The extent of retaliatory action will be greater as employees are reminded of the employers' unilateral power to decide employment levels and revoke psychological contracts. We therefore test:

Hypothesis 6e: The effects of recessionary actions on workplace trust perceptions will be moderated by layoffs, so the positive indirect effects on absence will be stronger in the presence of layoffs.

3. THE STUDY

3.1 The research design

The hypotheses can be summarised in a single model as displayed in Figure 1. We test our workplace-level hypotheses using multilevel structural equation modelling, as the variables are measured at different levels. Absence, the dependent variable, and the two moderators – compulsory and voluntary layoffs – are measured at the workplace level, while the predictors and mediators – recessionary actions, job security, trust perceptions, and well-being – are measured at the individual-employee level. We use multilevel analysis to create workplace-level measures of the predictors and mediators and because the employee-level data is nested in workplaces.

- Insert Figure 1 here -

3.2 The data

The data is from 2011 WERS, in which the workplace-level data is acquired from a management representative, while the individual-level data is collected through a questionnaire completed by employees in the same workplace. The fieldwork for 2011 WERS was carried out between March 2011 and June 2012. The management survey was conducted through face-to-face interviews with senior managers with day-to-day responsibility for industrial relations, employee relations, or personnel matters in the workplace, the majority of whom were not personnel specialists. The sample consisted of 2,680 private and public workplaces with five or more employees across the whole economy with the exception of primary industry. It represented 46 per cent of workplaces approached to participate in the survey.

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. If the workplace had 25 or fewer employees, all were asked to participate. The number of respondents to the employee questionnaire in sampled workplaces ranged from 5 to 24,

with a median of 12. The sample was 16,697 employees within 1,543 workplaces, representing a response rate of 57.6% of participating workplaces.

3.3 The measures

Recessionary actions were measured based on the total number of recessionary actions that employees experienced using a question from the WERS employee survey that asked: "Did any of the following happen to you as a result of the most recent recession, whilst working at this workplace?" Respondents were asked to select from nine different items. Each item was coded dichotomously, with a value of 1 if the action was experienced and 0 if not. The items were: "My workload increased", "My work was reorganised", "I was moved to another job", "My contracted working hours were reduced", "My wages were frozen or cut", "My non-wage benefits were reduced", "Access to paid overtime was restricted", "I was required to take unpaid leave", and "Access to training was restricted". The maximum value of the index was thus 9.

Layoffs, both compulsory and voluntary, were measured from the management survey based on a question that listed a set of recessionary actions and asked respondents: "Which, if any, of these actions were taken by your workplace in response to the recent recession?". Compulsory redundancies and voluntary redundancies were the first two in the list of options and were measured dichotomously.

Job security is measured by a single question asking employees how secure they feel their job is, based on the statement: "I feel my job is secure in this workplace". The five-point response scale for this question ranged from 1 = "strongly disagree" to 5 = "strongly agree".

Trust perceptions are measured by a reflective scale based on four items included in the employee survey measure (Cronbach's $\alpha = 0.93$), which are: Managers here..."can be relied upon to keep to their promises", "are sincere in attempting to understand employees' views", "deal with employees honestly", and "treat employees fairly". The five-point response pattern ranged from "strongly disagree" to "strongly agree". The first three items are based on Whitener et al.'s (1998) measures of trustworthy behavior. The fourth was created by the architects of WERS. The measure is calculated as the mean score of the items.

Anxiety is measured by three items from Warr's anxiety–calmness scale (1990), which is based on answers to the question in the employee survey: "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 used a five-point scale: "all of the time", "most of the time", "some of the time", "occasionally", and "never". Anxiety is measured by the mean scores of the emotional states (Cronbach's $\alpha = 0.84$).

Depression is similarly 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 same five-point scale is used as for anxiety. Depression is measured by the mean scores of the emotional states (Cronbach's $\alpha = 0.90$).

Workplace Absenteeism is measured as the percentage of work days lost at the workplace due to employee sickness or absence, using data collected from the management survey. Since the distribution of this measure is skewed and long-tailed, we took its logarithm and adjusted for the few workplaces that had a percentage score of zero by adding 1 to the variable.

We controlled for four variables at the workplace level:

Recessionary impact – a measure of the extent to which the workplace was adversely affected by the 2008 recession, based on asking respondents to the management survey: "Can you tell me to what extent your workplace has been adversely affected by the recent recession", using a five-point scale: 1= "A great deal", 2= "Quite a lot", 3= "A moderate amount", 4= "Just a little", and 5= "No adverse effect".

Proportion of females in the workforce – the number of female employees as a percentage of total employees.

Workforce age – the modal age group of the workforce. This is based on data from the employee survey, which asked respondents to locate their age in one of nine groups: the lowest being 16–19 and the highest 65 or above, with the majority of intermediate groups being in ranges of 9 years, e.g. 30–39. It thus takes a value from 1 to 9. We took the mode of ages of the employees in each workplace to be representative of the workforce.

Employment Size – The standardized total number of employees in the workplace based on data from the management survey.

Recessionary impact was included as a control variable to ensure that the effects of recessionary actions were not compounded by the intensity of the financial impact of the recession on the workplace. The gender and age variables were included as the strongest predictors of individual absenteeism identified by Johns (2009) and others (e.g., Darr & Johns, 2008) in the area, alongside our own predictors, although the theory behind their effects remains underdeveloped. Employment size is also expected to be related to absence levels as smaller workplaces may have lower levels,

or may influence how recessionary actions are implemented and also perceptions of fairness (Schminke, Ambrose & Cronpanzano, 2000).

3.4 Analysis procedure

Multilevel analysis was used as our study includes data from employees nested within workplaces; thus observations at the employee level are not independent of each other. We analyzed our data using multilevel SEM with R 3.5.1 (R Core Team, 2018) and the lavaan 6.3 package (Rosseel, 2012) which allows variables measured at different levels to be combined. For our model, layoffs and absenteeism were collected at the workplace level and everything else was collected at the individual level. For variables measured at the individual level a random intercept approach was used to decompose them into a latent mean score at the between-clusters level and a clustered mean-centred variable at the within-clusters level (Preacher, Zyphur, & Zhang, 2010). Using this approach, we can specify relationships between variables at both the individual and organizational levels.

Prior to the analysis, a multilevel confirmatory factor analysis model was estimated to test the factor structure of the main variables in the study at both individual and organizational levels. The individual-level constructs were specified factors at both levels, while the workplace variables, absence and both types of layoffs, were measured at the organizational level. This multilevel factor analytic approach allowed us to verify the fit between observed items and the hypothesized model, and also confirm whether the individual- and organizational-level constructs created from the individual-level data are isomorphic. Recessionary actions, compulsory and voluntary layoffs, job security, and absenteeism were specified as single-item latent constructs based on Hayduk's approach (1987). Overall goodness-of-fit was satisfactory: Chi-square (χ^2) = 2487.82; df =113; p

< 0.001; Root Mean Square Error of Approximation (RMSEA) = 0.04; Comparative Fit Index (CFI) = 0.98; Tucker-Lewis Index (TLI) = 0.97. This demonstrates weak metric isomorphism (Tay et al., 2014) and suggests the constructs are similar across levels. We also estimated an alternative one-factor model to confirm that variables were not reducible to a single latent variable at the respective individual and organizational levels – a Harman test. This model did not fit the data (RMSEA = 0.13; CFI = 0.64; TLI = 0.57), which confirms discriminant validity of the constructs at both levels, and suggests that common method variance may not be a significant problem for variables collected from the same respondents.

To test Hypotheses 1 to 5, we examine six stress-based indirect paths from recessionary actions to absenteeism, via: a) anxiety, b) depression, c) job security and anxiety, d) job security and depression, e) trust perceptions and anxiety, and f) trust perceptions and depression; and two withdrawal-based indirect paths from recessionary actions to absenteeism, via: a) job security, and b) trust perceptions. To test Hypotheses 6a to 6e, which examine how compulsory and voluntary layoffs moderate these mediation paths, we assess the moderation of the first stage of the indirect effects (i.e. the effect of recessionary actions on anxiety, depression, job security and trust perceptions). We evaluate these hypotheses by estimating the indirect effects (Hypotheses 6a–e) using parametric bootstrapping with 10000 samples.

4. **RESULTS**

Descriptive statistics of the main variables and the correlations amongst them are reported in Table 1, at the level at which each variable was measured. The correlations are at the organizational level, estimated by averaging the individual-level variables. For the individual-level variables, we also

present the ICC coefficients, which ranged from 0.07 for anxiety and depression to 0.23 for recessionary actions. These were all well above the recommended threshold of 0.05 (LeBreton & Senter, 2008) for indicating sufficient between-organization variation to justify the use of these variables at the organizational level.

- Insert Table 1 here -

The direct effects of recessionary actions and layoffs and their interactions on the final outcome, workplace absenteeism, as well as our mediators, were predominantly significant (Appendix A). Recessionary actions and compulsory layoffs were not significantly related to depression, while voluntary layoffs were likewise unrelated to anxiety. Of the control variables, both workforce age and the proportion of females were positively associated with workplace absenteeism. Recessionary impact and employment size were not, and were therefore omitted from our main analysis. We also included in our model the same relationships at the individual level, excluding layoffs and absenteeism which were only measured at the workplace level (the results of which are presented in Appendix B)

Table 2 shows the coefficients for the stress- and withdrawal-based indirect paths from recessionary actions to absenteeism. Analysis of the stress-based indirect paths via only well-being (Hypothesis 1) revealed recessionary actions to be positively related to anxiety, but not depression, while anxiety was negatively related to workplace absenteeism, indicating less absenteeism in organizations with more workplace-level anxiety. Nonetheless, the indirect relationships between recessionary actions and workplace absenteeism via anxiety and depression were both insignificant. Hypothesis 1 is thus not supported.

- Insert Table 2 here -

Testing Hypothesis 2, which involves job security and well-being, we found recessionary actions were negatively related to job security, and this in turn was negatively related to anxiety (but not depression), while anxiety was negatively related to absence (rather than the positive relationship hypothesized). The indirect paths through job security and both measures of well-being were not significant, so there is no support for Hypothesis 2.

For the equivalent path through trust perceptions, tested in Hypothesis 3, as for job security there was a negative relationship between recessionary actions and trust perceptions, which was in turn negatively related to both anxiety and depression. Anxiety was negatively related to absence and the indirect effect via trust perceptions and anxiety is significant (although that through depression is not). As this route involved three negative relationships, the indirect effect is also negative, indicating recessionary actions are associated with lower levels of absenteeism. This is not consistent with Hypothesis 3, as this posited a positive well-being–absence relationship and a positive indirect effect through trust perceptions and well-being.

Analysis of withdrawal absenteeism found more support for our hypotheses. All direct paths that make up the indirect relationship in both Hypotheses 4 and 5 were significant. Recessionary actions is, as already established, negatively related to job security and trust perceptions. In turn, these are significantly associated with workplace absenteeism, and in the hypothesized directions: job security is positively related to absenteeism, while trust perceptions are negatively related to it. Both indirect effects were significant indicating a negative indirect effect through job security and a positive one through trust perceptions, consistent with Hypotheses 4 and 5.

In addition to the hypothesised mediation effects, we also evaluated the total indirect effects for the hypotheses that involved two sequential mediators. The total indirect effects are the

combination of three paths: two involving each of the mediators separately and one involving both mediators simultaneously. These different paths may combine to either enhance or counteract each other. There are four such mediation paths reflecting the combined effects of stress-based and withdrawal absence. The first, which involves job security and anxiety, was negative and significant, and almost twice as strong as the mediation through job security alone. The stressbased paths, both through anxiety alone and through job security and anxiety, are not significant, but had a negative effect which when combined with the job security effect strengthen the total negative indirect effect. The second total indirect effect, involving job security and depression, was also negative and significant; however, this appears simply to mirror the indirect path through job security, while that through depression has almost no effect at all. With regards to the path via trust perceptions and anxiety, the total indirect is positive but non-significant. That is, the stress-based and withdrawal-based effects are in opposite directions, and therefore cancel each other out. Finally, the total indirect path via trust perceptions and depression was significant, but not as strong as that through trust perceptions alone. In other words, although the stress-based paths through depression alone and through trust perceptions and depression were not significant, they suppressed the withdrawal-based effect through trust perceptions.

Hypotheses 6a to 6e examined if the mediation paths were moderated by compulsory and voluntary layoffs, using Hayes' (2015) index of moderated mediation. The interaction between recessionary actions and both types of layoffs attenuated the negative relationship between recessionary actions and job security, but only voluntary layoffs attenuated the negative relationship between recessionary actions and trust perceptions (see Appendix A). Yet only two indirect paths were moderated, both by voluntary layoffs (Table 3). The first was the stress-based positive indirect path from recessionary actions to trust perceptions influencing anxiety and in turn absenteeism, while

the second was the withdrawal-based negative indirect path from recessionary actions to trust perceptions to absenteeism. The significant withdrawal mediation path involving job security (Hypothesis 4) is not moderated by either type of layoff. Compulsory layoffs do not moderate the mediation paths established in our main analysis.

Table 4 shows the conditional indirect effects for all mediation paths: i.e. it shows the indirect mediation effects for different values of the moderator. The results show that: (a) the negative indirect effect of recessionary action on absenteeism via trust perceptions and anxiety is weaker when voluntary layoffs occurred than when they did not, and (b) the positive indirect effect via trust perceptions is weaker when voluntary layoffs were used than when they were not. Thus, the indirect effects of recessionary actions on absenteeism are moderated by voluntary layoffs in two opposing ways. First, the attenuation of the negative indirect path via trust perceptions and anxiety indicates that the lower level of absence associated with the anxiety induced by a lowering of trust perceptions is not as low in workplaces where voluntary redundancies occurred. Second, the attenuation of the positive indirect path simply via trust perceptions indicates that the higher levels of absence associated with recessionary actions' lowering of trust perceptions are not so high in workplaces with voluntary layoffs. These effects are due to voluntary layoffs buffering the effect of recessionary actions on trust. Compulsory layoffs do not have this effect. Although these two significant results correspond to Hypotheses 6c and 6e, they do not provide support for them. Our hypotheses were based on voluntary layoffs intensifying the effects of recessionary actions on trust but we found that in fact they mitigate it. In addition, for Hypotheses 6c the mediation path is not as hypothesised because anxiety does not translate to increased but to decreased absenteeism

- Insert Tables 3 and 4 here -

5. **DISCUSSION**

The aim of the study was to assess the effect of recessionary actions on two types of absenteeism - stress-based and withdrawal absence. Identifying these types in terms of the routes through which they emerge from recessionary actions, we can assess firstly stress-based absence by whether the relationship between recessionary actions and well-being, either alone or resulting from low levels of job security and perceptions of management's trustworthiness, mediates a relationship between recessionary actions and absence, and secondly withdrawal absence by whether lower levels of job security and lower perceptions of trust alone mediated a relationship between recessionary actions and absence. Our empirical research, based on a large national survey of employees and employers following the 2008 recession, shows that recessionary actions may not be strongly associated with stress-based absence. The only relationship between recessionary actions and absence involving well-being was through anxiety associated with the negative relationship between recessionary actions and trust perceptions, but this was associated with lower absenteeism. Given the level of anxiety, one can treat this as indicative of a degree of presenteeism, since employees are attending when their mental health may not be perfect. This is a result that deviated from our hypothesized path, which assumed lower levels of well-being would be associated with absenteeism. It may signify that the mistrust in management extends to an uncertainty about how management will respond to absences as they respond to the recession and to their application of rules or norms about absenteeism.

Recessionary actions also were negatively related to workplace absence through their negative association with job security so, as expected, people more readily attended work for fear of increasing their insecurity and risking their future employment or promotion prospects. Recessionary actions were positively related to workplace absence through their negative association with trust perceptions so, as expected, employees more readily took time off work in response to feelings of unease about the trustworthiness of their employer. The study thus shows that recessionary actions' association with lower levels of trust perceptions can simultaneously increase and reduce absenteeism, thus adding to the emerging discussion of presenteeism and its coexistence with absenteeism.

That there is an association between anxiety and presenteeism, but not between depression and presenteeism, is consistent with the differential in activation between the two well-being dimensions. Past research has shown that the anxiety–absence relationship is weaker than that between depression and absence (Hardy, Woods, & Wall, 2003; Wood et al., 2016). Depression is associated with low levels of arousal and passive behaviors, of which absenteeism could be a manifestation, while anxiety is associated with high levels of arousal. This suggests that, of the two, depression induced by recessionary actions is more likely to increase stress-based absence than is anxiety. The fact that we did not find this to be the case, could be an indication that in recessionary times the arousal induced by anxiety may be reflected in attendance, not simply a lower rate of increase in absence than that caused by depression.

Our analysis of moderating effects confirms there are positive interactions between recessionary actions and both types of layoffs but only the voluntary variety moderates any of the significant mediation paths. Voluntary layoffs buffer the effects of the mistrust generated from recessionary actions. As such, in workplaces with voluntary layoffs, employees whose anxiety has increased because recessionary actions reduced their trust in management are less likely to attend work than similar employees in workplaces with no layoffs. Independently of the effects of mistrust on anxiety, absenteeism as a form of equivalent retaliation to increased mistrust is less likely in workplaces where voluntary layoffs occurred. Together, these processes translate to two opposing

effects on absenteeism: one that increases it and one that reduces it. Voluntary layoffs involve some semblance of choice for the employee and may be perceived as fairer by both employers and employee, which is why they may be the preferred way of handling layoffs. It would appear that the sense of employees having some choice over whether they leave the organization is of prime importance in explaining the way voluntary layoffs reduce the association between the lowering of trust perceptions consequent on recessionary actions and higher levels of absence. They may also be perceived as symbolic of the employer attempting to be as fair as possible in a situation where employment levels are deemed to be too high. Employees' need to retaliate to their growing mistreatment is lessened by a perception that employees laid off had some say in their severance.

In contract compulsory layoff processes did not appear to influence trust in any way. This may be because they are more clear-cut and generate less uncertainty. They could also be because the participating sample consisted of employees that were not selected for compulsory layoffs and have gauged that they are more valued or they are unlikely to be selected in future. Together these results also suggest that our assumption that compulsory and voluntary layoffs have similar effects was correct for job security but incorrect for trust. This suggests that voluntary layoffs can be used as a way to manage employee reductions and supplement other recessionary actions so that the breach of the psychological contract is less intense or does not extend so readily to feelings of contract violation. The strength of the relationships entailed in the significant routes to withdrawal absence, via job security and trust perceptions, are stronger than those constituting stress-based absence. The path via job security reduces absence, while that through trust perceptions increases it, as predicted in both cases. This domination of withdrawal effects at the workplace level does not necessarily mean that stress-based effects as commonly conceived are not present within the organization. They may be more prominent at the individual level. The relationships that we can

assess at the individual level – all those excluding absenteeism – are all significant (Appendix B). The stronger effects of reduced trust may well be more powerful at the workplace level, since the reduction may arise through collective processes, and negative responses to these processes may require an element of legitimacy, which may be fostered by employees sharing their views. This suggests that we might not expect a homology between relationships involving recessionary actions and absenteeism at the workplace and individual levels.

Our results confirm the value of differentiating types of absence on the bases of their routes through well-being and trust perceptions. They add support to conjectures about the role of psychologicalcontract breach in explaining the effects of recessionary actions and downsizing on employees' attitudes and behaviour. The findings also highlight the need to use multi-dimensional concepts of well-being, such as the differentiation between depression and anxiety that we have used, and avoid blanket terms such as stress or well-being and the conflation of these with attitudes and evaluations such as job satisfaction. Above all else this research has developed and substantiated a theory of the effects of the typical actions that organizations take when attempting to combat recession which may be applicable to employee behaviors beyond absenteeism. The key contribution of this study is to identify three mechanisms through which recessionary actions influence workplace absenteeism – the workforce's job security, trust in management and anxiety – and how they influence it in differing ways, two reducing it and one increasing it.

6. STRENGTHS, LIMITATIONS, AND FUTURE RESEARCH

This is the first study to differentiate workplaces according to their employees' exposure to counterrecessionary actions and to assess the impact of these actions on absenteeism and the extent to which the impact is mediated by employees' well-being, job security, and perceptions of management's trustworthiness. Our results highlight how the actions management take in response to recessions affect employees' absence levels regardless of the intensity of the recession's impact on the workplace.

The study also shows that the effects of the recession are not uniformly distributed across the economy. Had recessionary actions had no effect on employee behavior or well-being, as we found the intensity of the recessionary impact on the workplace did not, this would have suggested that any negative effects of recessions on employees were due to what Sinclair et al. (2010: 3) call "macroeconomic stressors", which affect the majority of employees and organizations. However, our results should not be used to rule out the differential effects of macroeconomic factors on employees, and particularly on perceptions of the economy, which in turn affect people's consumption and investment decisions, as well as their job-security perceptions. Future work could examine the interaction between the various levels – the macroeconomic and organizational stressors – as well as individual ones, such as whether employees have dependent relatives or high debts.

The key strength of the study is its foundation in a nationally representative survey of 1,543 workplaces, and 16,697 employees in these workplaces, which used validated measures and introduced for the first time pre-tested measures of recessionary actions and other recessionary variables. The workplaces covered virtually all sectors of the economy and a full variety of employees in terms of occupation, age group, domestic arrangements, and sexual orientation. Collecting data within workplaces means that the assessments are as proximal to the situations as possible, meaning the reliability of the measures – particularly those of recessionary actions – whether from employees or employers, is likely to be strong. The use of data from both employees and employers, and our application of multilevel analysis, indicate little risk of common-method

variance. Our confirmatory multilevel factor analysis of the variables collected from employees, the mediators, and the recessionary actions confirm this. Moreover, the demonstration of moderated relationships further strengthens this judgment.

We had no choice in using a time-based measure of absenteeism, as it is the only measure available in the data set. However, this is consistent with Johns and Hajj's (2016: 471–472) commendation of its use as the default measure of absence since: "It corresponds to most extant constitutive definitions of absenteeism; it may be easier to access than frequency; it allows for benchmarking with more studies in a wider variety of disciplines; it is easier to cost with certainty." It is in fact unlikely that employers can readily provide information on the alternative, the frequency measure.

The use of a single-item measure of job security, again unavoidable, may be questioned; but in our judgement this is a case where such a measure is not a limitation. Rather, it provides a summary statement of employees' perceptions of the security of their jobs, with the added practical benefit that it reduces survey length and cognitive load on participants. Single-item measures are especially apposite when the concept is unambiguous (Wanous, Reichers, & Hudy, 1997). Our measure focuses on our core concept, the threat of job loss or quantitative job security, and multi-item global measures with this focus (Probst, 2003; Vander Elst, De Witte, & De Cuyper, 2014) rely on items that are essentially different ways of assessing the same thing as our single-item measure. The evidence is that measures of job security such as ours are preferable to composite scales of qualitative job security that include insecurities about specific threats to features of the job (Shoss, 2017: 1920). Moreover, the available composite variables would not have been appropriate for our needs, as they include items that are equivalent to one or more of the recessionary actions in our independent variable; they also tend to include consequences or antecedents of job security.

The dataset's main limitation is that it is based on a cross-sectional design, meaning we cannot therefore assess causality. However, a model leading from employee absence to recessionary actions through perceptions of job security and trust does not have much plausibility. Prior levels of employee well-being may have some effect on employees' assessment of the mediators, and the extent to which these moderate the impact of the mediators could be assessed in future longitudinal studies. However, the evidence from longitudinal research (Hellgren & Sverke, 2003; Kinnunen, Mauno, Nätti, & Happonen, 1999) suggests that well-being follows job insecurity and precedes sickness absence, although there is some evidence of reciprocal relationships, as lower self-esteem (typically correlated with well-being) increases job security. Studies that assess absenteeism and the mediators during a recession whilst restructuring and other actions are occurring – perhaps using experience sampling – might be especially fruitful. Intra-individual analysis would be especially useful for assessing the cumulative effects of multiple recessionary actions such as successive rounds of wage freezes. It would also be able to distinguish between acute and chronic stress, which may have different implications for absenteeism and presenteeism.

Future studies could also include direct measures of presenteeism and thus fulfil the need identified by Johns (2009:12) for studies that include measures of both absenteeism and presenteeism. Since there is a direct effect of recessionary actions on absence, this may be taken to reflect physical illness, but the inclusion of health measures may be valuable. Studies could also include withdrawal or retaliatory behaviors such as lateness, sabotage and quitting, as well as organizational and individual performance.

While the dataset's source – a large combined representative study of employers and employees – adds robustness to the results, replication in less intense recessions or countries where government
policy is not focused on public-deficit reduction (austerity measures) would be an especially valuable supplement to these findings.

7. IMPLICATIONS FOR POLICY AND PRACTICE

We can draw three main implications for organizational policy and practice from this study. First, when contemplating recessionary actions, managers should be especially mindful of their effects on employees' perceptions of the organization and well-being, and how these affect absence. This may seem obvious, particularly as they will know of their effects on job security, but managers are less likely to consider in depth how such actions undermine trust or extend to absence. There is some evidence that wage cuts tend to be treated as a last resort, at least in European private enterprises (Du Caju, Kosam, Lawless, Messina, & Rõõm, 2015). This may apply to other recessionary actions, notably layoffs, and suggests that managers are mindful of the negative effects of recessionary actions. What may go unnoticed is the way absence is used as a retaliatory behavior by employees when they sense untrustworthiness on the part of management, or that the insecurity generated by recessionary actions may result in employees attending work when not well, physically or mentally. Such presenteeism is perhaps a neglected area of management, and especially likely to fly under the radar as managers concentrate on dealing with economic crises. In 2009, Johns (p. 21) described it as "a black hole when it comes to organizational policy", and we suspect little has changed on this score. Focusing on this may be more fruitful than reinforcing absence procedures or considering further ways of controlling absenteeism. Attempts to reduce the depletion in trust during the recessionary period could include ensuring that selection of leavers and recipients of other recessionary actions is made on a visible and fair basis; and more generally that other practices are managed according to just principles (Cropanzano, Bowen, & Gilliland, 2007).

Second, specific interventions to prepare management for recessions may be warranted. These may include training in conveying difficult decisions in an informative and fair way, and there is evidence that such training (designed on the principles of giving bad news designed in healthservice contexts) can reduce the negative impact on employees' trust perceptions (Richter, König, Koppermann, & Schilling, 2016). Equally, applying the commonplace prescription in the literatures on organizational change and job security of conveying information that is consistent, authentic, and explanatory, may be helpful (e.g. Brotheridge, 2003; Schweiger & Denisi, 1991; Van Dierendonck & Jacobs, 2012). The oft-made recommendation that information processes should involve consultation and provide employees with a voice may also be significant. Perhaps more important, though, is the development of new forms of involvement, or modifications of existing practices, and ensuring that all actions are designed and conducted according to current concepts of high-involvement management, and applied consistently throughout the organization. Prescriptions about involvement and communications tend to neglect the levels-of-management issue that ensuring consistent information and practice throughout the organization entails. The transmission of often rather clichéd visions is not sufficient to create the required unity of purpose; their use often seems to be based on the assumption that saying as little as possible or summing things up succinctly gives less chance for recriminations and ambiguities. Situations may contain ambiguities and uncertainties, and including these in communications and allowing local managers to discuss them with their subordinates, not least in their goal-setting, may be more telling than conveying a simple deterministic story that recessionary actions have been taken due to the prevailing economic climate. This echoes the more general prescription of Nijssen & Paauwe (2012: 3321) that the best way to achieve organizational agility and reduce the need for future recessionary actions is for the "organization to be in constant dialogue with their employees on the business planning."

Third, managers may consider ways of compensating employees for the loss of a reward or increased workloads. There may be limited scope for this – for example, allowing even one extra day's holiday can be costly. Yet the option of enriching job content may be relatively costless, suggesting managers should practice more conscious job design aimed at increasing the quality and meaningfulness of work. There is some evidence that such redesign, some of which may be initiated by employees themselves, can help to maintain performance during financial cutbacks, as Burns, Hyde, and Killett (2016) showed this in this case of patient care in the context of a patientcentred environment. A study of a layoffs showed, consistent with job demands-resources theory, that adverse effects on employees' commitment and performance were lower when job control was high (Brockner, Spreitzer, Mishra, Hochwarter, Pepper, & Weinberg, 2004). Similarly, Parker, Chmiel, and Wall (1997) observed that when job autonomy and role clarity increased following a downsizing exercise in the UK the adverse effects of increased demands were reduced. Nonetheless, such interventions should not be treated as an easy panacea, as the persistence of job insecurity may weaken their effects (Egan, Bambra, Thomas, Petticrew, Whitehead, & Thomson, 2007; Mohr, 2000).

8. CONCLUSIONS

Actions taken in response to recessionary pressures tend to have negative effects on employee wellbeing and perceptions of job security and the trustworthiness of management, and in turn these processes affect workplace-level absence. The effects on stress-based absence are limited. There was no increase in absence through effects on well-being, direct or indirect. Contrary to expectations the negative effects of recessionary action on trust perceptions which was associated with higher levels of anxiety led to lower absenteeism. However, the effects of recessionary actions on withdrawal absence were more pronounced, as their adverse effect on perceptions of trust was, as predicted, significantly related to higher levels of absenteeism – that is, independently of wellbeing effects. The impact of recessionary actions on job insecurity was, also as predicted, associated with lower absenteeism. We also found the extent of the two effects involving trust perceptions will be weaker when recessionary actions are accompanied by voluntary layoffs, but not by compulsory layoffs.

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	Variables	Means	SD	α	ICC	1	2	3	4	5	6	7
1	Recessionary actions	0.01	0.60	-	.23							
2	Compulsory layoffs	1.23	0.42	-	-	.20***						
3	Voluntary layoffs	1.24	0.43	-	-	.37***	.33***					
4	Job security	3.46	1.10	-	.22	49***	20***	33***				
5	Trust perceptions	3.39	0.97	0.93	.17	39***	08**	20***	.46***			
6	Anxiety	2.25	0.91	0.84	.07	.38***	.13***	.19***	39***	45***		
7	Depression	1.83	0.95	0.90	.07	.36***	.10***	.13***	39***	59***	.76***	
8	Workplace absenteeism	4.28	4.15	-	-	.00	09***	03	.03***	05*	01	.05*

Table 1. Means, standard deviations (SD), Cronbach's alpha (α), and correlations at the workplace level

Sample size (N) = 16697 employees nested within 1543 workplaces

Means and standard deviations are estimated from the raw data. Correlations are at the organizational level Recessionary actions, job security, trust perceptions, anxiety and depression were averaged for the calculation of the correlations *p < .05, **p < .01, ***p < .001

				2.5%	97.5%
	Estimate		SE	CI	CI
Recessionary Actions – Anxiety – Workplace Absenteeism	-0.06		0.03	-0.12	0.01
Recessionary Actions – Depression – Workplace Absenteeism	0.00		0.01	-0.03	0.02
Recessionary Actions – Job Security – Anxiety – Workplace					
Absenteeism (S)	-0.04		0.02	-0.08	0.01
Recessionary Actions - Job Security - Depression - Workplace					
Absenteeism (S)	0.00		0.01	-0.01	0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace					
Absenteeism (S)	-0.08	*	0.04	-0.15	-0.01
Recessionary Actions – Trust Perceptions – Depression – Workplace					
Absenteeism (S)	-0.03		0.08	-0.19	0.14
Recessionary Actions – Job Security – Workplace Absenteeism	-0.11	*	0.05	-0.21	-0.01
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	0.27	**	0.10	0.07	0.48
Recessionary Actions – Job Security – Anxiety – Workplace					
Absenteeism (T)	-0.20	***	0.05	-0.30	-0.09
Recessionary Actions – Job Security – Depression – Workplace					
Absenteeism (T)	-0.11	*	0.05	-0.22	-0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace					
Absenteeism (T)	0.13		0.09	-0.04	0.31
Recessionary Actions – Trust Perceptions – Depression – Workplace					
Absenteeism (T)	0.24	***	0.05	0.15	0.33

Table 2. Recessionary actions and stress- and withdrawal-based indirect paths to absence
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p* < .05, *p*< .01, ****p*< .001

S: the specific effect of the indirect path T: the total effect of the indirect path (consisting of the specific effect through two mediators in a series, and the indirect effects through each of the mediators separately)

	• •				2.5%	
Path	Moderator	Index		SE	CI	97.5% CI
Recessionary Actions – Anxiety – Workplace Absenteeism	Compulsory					
Recessionary Actions – Anxiety – Workplace Absenceisin	Layoffs	0.02		0.01	-0.01	0.04
Recessionary Actions – Anxiety – Workplace Absenteeism	Voluntary Layoffs	-0.01		0.01	-0.03	0.02
Recessionary Actions – Depression – Workplace Absenteeism	Compulsory	0.01				0.04
	Layoffs	0.01		0.02	-0.03	0.04
Recessionary Actions – Depression – Workplace Absenteeism	Voluntary Layoffs	0.00		0.01	-0.03	0.02
Recessionary Actions – Job Security - Anxiety – Absence (S)	Compulsory			0.00		0.04
	Layoffs	0.00		0.00	0.00	0.01
Recessionary Actions – Job Security - Anxiety – Workplace		0.00		0.00	0.00	0.01
Absenteeism (S)	Voluntary Layoffs	0.00		0.00	0.00	0.01
Recessionary Actions – Job Security - Depression – Workplace	Compulsory	0.00		0.00	0.00	0.00
Absenteeism (S)	Layoffs	0.00		0.00	0.00	0.00
Recessionary Actions – Job Security - Depression – Workplace						
Absenteeism (S)	Voluntary Layoffs	0.00		0.00	0.00	0.00
Recessionary Actions – Trust Perceptions - Anxiety – Workplace	Compulsory	0.04		0.01	0.00	0.0 0
Absenteeism (S)	Layoffs	0.01		0.01	0.00	0.02
Recessionary Actions – Trust Perceptions - Anxiety – Workplace	.			0.01	0.00	0.04
Absenteeism (S)	Voluntary Layoffs	0.02	*	0.01	0.00	0.04
Recessionary Actions – Trust Perceptions - Depression – Workplace	Compulsory					
Absenteeism (S)	Layoffs	0.00		0.01	-0.01	0.02
Recessionary Actions – Trust Perceptions - Depression – Workplace	.	0.04				0.04
Absenteeism (S)	Voluntary Layoffs	0.01		0.02	-0.03	0.04
Recessionary Actions – Job Security – Workplace Absenteeism	Compulsory					
	Layoffs	0.01		0.01	0.00	0.03
Recessionary Actions – Job Security – Workplace Absenteeism	Voluntary Layoffs	0.01		0.01	0.00	0.02
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	Compulsory	0.05			0.06	0.04
v 1 1	Layoffs	-0.03		0.02	-0.06	0.01
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	Voluntary Layoffs	-0.06	*	0.03	-0.11	-0.01

Table 3. Index of moderated mediation	for stress and withdrawal indirect	t paths, for first stage moderation by layoffs

Recessionary Actions - Job Security - Anxiety - Workplace	Compulsory					
Absenteeism (T)	Layoffs	0.02	*	0.01	0.00	0.03
Recessionary Actions – Job Security - Anxiety – Workplace						
Absenteeism (T)	Voluntary Layoffs	0.02	*	0.01	0.00	0.03
Recessionary Actions - Job Security - Depression - Workplace	Compulsory					
Absenteeism (T)	Layoffs	0.01		0.01	0.00	0.03
Recessionary Actions - Job Security - Depression - Workplace						
Absenteeism (T)	Voluntary Layoffs	0.01		0.01	0.00	0.02
Recessionary Actions - Trust Perceptions - Anxiety - Workplace	Compulsory					
Absenteeism (T)	Layoffs	-0.02		0.01	-0.05	0.01
Recessionary Actions - Trust Perceptions - Anxiety - Workplace						
Absenteeism (T)	Voluntary Layoffs	-0.04		0.02	-0.08	0.00
Recessionary Actions – Trust Perceptions - Depression – Workplace	Compulsory					
Absenteeism (T)	Layoffs	-0.03		0.01	-0.05	0.00
Recessionary Actions – Trust Perceptions - Depression – Workplace						
Absenteeism (T)	Voluntary Layoffs	-0.05	**	0.02	-0.09	-0.02
Sample size (N) = 16697 employees nested within 1543 workplaces						
* p < .05, ** p< .01, *** p< .001						
S: the specific effect of the indirect path						
T: the total effect of the indirect path (consisting of the specific effect the	hrough two mediators	s in a ser	ies, a	and the is	ndirect effe	ects through
each of the mediators separately)						

Table 4. Conditional indirect stress and withdrawal paths for f	first stage moderation by	layoffs			
Path	Moderator	В	SE	2.5% CI	97.5 % CI

Recessionary Actions – Anxiety – Workplace Absenteeism	No Compulsory. Layoffs	- 0.07	0.04	-0.15	0.00
Recessionary Actions – Anxiety – Workplace Absenteeism	Compulsory Layoffs	- 0.04	0.03	-0.09	0.02
Recessionary Actions – Anxiety – Workplace Absenteeism	No Voluntary Layoffs –	0.05	0.03	-0.11	0.01
Recessionary Actions – Anxiety – Workplace Absenteeism	Voluntary Layoffs	- 0.06	0.03	-0.13	0.00
Recessionary Actions – Depression – Workplace Absenteeism	No Compulsory. Layoffs	- 0.01	0.03	-0.06	0.05
Recessionary Actions – Depression – Workplace Absenteeism	Compulsory Layoffs	0.00	0.01	-0.01	0.01
Recessionary Actions – Depression – Workplace Absenteeism	No Voluntary Layoffs –	0.00	0.00	-0.01	0.01
Recessionary Actions – Depression – Workplace Absenteeism	Voluntary Layoffs	- 0.01	0.02	-0.06	0.04
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (S)	No Compulsory. Layoffs	0.04	0.02	-0.08	0.01
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (S)	Compulsory Layoffs	0.03	0.02	-0.07	0.01
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (S)	No Voluntary Layoffs –	0.04	0.02	-0.08	0.01
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (S)	Voluntary Layoffs	0.03	0.02	-0.07	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (S)	No Compulsory. Layoffs	0.00	0.01	-0.02	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (S)	Compulsory Layoffs	0.00	0.01	-0.01	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (S)	No Voluntary Layoffs	0.00	0.01	-0.02	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (S)	Voluntary Layoffs	0.00	0.01	-0.01	0.01

Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (S)	No Compulsory. Layoffs	_ 0.09	*	0.04	-0.17	_ 0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (S)	Compulsory Layoffs	0.07	*	0.03	-0.14	0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (S)	No Voluntary Layoffs –	0.10	*	0.04	-0.18	0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (S)	Voluntary Layoffs	0.07	*	0.03	-0.12	0.01
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (S)	No Compulsory. Layoffs	0.03		0.09	-0.21	0.15
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (S)	Compulsory Layoffs	0.02		0.07	-0.17	0.12
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (S)	No Voluntary Layoffs –	0.03		0.10	-0.23	0.16
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (S)	Voluntary Layoffs	0.02		0.07	-0.15	0.11
Recessionary Actions – Job Security – Workplace Absenteeism	No Compulsory. Layoffs	0.12	*	0.06	-0.23	_ 0.01
Recessionary Actions – Job Security – Workplace Absenteeism	Compulsory Layoffs	0.10	*	0.05	-0.19	0.01
Recessionary Actions – Job Security – Workplace Absenteeism	No Voluntary Layoffs –	0.12	*	0.06	-0.23	_ 0.01
Recessionary Actions – Job Security – Workplace Absenteeism	Voluntary Layoffs	0.10	*	0.05	-0.19	0.01
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	No Compulsory. Layoffs	0.30	**	0.12	0.07	0.53
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	Compulsory Layoffs	0.24	**	0.10	0.06	0.43
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	No Voluntary Layoffs	0.33	**	0.13	0.08	0.58
Recessionary Actions – Trust Perceptions – Workplace Absenteeism	Voluntary Layoffs	0.22	*	0.08	0.05	0.38
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (T)	No Compulsory. Layoffs	0.21	***	0.06	-0.33	0.10

Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (T)	Compulsory Layoffs		***	0.05	-0.28	_ 0.09
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (T)	No Voluntary Layoffs –	0.21	***	0.06	-0.33	
Recessionary Actions – Job Security – Anxiety – Workplace Absenteeism (T)	Voluntary Layoffs	0.19	***	0.05	-0.28	_ 0.09
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (T)	No Compulsory. Layoffs	0.13	*	0.06	-0.24	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (T)	Compulsory Layoffs	_ 0.10	*	0.05	-0.20	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (T)	No Voluntary Layoffs –	0.13	*	0.06	-0.24	0.01
Recessionary Actions – Job Security – Depression – Workplace Absenteeism (T)	Voluntary Layoffs	0.12	*	0.06	-0.24	0.01
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (T)	No Compulsory. Layoffs	0.15		0.10	-0.04	0.34
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (T)	Compulsory Layoffs	0.12		0.08	-0.05	0.27
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (T)	No Voluntary Layoffs –	0.17		0.11	-0.04	0.38
Recessionary Actions – Trust Perceptions – Anxiety – Workplace Absenteeism (T)	Voluntary Layoffs	0.09		0.07	-0.05	0.24
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (T)	No Compulsory. Layoffs	0.27	***	0.05	0.16	0.37
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (T)	Compulsory Layoffs	0.22	***	0.05	0.13	0.31
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (T)	No Voluntary Layoffs –	0.29	***	0.06	0.18	0.41
Recessionary Actions – Trust Perceptions – Depression – Workplace Absenteeism (T)	Voluntary Layoffs	0.30	***	0.07	0.17	0.44
Sample size (N) = 16697 employees nested within 1543 workplaces						

sample size (1N) = 1009 / employees nested within 1543 workplaces * p < .05, ** p < .01, *** p < .001

S: the specific effect of the indirect path

T: the total effect of the indirect path (consisting of the specific effect through two mediators in a series, and the indirect effects through each of the mediators separately)

Figure 1: Conceptual model



Dependent	x 1 1	ъ ·		aF	2.5%	97.5%
variables	Independent variables	Estim	ate	SE	CI	CI
Job Security						
	Recessionary Actions	-0.68	* * *	0.04	-0.75	-0.61
	Compulsory Layoffs	-0.05	**	0.01	-0.07	-0.02
	Voluntary Layoffs	-0.09	* * *	0.02	-0.12	-0.06
	Recessionary Actions x					
	Compulsory Layoffs	0.07	**	0.03	0.02	0.12
	Recessionary Actions		ata ata	0.00	0.00	0.10
—	Voluntary Layoffs	0.07	**	0.03	0.02	0.12
Trust Perceptions						
	Recessionary Actions	-0.43	* * *	0.03	-0.49	-0.36
	Compulsory Layoffs	0.01		0.01	-0.01	0.04
	Voluntary Layoffs	-0.04	**	0.01	-0.07	-0.02
	Recessionary Actions x					
	Compulsory Layoffs	0.04		0.02	0.00	0.09
	Recessionary Actions		ata ata ata	0.00	0 0 -	0.1.4
	Voluntary Layoffs	0.09	***	0.02	0.05	0.14
Anxiety						
	Recessionary Actions	0.08	**	0.03	0.02	0.14
	Compulsory Layoffs	0.02	*	0.01	0.00	0.03
	Voluntary Layoffs	0.00		0.01	-0.02	0.02
	Job Security	-0.07	*	0.03	-0.14	0.00
	Trust Perceptions	-0.27	***	0.03	-0.33	-0.20
	Recessionary Actions x					
	Compulsory Layoffs	-0.02		0.01	-0.05	0.00
	Recessionary Actions >					
	Voluntary Layoffs	0.01		0.01	-0.02	0.04
Depression ~						
	Recessionary Actions	0.03		0.03	-0.03	0.09
	Compulsory Layoffs	0.02		0.01	0.00	0.03
	Voluntary Layoffs	-0.02	*	0.01	-0.04	0.00
	Job Security	-0.02		0.03	-0.09	0.04
	Trust Perceptions	-0.48	***	0.03	-0.55	-0.42
	Recessionary Actions					
	Compulsory Layoffs	-0.04	**	0.01	-0.06	-0.01
	Recessionary Actions					
	Voluntary Layoffs	0.03	*	0.01	0.00	0.06
Absenteeism						
	Ratio of Female to tota	0.16	* * *	0.03	0.10	0.22
	employees					
	Age	0.04	**	0.01	0.01	0.06
	Recessionary Actions	0.14	*	0.07	0.01	0.28

Appendix A: All Workplace-level direct effects

Job Security	0.16	*	0.08	0.01	0.31
Trust Perceptions	-0.64	**	0.24	-1.11	-0.17
Anxiety	-0.73	*	0.28	-1.28	-0.17
Depression	-0.13		0.40	-0.91	0.66

Sample size (N) = 16697 employees nested within 1543 workplaces * p < .05, ** p < .01, *** p < .001

	Independent				2.5%	97.5%
Dependent variables	variables	Estimate		SE	CI	CI
Job Security						
	Recessionary					
	Actions	-0.20	***	0.01	-0.22	-0.19
Trust Perceptions						
-	Recessionary					
	Actions	-0.26	***	0.01	-0.28	-0.24
Anxiety						
	Recessionary					
	Actions	0.16	***	0.01	0.15	0.18
	Trust Perceptions	-0.25	***	0.01	-0.26	-0.23
	Job Security	-0.13	***	0.01	-0.15	-0.12
Depression						
-	Recessionary					
	Actions	0.12	***	0.01	0.11	0.14
	Trust Perceptions	-0.38	***	0.01	-0.40	-0.36
	Job Security	-0.12	***	0.01	-0.13	-0.10

Appendix B: Individual-level direct effects

Sample size (N) = 16697 employees nested within 1543 workplaces *p < .05, **p < .01, ***p < .001

Note: These results are the individual level direct paths. These paths correspond to the hypothesized workplace-level model, compulsory and voluntary layoffs and absenteeism which were measured only at the workplace level.