High performance work systems and workers’ well-being: a sceptical view

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Abstract: The mainstream approach to new work systems – so-called high performance work systems – views workers’ commitment, satisfaction and well-being as the main mediators between the introduction of new organisational practices and business performance. However, the effects of such practices on workers are highly controversial. By means of a survey of existing theoretical and empirical studies on the topic, this paper analyses the traditional opposition between supporters of the ‘empowerment thesis’ and supporters of the ‘intensification thesis’. The results show that internal tensions relative to the application of the new work practices and methodological difficulties encountered by researchers explain the uncertainty of the results obtained in the literature. The principal implications for future research in this field concern closer attention to the context in which the practices are introduced and to the characteristics of individuals, the use of more detailed indicators, and the devising of multi-approach and multi-method research designs.

Keywords: high performance work systems; HPWS; new forms of work organisation; well-being; job satisfaction; empowerment; intensification; control; discretion; job stress; wage; job security; work innovation.


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1 Introduction

The debate on the effects of the new work systems – the so-called high performance work systems (HPWS) – in terms of improvement in the economic and productive results of the firm is rich with contributions. It exhibits substantial agreement that, in the presence of a well-designed and properly implemented system, the effects are positive (see for all McDuffie, 1995; Ichniowski et al., 1997).
More controversial are the effects of such practices on the well-being of workers, although recent years have seen a proliferation of studies on this issue. However, better understanding of the results of the HPWS on workers is important not only from an ethical or moral perspective. There are at least other two main reasons for advancing this stream of inquiry. Firstly, the theoretical model underlying the mainstream view maintains that, in HPWS contexts, a competitive advantage can be obtained only when application of the new management practices gives rise to an increase in commitment by workers such to persuade them to devote discretionary effort to the firm – that is, work harder in pursuit of the organisation’s goals (Appelbaum et al., 2000). The strategies adopted to achieve productivity gains from a simple quantitative increase in effort may be successful in the brief period, but they are unlikely to do so in the long one (Appelbaum and Batt, 1994). At theoretical level, the role of mediation between the introduction of the new work practices and organisational performance is therefore allocated to the workers. But if empirical research is not also equipped with a worker-centred approach, it will never thoroughly understand why HPWS act or otherwise on organisational performance (Guest, 2002). Secondly, as pointed out by Peccei (2004), more expressly considering the effects exerted by HR practices and policies workers would help align HRM research with an important tradition of thought in the social sciences (that comprising organisational behaviour, industrial and organisational psychology, industrial relations, and the sociology of work). It would consequently contribute to steering HRM research in a less openly managerial direction.

The aim of this study is to systematise the state of the art and to propose a general interpretation which furnishes indications for future research in this field. The next section defines the field of observation, or rather what the most accredited literature considers to be a HPWS. The third section briefly describes the main theories in circulation concerning the effects of HPWS on worker well-being. The fourth section conducts an empirical survey of current studies, distinguishing two macro dimensions (emotional and economic) of the impact that HPWS may have on the well-being of workers, and showing how the inconsistency of the results obtained is largely explainable in terms of tensions among high performance practices and the superficiality of the information available. The final section offers suggestions as to future research.

2 HPWS: dimensions and components

The possibility that every firm may adopt particular practices or ones tailored to its organisation makes a systematic list of the practices constituting a high performance work system of little use, as well as difficult to compile. Instead, of much greater interest, is defining a set of features shared by such practices. Accordingly, the changes brought about by the new forms of work organisation can be arranged along three dimensions, each with its own components (European Commission, 2002):

1 the ways in which work is organised in regard to operational activities (for example, multiskilling, job rotation and semi-autonomous work groups)

2 the ways in which work is coordinated within the organisation (for example, hierarchy flattening measures, information flows, interactions between the workforce and management (participation) and performance measurement
personnel management policies consisting of investments in training and merit pay. Hence if new work practices are to be considered such they must modify, at least to some extent, the way in which work is organised, coordinated or managed.

The definition furnished by the European Commission is undoubtedly very useful for identifying the organisational dimensions on which the new work practices operate. But on the basis of current theories, and in confirmation of what was said above concerning the ‘necessary incompleteness’ of the existing definitions, it seems to overlook some important components of personnel management policies. The presence of non-economic forms of workforce incentivation and a good industrial relations climate, in fact, are also key components of a HPWS (Della Torre and Solari, 2011).

According to Appelbaum et al. (2000), whose study is one of the main landmarks in the literature on HPWS, at the centre of these systems is an organisation of work that gives workers in non-managerial positions the opportunity to participate in decision-making on substantive questions, and which requires the support of human resources management practices which increase the skills of the workers and furnish the incentives to participate in decisions. The incentives may be of two types:

1. financial or extrinsic (individual, collective, or group)
2. intrinsic (satisfaction, challenging work and autonomy; reciprocal trust and consideration of workers as stakeholders).

This latter category includes both covert and overt incentives. Belonging among the former are, for example, job security and the perception of workers that their firm is competitive; while the most important of the overt forms are the opportunity to pursue a career within the organisation (i.e., the creation of internal labour markets) and the introduction by the firm of measures intended to resolve the conflict between work and family that preoccupies numerous workers.

The last aspect to be considered is the role of industrial relations. In workplaces where trade unions are present, in fact, the creation of a good industrial relations climate and the involvement of the trade-union representatives in processes of organisational innovation are important components of a HPWS, both in terms of the quality of the innovations introduced – more substantial (Vidal, 2007) and productive (Cristini et al., 2003; Zwick, 2004) – and in terms of greater guarantees of support for the new practices and their diffusion among workers (Appelbaum and Batt, 1994).

Although each label implies a greater or lesser emphasis on the three dimensions, to facilitate the reading of the next sections the general label ‘HPWS’ will always be used (except when strictly necessary) even if the authors of the studies cited employ a different one, while (especially in the fourth section) the focus will be on the individual practices considered by each study.

Three perspectives on HPWS and workers’ well-being

On examining the studies that the social sciences have produced in the past 20 years on changes in the organisation of work and technological developments, one finds two principal and contrasting currents of thought. Each of them has internal nuances, and a third, intermediary position has been more recently added to them (Geary, 2003; Peccei, 2004).
3.1 The optimistic position

The optimistic position, or ‘the empowerment thesis’, emphasises the transformative capacity of current changes with respect to Taylorist-Fordist organisational models: the pressure for change has been driven by managerial intentions to restructure labour relations according to a new strategy designed to respond to increasingly competitive markets, and whose main effects are an improved corporate performance and greater workforce well-being. The innovations introduced by management confer greater powers on workers (empowerment); they make the work more satisfying; they create a better and more stimulating work environment; and they increase workers’ pay because the firm, now more competitive, distributes a proportion of its higher earnings to them.

The theme of commitment is central to this approach, because it is the principal lever on which management must work to obtain the discretionary effort of workers, this being the element best able to produce competitive advantages for the firm. As Walton (1985) aptly puts it, according to the supporters of HPWS a shift is taking place from the ‘management of control to management of commitment’. This is a sort of ‘revolution of work’ (Smith, 1997) which should align the interests of the workers with those of their managers, improve productivity, innovation and quality, and therefore restore competitiveness to firms. Appelbaum et al. (2000), in their influential study on three US manufacturing sectors, theorise and empirically demonstrate that the effects of HPWS on the well-being of workers are mediated by the greater trust that arises between the latter and managers, as well as by the intrinsic rewards (for instance, a chance to do challenging work) that the new practices offer to those involved in their adoption. On this view, therefore, trust and intrinsic rewards are important mediators of workers’ commitment and satisfaction, and they reduce stress levels.

In short, according to the optimistic position, HPWS make it possible to reach win-win solutions between the firm and workers. The latter are more committed and furnish ideas. In exchange, they receive higher wages and intangible rewards (skills development, better work environment) which induce them to increase their commitment to the firm and be more satisfied with work.

3.2 The pessimistic position

The most critical positions contest the innovative capacity of current changes and maintain that nothing has changed with respect to the traditional hierarchical forms of control and authority in work relations. On the contrary, these forms have been strengthened and obscured through the strategic use of participatory language. In other words, the theorists of the pessimistic position (also called the ‘intensification thesis’) argue that “management’s intentions are not so noble, that an extension in management control is the primary motive, and that there is no managerial need or desire for tapping employees’ discretionary effort or skill development” [Geary, (2003), p.339]. In these contexts, the consequences for the workers would be a worsening of well-being, the intensification of workloads, and the constant risk of job loss.

These views are apparent both in the theoretical approach of labour process theory (LPT) and in the most recent managerial strand of critical management studies (CMS). Here, it is the theme of control that assumes central importance. Thompson and Harley (2007) identified four main propositions in regard to the presence and type of control in contemporary management systems:
the persistence of resistance by workers also in the presence of new forms of normative control based on the attitudes and emotions of workers

2 a questioning of the claim that introduction of the new practices automatically reduces (or eliminates) the traditional practices of bureaucratic rationalisation, work intensification, and scientific management

3 the extension of control to new areas, i.e., not only do the new forms of control add to (rather than replace) the traditional ones, but the latter are applied to new domains (for instance, through attempts by management to identify, monitor and standardise the tacit knowledge of the most experienced workers in order to accelerate the product development cycle)

4 the increasing hybridisation of control structures as a consequence of the ever greater complexity of organisational structures.

To be noted is that both the optimistic and pessimistic positions link the new managerial techniques with a better corporate performance and greater discretionary effort by workers. For the supporters of the LPT, however, this directly or indirectly leads to an intensification of work, and to stress levels higher than those of workers not involved in HPWS (Ramsay et al., 2000). According to some authors, in fact, the 1980s and 1990s saw a significant increase in the effort required of workers. At the European level, the data of the European Survey of Working Conditions indeed show an increase of work intensity in the early 1990s (Green and McIntosh, 2001), but in the second part of the decade the trend went into reverse (Gallie, 2005). Besides the unclear tendencies, what these contributions do not fully explain is the role of technology: if the intensification of work in the early 1990s was largely due to technological innovation (Green and McIntosh, 2001; Green, 2004), the halt of this trend in the second part of the decade can certainly not be explained by a decrease in the use of computer-based technologies, which, on the contrary, underwent exponential growth.

3.3 The sceptical position

In recent years, a third approach has arisen which occupies an intermediate position between the two just described. It argues that the HPWS practices do not necessarily have a significant impact, positive or negative, on the well-being of workers (Peccei, 2004). Scepticism about the necessary existence of effects on workers has been bolstered by Ramsay et al. (2000) influential study which empirically tested the three HCM, HIM, and LPT approaches on 1998 Workplace Employment Relations Survey data: the results did not significantly confirm any of the three explanations considered.

Moreover, similar to the sceptical position is the contingent view, according to which even in cases where such effects are apparent, they are not uniform. They are instead contingent on a series of factors, such as the ways in which the innovations have been introduced (for instance, whether or not the workers or their representatives have been involved), the workers’ previous experiences, the importance given to job security, and the extent to which human resources management practices in the strict sense (i.e., the third dimension of HPWS as defined above) have been adapted to support introduction of the innovations (Geary, 2003).

Acknowledging that the sceptical position is the least developed of the three, Peccei (2004) identified a number of arguments in support of it: the new practices are adopted
by firms to only a limited extent, and even when they are adopted, they are often not effectively implemented. The impact on workers is often contingent on (and therefore moderated by) other factors (the re-regulation thesis); the effects on the workers may be manifold and contradictory, so that they nullify each other. The effects of HPWS on workers may therefore be very complex, the causal chains involved rather long, and the network of very extensive and varied. It is consequently very difficult to predict or to define the overall impact in simple terms (Peccei, 2004; Geary, 2003).

4 The empirical evidence: satisfaction and intensification?

Whilst the theoretical approaches outlined above are relatively clear and easily distinguishable, empirical studies furnish controversial evidence.

The next two sections will seek to show that the reasons for the contrasting results obtained by studies are due to both methodological difficulties caused by the superficiality of the information available, and to the arguments of the sceptical position described above – that is, the tensions which occur in application of the new practices, and the importance of the characteristics of individuals and the context in which the practices are introduced. The results obtained on the effects in terms of emotional well-being are considered first, and then those concerning economic well-being.

4.1 Emotional well-being

4.1.1 Stress and satisfaction

The issues regarding the worker’s emotional well-being are very complex, even if a purely organisational point of view is assumed and psychological theories are set aside. More than 30 years ago, in fact, when seeking to formulate a thoroughgoing theory of job satisfaction, Kalleberg (1977) identified 34 job characteristics potentially able to influence a worker’s level of satisfaction (measured on five items). For each of the characteristics he distinguished between the value attributed to it by the worker (work value) and the availability of rewards about it (job rewards). Factor analysis on the values and the rewards recorded by around 1,500 American workers brought out six significant dimensions:

1. the *intrinsic* dimension relative to the characteristics associated with the job (if it is interesting, if it allows autonomy at work, etc.)
2. the dimension of ‘convenience’ determined by the characteristics of the job that give comfort (good working hours, enough time to do one’s job, etc.)
3. *financial* dimension (pay, job security, etc.)
4. the dimension relative to *relations with colleagues* (opportunities to make friends, pleasant and friendly colleagues, etc.)
5. the dimension relative to *career opportunities* (good chances of promotion, transparency and fairness of promotions, etc.)
6. the dimension relative to the *adequacy of resources* (instruments, information, and authority required to do the job well, etc.).
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The result most relevant to our purposes was that, when values and rewards were considered jointly, it was the intrinsic dimension of the job that had the greatest effects in determining overall job satisfaction (the financial dimension came second in order). On interpreting the results, Kalleberg stressed that the variability recorded in the values and rewards attributed to work by individuals is historically characterised by the socio-economic context of the period in which the survey is conducted and, consequently, it is not generalisable.

Kalleberg’s study is also important for the accuracy of its methodology. In fact, studies that concern themselves with the effects HPWS on work well-being tend to simplify their measurement methods. For instance, they measure the level of job satisfaction with the simple reply to the question ‘On a scale from 1 to 5 to what extent are you satisfied with your job?’; or they measure the level of job stress with questions like ‘On average, how much of your free time is taken up with worries about work?’. Or, again, they use only a limited number of explanatory variables. More generally, none of the studies surveyed had a research design which distinguished between values and rewards in job characteristics. These are evidently extreme simplifications, although they are the only ones possible with the data available.

Some recent findings based on a detailed job satisfaction indicator (15 items) show that individual merit pay systems increase the satisfaction of workers in larger firms in which the trade unions are present, but they have no effects in smaller firms (Artz, 2008). In regard to the role of trade unions, moreover, another study by Artz (2010) shows that job satisfaction increases during the first period in which a worker is enrolled with a union, while it decreases in subsequent periods. Only when the worker decides to leave the trade union does his/her job satisfaction begin to grow again, but only after some years. Other empirical studies suggest that attention should be paid to the degree of coverage by collective bargaining, in that the dissatisfaction (four items) of unionised workers can be linked with the fact of working in firms not covered by collective agreements, so that they cannot exploit voice mechanisms (Bryson et al., 2010).

Controversial results also emerge from the study conducted by Macky and Boxall (2007) on a large sample of workers in New Zealand, and which reports a positive and significant association between the number of high performance practices in which the workers are involved and their degree of job satisfaction (16 items), the level of trust in the management, psychological identification with the organisation (affective commitment), and the intention to remain working for the firm (behavioural commitment). However, Macky and Boxall find that the complementarity effects demonstrated in the relations between HPWS and business performance (McDuffie, 1995; Ichniowski et al., 1997) are much weaker in relation to the well-being of workers, and are at times negative. There consequently seem to be limits to the positive effects of HPWS on workers. These limits are probably due to the complexity of a work organisation system in which managerial initiatives in this direction are too numerous. Or they are due to excessive zeal by managements in applying HPWS practices. These may give rise to an intensification of work, producing stress in workers and reducing the overall positive effects (Macky and Boxall, 2007).

In regard to stress, on analysing a representative sample of more than 15,000 workers, Askenazy and Caroli (2010) found that that use of quality norms, job rotation, working hours flexibility, and workforce participation practices (in terms of periodic collective discussions on work organisation) was associated with a greater mental effort that produced psychological stress (12 items) and with the perception of being at greater risk.
of workplace accidents, even if that perception was not confirmed by an effectively higher level of accidents. Askenazy and Caroli also showed that the use of new information and communication technologies (internet, electronic data sharing and e-mail) increased mental effort in that they heightened the difficulties of doing the work properly and the workers’ awareness of the consequences of their errors. But it reduced the risk of accidents and the isolation of workers (thereby favouring the creation of more cooperative work environments). Unfortunately, the authors did not test for possible interactions between the use of new work practices and the use of new technologies in determining such effects.

Kalleberg et al. (2009) analysed a representative sample of Norwegian workers, finding that opportunities to participate in decisions concerning their work had mixed effects on their stress levels (five items); but the positive results seemed to be greater than the negative ones. On the one hand, consistently with the systemic logic of HPWS in which training is necessary for workers to take advantage of opportunities to participate (Appelbaum et al., 2000), factors like autonomy, consultation, and work in autonomous and non-autonomous groups were all positively associated with skills development, for both men and women. On the other hand, however, while consultation and autonomy also had positive effects on stress levels, autonomous group work tended to have negative effects.

A convincing interpretation of the relations among HPWS, stress, and satisfaction attributes a mediator effect to the degree of trust in relations between workers and management (Appelbaum et al., 2000; Innocenti et al., 2011). The research by Appelbaum et al. (2000) investigated the effects of HPWS on the job satisfaction (one item) and the job stress (three items) of around 4,000 American workers. In regard to satisfaction, the results showed that the key components of a HPWS had generally positive effects, while as regards stress they found that the effects were strongly mediated by the degree of trust in management-workers relations; if trust was low, HPWS practices increased stress, if it was high, the stress diminished significantly. Nevertheless, according to Appelbaum (2002, p.135), workers’ satisfaction is not often considered in the design of HPWS: “Today, managers who introduce more participatory work systems emphasize incentives to motivate workers to participate in training and decision making as an important component of an HPWS. Job redesign intended to increase job satisfaction is not a consideration. As a result the positive association between satisfaction and motivation may no longer hold. This may be particularly the case if job stress increase. Alternatively, increased worker autonomy in an HPWS may result in both higher commitment and higher satisfaction”.

Overall, the evidence in regard to the satisfaction and the levels of stress recorded by workers involved in HPWS is not clear-cut. At a general level, one may conclude that the effects of HPWS on the workers are moderately positive, or at most non-existent; it is difficult to find evidence of negative effects. Besides methodological issues, this is due in large part to the paradox that one encounters when studying the effects of HPWS on workers. Stress and anxiety are caused by their greater responsibility in the identification and management of production problems; but this greater responsibility also makes the work less routine, and it increases the intrinsic rewards for workers (Appelbaum, 2002). The workers involved in HPWS, therefore, may register higher levels of satisfaction and greater intrinsic rewards from their work, but at the same time they may be subject to greater anxiety and more intense work rhythms.
4.1.2 Control and discretion

The effects of the HPWS on the control over work and on the discretion exercised by employees in the management of their work are also characterised by inner tensions that make their interpretation rather complex. On the optimistic view, the decentralisation of decision-making that confers greater autonomy on workers in the performance of their jobs (i.e., empowerment) is necessary to achieve the objectives of continuous improvement and to make the production process more responsive to the dynamism of modern markets. By contrast, the critical view considers the new work practices to be instruments mainly employed by managements to increase their control over workers and to dictate times and rhythms for performance of their work (i.e., intensification). In fact, some of the control functions previously exercised by management have now been transferred to workers through, for example, the creation of work groups in which each member checks the performance of colleagues and each group monitors the activities of the other groups. Hence, the degree of control does not diminish; it simply shifts from a vertical dimension (management-workers) to a horizontal one (workers-workers) (Smith, 1997; Sewell, 1998). Sewell (1998) also argues that, in work systems set on team-work, the vertical control continue to exist as well, but it assume the form of surveillance through technologies of production, i.e., in a manner less intrusive than direct bureaucratic control.

The theme of control is connected with job satisfaction and job stress. In psychological analysis, the most important theoretical model used to study the relationship between work and health is the job demand-control model (JDC) (Karasek, 1979). According to the JDC model, two hypotheses can be formulated. The so-called strain hypothesis predicts that the worst reactions in terms of psychological stress and physical health arise in high-strain jobs, that is, ones characterised by high job demand and low job control over own work, while work situations characterised by both high demand and control produce greater learning, motivation and skills development. The buffer hypothesis predicts that job control ‘buffers’ the negative effects of workloads on the degree of psychological stress. The two hypotheses are not mutually exclusive; indeed, it is possible to consider the buffer hypothesis as a specification of the strain hypothesis (Häusser et al., 2010).

A survey of 63 empirical studies published between 1979 and 1997 showed that the strain hypothesis was supported by a substantial number of such studies, albeit with some differences associated with gender (the hypothesis seemed to be valid mainly for men), while the buffer hypothesis was instead supported by around half the studies examined (Van der Doef and Maes, 1999). Moreover, “In a number of studies the moderating effect of job control is only evident for a subpopulation within the sample, for instance for employees who are high in private self-consciousness […], those with an internal locus of control […] or, on the contrary, those with an external locus of control […]. This suggests that personality characteristics may in some cases determine whether employees benefit from high control in their jobs” (p.107). In this sense, besides the simple desire to exercise more or less control over one’s work, an important aspect is how individuals cope with stressful situations, which must be suited to the degree of control foreseen by the job. Hence, if an individual’s personality induces him/her to react to such situations passively, a high degree of job control produces a mismatch between the two variables. Rather than moderating the negative effects of heavy workloads, job control itself
becomes a source of stress. By contrast, if individual’s personality is characterised by a highly active approach to coping with stressful situations, a high degree of job control moderates the negative effects of heavy workloads (de Rijk et al., 1998; Van der Doef and Maes, 1999; Sparks et al., 2001).

The results of the review by Van der Doef and Maes (1999) are confirmed in substance by a subsequent review of Häusser et al. (2010) which takes into account 83 empirical studies published between 1998 and 2007. The authors believed, however, that the empirical weakness of the buffer hypothesis was not due to the scant validity of the hypothesis, but rather to the superficiality of the research designs, which paid little attention to the match between the means used to measure the two dimensions.

This evidence from psychological studies confirms and reinforces the findings of organisational studies concerning the importance of environmental and individual factors in determining the effects of the new management practices on workers. The case studies in the literature show, in fact, that some types of workers may appreciate reconfiguration of the work process in a more orderly and better-managed way. According to this tendency, called the ‘Disciplined Worker Model’, if the result is a better work organisation, the workers may positively evaluate a reaffirmation of managerial power (Geary, 2003). On this view, the workers assume greater responsibility for their work and are able to participate in its organisation. Nevertheless, this does not lead to particularly significant empowerment (as the optimists instead claim) because, at the same time, managerial authority is redefined and re-affirmed. Only rarely does this managerial reaffirmation come about in a crude manner (as the pessimists maintain). The need to gain the consent of the workers, in fact, guarantees both a real increase in the autonomy assigned to workers and a balanced redefinition of managerial power: “Management continues to confront the perennial problem of identifying the apposite balance between consent and control. But nor is it a case of management simply reassembling or juggling existing practices. There is a new dynamic, but one cast within the familiar terrain of management seeking to maintain control by granting employees discretion so that their commitment and creativity may be harnessed, but also restricting this so that this same discretion might not be used in ways which run against managements interests” [Geary, 2003, pp.351–352].

Furthermore, also the institutional context seems to perform an important role in determining the relations between HPWS, discretion and control. Dobbin and Boychuk (1999) showed that, job characteristics remaining equal, workers in Nordic countries had greater discretion than those in other countries. This suggests the existence of a context effect (linked with systems of management, training, bargaining, and unemployment) which should be considered by researchers on new work practices. Along the same lines, Gallie (2003) demonstrated that in countries where governments and social partners gave greater importance to issues concerning the quality of work, workers seemed to enjoy better job quality and more opportunities to participate in corporate decisions compared with workers in countries which had not moved in this direction. However, a recent comparative study on the perception of workers with respect to job quality has shown that theories that look to the institutions for the essential explanation of differences among countries (e.g., varieties of capitalism and power resources) have some validity at the general level, but they are unable to explain the differences to be found in many intrinsic (i.e., to do with content) aspects of job quality (Olsen et al., 2010).
Overall, it seems that in this case, too, it is difficult to reach generalisable conclusions: as Batt and Doellgast (2005, p.155) point out, “there is a wide range of variation in outcomes, which depend importantly on such factors as history, institutional context, and the strategies of employers and unions”. We shall return to this point in the concluding section.

4.2 Economic well-being: wage premiums and job security

The sharing of the firm’s best results with its workforce is also an issue much debated in the literature. Wage premiums and job security are two among the main mutual gains that HPWS can (and must) offer to firms and workers. Wage premiums represent an immediate economic gain for workers, while stable employment is indicative of economic security in the long run.

According to the mainstream view of HPWS, if there is no sharing of higher earnings with the workforce, the high performance organisation of work, at least in its ‘lofty’ and long-period conception, will fail because trust relations between management and workers break down (Brown et al., 1992; Appelbaum et al., 2000; Godard, 2001). The economic well-being of workers is also an argument often used to identify advanced HRM systems among the main causes of the decline in workplace unionisation recorded in large part of the European countries (Handel and Levine, 2004).

However, once again, the evidence is weak and conflicting. Bauer and Bender (2001), on analysing a matched employer-employees sample in Germany, showed that firms which used the new work practices offered wages on average lower than those of firms which did not use flexible practices. Forth and Millward (2004) analysed data from the 1998 Workplace Employee Relations Survey to show that workers in firms adopting HPWS practices received wages on average 8% higher than those of workers with comparable jobs in more traditional firms. In this study, job security emerges as a practice to support other practices. It is also interesting to note that the presence of trade unions, or their participation in wage bargaining, enables workers to obtain higher wages. Handel and Gittleman (2004) and Osterman (2000) studied two different samples of US firms but did not find significant effects on the wages of workers. According to the authors, even when some positive effect did exist, there were reasons to doubt the robustness of the results. Appelbaum et al. (2000) instead reported significant positive effects in two of the three sectors studied.

Handel and Levine (2004) conducted a wide-ranging survey of studies on the effects of HPWS on wages, considering more than 20 of them. It emerged from the survey that while studies on nationally representative samples did not report significant effects, the results of sectoral studies or ones on single firms were more positive. This discordance in the results, according to Handel and Levine, may have been due to the fact that with a narrower focus, unobserved heterogeneity can be better controlled for, and measurement errors are greatly reduced. However, even when the effects are statistically significant, they tend to be moderate and their causality is obscured by the possibility of selection bias. This interpretation is supported by other evidences showing that organisational change is strongly skilled-biased and induces firms not to hire low-skilled workers (Caroli and Van Reenen, 2001).
Two further results of great interest for our purposes here emerge from Handel and Levine’s survey. The first concerns the fact that the average effect of HPWS on wages is positive and ranges between 0% and 5%, while almost all the negative effects are not significant; the second is that HPWS do not seem to produce a wage premium comparable with that of high trade-union power in workplaces, and that they are at most a partial substitute for the decline of that model of industrial relations; in other words, HPWS may be necessary to achieve wage growth, but on their own they are not enough to off-set the decrease in the effects of unionisation.

A follow-up study on Handel and Levine’s survey furnished further interesting results. Analysing the same sample of firms of the previous study (Osterman, 2000), but this time only considering core workers in the manufacturing sector, Osterman (2006) showed that for blue-collars wages were significantly higher in workplaces employing HPWS. High skill levels and the use of computer-based technologies were also variables associated with higher wages (as much of the literature maintains), but, according to Osterman, these factors (skills and technological level) are not the main channel through which work organisation influences wages. The key mechanism seems instead to consist in productivity gains (independently of technological level and skill), which are then shared through group payment systems.

Turning to long-period security, it is quite widely believed that one of the principal characteristics of a workplace identified with HPWS is the certainty of the workers that they will keep their jobs. Long-period security is regarded as essential to obtain the trust of workers and trade unions and their consent to the use of work practices requiring greater commitment than traditional ones (Bonazzi, 1993; Liu et al., 2009). Moreover, the duration of the employment relationship is also crucial from the point of view of the competitive advantages obtainable by the firm (Arthur, 1994; Huselid, 1995; Guthrie, 2001). According to the mainstream view, investments in the training of workers and the experience that they accumulate in the new work organisation are assets that the firm may lose if there are other firms present on the market able to attract its workers.

Once again, the empirical evidence is mixed. Ostermann (2000) showed that the presence of high-performance practices is associated with a higher probability of dismissals for production workers, even in firms recording generally positive occupational balances. Black et al. (2004) found that some HPWS practices were associated with significant personnel reductions, as reported by Osterman (2000), but the outcomes varied according to the practices considered and the unionisation or otherwise of the workplace.

Smith (1997) found that the impacts of HPWS are direct on workers in non-managerial functions and indirect on those in managerial functions; for the latter, occupational uncertainty was one of the main outcomes. Between 1988 and 1995, a period in which, according to Smith, HPWS spread substantially in the USA, 18% of dismissals for which it was possible to identify the job concerned middle managers, who represented between 5% and 8% of the US labour force. Osterman (2000), moreover, found that in firms using at least two practices out of the four considered in 1992, the incidence of dismissals among senior managers was unchanged in 1997, while in firms with fewer than two practices it had increased by 2.2%.

The overall picture emerging from studies on the effects of HPWS on the economic well-being of workers therefore seems one of moderate support for the optimistic position, with positive (but weak) effects in the short period tending to vanish in the long run. In the long period, the positive effects for workers seem to be not so much job
security as the development of skills attractive on the market, that is, an indirect form of secure employment maintenance.

5 Concluding remarks and recommendations

This concluding section dwells on information that emerges from the foregoing survey of the approaches used, and the results obtained, by studies on the effects of HPWS on workers.

The main finding is that HPWS have very mixed effects on the well-being of workers. Of the three positions identified, the ‘sceptical’ one therefore seems most prudent; whilst the universalistic positions, whether optimistic or pessimistic, do not seem consistent with the empirical results. To use the well-known classification of Delery and Doty (1996), this requires adopting a ‘configurational’ approach, given that the results seem to vary, both according to the ways in which practices are adopted and implemented and according to historically determined factors, such as the characteristics of individuals, the firm, and the socio-economic context in which the new practices are introduced (Guest, 2002; Peccei, 2004; Macky and Boxall, 2007). Nevertheless, the question of the effects of HPWS on workers has to date been addressed mainly by focusing on the practices and mechanisms of management, without considering the characteristics and the contextual conditions that give meaning to those practices and mechanisms (Thompson and Van den Broek, 2010).

One of the main methodological shortcomings of current research is that it uses indicators at times too simplified to represent such complex concepts as the well-being and satisfaction (or stress) of workers. Moreover, restricting the explanatory variables to the characteristics of the work practices in which the worker is involved means losing sight of both the values that the individual attributes to the various aspects of his/her job (economic, environmental, relational, in regard to content, etc.) and the rewards that the worker gains from his/her for each of these aspects. For example, if it is true that levels of satisfaction vary according to age (Kalleberg and Loscocco, 1983), it can be hypothesised that also organisational changes to high-performance solutions have differing effects according to age and work experience. It is therefore advisable to start from the personal dimension of workers, using broader and more composite concepts and measurements yielding multidimensional definitions of the phenomena to be studied. In this regard, more than 30 years since its publication, Kalleberg’s (1977) study, which first drew the distinction between values and rewards, is still an important referent for research design.

Another recommendation concerns the development of interdisciplinary studies which draw on the findings of psychologists of work and organisations. This holds both because of the just-mentioned need for more complete definitions of the variables to explain, and because the survey has also shown that impacts of HPWS on the well-being of workers are mediated, amongst other things, by the psychological characteristics of those workers. The above survey had insufficient space to conduct detailed analysis of the contributions by psychologists in this regard; it did no more than describe the JDC Model, which has an indubitably important role in the psychological literature but certainly does not exhaust the potential contribution of studies in that field. To gain thorough understanding of the relations between HPWS and the well-being of workers, it is desirable that future studies should integrate not only economic and organisational approaches but also psychological ones into a single research design. As Thompson and
Van den Broek (2010) point out, joint consideration of the first and second aspect suggests the more general recommendation of developing comparative, multi-level, and multi-method analysis in order to remedy the limited generalisability of the analyses conducted to date.

A final consideration concerns the promising but still unexplored area of relations between HRM and life satisfaction/well-being, analysis of which goes beyond the organisational dimension and considers the role of advanced systems of human resources management and organisation in determining the well-being and overall satisfaction of workers. This topic is significant for two main reasons: firstly, an approach of this kind would induce studies on SHRM to espouse a more ‘balanced’ view of organisational performance (which also considers the social impacts of the policies and practices adopted) (Paauwe and Boselie, 2005; Boxall and Purcell, 2003); on the other, even on assuming a strictly managerial point of view, this approach would make it possible to understand and to distinguish between practices that act on work satisfaction/well-being and practices that act on life satisfaction/well-being. One of the few existing studies on this subject has found, for example, that job security – widely regarded as essential for the satisfaction of workers in HPWS – is an element which pertains to the overall dimension of a person’s well-being, not to his/her current occupation (Guest, 2002). In this case, investments in managerial policies centred on job security seem of little use in increasing job satisfaction. Instead, it would be more efficacious to invest in the development of skills useful to the firm and which give workers high employability in the labour market.

References


