



Target-based teamworking: Groups, work and interdependence in the UK civil service

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ABSTRACT

In terms of its implications for work and production, studies of teamworking have generally relied on concepts of autonomy and flexibility. An in-depth, qualitative case study of the UK Inland Revenue reveals a form of teamworking in which both autonomy and flexibility play little part. It is argued that teamworking in this case is best conceptualized by giving greater weight to interdependence. In particular, teamworking in the Inland Revenue works through the outcome interdependence engendered by the emphasis on the team's work targets. This form of teamworking is given the name 'target-based teamworking'. Certain aspects of the nature of production appear to encourage this form of teamworking. More generally, the case promotes interdependence as a means of understanding teamworking, and suggests that the key to this understanding is an analysis of the relationship between interdependence and autonomy.

KEYWORDS

autonomy ■ case study ■ interdependence ■ public sector ■ targets ■ teamworking

Teamworking, autonomy and interdependence

Two puzzles

We begin this article with two puzzles: one conceptual, the other empirical. The first puzzle concerns the basic question of how we define teamworking

in its current manifestation. In particular, how do we overcome what Benders and Van Hootegeem (1999: 618) call 'the issue of autonomy'? How, in other words, do we reconcile a definition of teamworking based on autonomy with the existence of team-based forms of work organization in which autonomy is largely absent?

The second, empirical, puzzle concerns the results of research we undertook on the operation of teamworking in the UK's tax assessment and collection service, the Inland Revenue. Teamworking was recognized by employees as representing a significant change in the way in which their work was organized. It was also seen by management as being effective in terms of performance. At the same time, however, teamworking in the Inland Revenue appeared to lack a number of the characteristics generally associated with this form of work organization. Its introduction had seen little increase in employee flexibility and – in parallel to our first puzzle – there had been little in the way of enhanced employee autonomy.

This article suggests that the answers to these two puzzles lie in the same place. An understanding of teamworking in the Inland Revenue, we argue, can best be developed by emphasizing interdependence rather than autonomy. More specifically, use of the idea of outcome interdependence allows us to identify what we call 'target-based' teamworking. This, in turn, allows us to suggest that in addressing 'the issue of autonomy', some advantage might be gained by looking not just at autonomy but also at how autonomy and interdependence interact.

The rest of the article's introductory section will focus on the first of our two puzzles. We shall see how a conception of teamworking based on autonomy excludes from consideration a number of team-based forms of work organization, perhaps the most important of which are those associated with Japanese-style 'lean' production. A number of ways of addressing this issue have been put forward, but each of them, we argue, fails to resolve it satisfactorily. It is in this context that we examine the concept of interdependence. This examination is structured around two main issues: the relationship between task and outcome interdependence, and the relationship between interdependence and autonomy.

In the body of the article we see how our second, empirical, puzzle arose. We shall see that teamworking in the Inland Revenue takes on a particular form. The shift from 'individual allocations' to 'group allocations' of work was associated with no great enhancement of employee autonomy and no systematic shift in the direction of employee flexibility. The application of concepts of interdependence allows us to interpret these changes and, with that, to develop the idea of target-based teamworking.

In the article's final section we return to the issues raised in the

introduction. There is no claim that target-based teamworking will or should arise in all circumstances, and we identify some of the contingent factors that appear to be important in our case study. Having shown how our second puzzle might be resolved by having teamworking in the Inland Revenue understood in terms of the interdependencies it engenders, we examine what our case implies for the relationship between autonomy and interdependence. This allows us to say something about our first, conceptual, puzzle. An understanding of teamworking, we argue, might benefit from seeing it not in terms of autonomy alone but in terms of how autonomy and interdependence interact.

Teamworking and autonomy

Teamworking has emerged in recent years as one of the most important ways in which work is being re-organized. The most recent Workplace Employee Relations Survey, for example, found that 65 percent of UK workplaces reported the use of team-based working for at least some of their employees (Cully et al., 1999). Although teamworking is an idea with a long history (see Buchanan, 2000), we follow Procter and Mueller (2000: 3) here in arguing that in its current manifestation ‘its chief distinguishing characteristic is that it is in some sense “strategic”.’ Rather than the design of work having as its focus the well-being of employees, it has come to be concerned with the way in which organizations deal with fundamental questions regarding their customers and competitors (Buchanan, 1994).

Seen from this perspective, the organization of work under teamworking is centred on two concepts: flexibility and autonomy. Flexibility follows to some degree from the basis on which teams are established. Because teams will often have responsibility for a particular product line or a particular group of customers, the relationship between teamworking and flexibility can be a close one. Reorganizing production on this basis has the effect – indeed, often, the intention – of making functional specialization difficult to maintain. In a manufacturing setting the introduction of cellular production offers a good example of the application of these principles (Procter et al., 1995).

For the purposes of this article it is autonomy rather than flexibility that we want to emphasize. In any case, it can plausibly be argued that autonomy is the concept most closely associated with teamworking. According to Sinclair (1992: 613), ‘team theorists almost inexorably end up looking for decision-making as the predominant group work indicator’. To understand the theoretical underpinnings of this association we need to look at sociotechnical systems (STS) theory and, in particular, at its concept of the

autonomous work group (AWG). As Manz (1992: 1121) argues, the 'joint optimization' of the social and technical aspects of the organization of work usually involves a 'shift in focus from individual to group methods'. Underlying this is 'the view that a group can more effectively apply its resources to address work condition variances within the group than can individual employees working separately' (Manz, 1992: 1121).

Although these ideas provide us with a theoretical understanding of teamworking, this is not the same thing as saying that teamworking in practice is always the result of their application. Certainly – although the linkage may sometimes be no more than superficial (Thompson & Wallace, 1996) – we can see cases in which STS theory has played a direct role in the introduction of teamworking (Benders & Van Hooitegem, 1999). There are, however, a number of sources from which the rationale for teamworking might emerge. Indeed, Buchanan (2000) shows how the early development of STS theory in the 1950s was itself based on pre-existing arrangements of work which had emerged spontaneously in such settings as UK coal mines and Indian textile mills. The more recent re-emergence of autonomous teams has taken place under a variety of labels (Benders & Van Hooitegem, 1999). In the UK, for example, cellular manufacturing was one of the most important channels through which teamworking was introduced in the 1980s and 1990s (Benders & Van Hooitegem, 1999). More recently we have seen customer- or product-focused teams emerging as part of such developments as Business Process Reengineering (Hammer & Champy, 1993) and 'strategic segmentation' (Batt, 2000). In the same vein, Mueller et al. (2000) identify a number of discrete 'trajectories' for teamworking, among which STS theory lines up alongside 'humanization of work' and 'employee involvement'.

Indeed, in order to understand fully the strength of the relationship between teamworking and autonomy, we can approach it from the opposite direction and see teamworking as part of the broader movement towards the greater direct involvement of employees in organizational decision-making. Whether we call this direct participation (Marchington & Wilkinson, 2000), employee involvement (Marchington, 2000) or empowerment (Wilkinson, 1998), the key argument is that the increasing volatility of markets and the acceleration of technological change make necessary an enhanced role for employees in decisions about how their work is organized. This can take the form of the involvement of individual employees but increasingly it has meant a greater degree of autonomy at the level of the team. Marchington (2000), for example, explicitly considers teamworking as an extension of existing forms of employee involvement; and in Wilkinson's (1998) classification of forms of empowerment, 'task autonomy' is expected to involve the restructuring of work around semi-autonomous teams.

We can go a stage further than this by looking at both teamworking and involvement as important parts of high-performance work systems (HPWSs). For Boxall and Purcell (2003: 103) these new systems' attempts to foster employee commitment are 'most usually achieved through the extensive adoption of teamworking as the fundamental building block of the organization'. Whitfield and Poole (1997) see employee involvement as characteristic of HPWSs, with teamworking being a major part of this. Similarly, Appelbaum and Batt (1994) identify 'American Team Production' as one of the two major types of HPWS, its chief distinguishing feature being its emphasis on worker participation in decision-making.

It is at this point, however, that we encounter our first puzzle: Benders and Van Hooetegem's (1999) 'issue of autonomy'. The issue is that a reliance on autonomy in definitions of teamworking means that some forms of work organization that are generally thought of as being team-based are excluded from consideration. In particular, we are thinking of the groups that form part of the archetypal Japanese system of 'lean' production. Although Womack et al. (1990: 99) claimed that 'in the end, it is the dynamic work team that emerges as the heart of the lean factory', the members of such teams do not have the autonomy possessed – at least in principle – by members of an AWG (Benders & Van Hooetegem, 1999).

There are a number of ways in which this issue can be approached. One line of argument is that we should include within a team's autonomy the discretion exercised by the team leader (Benders & Van Hooetegem, 1999; see also Delbridge et al., 2000). Although this allows the Japanese teams to be considered autonomous, it does so only by stretching the conception of autonomy almost to breaking point. A second possibility, and the one favoured by Benders and Van Hooetegem (1999), is a case-by-case approach, in which teamworking is defined according to the research questions being addressed. Although this has the attraction of avoiding too restrictive a definition, the danger is of 'teams' or 'teamworking' coming to have almost no meaning at all.

A third possibility is to 'solve the issue of autonomy by considering it as a variable rather than as a defining characteristic' (Benders & Van Hooetegem, 1999: 618). This is the position taken by, for example, Mueller (1994). As Benders and Van Hooetegem (1999) point out, although Mueller's definition of a team has the merit of encompassing both Japanese teams and AWGs, it is able to do so only by also covering a variety of forms of work organization that many would find it difficult to regard as teamworking. At the same time, in trying to avoid being *too* vague, Mueller's definition includes elements (e.g. the stricture that a team should have between 8 and 15 members) that appear arbitrary and restrictive.

It is in any case very difficult to make a clear distinction between autonomy-as-variable and autonomy-as-defining-characteristic. For one thing, if autonomy is disregarded as the defining characteristic, then, to fulfil this function, we are left with little more than the size of the group. Even if we treat autonomy as a variable, we still have a situation in which groups with greater degrees of autonomy are seen as being stronger or more pure forms of team than those in which autonomy is more limited. Koch and Buhl (2001), for example, distinguish between 'strong' and 'weak' teams, with the latter characterized by 'little development of autonomy and decision latitude' (p. 165). A similar approach is implicit in the UK WERS survey (Cully et al., 1999), which delineates a number of different forms of teamworking according to the depth of team members' decision-making responsibility. Likewise, the pan-European EPOC survey (Benders et al., 2001) identifies three forms of teamworking on the basis of a metric that combines the proportion of employees working in groups with a measure of the extent of group decision-making.

The danger, of course, is that it becomes very difficult to distinguish between teams and 'non-teams'. If we accept that any group has *some* degree of decision-making autonomy, however small, then at what point do we say that it becomes a team? On the basis of the 'strongest' definitions in the 1998 WERS and the 1995/96 EPOC survey, only 3 and 4 percent of workplaces respectively could be said to have teamworking (Benders et al., 2001; Cully et al., 1999). The rarity of such a phenomenon would seem to make it barely worth studying.

There are two things we can do to try and extricate ourselves from this apparently debilitating situation. First, at a general level, we must remind ourselves about what we are looking at. Our concern is not with how teams of any kind operate in any set of circumstances. We are looking at contemporary employing organizations for which, as we have argued, teamworking is a management strategy for the organization of work, the aim of which is to improve organizational performance. 'Teams,' as Thompson and Wallace (1996: 105) express it, 'are an instrument of redesign, not ends in themselves.' By defining our area of concern in this way we are going some way towards the case-by-case approach advocated by Benders and Van Hooetegem (1999). It might also be claimed that this or any other delimitation is essentially arbitrary in nature. Although we have some sympathy for both these points, we would argue that it is necessary to make *some* degree of delimitation in what we understand by teamworking. The general concept we are using here, moreover, is wide enough to get us round the 'issue of autonomy' – by being able to encompass both teams that are based on autonomy and those that are not – while at the same time being

narrow enough to carry significant meaning. Stressing the 'strategic' aspect of teamworking also helps us avoid the question of having to say at what point a 'group' becomes a 'team'. Put crudely, we are concerned not so much with *how much*, say, autonomy teams might have, as with the motivations for and effects of teams being given *more* autonomy.

The second thing we can do is to look at the principles upon which the managerial strategy of teamworking is based. Here we follow Parker et al.'s (2001) review of research on work design. This calls for a more systematic treatment of teamworking, one that moves away from an over-reliance on such 'traditional' (p. 422) concerns as autonomy. Such an approach would have 'a broader set of work characteristics to draw from' and would recognize that 'the relative salience of particular work characteristics will depend on the context' (p. 424).

It is these two calls that we take up in this article. As we have noted, our study of the Inland Revenue left us with a puzzle. It revealed a form of teamworking in which autonomy and flexibility played little part. As we shall see, an understanding of the operation of teamworking in this setting involves a much greater emphasis being placed on concepts of interdependence. Before we can present our case study, therefore, it is to the idea of interdependence that we must turn.

Teamworking and interdependence

A useful starting point is provided by James Thompson's (1967) *Organizations in action*, in which he identifies three forms of interdependence: pooled, sequential and reciprocal. Pooled interdependence refers to a situation in which each part of the organization makes a discrete contribution to output: interdependence exists in the sense that 'unless each performs adequately, the total organization is jeopardized' (p. 54). For sequential interdependence to exist, the outputs of one part of the organization must be the inputs of another; whereas reciprocal interdependence means that this sequential interdependence is not simply all one way: 'the outputs of each become inputs for the others' (p. 55). The three forms of interdependence are thus to be understood as ascending in order of complexity, with sequential interdependence necessarily including pooled, and reciprocal necessarily including both pooled and sequential.

Although these forms of interdependence were applied originally to the relationship between different parts of the organization, they can quite easily be extended to cover the relationship between individual jobs. In the case of pooled interdependence, individual workers would work in parallel, each doing basically the same job; sequential interdependence would most easily

be conceptualized in terms of the relationship between workers on an assembly line; and reciprocal interdependence would be what members of a work team would experience.

When applied to issues of work organization, we can break down the idea of interdependence in another way: into task and outcome interdependence. Task interdependence can, in turn, be divided into its non-discretionary and discretionary elements. Thus in order to, say, build a car or treat a patient, certain tasks must be performed and some must be performed in a certain order, but there is also some flexibility in how these tasks are allocated both between groups and, within groups, between individuals. Wageman (1995) captures some of the relationship between the non-discretionary and the discretionary elements of task interdependence in her distinction between task inputs and the process of execution. What complicates matters is that in the process of execution, discretion can be exercised either by management or in the behaviour of team members themselves.

The second main form of interdependence in work, outcome interdependence, can be defined as 'the degree to which significant outcomes an individual receives depend on the performance of others' (Wageman, 1995: 147). This also can be divided into two: goal and reward. The former covers such things as group production targets; the latter, financial reward in its various forms.

The outcome/task distinction and Thompson's classification map onto each other quite neatly. Pooled interdependence might be thought of as representing a situation in which only outcome interdependence applies: the interdependence lies in the simple addition of individual efforts. Sequential interdependence can then be seen as adding a measure of task interdependence to this situation; and reciprocal interdependence, as making this task interdependence more complex. Important here is that the more complex the form of interdependence, the more difficult and more costly it is to coordinate and control. The introduction of teamworking, in introducing reciprocal interdependence to a situation of sequential or even pooled interdependence, would, from a management point of view, have to be capable of generating compensatory benefits.

In much of the research applying interdependence to issues of work organization, it is task rather than outcome interdependence that has been the focus of attention. With job design theory dominated from the 1970s onwards by the Job Characteristics Model, attempts were made to incorporate interdependence into it. Kiggundu (1981, 1983) approached this in a direct fashion by proposing that task interdependence be included in the model as a key job characteristic. Although his own test of this theory offered him some encouragement, his findings relate primarily to the design of

individual jobs (Kiggundu, 1983), and it is only more recently that this concern with task interdependence has been carried over into research on team-based forms of work organization. In this context Sprigg et al. (2000) identified task interdependence as important in determining the effects of work design on employee strain and satisfaction. Looking at two different production processes in the same manufacturing company, they found that where interdependence was low, the introduction of teamworking was associated with lower levels of satisfaction and higher levels of strain.

Other research in team-based settings has been more concerned with outcome interdependence and, in particular, with its relationship with task interdependence. Saavedra et al. (1993) combined these two forms with feedback interdependence in order to generate what they call 'complex' interdependence. Their experiment-based approach did provide some support for the idea that task and outcome interdependence should be congruent with each other. Given the way we have characterized teamworking earlier in this article, however, we would support Shea and Guzzo (1987a: 351) in their contention that insight is better generated through studies of 'natural' work settings.

On the question of the relationship between task and outcome interdependence, there are two bodies of work that are of particular interest. The first is Wageman's (1995) examination of the impact of introducing three different levels of outcome interdependence (individual-based reward, group-based reward or some 'hybrid' of the two) to each of a number of groups of Xerox service technicians exhibiting different levels of task interdependence (again, individual, group or hybrid). This was a wide-ranging study but two of her conclusions are of especial interest. The first is that, when the groups were assessed in terms of performance, there was no simple congruency between task and outcome interdependence. The worst performers were those groups with hybrid outcomes or tasks, but even those with hybrid tasks *and* outcomes were out-performed by groups that combined, say, individual-based tasks with group-based outcomes.

Wageman's second conclusion concerned the question of whether outcome and task interdependence, although conceptually quite separate, are in fact experienced as such. Her findings suggested that whereas task interdependence affected employees' experienced outcome interdependence, the reverse was not the case. For Wageman, therefore, it is task interdependence that is the dominant force in the relationship. 'The pivot . . .,' she argues (1995: 173), 'is how the work is structured . . . it is most essential to create real task interdependence and then support the task design with interdependent rewards.'

The second body of work that addresses the relationship between task

and outcome interdependence is that of Shea and Guzzo (1987a, 1987b). In contrast to Wageman's findings they place the emphasis very much on the role played by outcome interdependence, which, in their model, is able to have a direct impact on group effectiveness. Task interdependence can be of effect only indirectly, through either outcome interdependence or 'potency', the collective belief of the group that it can be effective.

Shea and Guzzo's (1987b) own testing of their model gives it only limited support. Using survey evidence to examine the impact of the introduction of a team bonus for sales teams in a large retail company, they found a clear link between outcome interdependence and team members' own evaluation of customer service. However, when sales was taken as the measure of effectiveness, it could not be linked with the hypothesized variables. What most surprised the researchers was the degree of change that team members were able themselves to effect in task interdependence. 'We regard task interdependence as malleable,' argue Shea and Guzzo (1987b: 30), 'especially when the group's work is not highly constrained by technology'. In contrast to Wageman, they conclude that managers should attend to the issue of outcome interdependence and should leave to the group members the development of patterns of task interdependence.

This last point leads us to our final issue concerning interdependence: its relationship with autonomy. The most explicit attempt to deal with this issue is provided by Liden et al. (1997), who look at task interdependence as a moderator of the relationship between group autonomy and performance. On the basis of a survey of work groups in two US organizations, their findings were that where interdependence was high, high levels of autonomy were associated with high levels of performance, but when interdependence was low, high levels of autonomy were associated with low levels of performance. Thus by taking interdependence into account, they argued, sense could be made of previous mixed findings on the relationship between autonomy and performance.

This review of the literature on interdependence provides us with a framework within which we can attempt to resolve the two puzzles with which we began this article. Taking the second puzzle first, there are two ways in which using concepts of interdependence allows us to interpret the operation of teamworking in the Inland Revenue. First, as we shall see in the course of the article, the basic concepts of interdependence are extremely useful in developing an understanding of the form teamworking takes in this case. Second, looking at the case in this way allows us to develop insights into the key issues we have just identified: the relationship between task and outcome interdependence and the relationship between interdependence and autonomy. This last point in turn leads us back to the first of our original

puzzles. How we might address the 'issue of autonomy' is by shifting the emphasis from autonomy itself to the relationship between autonomy and interdependence.

The case study: The Inland Revenue

The Inland Revenue

The Inland Revenue is the UK's tax assessment and collection department. At the time this research was undertaken it employed over 52,000 people. Its main operating unit was the district office, of which there were between 500 and 600 spread across the country. The size of office varied from around 50–60 staff up to around 500. Under a programme of organizational restructuring, both the number of staff and the number of district offices were in decline.

Under the Inland Revenue's grading system, staff are placed in one of five pay bands, A to E, with A being the highest. Within the district offices, the jobs and responsibilities associated with Band E staff – divided between E1 and E2 (accounting for 34 percent and 27 percent of staff respectively in 1997) – and Band D staff (22 percent) are as follows:

- *Revenue Assistant (RA) (Band E2)*: work at this level is made up of basic clerical tasks such as receiving mail, record-keeping and sorting and filing documents.
- *Revenue Officer (RO) (E1)*: ROs are concerned with the routine calculation and collection of tax. They would also be the point of contact for members of the public.
- *Revenue Executive (RE) (D)*: REs deal with more complex tax cases and provide technical support to ROs and REs.

The research project

In order to undertake the research, access to six district offices was negotiated through an initial contact in the Inland Revenue's central human resources division (HRD). The offices were chosen by the HRD on the basis of their providing a range of sizes, types and experiences of teamworking. Over the period December 1998 to February 1999 one or both of the researchers spent two days in each office, carrying out a series of hour-long, semi-structured interviews. Although the nature of the research entailed some degree of variation, the interviews were structured around the following

topic areas: the understanding of teamworking, the reasons for its introduction, the nature of work under teamworking, the nature of management, the organizational infrastructure, and the success of teamworking. The interviewees were chosen by the researchers' point of contact within each of the offices, who was asked to provide people from a range of functions, grades and points of view. A total of 74 people were interviewed in the offices, a figure that includes 23 Band D employees, 27 Band E1 and 8 Band E2. In addition, interviews were carried out with members of the HRD and training office. The researchers were also given access to a wide range of official documentation – strategy documents, organizational charts, internal memoranda, etc.

Teamworking in the Inland Revenue: Background and objectives

We observed in our introduction that teamworking has increasingly come to be associated with organizations' strategic objectives, and this was certainly the case in the Inland Revenue. At a general level it was seen as part of the move to make the Inland Revenue a more 'customer-driven' or business-like organization. More specifically, teamworking was inextricably bound up with two important organizational changes. The first of these was the introduction of the 'self-assessment' (SA) of tax liability for a large number of taxpayers in 1997/98. Throughout the period of SA's introduction, the move to teamworking was a key component of recommendations made by central management to those working in the district offices.

Although many of our interviewees associated SA and teamworking with each other, there was not a clear and unified view on the nature of this link. One view was that it was simply the scale and complexity of change that made it difficult to continue to organize work on an individualized basis. Teamworking was thus seen as offering the organizational flexibility necessary to effect so important a change. A more cynical view was that teamworking was merely a way of getting increasing volumes of work from declining numbers of staff. In common with other areas of the public sector, the Inland Revenue was under constant pressure to produce efficiency gains. Allocating work to groups rather than to individuals not only made some of this intensification less obvious, but it provided the means by which it could more easily be extended: 'it just seems to be a very backdoor way of getting us to take on more work without us really realizing it,' said one RO.

The second important organizational change was the process of 'delayering' that had been introduced a couple of years before teamworking. One layer of management within the district offices had been removed completely, the objective being that there should be no more than one layer

between the head of the office and anyone else within it. This carried with it fundamental implications for the role of what was called the front-line manager or FLM (generally a Band D employee), who now operated as this sole intermediary level. Not only was the level of responsibility of FLMs thereby greatly enhanced, but they were also expected to embody a change towards a less directive and more facilitative style of management.

These strategic objectives and structural changes were accompanied by direct attempts to engender a culture of teamworking in the Inland Revenue. Prominent among these was the dissemination by the HRD of a team development pack, a training package consisting of eight modules designed to take teams through various stages of development. The use of the team development pack was at the discretion of the head of each district office, and, in the offices visited by the researchers, either the package had not been used at all or it had been abandoned after two or three modules. Overall it appeared to have had little impact. 'We drew up a team charter,' said one RO. 'I don't know whatever happened to it. I've never seen it since.' Although time pressures were cited in defence of this failure, it also reflected a widespread scepticism about what were considered to be the 'softer' aspects of teamworking. One interviewee dismissed the team development pack as 'party games'; another called it a 'criminal waste of taxpayers' money'.

Teamworking in the Inland Revenue

From individual to group allocations

We must first of all establish what precisely was meant by teamworking in the Inland Revenue. In essence, as one RO expressed it, 'it is not having your own individual work; it is having work which belongs to the team, and then doing it as part of the team'. According to two other ROs:

... you just all work from the one pot instead of having your own little pots.

You are looking at a whole cake instead of just the slices.

And for one member of the central HRD:

... instead of each having your own bucket of work, you just put a bigger bucket in the middle and people go and help themselves as and when they're ready.

Whether expressed in terms of pots, cakes or buckets, what team-working meant was a shift from 'individual allocations' to 'group allocations' of work. Under the former, each RO had been allocated a certain set of taxpayers, usually on the basis of the taxpayer's surname. One person would take A-E, the next F-J, and so on. The individual would then take responsibility for the standard processing of all work associated with these taxpayers. Under the new system of teamworking, allocations of taxpayers were made not to individuals but to groups of ROs. Thus a group of, say, five or six ROs would be jointly responsible for an allocation containing, for the sake of example, taxpayers with surnames beginning with letter A-M.

This move from individual to group or team allocations was a fundamental change. Individual allocations had provided a strong sense of identity and had often been jealously guarded: 'if anybody tried to take my allocation of work off me,' said one Band D employee, 'I'd have done murder for it.' But an attachment to individual allocations was not just a question of unthinking resistance to change. It was widely held among interviewees that the system had offered advantages from the point of view of customer service. Taxpayers had an identifiable point of contact with the Inland Revenue, and this point of contact had a thorough knowledge of them and their case. In the words of one RO:

... you had pride in your work. It was your work and you had continuity of dealing with people ... And they knew you were dealing with it, you dealt with it for a length of time and you got to build a relationship with the person you were dealing with.

The system of individual allocation had not been without its disadvantages. Many of those interviewed explained how their work would build up when they were away on holiday. More generally, others associated individual allocations with pressure and isolation. One FLM said:

... it was really each man for himself. It was rather a secretive thing as well, that individuals on their own allocation work would not necessarily know what other people's work position was. There would be lots of, 'Psst, have you heard? Such-and-such, she's got fifty more pieces of post than me,' that sort of thing.

Whatever the attitude taken towards it, we can perhaps best understand the shift from individual to group allocations as the replacement of pooled by reciprocal interdependence. With individual allocations, interdependence arises simply from the adding together of each employee's discrete inputs.

What teamworking does, in its introduction of group allocations of work, is to open up the possibility of making the relationship between employees much more complex. To examine the different forms this took we turn now to the question of how the work of a team was divided between its members.

Employee autonomy in the division of work

As we observed earlier, a corollary of teamworking in the Inland Revenue was the transition to a more facilitative style of management on the part of the FLMs. This meant that it was up to the group members – in consultation with their FLM – to decide how their allocation should be worked. In practice, the role of the FLM in this process was often a very limited one. This was in part due to the change in management style, but FLM involvement was also curtailed by the amount of administrative work their new role required of them. ‘I assume they [the FLMs] are working behind the scenes,’ said one team member, ‘doing whatever the managers do’.

It is thus here that we see the introduction of the limited degree of autonomy that the move to teamworking involved. Capturing our earlier distinction between task inputs and the process of execution, there was some degree of discretion over the extent of interdependence, and, at least in part, this discretion was exercised by the workers themselves. One possibility was that the team members would use this discretion to revert to a system in which they each had an individual allocation of taxpayers. One RO described her experiences:

... the work was literally split up like it was before teamworking came in. I would actually deal with everybody's name that began from A–D ... and so on and so forth.

Although in theory such an allocation of work was possible under the new system, our own investigations suggested that recidivism of this nature was very rare.

At the other end of the spectrum, a second possibility was that the group allocation would be divided so that team members were each dealing, not with certain taxpayers, but with certain types of work. In Thompson's (1967) terms, this move from individual allocations to functional specialization would be seen as the replacement of pooled interdependence by sequential interdependence. From the point of view of the FLMs, some degree of specialization was welcomed on the grounds of efficiency. Somewhat paradoxically, it could also be seen as a way of retaining some of the benefits of individual allocations. According to one FLM:

... they've got something they're responsible for, which is what they lost when they lost the allocations that we used to have ... and most people do like to have something to call their own, don't they?

Overall, however, the degree of functional specialization appeared to be quite limited. Many aspects of work in the Inland Revenue had to be undertaken at a certain time of year, and thus did not lend themselves to being dealt with in this way. For the most part, functional specialization related to tasks that constituted only a small proportion of both the group's and the individual's work. One RO said:

... we get things like returned cheques, and one particular person handles all those, so you know there is somebody to give them to that knows just exactly what to do to get it dealt with as fast as they can.

In looking at the way in which group allocations were divided up, therefore, both individual allocations and functional specialization existed largely as conceptual possibilities. In between these two extremes, what we observed in operation was a whole range of more rough-and-ready means of dividing up work. One RO described how their group started off teamworking by each team member taking a folder of correspondence, working through it, taking another, and so on. Problems arose, however, 'when you realize that the person sitting next to you has only done two bits that day and you've done, like, 30'. This apparently straightforward system – working on what might be called the 'cab-rank' principle – could thus be quite difficult to operate effectively. An RO described the difficulties:

... we worked everything as it came in. You went to the post and got 10 pieces of post-work done, then you went back and got more. So everything was very random, there was not a lot of continuity ... I don't think it worked particularly well.

What the move away from individual allocations implied was that the work associated with a particular taxpayer would now be done by different people at different times. The work relationships between members of the group were now much more complex: rather than the pooled interdependence of individual allocations we have a system based on reciprocal interdependence. This brought with it a number of issues. The problems in picking up a case from a fellow team member could be a source of dissatisfaction. One RO put it as follows:

... the frustrating part for me is you open a file and things have gone on before and you have sit there and think, 'What on earth has been going on?', because it's not always easy to follow the way other people work.

That the case would then be passed on to someone else, moreover, meant that it was unlikely that any employee would gain the satisfaction from seeing it worked through in its entirety. According to an FLM:

... you could pick up a really grotty case, and you could spend two days doing it, and you could write out, a reply would come in and you'd never see it again – Fred Bloggs next door would handle it. So you've done all that work, you've put all that effort in, the reply might just be, 'Thanks very much for that. Yes, I agree your calculations', but unless Fred Bloggs shows it to you and says, 'They've agreed, that's a good bit of work', you're never going to know.

The overall effect, it was argued, was that the taxpayer was likely to receive a poorer service. In the words of one RO:

... the taxpayer could have one of six people handling his case. He could ring up one day and someone will say, 'Oh, I don't know anything about you' ... If you can be straight on the ball, because you know the case ... to me it's a far more efficient service.

We can thus see the introduction of teamworking in the Inland Revenue as being a move to a more complex and in some ways more costly form of work organization. So far, however, we have looked only at the work of the ROs. In order to appreciate the full implications of teamworking, we need also to look at their relationship with other groups of workers.

Employee flexibility in multifunction/multiband teams

Although the concept of teamworking in the Inland Revenue was centred on the move of the ROs to group allocations of work, a second important intention was that teams would be 'multi-process' or 'multi-functional'. In line with the broader strategic objectives we outlined earlier, there would, in short, be an element of task flexibility. Thus, as well as ROs, teams would contain both RAs, whose work was of a very simple clerical nature, and REs, who dealt with the more difficult and technical aspects of cases. Matters were complicated by the fact that task flexibility in the Inland Revenue involved

individuals' taking on work not so much in different areas as at different levels of responsibility. What might be described as multiprocess or multifunctional teams could also be seen – and were also referred to – as multiband or multigrade ones. Flexibility was thus of a 'vertical' rather than a 'horizontal' nature.

Even a limited degree of flexibility proved difficult to achieve in these circumstances. Although in a number of the offices the ending of individual allocations was marked by a formal attempt to institute these multiband teams, what we observed in practice was a move away from this ideal-type. In one office, Office X, there was resistance to the idea that an individual's identification with their team should to some degree replace their identification with their grade. As a result of these considerations, changes were introduced in the way teamworking was structured. Rather than having four REs on each of six teams, the REs as a whole were constituted into a single group. 'That hasn't in any way changed the support that those REs give to the ROs and the RAs . . .' said one manager in the office, 'It's just that they have got their own identity back again and they feel a lot happier'. With the RAs reconstituted in a similar way, this left teamworking confined to the RO grade.

In a second office, Office Y, the formal introduction of multiband teams had seen only a very slight blurring of distinctions between the work of the different grades. On the whole, grade distinctions were retained: 'it's just the RAs doing the RA jobs and the ROs doing the RO jobs,' said one RA, 'and they are sort of clonked together'. Many employees found it difficult to describe where the boundaries of their own team lay. One RO described the position in their team:

There are nine people in [my team] at the moment. Five are at RO level and four at RE level. We've got two Revenue Assistants which are supposed to be with our team but because they don't sit with us at all they are not really attached to us. Only the ROs and REs sit together at the moment.

In this case even the ROs and the REs were separate from each other: 'all the REs work together and all the ROs work together, so we are divided a bit.' Although at a formal level the idea of the multiband team had been retained, the *de facto* situation in Office Y was not far from the formal reversion to an essentially grade-based system that we had observed in Office X.

It is at this point that we can see the emergence of the empirical puzzle described in the introduction to this article. Employees recognized that the shift from individual allocations to group allocations was a significant change

in the way in which their work was organized. At the same time, autonomy had been extended only so far as to cover how work was to be allocated within each team; and, despite management intentions, there had been little systematic increase in employee flexibility. In order to understand what was most important in the operation of teamworking in the Inland Revenue, we turn now to a consideration of the teams' work targets.

Target-based teamworking: Towards outcome interdependence

When asked about teamworking and what it implied for their own work, many interviewees answered by comparing it with what had existed before. In line with the broader changes taking place in the Inland Revenue, there was a widespread recognition that the emphasis now was very much on results. One senior employee compared what he saw as the 'old' and the 'new' systems:

... the new one now ... is very work orientated. The other one ... I think it's maybe, 'If you work in a team and you get the spirit, if you like, or the feeling right, the work will take care of itself.' Work was definitely second, or results I should say, perhaps more than work.

Comparing the current situation with when she had resumed employment in the early 1990s, one RO said, 'the pressure is on the target work. I think the emphasis was, years ago, that it didn't matter how long it took to reply to a person making an enquiry as long as you eventually get the reply'. Another RO expressed similar views:

In the days when I first started – we are talking about 20 years ago here – there wasn't the targets then ... the whole structure of the Revenue's changed, which meant that everybody is looking towards greater efficiency, again in targets: we must clear targets by a certain time.

With little direct mutual identification between team members, we can go as far as to say that, more than anything, it was the work target that defined the team. One team member described this:

... we all have targets we have to meet, so we all work together to meet the target. You can't say we work as a team like at a building site, because it's impossible to sit there and observe a teamworking as a team ... But we all do the same thing, if necessary, or the same type of work, in order to clear our targets.

It is this that we can describe as a target-based form of teamworking. What it means in day-to-day terms is that individuals will take on work with their team target in mind. In the words of one RO:

... there was no team type of thing before, you were always an individual working ... It was more like, 'If you finish that ... if you've got time ... do something,' and you used to be, 'Alright'. There was never no urgency to do it. Whereas now it's, like, 'When you've done that, do this' ... you make sure you do it because you know that the team falls down and the manager will say, 'We've got to meet these targets ...'

A number of other examples were offered by interviewees. One said:

... rather than ..., 'I've done my 150 a week', or whatever, and somebody else has only done 100 and I'll say, 'Oh well, you know,' ... nowadays I'll say, 'Oh well, I'll do 50 then, so that we've both done 150,' ... so it looks good that the team has done it, but it also looks good on the individual ... because he's done more to help the team achieve 300, he's done two-thirds, but at the end of the day the team has done 300 ...

All this should not be taken to mean that the team target replaced completely the individual targets that employees had. In fact, the performance management system continued to be based very much on the appraisal of the individual. What was new was not an emphasis on targets but an emphasis on team targets. Although individual targets continued to exist, the difference was that they were now seen much more in terms of the contribution they made to the team target. A comment from one RO captures the spirit of this: 'with teamworking we are doing the same jobs but we are doing them combined'. This was echoed in another comment:

... our very first team meetings, we used to have when I first started, would be like a work state report of how each individual is doing and how the group is doing. But it was a group and not a team ... Whereas now it's like how the whole team is doing and you can take more of a collective pride in how we are all doing.

The team target, in turn, could be defined in terms of the contribution it made to the office or district target. According to an FLM:

people just work together in, whatever, smaller teams, bearing in mind they're part of [a] bigger team, in the sense of the office. Prior to that, for the majority of staff, they felt very much individual [*sic*]. It's what they achieved on their own allocation was what was important, not how the district produced as a whole.

In terms of the concepts discussed in the introduction to this article, target-based teamworking can be seen as being reliant on outcome interdependence. More than this, it is reliant on the goal rather than the reward aspect of outcome interdependence. Reward is still based primarily on individual rather than team performance; while it is employees' identification with their team's goal or target output, rather than their identification with their fellow team members, that provides their identification with the team.

Discussion and conclusions

We can now see what form teamworking takes in the Inland Revenue. The starting point is the shift from individual to group allocations of work. In conjunction with the move to a more facilitative style of management, the shift allows some degree of autonomy at the level of the group or team. The degree of autonomy is quite limited, however, extending only to cover the issue of how work within the group is allocated. Despite the intentions of senior management, there is also very little in the way of increased flexibility. With teams' blurred and shifting boundaries meaning that little exists in the way of group identification and development, it is, more than anything, the work target that defines the team. We might go as far as to say that it is difficult, if not impossible, to consider the team and the target separately from each other. What we have in the Inland Revenue is, in short, a 'target-based' form of teamworking.

Teamworking in the Inland Revenue is thus of a very parsimonious character: what might be considered quite a 'weak' form of teamworking appears capable of having a significant impact. We should remember, however, that prior to the introduction of teamworking, work was organized on a highly individualized basis. To return to a point made in our introduction, we need to take account of the *direction* of change as well as its destination. That said, we do have a situation in which, rather than the panoply of support systems often associated with teamworking, the key to its operation rests in a relatively simple reorganization of production and work. Space does not permit a full consideration of these issues here, but we have investigated them at length in another article (Currie & Procter, 2003).

In this article we have used the fate of the team development pack to illustrate the point that the explicitly cultural attempts to promote teamworking were largely ineffective. The case as a whole is in line with the down-playing of the normative elements of teamworking which is suggested in the work of, for example, Cohen and Ledford (1994).

This is not to suggest that this is the way in which teamworking will or should operate in all circumstances. Our findings provide more support to those such as Dunphy and Bryant (1996), who argue that it is necessary to identify and understand the differences between a variety of forms of teamworking. In this spirit we can identify certain contingent factors that seem to be important in our case. Prominent among these is what we might describe as the production technology in the Inland Revenue. Two aspects of this deserve particular attention. First, work is easily expressed in terms of quantitative targets, and these targets are easily translatable between the different levels of individual, team and office. An office target can easily be divided into a set of team targets and, in turn, into a set of individual targets. Looked at from the other direction, individual targets can easily be added together to produce a team target and, in turn, an office target. It may be that this form of teamworking is applicable in other, similar settings: the call centre is one that immediately suggests itself.

The second aspect of the Inland Revenue's production technology is that, in parallel to the first, the physical organization of production is relatively easy to change. Compared with the time and effort involved in, say, reorganizing the factory floor for cellular manufacturing, the shifting of desks around an open-plan office is quite a straightforward matter. By the same token, it must be noted that the ease with which teams can be formed and re-formed means that there may be little incentive to make any particular configuration effective.

Before returning to the concerns raised in our introduction, there is one issue that we must address: can the introduction of teamworking in the Inland Revenue be considered successful? Our case provides an example of the idea that teamworking now has as its concern not job design but an organization's more strategic objectives. It could even be argued that in removing from individuals some degree of 'ownership' of their work, jobs were less well-designed than they had been. In trying to assess the more strategic objectives, the use of quantitative evidence lies somewhat outside the scope of this research project. It would, in any case, be very difficult to provide. We have no non-teamworking 'control group' either inside or outside the organization; while a before-and-after comparison of work volumes would have been difficult to conduct against the background of the simultaneous introduction of self-assessment (SA).

Following Shea and Guzzo (1987a) we can look at the effectiveness of teamworking in terms of its 'situation-specific' goals. The most tangible of these was that teamworking would contribute to the successful transition to SA. Although there was not general agreement on the precise manner in which it had done so, the impression gained from employees at all levels was that the transition to SA was certainly eased by teamworking and, if anything, might not have been achieved without it.

But what about the concepts of interdependence which we highlighted in the introduction to this article? The case presented here certainly demonstrates their usefulness in analysing teamworking. Most basically of all, the move from individual to group allocations in the Inland Revenue can be seen as a shift from pooled to reciprocal interdependence. Although teamworking in its reciprocal form tends to direct our attention to the task aspects of interdependence, the case presented here suggests that more attention than hitherto might be given to its outcome aspects and, in particular, to goals rather than rewards. Our findings are more in line with those of Shea and Guzzo (1987a, 1987b), whose emphasis is on outcome interdependence, than with those of Wageman (1995), who emphasizes interdependence in tasks. Our case also illustrates Shea and Guzzo's point about how, especially in certain technological conditions, management might take advantage of the malleability of task interdependence by leaving this aspect to team members and concentrating their own efforts on outcome interdependence.

Our findings also allow us to cast light on the processes underlying some of the associations identified in the literature. The first of these concerns the relationship between task interdependence and outcome interdependence. We are presented in the Inland Revenue with a complex relationship between the reciprocal interdependence in tasks and the outcome interdependence as represented by the team target. At one level, employees' identification with their team target provides the means of offsetting the costs inherent in the shift to reciprocal interdependence. Task and outcome interdependence thus tend to work in opposite directions to each other. At the same time, it is unlikely that the same degree of identification with the team target would have been achieved without the greater reciprocal interdependence. Had group allocations been worked simply as the aggregation of individual allocations, it is difficult to envisage a move to the situation in which individuals regarded their own performance much more in terms of its contribution to their team's performance. In this respect, the two forms of interdependence work in conjunction with each other. In itself, this might help us to understand Wageman's (1995) finding concerning the influence of task interdependence on outcome interdependence. What it means more broadly is that we have two conflicting tendencies. A full

account of the relationship between task and outcome interdependence would thus need to take into account the possibility of their simultaneously working both with and against each other.

These points also have implications for our understanding of the relationship between interdependence and autonomy. Liden et al.'s (1997) study identified task interdependence as a moderator of the relationship between group autonomy and performance, and we can now say something about the dynamics of this. The introduction of autonomy over the allocation of work in the Inland Revenue allowed teams to exercise some discretion over the degree of task interdependence. The greater the degree of autonomy, the more might reciprocal interdependence be expected to extend. As we have suggested, the greater the degree of reciprocity, the greater the contribution to the identification with the team target and, with that, the greater the contribution to performance. The greater the degree of autonomy, in other words, the more effective teamworking might be. Against this, however, have to be set the greater costs of coordination that reciprocal interdependence involves. Attempts to achieve greater levels of interdependence through the extension of group autonomy might therefore be counter-productive: the benefits from the identification with the team target might never outweigh the increase in the costs of coordination. We cannot say how this relationship between reciprocal and outcome interdependence will in all cases work itself out. What we can say is that rather than in terms of autonomy, it is in terms of the relationship between autonomy and interdependence that teamworking might best be investigated and understood.

Making use of these arguments allows us to go some way towards resolving the two puzzles we identified at the beginning of this article. We have shown how applying ideas of interdependence allows us to resolve the empirical puzzle: teamworking in the Inland Revenue is effective through the interaction of autonomy and interdependence rather than through autonomy alone. This also suggests an answer to our conceptual puzzle. A greater emphasis on interdependence gives us a conception of teamworking that encompasses both its autonomy-based forms and those where autonomy is largely absent. It is here that we might look for an answer to the 'issue of autonomy'.

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