

Does time management training work? An evaluation

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In an increasingly competitive business environment, organisations have sought to increase productivity and reduce costs. The consequences of this for many employees include increased workloads, longer working hours and greater time pressures which, the evidence suggests, are linked to stress, high rates of absence and turnover. At the same time there has been an increasing emphasis on the desirability of achieving work/life balance for individuals. In pursuit of these apparently conflicting demands it has been argued that individuals must work 'smarter' rather than harder and that individuals need to develop the ability to manage their time effectively to achieve this. Yet, previous research on time management training has been limited in scope, open to criticism in terms of research approach and inconclusive in assessing the effectiveness of such training. This paper reports the results of a longitudinal and triangulated evaluation of time management training undertaken in a variety of organisational settings, which sought to establish whether the training was effective, not only from the viewpoint of the participants, but also from the perspective of their managers. The evidence, collected using quantitative and qualitative approaches, suggests that although such training is affected by context and motivation, it does have a positive impact for the majority of participants.

Introduction

In an increasingly competitive business environment, organisations have sought to increase productivity and reduce costs. In response to these pressures 'downsizing has spread like a contagion' (Hutton, 1997, p. 40) and 'organisations have been stripped to the core and resources are limited' (Mann, 2002, p. 29). The consequences for the

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surviving workforce include increased workloads, greater time pressures and longer hours (Noon, 1998). In the UK the longer hours phenomenon continues to affect increasing numbers among the workforce, a trend illustrated by a rise in the proportion working more than 60 hours from 11% in 2000 to 16% in 2002 (Daykin & Baldwinson, 2002; DfEE, 2000).

Yet, a long hours culture 'results in stress and reduced effectiveness' (DTI, 2001: 4), making people feel less able to cope and to control their workloads, their time and their lives (Noon, 1998; Richards, 1987). The cost of all this to individuals is impaired health, damaged relationships and poor quality of life (Davis, 1999; DTI, 2001; Roger, 2002). The cost to organisations is alarming. For instance, stress is said to be undermining performance in 90% of UK companies (Industrial Society, 1997), costing industry £5 billion annually (Conran, 2002) and causing 13 million days sick leave in 2001–02 (Roberts, 2003). In addition to the costs of stress, absence and related high labour turnover, many organisations suffer what Noon (1998, p. 13) describes as the 'corrosive effects of delay.' Such delays result in missed deadlines or poor quality work, with potential costs to the organisation in relation to customer service, image and competitiveness.

The need to 'work smarter, not harder' (Lakein, 1973, p. vii) is offered as the apparent solution to these increased pressures caused by a climate where 'more has to be done and it has to be done now' (Higgs, 2003, p. 15). An important factor in the ability to 'work smarter' is argued to be the ability of an individual to manage their time effectively. The Management Standards of the UK Management Charter Initiative (MCI, 1997, p. 40), for example, include the ability to 'manage your own time and resources to meet your objectives' whilst an Industrial Society survey (Garnett, 1993) estimated that ineffective use of time was wasting 20% of UK plc's management costs.

Time management training appears to offer an obvious solution, yet there are siren voices. Drucker (1977) warns against claims of time management panaceas, Covey *et al.* (1994), and Noon (1998) believe that many earlier forms of time management training do not work, whilst Slaven and Totterdell (1993) and Macan (1996) assert that there is little convincing empirical evidence of the effectiveness of time management training.

This paper reports the results of a longitudinal and triangulated evaluation of time management training undertaken in a variety of organisational settings which sought to establish whether the training was effective, not only in the view of participants, but also from the perspective of their managers. Effective in this context is defined as the ability to apply the training and achieve improvement in areas such as work/life balance, prioritising, and the achievement of objectives. In Kirkpatrick's (1994) terms, a level three evaluation of whether the knowledge learned is actually being transferred and used as it was intended (Olsen, 1998). The paper begins by considering the importance of time management and the approaches adopted to develop the associated skills. Previous research in this area is then considered and found to be inconclusive. The approach and findings of the research reported here are then discussed and evidence presented which demonstrates that time management training of the type advocated by Covey *et al.* (1994) does appear to produce time management behavioural improvements in the workplace.

The development of time management

Adair (1987, pp. 7–8) believes that time management is hard to define and quotes Leon Alberti and Benjamin Franklin, of the 15th and 18th centuries respectively, as early contributors in the field with their notions of saving and using time, and time as a valuable resource. Based on their ideas, the definition underpinning this research is that time management is the use of time to achieve work and life goals. Little was written on this subject prior to the work of Drucker (1970), Mackenzie (1972) and Lakein (1973). Lakein's influential work covers issues such as the importance of clear goals, planning, prioritising, interruptions, procrastination, paperwork, delay and continuous personal improvement and underpins much of the current time manage-

ment practice. However, the overall emphasis is on efficiency, exemplified by his final appendix of 61 ways on 'How I save time' (Lakein, 1973, pp. 158–60).

Covey *et al.* (1994) usefully categorise four generations of time management. The first generation is based on reminders and characterised by simple notes and checklists. The second generation adds more planning, preparation, goal setting and scheduling, featuring calendars and appointments on paper or computer. The third generation adds prioritising and control with a review of values, the setting of long- to short-term goals and daily prioritising, often in electronic or paper-based organisers. Whilst these three generations may have improved people's effectiveness, Covey *et al.* still believe that these earlier approaches, with their emphasis on efficiency and organisation, have failed to enable people to match what they regard as important and how they actually spend their time. They therefore believe that these first three generations of time management simply do not work. Noon (1998, p. 11) expresses similar sentiments, believing that 'we cannot go on doing more work in shorter time just because the work is there to be done.' Covey *et al.* (1994) propose a fourth generation of time management, which, they claim, incorporates the best features of earlier generations but focuses on identifying what is really important in life, and spending an increasing amount of time on that. In similar vein, Noon (1998) advocates what he terms a 'reductionist' stance, which involves eliminating all unnecessary work, learning to say 'no' and, like Covey, focusing on what is important.

The evaluation of time management training

'At best, management development and training must always be an act of faith' (Peel, 1984, p. 35). That statement reflects the difficulty of evaluating training, echoed by Robinson and Robinson (1989, p. 275), 'no single factor, including training, could by itself have brought about the change that has taken place.' Stewart (1999, p. 180) adds a further dimension when, after defining evaluation as synonymous with assessment, he says, 'all assessment is necessarily and by definition subjective' which should deter people from 'pursuing an unobtainable holy grail, i.e. clear and demonstrable proof that investment in employee development brings measurable and valuable benefits' (Stewart, 1999, p. 194).

Yet, the increasing pressure within organisations to use resources as efficiently as possible is also leading to an increasing requirement for accountability and for training to be demonstrably effective (Phillips & Phillips, 2001) even in those areas which, in the past, have been considered difficult to measure. Evaluation of training involving soft skills wherein 'the topic is not a set of . . . rules for turning people into efficient machines but a set of principles which each individual must apply to his or her situation' (Richards, 1987, p. 73) has long been perceived as problematic by organisations. Time management is no exception and previous studies have failed to provide convincing evidence about the impact of such training. Kirkpatrick (1994, p. 25) goes so far as to observe that time management is one of the programmes where 'it is difficult if not impossible to measure final results'. However, identifying the transfer of the knowledge and skills learnt during training into the workplace is an important aspect of assessing whether training is having business impact (Olsen, 1998) and attempts have been made to measure the impact of time management training. In several cases where assessment was undertaken, self-reported, perceived improvement in time management skills was not always matched by behavioural changes relating to how people spent their time (for examples, see Briddell, 1987; Kirby, 1978; Robinson, 1974). In other cases behaviour improvements were reported and included more time spent on high priority tasks, both work and relaxation, completing projects on time and making more time for academic reading (Hall & Hirsch, 1982; King *et al.*, 1986; Maher, 1986; Woolfolk & Woolfolk, 1986). However, in many of these cases sample sizes were very small ($n = 2$ to $n = 9$) and their validity questioned (for examples, see Macan, 1996; Slaven & Totterdell, 1993). Hanel *et al.* (1981) claimed improved time management behaviours in one study but without the benefit of supporting empirical evidence. Britton and Tesser (1991) found a correlation between time

management training and the improvement of grades in American students, in contrast to Bost (1984) who had previously found that such training made no difference. Slaven and Totterdell (1993) were unable to determine whether the time management training they researched changed related behaviour. Macan's (1994, 1996) research suggested that such training did not, while Orpen's (1993) research findings suggested that it did.

A further area of contention which emerges in the context of time management relates to the use of personal organisers, whether it be a simple diary or a more comprehensive paper or electronic organiser, which are often portrayed as the cornerstone of time management approaches. The time management literature warns of the vested interest that the organiser companies have in selling the paper-based or software versions and the danger of systems becoming an end in themselves, rather than a means to an end (Adair, 1987; Atkinson, 1992; Bird, 1998; Clegg, 1999; Covey *et al.*, 1994; Hindle, 1998; Noon, 1998). However, despite the lack of empirical evidence, there appears to be a consensus that some form of system is needed if people are to manage their time effectively, although the type of system is a matter of personal preference and experimentation.

On the basis of existing empirical evidence, therefore, the picture in relation to the effectiveness of time management training is confused and inconclusive. There are a number of possible explanations for this confusion. The first may lie in the nature of the time management training involved which was likely to be of the three earlier generations discussed above, rather than the more principles-driven 'fourth generation'. A second possibility is the adoption of an inappropriate research approach; Slaven and Totterdell (1993), for example, appear to have been overly positivist emphasising quantitative measures while overlooking strong qualitative evidence which contradicted their unproven conclusion. Orpen (1993), Macan (1994 and 1996) and Jex and Elaqua (1999), relied solely on quantitative data. Goldstein (1986, p. 22), concerned about this general approach, argues that 'the continuum from good to bad does not have anchors with quantitative on the good side and qualitative on the bad side.' Some supporting observations or comments when measuring behaviour therefore seem more appropriate than a purely quantitative approach.

A third explanation relates to the evaluation measurement method. Sharp and Howard (1996), and Diamantopoulos and Schlegelmilch (2000) stress the importance of ensuring the validity of measurement device measures. Sharp and Howard (1996) also point out that some variables are hard to measure and time management comes into this category (Kirkpatrick, 1994). In such cases, surrogate measures have been developed such as the Time Structure Questionnaire (Bond & Feather, 1988), the Future Perspective Scale (Bird & Jordan, 1987), the Time Urgency Scale (Landy *et al.*, 1991) and the Time Management Behaviour Scale (Macan *et al.*, 1990). However, all these measures are prescriptive and insufficiently flexible to accommodate varying time management training needs. Furthermore, their constructs are set at the operational, rather than concept level. For example Macan's (1996, pp. 231–2) model includes constructs such as 'I set short-term goals for what I want to accomplish in a few days or weeks' and 'I make a list of things to do each day and check off each task as it is accomplished'. The problem with this approach is that in order to cover all the aspects of the subject, 'it is possible – and often desirable – to have multiple definitions of the same concept' (Diamantopolous and Schlegelmilch, 2000, p. 22). Applying this to time management would result in a huge number of operational definitions, making the instrument unwieldy and impractical. Macan's (1994) attempt to overcome this by simplifying the subject into three broad areas raises Easterby-Smith's (1994) concern of oversimplification, especially as Slaven and Totterdell (1993, p. 20) comment, 'it is difficult to specify the exact behaviours which an effective time user ought to display'.

Methodology

Notwithstanding the difficulties involved, as Campbell (1998) argues, it is not only important to plan and deliver training programmes carefully, but also to determine

their relevance and effectiveness, while Van der Klink *et al.* (2001) note that the lack of transfer from the training situation into the workplace is a key issue on the HRD research agenda. Researchers and trainers alike generally recognise that evaluation is an important part of the training system. However, although a great deal of information exists regarding various designs, application still lags behind (Geertshuis *et al.*, 2002). Despite the criticisms and limitations of Kirkpatrick's model, it remains the most popular approach to training evaluation (Phillips & Phillips, 2001). Indeed, Kearns (1995, p. 38) comments that whilst there have been several variations and adaptations of Kirkpatrick's four-level model, none have 'made any significant improvement or conceptual breakthrough from the original'. 'The power of Kirkpatrick's model is its simplicity and its ability to help people think about training evaluations' (Alliger & Janak, 1989) for, as Geertshuis *et al.* (2002) acknowledge, in the practice of training evaluation the constraints of time and finance often outweigh considerations of theoretical validity and professionals within organisations may not know how to apply complex techniques. The reality is that the majority of evaluation that does take place addresses Kirkpatrick's level 1 (reaction) and level 2 (learning) but neglects the transfer of that learning to the workplace and its effect. Yet, as Mumford (1995) observes, the purpose behind management development is to achieve effective management behaviour while Yamnill and McLean (2001) state that training is useless if it cannot be translated into performance.

A major drawback of the hierarchical nature of Kirkpatrick's model is the implication that the top evaluation outcome every time is Level 4 (results), meaning some form of demonstrable organisational improvement. This is the so-called 'dollar criterion' (Brogden & Taylor, 1950), an approach promoted by sections of the literature as a means of increasing the perceived image and contribution of the HR or training function to an organisation (Jackson, 1989; Kearns, 1995; Phillips, 1991; Swanson, 2001). In adding a fifth level of evaluation Phillips expanded Kirkpatrick's framework to include the return on investment (ROI), the conversion of benefits to monetary value which can then be compared to the fully loaded costs of the training (Phillips & Phillips, 2001). However, Phillips and Phillips (2001, p. 242) also note that it is not always appropriate to evaluate at the fourth and fifth levels as ROI is often 'characterised as a difficult and expensive process'. For the average practitioner the identification of direct causal links in terms of impact on the organisation's 'bottom line' is often perceived as problematic, complex and daunting, particularly in relation to the development of soft skills and can act as a significant barrier to evaluation beyond the reaction level (Skinner, 2004).

The idea of assessing changes in behaviour (Kirkpatrick level 3) is far more accessible. Thus the research project reported here sought not only to assess the effectiveness of the time management training in terms of changing behaviour but also to do so by designing a process that would facilitate such an assessment. Given the limitations of previous approaches as described above, an adaptable surrogate measurement instrument, the Key Skills Questionnaire (KSQ), was developed linked to a checklist of key time management skills used in the main course workbook (Green, 1999). The KSQ was designed, tested and adapted for use with five types of time management training on 20 courses, including public, private, charity, in-company and open courses (Table 1).

The time management training measured here fits Covey *et al.*'s (1994) classification of fourth generation. Reflecting this, unlike earlier instruments, the KSQ used measures defined at the construct conceptual level rather than the construct operational level with the aim of capturing the essence of the key ideas. Participants were asked to rate their time management skills against the key principles covered by the time management training. These included the ability to plan, prioritise and schedule each day, spend more time on the important rather than the urgent, manage interruptions, link medium-term plans to daily plans, set and achieve clear objectives, use lists to reduce forgetfulness, to say 'no' in a non-career threatening way, procrastinate less, decide what is personally important, improve the work/life balance and influence the organisation's time culture.

Table 1: Course summary

Organisation	Course (with personal organiser)	Dur.	Nos.	T1	T2	T0	Void
Police trainers and manager	Time management	1 day	18			18	
Police IT support team & mgr	Time management	1 day	20		17	3	
Fmcg* sales managers	Sales time management	1 day	13	5	7		1
Fmcg sales team – North	Sales time management	1 day	11	2	9		
Fmcg sales team – West	Sales time management	1 day	12	4	6	2	
Fmcg sales team – Midlands	Sales time management	1 day	12	6	4		2
Fmcg sales team – South	Sales time management	1 day	12	4	5	2	1
Open course – marketing bias	Time management	1 day	11	4	7		
Open course – marketing bias	Time management	1 day	4	3	1		
Open course – mixed functions	Time management	1 day	9	6	2	1	
Course (without personal organiser)							
Regional development agency	Time management	1 day	7		7		
Motor manufacturer	Time management	1 day	8		8		
International financial services	Time management	1 day	6		6		
IT consultancy	Time management	2 day	8		8		
Charity IT support team (office/field)	Managing priorities	2.5 hrs	22	11	11		
Pharmaceuticals – mixed functions	Time tips	1.5 hrs	17	9	8		
Local authority senior management	Exec time management	1 day	6		5	1	
Pharmaceuticals – new R&D team	Time management	1 day	15	8	7		
Pharmaceuticals – mixed functions	Time tips	1.5 hrs	14	6	8		
Local authority department team	Exec time management	1 day	8		8		
Totals			233	68	134	27	4

Key:

Dur.: Duration of course

Tr.: Trainer (A = researcher, B = associate)

Nos.: Number of course attendees

T1: End of course self-scores only

T2: Longitudinal self-scores

T0: No self-scores

Org.: Filofax organiser included

* Fmcg = fast-moving consumer goods

The instrument was pilot-tested by a trainer with four clients in different business sectors. The purpose of the pilot was to ensure there were no problems in answering the questions and to obtain an initial assessment of the validity of the questions and reliability of the data (Bell, 1999; Saunders *et al.*, 2003). The results were therefore analysed and discussed with the client organisations. From this it was evident that the questions were understood, requiring no rewording and the data produced made sense, thereby supporting its content validity (Mitchell, 1996).

In order to overcome some of the limitations of previous research already noted, this research combined quantitative and qualitative data collection over time (between two and seven months) in a variety of organisational settings. It involved five training providers and two trainers, one of whom was also the researcher. Participants ranged from chief executives to secretaries, with a common denominator of a responsible position with some level of discretion in time usage. Courses varied from two days to two hours and some included the use of a personal organiser. As the sample reflected the wide range of industries and course variations faced by training providers in a typical year, it was representative and can best be described as purposive, of the heterogeneous type (Saunders *et al.*, 2003). A total of 232 participants rated their time management skills after the training and 134 also rated it between two and seven months later, depending on the organisation. Managers gave second opinions on 75 of those who had taken part in the re-rating with a 95% agreement on the figures. Semi-structured interviews with managers of 42 of the 134 were used to triangulate data.

An important consideration in encouraging evaluation was the need to design an instrument that was easy and quick to complete while relatively comprehensive in coverage. Whilst the standard instrument was used on eleven open and in-company courses, it was sufficiently robust to deal with slightly varying training needs in the other nine courses evaluated. For instance, managing interruptions and delegation were not relevant in the five sales courses, whereas planning economical journeys and achieving monthly objectives were. On the three short courses, the KSQ reflected the more limited objectives and content. This resulted in a range of seven to fifteen measures, according to the specific needs and duration of the course. It is argued that adapting the instrument to meet the specific training needs of the organisation and to thereby 'expose itself to the vagaries of the organizational context', as encouraged by Dionne (1996, p. 282), produces more meaningful results than a prescriptive 'one-size-fits-all' approach.

At the end of each course, participants were invited, on a voluntary basis, to complete a KSQ. Each of the questionnaires used a seven-point numerical response format, with 1 representing low or poor and 7 high or good. Although a number of authors advocate the importance of pre-course testing for comparative purposes (for example Warr *et al.*, 1999) the decision was taken that participants should complete their KSQs at the end of the course rather than in advance, for as Wiltsher (1999, p. 190) observes, 'we do not know what we don't know! In other words we are unconsciously incompetent.' By exposing people to the course content first, it was felt that they were more likely to become consciously incompetent and therefore be more accurate in their self-scoring. It also ensured that participants completed them individually, rather than in discussion with others, thereby avoiding a potential source of contamination (Saunders *et al.*, 2003).

Given the focus on application of learning, the triangulation of self-scores was also important. Between two and seven months later, participants were contacted again to complete their follow-up scores. Originally, the intention was to have a consistent three-month gap, long enough for learning and implementation to occur, but short enough to reduce the risk of people changing job. However, one organisation required the analysed results at an earlier stage to show at a sales conference, another announced a major reorganisation the day after the course and wished to delay evaluations, whilst various other operational reasons caused further irregular rather than regular data capture. This was not felt to be a critical factor as there was no unanimity in the existing literature of a 'best' time interval. For instance, Orpen (1993)

and Slaven and Totterdell (1993) conducted their follow-up after five weeks whilst Macan's (1996) was after four to five months. The follow-up participant scores were obtained by either posting the original scores to the course sponsor to circulate or e-mailed direct to the individual. The same routes were used for the returns.

One of the conditions when agreeing access to participants from both client organisations and associate training providers was that the exercise would be voluntary, non-intrusive, confidential, quick and easy to do. Sharp and Howard (1996) comment on the ethics of fulfilling any agreements with organisations and for this reason alone, follow-up of non-returns was not appropriate. Concerns that only people who had improved would respond was refuted by the wide spread of scores, including some minus ones. As Russ-Eft *et al.* (1997) and Swanson (2001) note, self-reported scores by themselves are not reliable evidence; corroboration of these scores was therefore sought from line management and trainers and obtained for 56% of respondents. Reflecting the advice of Todd (1979), Hamblin (1974) and Rae (1997), a pragmatic, flexible approach was taken with these busy people. The preferred method of face-to-face semi-structured interviews to explore the apparent reasons for some of the quantitative results (Saunders *et al.*, 2003) was only possible with the high-scoring police courses and the low-scoring charity course. The managers' confirmation that the resultant notes from the meeting were accurate further triangulated the data gathered through interviews. Logistical difficulties in other organisations led to the remaining triangulation occurring via e-mailed response to questionnaires. Managers were asked whether they agreed, tended to agree, tended to disagree, disagreed or were not sure about their people's self-reported scores. Of the 75 triangulated scores 46% agreed and 49% tended to agree with the self-reported scores. Only 5% disagreed with the results that divided equally between concerns for under- and overscoring. No one disagreed. The questionnaires also sought feedback by asking for supportive examples of any observed changes in workplace behaviour since the training. In addition, two telephoned semi-structured interviews were also undertaken with an associate trainer covering four of the courses to explore client responses in general and the participant scores in particular.

Of the 233 participants 53% completed the follow-up self-report on their perceived skill levels on the KSQ agreed for their course with their organisation beforehand. To make allowance for the different number of key skill indicators (KSIs) used on the courses, an individual's total score was divided by the number of KSIs used on their particular course. This gave an average or 'normalised' KSI score. To determine if the respondents were a representative sample of the total trainee population, an independent sample two-tail *t*-test was conducted, comparing the first scores of the single respondents with the first scores of those who had responded twice. This showed no significant difference between the means ($t = -0.969$, $df = 201$, $p = 0.333$). With 95% either agreeing or tending to agree, the triangulated and non-triangulated scores can be treated as the same for analysis purposes.

To determine the results of the training, the scores for each participant were totalled at the end of the training (T1) and at the follow-up time (T2). These scores were divided by the number of KSIs used, thus producing their normalised start scores and normalised end scores. The significance of the results was checked with a paired sample *t*-test, comparing the normalised start and end scores. The results were highly significant ($t = -13.683$, $df = 133$, $p < 0.000$). Subtracting the start scores from the end scores gave the gain scores, that is the individual's perceived improvement on the 1 to 7 bipolar scale. By adding these scores together and dividing by the number of respondents from the course, mean gain scores were obtained for each course as well as for each individual.

Results

In this section the findings from each type of course are presented as short cases that both illustrate the positive impact of the training for the different groups and highlight other factors which emerged as important in the relative success of the training. The

Table 2: Mean gain scores for each course

Course	Mean gain	Course	Mean gain
Police IT	+1.19	Charity IT	+0.43
IT Consultancy	+1.21	Open Course – Mrktng bias	+1.27
Regional Develop. Agency	+0.53	Pharma – Mixed functions	+1.06
Motor Manufacturer	+0.88	Local gov. – senior mgrs	+0.55
Internat. Financial Services	+0.57	Pharma – New R&D team	+1.06
Fmcg – sales managers	+0.57	Pharma – Mixed functions	+1.45
Fmcg – sales North	+0.93	Open Course – Mktng bias	+1.07
Fmcg – sales West	+0.12	Open Course – Mixed functs	+1.37
Fmcg – sales Midlands	+0.96	Local Gov Department	+0.37
Fmcg – sales South	+0.79		

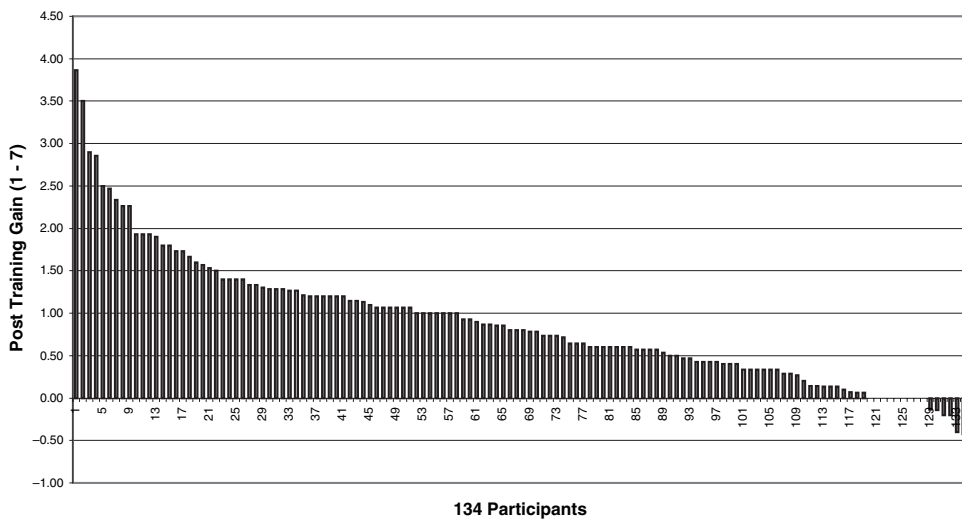


Figure 1: Time management training evaluation.

courses evaluated differed in terms of location, underlying need, type of organisation and nature of participants. However, in contrast to the contradictory and inconclusive earlier studies on time management training, the research reported here identified behavioural improvements, as assessed by the respondents, as a result of all 19 courses evaluated. Positive mean scores were recorded for each course (Table 2) while Figure 1 shows that from the triangulated self-reported scores, 119 participants (89%) recorded some improvement, 9 (7%) recorded no change and 6 (4%) recorded worse scores. Of the 89% who improved, 57 (42%) improved by one or more units on the 1 to 7 bipolar scale.

The county police force

The identification of the management of time as a major training need in the Support Units for Training and for Information Technology (IT) occurred following a major reorganisation. Both teams attended one-day time management courses in September 1999 (Training) and January 2000 (IT). These were highly interactive, mixing laptop-based presentations with real-life examples, stories, discussions, breakout and plenary

Value added after three months

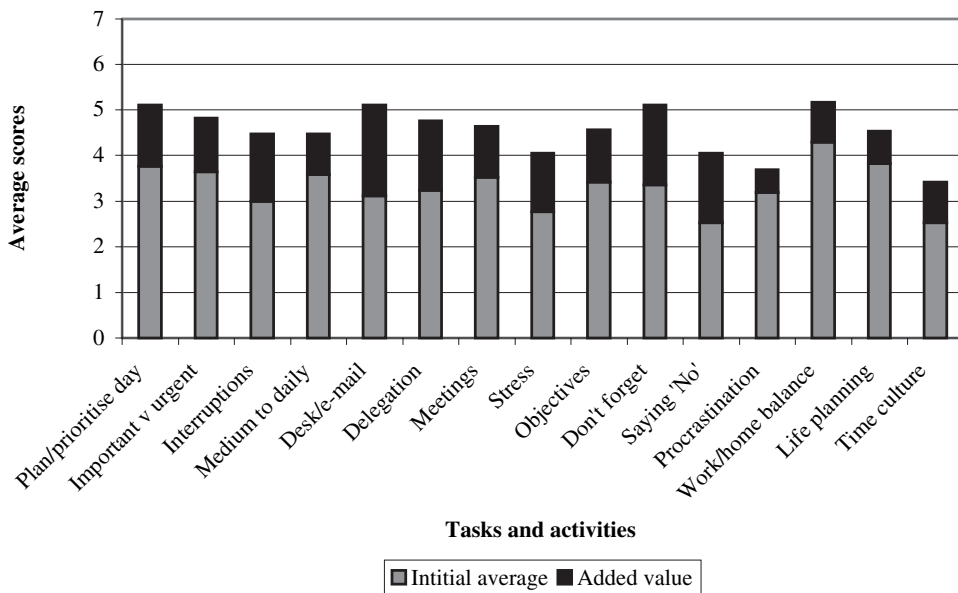


Figure 2: Police force.

sessions, a case study and personal action planning. Challenging existing ways of doing things, the course offered simple, practical alternatives geared to the participant's workplace and job roles. In April 2000, a follow-up meeting was held with the Training and Development Manager and the Department Head of Technology Services to review the data analysis from the KSQ and progress versus course objectives. An overall 36% average improvement in personal effectiveness had been recorded (Figure 2) and this accorded with the effects observed by the two managers.

The Training and Development Manager had observed examples of each of his new team leaders passing on the ideas and philosophies learnt on the day to their people. Planning was clearer. Meetings had been an issue, but they were now much more focused with shorter agendas and better quality discussions. Management of paperwork on the desk was the biggest obvious improvement. The Department Head of Technology Services felt that following the training, both he and his team now thought more strategically about what they were working on. The culture within the Department was changing with policies and procedures being set and consequences of actions considered. People were making themselves more accountable for how they spent their day. Effective delegation was filtering down the organisation. There was more ownership and personal development. Discussions with 'customers' were more focused; his people were more business-oriented, more proactive and more confident in themselves. Regarding the objective to achieve deadlines with less stress, the IT manager reported fewer deadlines being hit by his department but this was a positive rather than negative result on the basis that fewer deadlines were being accepted. People were now saying 'no' in an acceptable way.

The open courses

These courses scored more highly than any of the other groupings, with average course percentage improvements of 42%, 31% and 40%, respectively. Explanations for these high scores appear to be rooted in factors which have previously been identified as

key in improving learning transfer (Lodahl & Kejner, 1965; Noe, 1986; Slaven & Totterdell, 1993; Steers & Porter, 1975; Vroom, 1964). The majority of people on open courses were involved in the decision to attend and accepted that they had a need for the training. Consequently motivation to learn was higher than for individuals who had been told to attend.

The sales force

The UK sales force of this organisation had recently experienced substantial changes in the way it worked following a European court ruling, compounded by the gradual introduction of laptop computers. Sales management felt they needed help on their time management if they were to achieve the varied tasks now expected of them. The five courses provided for this organisation recorded a 27% average improvement (ranging from 14% to 45%) and the training manager 'tended to agree' with the results. However, the training manager noted that 'due to the significant changes in [the business] it is difficult to make comparisons'. The changes which had occurred had resulted in 20 of the original delegates attending the course having been made or being in the process of being made redundant.

These changes in the organisational context illustrate the difficulty of being able to evaluate the impact of training accurately over time. Porter and Lawler (1968) hypothesised that trainability was a function of ability, motivation and perceived work environment, factors which Noe (1986, p. 737) suggests 'may be useful for understanding why learning, behaviour change, and performance improvement differ among training program participants'. However, Clarke (2002) notes that we are still some way from determining precisely which aspects of the work environment mediate learning transfer. The results for this organisation may have been negatively affected by the stress or irritation of coping with new jobs and new laptops at the same time as being given a paper personal organiser as part of the course. In terms of motivation, however, the training manager noted that for the 'survivors'

the Time Management course has greatly assisted in the extra responsibilities the remaining personnel have had to take up . . . all delegates have had to work smarter on the company priorities, this includes constant deadlines having to be met on specific objectives. Delegates in this area have demonstrated a marked improvement.

Conversely, the results could have been positively affected if there was rumour of redundancies and people perceived a need to present themselves in a positive light. This may have created an environment where the trainees felt motivated to apply, and be seen to apply, the training content (Van der Klink, 2001).

The short courses

Two short lunchtime sessions for a pharmaceutical organisation produced performance improvements averaging 28% and 48% whilst in contrast another short course for a charity's IT team produced improvements of only 12%. On the management-by-exception basis (Adair, 1988) a face-to-face semi-structured interview was arranged with the charity manager concerned. Rather than the anticipated response that the low scores resulted from people being sent on training that they did not want, the charity manager believed that

Everyone loves training. It enhances their CVs and shows that people are prepared to invest in their skills. This is especially true for technical skills in the IT sector.

However, she also observed, 'if people are not given the resources they need, changes from training will not happen', and a survey conducted after the training had taken place revealed understaffing of 24% in this organisation. The importance of work environmental characteristics in relation to the transfer of learning is widely discussed within the literature (for example Axtell *et al.*, 1997; Lim & Johnson, 2002; Noe, 1986). Specific factors highlighted as adversely affecting the work environment include inad-

equate budgetary support (Lim & Johnson, 2002) and insufficient time to meet deadlines (O'Connor *et al.*, 1984) often resulting in frustration and dissatisfaction (Peters & O'Connor, 1980). A further example of the impact of resources on learning transfer, echoing Noon's (1998) comments on increased workloads, was the emailed note from a participant on one of the other short courses:

Since January, the structure of the [X] buying team has changed. Before the change, I was the [Y] buyer in charge of two assistants. Now, I am also the [Z] buyer and have only one assistant. I think this ought to be considered when comparing results.

The local authority team

The senior management team of a large local authority undertook a time management course linked to an outdoor event for which the mean increase in performance was only 13%. However, when agreeing the triangulated scores their line manager commented very positively that 'the course was excellent, it fulfilled my aim of enhancing both the knowledge and effectiveness of my management team'. His observations in relation to individuals confirmed achievement of the intended outcomes of the training. 'More effective planning and linking to goals has improved performance', 'delegation has improved' and 'planning and prioritising have definitely improved, coupled with a major improvement in paper handling'. This case illustrates the relative nature of improvement. The senior team demonstrated a very high level of professionalism and experience on the team-building exercise and it was evident they were already highly skilled in most aspects of management. Consequently they were unlikely to improve as dramatically as, a younger, less experienced group and this was reflected in the modest 13% improvement.

Personal organisers

The research also offered an opportunity to explore the impact of personal organisers and they emerged as significant in the effectiveness of the course, regardless of the nature of the group or assessed need for training. In half of the courses personal organisers were provided for participants (see Table 1 for details). The organiser was an A5 paper-based system containing planning, diary, notes, key result areas file and contact details. In this study the start scores of 'organiser' and 'no organiser' participants were compared to ensure a representative sample. The two one sample *t*-tests were virtually identical, with *t* values of $t = 38.251$ and $t = 38.544$ and mean values of 3.8056 and 3.8206 for organiser and no organiser, respectively. However, the participants who received a personal organiser as part of the course showed a percentage gain score which was 28.7% higher than those who did not receive an organiser. The mean improvement for participants without an organiser ($n = 76$) was 23.1% and with an organiser ($n = 58$) 29.8%. The difference between participants' median scores was even wider at 15.3% without an organiser and 27.6% with one. This evidence suggests that, as claimed, personal organisers do offer a means of capitalising on time management training. However, this is an area that has been underexplored despite the widespread advocacy of their value, and further research is needed to establish this beyond doubt.

Discussion

Rather than teaching job specific skills, time management training seeks to develop what Atkinson (1999) refers to as cognitive skills; thought processes which allow the individual to read situations and which can be used to understand and address issues or problems, the inherent assumption being that individual effectiveness is inextricably linked to organisational effectiveness. The findings reported in this paper do suggest that 'fourth generation' (Covey *et al.*, 1994) time management training programmes can lead to an understanding of key principles which then produce

improvements in relevant skills areas as assessed by the majority of those undertaking the training and by their line managers. At an individual level the majority of participants in this study did record significant observable improvement in key areas such as planning, prioritising, assertiveness and consequent reductions in their stress levels with median improvements in personal effectiveness of some 20%. This suggests that time management training of this type has a positive contribution to make, although, as the local authority team illustrated, the extent of change which can be reasonably expected and achieved will vary. In cases where no improvement was reported by the individual, the triangulation with the line manager permitted the identification of possible underlying causes.

If the intention that lies behind most, if not all, organisational training is that, through the application of the knowledge and skills learnt desirable changes in behaviour should be achieved, then the transfer of learning from the course to the workplace must be a key issue for organisations (Cornford, 2002; Olsen 1998). A major hurdle to the evaluation of this transfer is the perception that it is difficult and costly to do. One of the key purposes of the research reported here was to test the KSQ evaluation tool. In contrast to previous attempts to measure the impact of time management training (for example Orpen, 1993; Macan, 1994) the KSQ did appear to provide an adaptable and user-friendly tool for such assessment. Agreeing the content of the KSQ with the client organisation beforehand ensured an understanding of each construct and an adaptation to the client's specific needs. The KSQ was consistently completed by people in the way it was intended, as confirmed by triangulations from managers. The overall 20% median improvement based on self-reported scores was supported by both quantitative and qualitative evidence from participants' managers. At an individual level the differences identified between individuals by the KSQ instrument were supported by subsequent qualitative data provided by line managers, for example, in local authority a manager observed that for participant X, 'only limited change occurred in this period', which was consistent with the KSQ self-reported score of only +8%. Two individuals on the police course showed no change in their scores. The line managers concerned were unsurprised by this, identifying that one had an assertiveness problem and the other was already being counselled on some personal issues, which they felt explained the scores.

Exploration of the reasons behind the differences in scores also highlighted the importance of other influences on training effectiveness, especially trainees' attributes and attitudes (Warr *et al.*, 1999; Watkins, 2003), aspects of the work environment and the desire to attend a course (Slaven & Totterdell, 1993). The positive contribution of a supportive work environment was illustrated by the county police force wherein Kirkpatrick's (1994) four conditions necessary for training-induced change to occur were evident, namely the desire, the knowledge, the right climate and reward for change. This was also true for the local authority, but gains were smaller due to the skill levels already present, highlighting the importance of context in determining the degree of improvement which can be expected. In the case of the sales force the four factors were also present, albeit created by the rather more negative redundancy scenario. Issues of resourcing (the charity) and motivation (open courses) were also identified as factors which enhanced or limited the effectiveness of the training regardless of the value of the course itself. Nevertheless, even in the cases where contextual factors appeared not to be supportive of training-induced change, the net effect was one of observable and measurable improvement for the majority of participants.

Conclusion

The increasing focus on accountability and demonstrable impact relating to training means it is important to identify efficient and effective ways to measure learning transfer, particularly in those areas traditionally regarded as 'soft' and impossible to measure. The KSQ requires further testing for the evidence to be wholly compulsive but first indications are that it is a useful evaluation tool which can identify the degree of individual improvement that occurs in the workplace following 'fourth

generation' time management training. At an organisational level the inefficient use of time has been widely recognised as a significant and costly problem, for organisations can ill afford the loss of management time and the attendant costs (Garnett, 1993) if they wish to improve their competitiveness. In addition, it has been estimated that stress-related illness accounts for 60% of UK workplace absences (Le Fevre *et al.*, 2003) and the increasing awareness of the impact of stress-related illness, combined with the onus on employers to protect employees against stress in the workplace adds another important dimension. A key factor that causes an individual to experience their environment as stressful relates to control over workload and the individual's perception about their ability to fulfil the demands made (Le Fevre *et al.*, 2003). In these terms our evidence suggests that fourth generation time management training has the potential to play a significant part in the management of stress (Rees & Redfern, 2000) and improving both individual and organisational effectiveness.

References

- Adair, J. (1987), *How To Manage Your Time* (Guildford: Talbot-Adair).
- Adair, J. (1988), *The Action-Centred Leader* (London: The Industrial Society).
- Alliger, G. and Janak, E. (1989), 'Kirkpatrick's levels of training criteria: thirty years later', *Personnel Psychology*, **42**, 331–42.
- Atkinson, J. (1992), *Better Time Management* (London: Thorsons).
- Atkinson, S. (1999), 'Reflection: Personal development for managers – getting the process right', *Journal of Managerial Psychology*, **14**, 6, 502–10.
- Axtell, C., Maitlis, S. and Yearta, S. (1997), 'Predicting immediate and longer term transfer of training', *Personnel Review*, **26**, 3, 201–13.
- Bell, J. (1999), *Doing Your Research Project* (Buckingham: Open University Press).
- Bird, B. and Jordan, R. (1987), 'A study to develop measures of time orientation and future time perspective'. Paper presented at the meeting of the Academy of Management, New Orleans, LA. Cited in Macan (1994) 'Time management: test of a process model', *Journal of Applied Psychology*, **79**, 3, 381–91.
- Bird, P. (1998), *Time Management* (London: Hodder and Stoughton).
- Bond, M. and Feather, N. (1988), 'Some correlates and purpose in the use of time', *Journal of Personality and Social Psychology*, **55**, 321–9.
- Bost, J. (1984), 'Retaining students on academic probation: effects of time management peer counselling on students' grades', *Journal of Learning Skills*, **3**, 38–43.
- Briddell, W. (1987), 'The effects of a time management training program upon occupational stress levels and the Type A behavioral pattern in college administrators'. PhD dissertation, Florida State University.
- Britton, B. and Tesser, A. (1991), 'Effects of time management practices on college grades', *Journal of Educational Psychology*, **83**, 3, 405–10.
- Brogden, H. and Taylor, E. (1950), 'The dollar criterion – applying the cost accounting concept to criterion construction', *Personnel Psychology*, **3**, 133–54.
- Campbell, C. P. (1998), 'Training course/program evaluation: principles and practices', *Journal of European Industrial Training*, **22**, 8, 323–44.
- Clarke, N. (2002), 'Job/work environment factors influencing training transfer within a human service agency: Some indicative support for Baldwin and Ford's Transfer Climate Construct', *International Journal of Training and Development*, **6**, 3, 46–162.
- Clegg, B. (1999), *Instant Time Management* (London: Kogan Page).
- Conran, S. (2002), 'Cost of stress', MT Letters, *Management Today*, November 14.
- Cornford, I. (2002), 'Two models for promoting transfer: a comparison and initial analysis', *Journal of Vocational Education and Training*, **54**, 1, 85–102.
- Covey, S., Merrill, R. and Merrill, R. (1994), *First Things First* (New York: Simon & Schuster).
- Davis, E. (1999), 'Does your life work? The Management Today Work-Life Survey', *Management Today*, August, 48–55.
- Daykin, S. and Baldwinson, L. (2002), DTI survey cited in 'The long-awaited wake-up call', *People Management*, 24 October, 20–1.
- DfEE (2000), *Work-Life Balance 2000 Baseline Survey* (London: Department for Education and Employment).
- Diamantopoulos, A. and Schlegelmilch, B. (2000), *Taking The Fear Out Of Data Analysis* (London: Business Press).

- Dionne, P. (1996), 'The evaluation of training activities: a complex issue involving different stakes', *Human Resource Development Quarterly*, 7, 3, 279–86.
- Drucker, P. (1970), *The Effective Executive* (London: Pan Books).
- Drucker, P. (1977), *People and Performance: The Best of Peter Drucker on Management* (London: Heinemann).
- DTI (2001), *Work-Life Balance: The Business Case* (London: Department of Trade and Industry).
- Easterby-Smith, M. (1994), *Evaluating Management Development, Training and Education* (Aldershot: Gower).
- Garnett, A. (1993), *It's About Time – Working Time Survey* (London: Industrial Society).
- Geertshuis, S., Holmes, M., Geertshuis, H., Clancy, D. and Bristol, A. (2002), 'Evaluation of workplace learning', *Journal of Workplace Learning*, 14, 1, 11–18.
- Goldstein, I. (1986), Presidential address to the Society of Industrial-Organizational Psychology. Washington, DC, cited in Alliger and Janak (1989).
- Green, P. (1999), *Managing Time: Loving Every Minute* (Cookham: CIM).
- Hall, A. and Hirsch, D. (1982), 'An evaluation of the effects of a time management training program on work efficiency', *Journal of Organizational Behaviour Management*, 3, 4, 73–96.
- Hamblin, A. (1974), *Evaluation and Control of Training* (Maidenhead: McGraw-Hill).
- Hanel, F. Martin, G. and Koop, S. (1981), 'Field testing of a self-instructional time management manual with managerial staff in an institutional setting', *Journal of Organizational Behaviour*, 4, 3 & 4, 81–96.
- Higgs, M. (2003), in Watkins, J., 'Terms of engagement', *People Management*, 6 February 2003, 15.
- Hindle, T. (1998), *Manage Your Time* (London: Dorling Kindersley).
- Hutton, W. (1997), *The State To Come* (London: Vintage).
- Industrial Society (1997), cited in Anderson, R. (2001) 'Stress in the workplace – Does it exist?' *Chiltern News*, Issue 24, 1–2 Maidenhead: CIPD Chiltern Branch.
- Jackson, T. (1989), *Evaluation: Relating Training to Business Performance* (London: Kogan Page).
- Jex, S. and Elacqua, T. (1999), 'Time management as a moderator of relations between stressors and employee strain', *Work & Stress*, 13, 2, 182–91.
- Kearns, P. (1995), *Measuring Human Resources and the Impact on Bottom Line Improvements* (Hitchin: Technical Communications (Publishing)).
- King, A., Winett, R. and Lovett, S. (1986), 'Enhancing coping behaviours in at-risk populations: The effects of time-management instruction and social support in women from dual-earner families', *Behaviour Therapy*, 17, 57–66.
- Kirby, A. (1978), 'An analysis of the effects of instruction on college students time management'. PhD dissertation, School of Education, Georgia State University.
- Kirkpatrick, D. (1994), *Evaluating Training Programmes: The Four Levels* (San Francisco, CA: Berrett-Koehler).
- Lakein, A. (1973), *How To Get Control of Your Time and Your Life* (New York: Signet).
- Landy, F., Rastegary, H., Thayer, J. and Colvin, C. (1991), 'Time urgency: the construct and its measurement', *Journal of Applied Psychology*, 76, 5, 644–57. Cited in Macan (1994).
- Le Fevre, M., Mathery, J. and Kolt, G. (2003), 'Eustress, Distress and Interaction in Occupational Stress', *Journal of Managerial Psychology*, 18, 7, 726–44.
- Lim, D. and Johnson, S. (2002), 'Trainee perceptions of factors that influence learning transfer', *International Journal of Training and Development*, 6, 1, 36–48.
- Lodahl, T. and Kejner, M. (1965), 'The definition and measurement of job involvement', *Journal of Applied Psychology*, 49, 24–33.
- Macan, T. (1994), 'Time management: Test of a process model', *Journal of Applied Psychology*, 79, 3, 381–91.
- Macan, T. (1996), 'Time-management training: effects on time behaviours, attitudes and job performance', *The Journal of Psychology*, 130, 3, 229–36.
- Macan, T., Shahani, C., Dipboye, R. and Phillips, A. (1990), 'College students' time management: Correlations with academic performance and stress', *Journal of Educational Psychology*, 82, 760–8.
- Mackenzie, R. (1972), *The Time Trap* (New York: AMACOM).
- Maher, C. (1986), 'Improving the instructional supervisory behaviour of public school principals by means of time management: Experimental evaluation of social validation', *Professional School Psychology*, 1, 177–91.
- Mann, S. (2002), 'Working around projects', *Professional Manager*, 11, 6, 29.
- MCI (1997), *Management Standards: Management, Level 4* (London: MCI).
- Mitchell, V. (1996), 'Assessing the reliability and validity of questionnaires: an empirical example', *Journal of Applied Management Studies*, 5, 2, 199–207.
- Mumford, A. (ed.) (1995), *Handbook of Management Development* (Aldershot: Gower).

- Noe, R. (1986), 'Trainees' attributes and attitudes: neglected influences in training effectiveness', *Academy of Management Review*, **11**, 4, 736–49.
- Noon, J. (1998), *Start Time Forward* (Burgess Hill: Filofax).
- O'Connor, E., Peters, L., Pooyan, A., Weekley, J., Frank, B. and Erenkranz, B. (1984), 'Situational constraints effects on performance, affective reactions, and turnover: A field replication and extension', *Journal of Applied Psychology*, **69**, 663–72.
- Olsen, J. H. Jr (1998), 'The evaluation and enhancement of training transfer', *International Journal of Training and Development*, **2**, 1, 61–75.
- Orpen, C. (1993), 'The effect of time-management training on employee attitudes and behaviour: A field experiment', *The Journal of Psychology*, **128**, 4, 393–6.
- Peel, M. (1984), *Management Development and Training* (London: BIM/Professional Publishing).
- Peters, L. and O'Connor, E. (1980), 'Situational constraints and work outcomes: The influence of a frequently overlooked construct', *Academy of Management Review*, **5**, 391–7.
- Phillips, J. (1991), *Handbook of Training Evaluation and Measurement Method*, 2nd edn (London: Kogan Page).
- Phillips, P. P. and Phillips, J. (2001), 'Symposium on the evaluation of training', *International Journal of Training and Development*, **5**, 4, 240–7.
- Porter, L. and Lawler, E. (1968), *Managerial Attitudes and Performance* (Homewood, IL: Irwin).
- Rae, L. (1997), *How To Measure Training Effectiveness*, 3rd edn (Aldershot: Gower).
- Rees, C. J. and Redfern, D. (2000), 'Recognising the perceived causes of stress: A training and development perspective', *Industrial and Commercial Training*, **32**, 4, 120–7.
- Richards, J. (1987), 'Time management – a review', *Work & Stress*, **1**, 1, 73–8.
- Roberts, Z. (2003), 'Worrying about stress', *People Management*, 6 March, 14–15.
- Robinson, C. (1974), 'Effects of time management training upon school counsellors' use of time, task-orientation and internal-external orientation', PhD dissertation, School of Education, Georgia State University.
- Robinson, D. and Robinson, J. (1989), *Training for Impact* (San Francisco, CA: Jossey-Bass).
- Roger, D. (2002), *Managing Stress: Live Long and Prosper* (Cookham: CIM).
- Russ-Eft, D., Preskill, H. and Sleezer, C. (1997), *Human Resource Development Review: Research and Implications* (London: Sage).
- Saunders, M., Lewis, P. and Thornhill, A. (2003), *Research Methods for Business Students* (Harlow: Pearson).
- Sharp, J. and Howard, K. (1996), *The Management of a Student Research Project*, 2nd edn (Aldershot: Gower).
- Skinner, D. (2004), 'Primary and secondary barriers to the evaluation of change: Evidence from two public sector organizations', *Evaluation*, **10**, 2, 135–54.
- Slaven, G. and Totterdell, P. (1993), 'Time management training: does it transfer to the workplace?', *Journal of Management Psychology*, **8**, 1, 20–8.
- Steers, R. and Porter, L. (eds) (1975), *Motivation And Work Behaviour*. New York: McGraw-Hill.
- Stewart, J. (1999), *Employee Development Practice* (London: FT Pitman Publishing).
- Swanson, R. (2001), *Assessing The Financial Benefits of Human Resource Development*. Cambridge MA: Perseus Publishing.
- Todd, D. (1979), 'Mixing qualitative and quantitative methods – triangulation in action', *Administrative Science Quarterly*, 24 December.
- Van der Klink, M., Gielen, E. and Nauta, C. (2001), 'Supervisory support as a major condition to enhance transfer', *International Journal of Training and Development* **5**, 1, 52–63.
- Vroom, V. (1964), *Work And Motivation* (New York: Wiley).
- Warr, P., Bird, M. and Rackham, N. (1970), *Evaluation of Management Training* (Epping: Gower).
- Warr, P., Allan, C. and Birdi, K. (1999), 'Predicting three levels of training outcome', *Journal of Occupational and Organizational Psychology*, **72**, 3, 351–75.
- Watkins, J. (2003), 'Terms of engagement', *People Management*, 6 February, 14–15.
- Wiltsher, C. (1999), 'Fundamentals of adult learning', in Wilson, J. (ed.) *Human Resource Development: Learning and Training for Individuals and Organisations* pp. 185–203 (London: Kogan Page).
- Woolfolk, A. and Woolfolk, R. (1986), 'Time management: an experimental investigation', *Journal of School Psychology*, **24**, 3, 267–75.
- Yamhill, S. and McLean, G. (2001), 'Theories supporting transfer of training', *Human Resource Development Quarterly*, **12**, 2, 195–208.