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Is it time well spent? The relationship between time management behaviours, perceived effectiveness and work-related morale and distress in a university context

Hugh Kearns* and Maria Gardiner
Flinders University, Australia

Despite the high 'guru-factor' in time management, few claims have been subjected to empirical investigation. This study tests the claims that people who manage their time well perceive themselves to be more effective and feel less stressed. University staff and students were utilized to investigate the relationship between time management related behaviours, perceived effectiveness, and work-related morale and distress. Results suggested a hierarchy of time management behaviours. Having a clear sense of career purpose was most important for perceived effectiveness at work, followed by planning and prioritizing. This study has significant practical implications for staff and students. If the aim of using time management strategies is to improve performance and reduce stress, people need to learn to identify the purpose in their career, then plan their time accordingly, rather than tidying desks and hanging 'do not disturb' signs on doors.

Keywords: *Morale and distress; Perceived effectiveness; Time management*

Introduction

Increasing pressures in today's workforce have led to time being viewed as a highly valuable resource. This is particularly the case in universities. Boyd and Wylie (1994), in their survey of university staff, found that 80% believed their workload had increased in recent years, and many more believed it would continue to increase in the years to come. Numerous other studies have found university staff report excessive

*Corresponding author. Flinders University, GPO Box 2100, Adelaide 5001, Australia. Email: hugh.kearns@flinders.edu.au

workloads and long working hours (Cross & Carroll, 1990; Early, 1994; Daniels & Guppy, 1994a, 1994b; Court, 1996; Jackson & Hayday, 1997; Doyle, 1998; Doyle & Hind, 1998; AUT, 2003; Tytherleigh *et al.*, 2005). These high workload demands are one of the chief causes of stress in university staff (Dua, 1994; Gillespie *et al.*, 2001; Hogan *et al.*, 2002; Winefield *et al.*, 2003; Winefield & Jarrett, 2001), which in turn has a detrimental effect on their job performance and well-being.

   Talking to people in any university in Australia reveals that lack of time is a persistent and much-lamented issue. Academics feel constantly demanded by students, that there isn't enough time to prepare their teaching and that the administration load is just not possible to fulfil. And when could there possibly be time for research? Administrative professionals within universities also describe demands that are constant and relentless, which provide them with little opportunity to control their time and their day (Gillespie *et al.*, 2001). Today's students will tell you that, with demands of lectures, study, assignments, exams, technology and work, there is barely any time for a life. Recent studies indicate these time pressures seem to be getting more critical for already overworked university staff and students (Gillespie *et al.*, 2001), and also with anecdotal evidence suggesting the same for students.

   There are hundreds of self-help books marketed at the 'time-poor' that argue effectiveness can be greatly improved through practices such as writing lists, planning ahead, prioritizing the importance of tasks (e.g. Fontana, 1994; Collis & Leboeuf, 1995; Booth, 1997; Mackenzie, 1997) and avoiding bad habits such as procrastination (Sherman, 1989). However, despite the large volume of material available, and the wide endorsement of good time management practices in organizations and workplaces, it appears that few studies have actually tested the empirical validity of basic time management principles; this is particularly so in a university environment. Therefore, in order to better understand the effect of various demands in universities today, the current study aimed to examine the relationship between various outcomes and specific time management behaviours for academic staff, general staff and students.

   Time management principles, including awareness and control of time, have been linked to a number of outcomes for employees, such as higher perceived performance, lower somatic tension (Macan *et al.*, 1990) and increased job satisfaction (Landy *et al.*, 1991). An increased workload, resulting in greater time pressures, has been identified as a major cause of stress in university staff (Dua, 1994; Gillespie *et al.*, 2001; Winefield & Jarrett, 2001; Hogan *et al.*, 2002; Winefield *et al.*, 2003). Time management is also related to particular outcomes in university students, for instance, poor time management was a perceived cause of examination failure (Ling *et al.*, 2003), and control over time has been correlated with grade point average (Britton & Tesser, 1991).

   Despite this, there has been little focus on whether engaging in time management behaviours (e.g. making lists, setting deadlines) actually improves how effective a person is at work. This relationship is suggested by the prolific time management literature (Lakein, 1973; Covey, 1989; Bliss, 1991) but, to date, has received scant

empirical attention. One study that did examine this relationship was conducted by Hall and Hursch (1982), who provided time management training to four university faculty members. After the training, a positive relationship was found between time spent on high-priority activities and self-evaluations of work effectiveness.

Time management is additionally linked to improved psychosocial functioning, for example, by alleviating stress in both workers (Macan, 1994; Jex & Elacaua, 1999) and university students (Misra & McKean, 2000). The present study aimed to expand upon these findings, measuring psychological well-being using indices of work-related morale and distress. Given the existing, albeit limited, empirical literature, we expected to find a positive association between time management behaviours and work-related morale, and a negative association between time management behaviours and work-related distress, for each of our three groups (academics, general staff and students).

In attempting to determine the relationships between time management behaviours and perceptions of effectiveness, work-related morale and work-related distress in a university environment, the current study aimed to test their relationship with four specific time management behaviours. The literature devoted to time management makes little distinction between the various behaviours, and fails to suggest which might be the most important in relation to effectiveness. Is making a to-do list as important as putting a 'do not disturb' sign on your door? Is making a plan more worthwhile than regularly emptying your in-tray? To answer these questions, we adopted a multidimensional approach to time management (Britton & Tesser, 1991; Macan *et al.*, 1990). From our experience in conducting time management courses, and from the time management literature, we identified four main behaviours:

1.   Having a clear purpose in your career;
2.   Planning and prioritizing;
3.   Avoiding interruptions and distractions;
4.   Being organized.

The first behaviour, having a clear purpose in your career, includes being clear about the role you aspire to or the contribution you want to make in your work life. The second behaviour, planning and prioritizing, includes tasks such as setting aside time each day to plan out the day's tasks and prioritize, making lists and setting deadlines. In an academic context, this would include planning ahead for lectures blocking out specific time for research, having time to create efficient systems and creating a study plan. The third behaviour is avoiding interruptions and distractions. The academic setting for both academic and general staff provides plentiful opportunities for interruptions and distractions, for example, student demands, emails and phone calls, and colleagues who just want a minute of your time. The final behaviour, being organized, includes tasks that relate more to the mechanics of time management. For example, the tidy desk, responding quickly to emails and having an efficient filing system.

Given that a 'lack of time' may be the most significant day-to-day issue facing many people working or studying in an academic setting, the current study aimed to examine

the relationships between time management behaviours and perceived effectiveness, morale and distress among university staff and students. In addition, to expand on the existing literature, we aimed to take a multidimensional approach to time management, in order to develop a guide to the time management behaviours that would be most productive and beneficial for busy academics, general staff and students.

Method

Participants

Staff and students attending training courses in a staff development unit at a medium-sized research-intensive university were invited to participate in the study. Approximately 290 questionnaires were distributed, with an accompanying letter explaining the value of participation and confidentiality of responses. Of these, 269 were completed and returned, yielding an approximate response rate of 93%. The participants consisted of academic ($n = 59$) and general staff members ($n = 92$; general staff members include all non-academic staff, and include administration, technical and support staff) and undergraduate and postgraduate students ($n = 118$).

This sample represents approximately 10% of academic staff, 10% of general staff and 1% of students. The sample consists of 74% female, and 42.3% are between 21 and 30 years of age. Level B academic status was most highly represented among the academic staff, (48.1%), while the general staff ranged from HEO levels 2–9, the most represented level being level 5 (26.1%).

Materials

A questionnaire was developed specifically for this study, designed to measure demographic information (age, gender, type of position), different time management behaviours and perceived effectiveness. Work-related morale and distress were also measured. (A copy of the full questionnaire is available from the authors.)

Time management behaviours.   Four scales were developed for use in this study, one measuring each of our four time management behaviours. The items for each were developed using the content of time management courses run at Flinders University, which in turn were drawn from the time management literature. Each questionnaire consisted of a number of items, asking participants to rate how true each statement was for them, using a seven-point Likert-type scale. Higher ratings indicate more frequent time management behaviours.

(a) *Having a clear purpose in your career*. This questionnaire consisted of a single item: 'Are you clear about what is important for you to achieve in your career?'
(b) *Planning and prioritizing*. The planning and prioritizing measure consisted of five items, with an average inter-item correlation of 0.27. Items included: 'How frequently do you set deadlines for yourself?'

(c) *Avoiding interruptions and distractions*. This questionnaire consisted of five items, with an average inter-item correlation of 0.25. Items included: 'Do you make a conscious effort to avoid interruptions when working on important tasks?'
(d) *Being organized*. This scale consisted of two items, which correlated with each other with a coefficient of 0.20. Items included: 'Do you empty your in-tray/email in-box daily?'

Perceived effectiveness.   Participants were asked six questions relating to how effective they felt they were at work. Items included: 'How much control do you feel you have over your time at work?', and were rated on a seven-point Likert-type scale. The scale was found to have only moderate internal consistency ($\alpha = 0.69$). This increased to 0.74 with the removal of question 5, which was less correlated with the other items. As such, all analyses are performed using the five-item version of the scale. Total scores for perceived effectiveness range from 5 to 35, with higher scores indicating greater effectiveness.

Work-related morale and distress.   Work-related morale and work-related distress were measured using Hart *et al.*'s (1996) 14-item scale. Participants were asked to rate the frequency of a number of different feelings while at work over the previous month. Responses were made on a seven-point Likert-type scale, ranging from 'not at all' to 'all the time'. Seven emotions reflect work-related morale (e.g. enthusiastic, proud), while seven reflect work-related distress (e.g. tense, unhappy). Each were summed separately to obtain separate indices of morale and distress, which range from 1 to 49 (greater scores indicating greater levels of morale or distress).

Results

Academic staff, general staff and students

The means and standard deviations for perceived effectiveness, morale and distress, and each of the time management behaviours, are presented in Table 1. One-way ANOVAs were conducted to examine any differences between academic staff, general staff and student participants for all measures. There were non-significant main effects of group for each of the time management behaviours, work-related morale and work-related distress ($p > 0.05$ for all contrasts). The only significant main effect found was for perceived effectiveness, F(2,261) = 3.67, $p = 0.027$. Post-hoc analyses revealed that general staff had higher levels of perceived effectiveness than did academic staff; academic staff had a clearer purpose in their career than did general staff; and general staff were more organized than were either academic staff or students ($p < 0.05$ for all contrasts). No other significant differences between the groups were found. Similarly, there were no differences by gender, full-time status or length of time at the university.

Table 1.   Means and standard deviations of time management behaviours, perceived effectiveness, morale and distress, for academic and general staff, students and overall

	Academic staff	General staff	Students	Total
Perceived effectiveness[a]	23.03 (4.31)[b]	24.95 (4.67)[b]	24.12 (3.80)	24.15 (4.26)
Work-related morale	33.82 (7.62)	32.25 (7.77)	32.93 (6.47)	32.89 (7.20)
Work-related distress	21.04 (8.73)	20.98 (8.60)	22.00 (8.04)	21.43 (8.37)
Having a clear purpose in your career[a]	5.44 (1.42)[c]	4.72 (1.61)[c]	5.17 (1.14)	5.08 (1.40)
Planning and prioritizing	26.72 (4.51)	25.80 (4.10)	25.37 (4.33)	25.84 (4.28)
Avoiding interruptions and distractions	18.61 (4.68)	20.17 (3.51)	19.18 (4.31)	19.54 (4.09)
Being organized[a]	9.10 (2.68)[d]	10.47 (2.74)[d, e]	9.00 (2.75)[e]	9.61 (2.79)

[a]Significant main effect, $p < 0.05$; [b, c, d, e]Significant difference, $p < 0.05$.

Correlations between time management behaviours and measures of perceived effectiveness, morale and distress

Correlations were performed between items for each separate time management behaviour scale and the three outcomes: perceived effectiveness, morale and distress. A number of significant correlations emerged, supporting the hypothesis that those who undertake more positive time management behaviours are also more likely to believe themselves to have higher work-related effectiveness and morale, and are less likely to report work-related distress. As indicated in Table 2, the 'having a clear purpose' behaviour correlated positively with perceived effectiveness and morale, and negatively with distress. Two of the five items in the 'planning and prioritizing' measure (scheduling time and working to deadlines) were positively correlated with perceived effectiveness, while four (scheduling time, setting and working to deadlines, and making lists) were positively correlated with work-related morale. Only one item (working to deadlines) was negatively correlated with distress. Three of the five items in the 'avoiding interruptions and distractions' scale (avoiding procrastination, saying 'no' when already under pressure and avoiding excessive time on unimportant tasks) correlated negatively with work-related distress, while only one (correctly estimating the time needed for tasks) was positively related to perceived effectiveness. Neither of the two items related to the 'being organized' behaviour (maintaining a clear working space, and emptying in-tray regularly) were correlated with perceived effectiveness, morale or distress.

   In order to clarify the pattern of relationships between variables and to determine some degree of hierarchical importance, the items for each of the four time management behaviours were summed to provide a total score for each behaviour. Correlations

Table 2. Correlations between time management behaviours and measures of perceived effectiveness, morale and distress

Item	Effectiveness	Morale	Distress
Having a clear purpose in your career			
Being clear about what is important	**0.261★★**	**0.363★★**	**−0.242★★**
Planning and prioritizing			
Scheduling time for the day	**0.210★**	**0.296★★**	−0.100
Setting deadlines	0.156	**0.209★**	−0.069
Working to deadlines	**0.391★★**	**0.187★**	**−0.184★**
Making lists of tasks to complete	0.153	**0.170★**	−0.107
Prioritizing the time spent on work	0.157	0.091	−0.036
Avoiding interruptions and distractions			
Correctly estimating the time needed for tasks	**0.237★★**	0.090	−0.155
Avoiding procrastination	0.137	0.070	**−0.176★**
Saying 'no' to others when already under pressure	0.140	0.003	**−0.164★**
Avoiding interruptions when working on important tasks	0.113	0.116	−0.010
Avoiding spending excessive time on unimportant tasks	0.107	0.094	**−0.184★**
Being organized			
Maintaining a clear working space/desk	0.156	0.056	−0.074
Emptying in-tray/email inbox daily	0.124	0.034	−0.018

n ranges from 252 to 265; ★$p < 0.01$; ★★$p < 0.001$.
Note: Due to the multiple inferential tests, the more stringent alpha level of 0.01 was used to reduce the likelihood of type I error.

between each of the time management behaviours and measures of perceived effectiveness, morale and distress were then performed. The correlations, as displayed in Table 3, confirm that the relationships between time management and perceived effectiveness, morale and distress vary according to the different behaviours.

The relationships between the outcome measures and the different time management behaviours can be summarized as follows:

● *Having a clear purpose*: this behaviour correlated significantly with all three outcome measures; it was positively related to perceived effectiveness and work-related morale, and negatively related to work-related distress.

Table 3. Correlations between time management factors and measures of perceived effectiveness, work-related morale and distress

Item	Effectiveness	Morale	Distress
Having a clear purpose	0.261★★	0.363★★	−0.242★★
Planning and prioritizing	0.338★★	0.306★★	−0.148
Avoiding interruptions and distractions	0.241★★	0.136	−0.239★★
Being organized	0.173	0.054	−0.054

n ranges from 251 to 263; ★★$p < 0.001$.

- *Planning and prioritizing*: this behaviour was positively correlated with work-related (perceived) effectiveness and morale, but was not related to work-related distress.
- *Avoiding interruptions and distractions*: this behaviour was positively correlated (albeit weakly) with perceptions of effectiveness. It was not related to work-related morale; however, it was negatively correlated with work-related distress.
- *Being organized*: the correlations between this behaviour and the outcome measures were weak and non-significant, suggesting that this behaviour is the least important with regard to the work-related outcomes we measured.

Further analyses were conducted to see if this pattern held true for each group of participants: academic staff, general staff and students. Visual inspection of correlations performed for each group revealed similar patterns across all three types of participants, with only minor variations. Being organized was positively related to work-related morale only for general staff members, while for students, the behaviour of avoiding interruptions and distractions was not significantly related to any of the outcome measures, as it was for academic and general staff members.

Discussion

The present study aimed to investigate the relationships between time management behaviours and various outcomes in a university population: perceived effectiveness, work-related morale and work-related distress. As hypothesized, those people who performed more time management behaviours believed themselves to be more effective at work, and had higher levels of morale and lower levels of distress. These relationships were essentially the same across each of our three groups: academics, general staff and students. The only variations were that being organized was related to morale only for general staff members, and avoiding interruptions and distractions was not related to perceived effectiveness, morale or distress in students.

Prompted by previous studies supporting a multidimensional view of time management (e.g. Macan *et al.*, 1990), we also examined the relationships between the work-related outcomes and each of our time management behaviours: having a clear purpose in your career, planning and prioritizing, avoiding interruptions and distractions and being organized. Based on the pattern of relationships found, we are proposing the model displayed in Figure 1.

In this model, the four behaviours are arranged in a hierarchy of importance. At the top, the most important behaviour is having a clear purpose. Those with a purpose for their career are more likely to feel effective at work. In addition, having a clear sense of purpose appears to boost morale and guard against distress. At the next level of importance in the hierarchy is planning and prioritizing. Those who plan their time and prioritize their tasks not only feel more effective at work, but also have higher morale. Avoiding interruptions and distractions is the next important; it appears to have some buffering effect against distress in the workplace but does little to improve perceived effectiveness. At the lowest level of the hierarchy is being organized, which has no significant influence on perceived effectiveness, morale or distress. At this
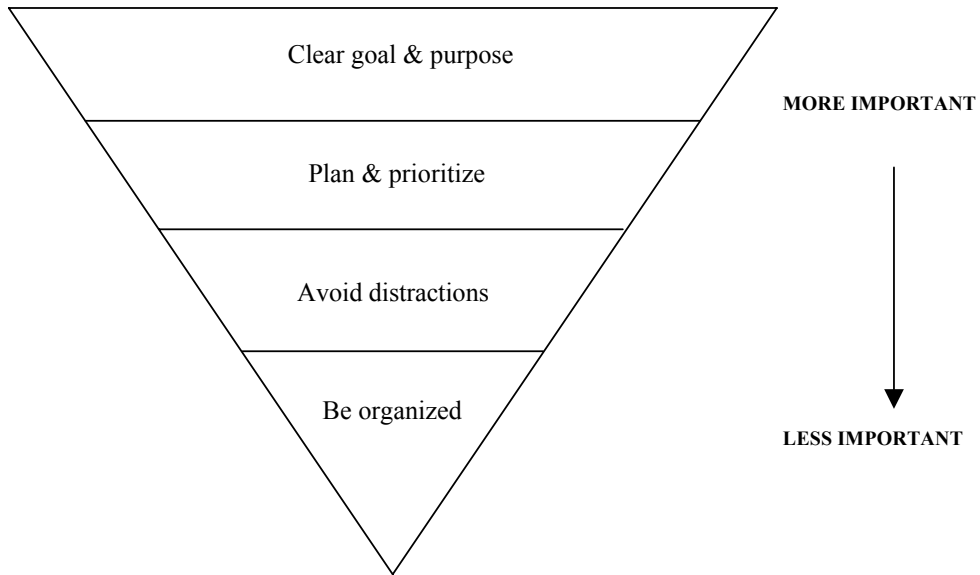
Figure 1.   A hierarchy of importance for time management behaviours in predicting perceived effectiveness, work-related morale and distress

stage, our model is theoretical as it is based on a correlational design; more research would be needed to investigate any causal validity of this model.

The existing literature provides some support for this model. Excessive workload, which contributes to feelings that people lack time to complete their work, has been shown to be a predictor of stress, which in turn leads to negative psychological symptoms and poorer performance at work (Dua, 1994; Gillespie *et al.*, 2001; Winefield & Jarrett, 2001; Hogan *et al.*, 2002; Winefield *et al.*, 2003). It is therefore reasonable to suggest that behaviours designed to better manage time will improve feelings at work and will increase work effectiveness. Furthermore, Gillespie *et al.* (2001) found that having a clearly defined role in the university helped to reduce stress; this may suggest that having a clear purpose or plan for one's career and being clear about what is important, and subsequently planning activities that will help one's career and avoid unnecessary distractions, will help to alleviate stress. The authors also found that staff reported planning and prioritizing tasks as a means of managing stress, as our model suggests.

Practical implications

Overall, our model suggests that the most important aspect of time management is related to the big picture, namely having an overarching plan or purpose. Next, specific time management strategies, such as prioritizing tasks, are useful at improving psychological functioning at work, in particular, by boosting morale. Finally, avoiding interruptions or performing organizational tasks, such as tidying, although

widely endorsed by popular time management programs, may play less of a role in these specific outcomes.

In effect, this model suggests that an academic better spends her precious free hour on making a list with deadlines and priorities than answering the scores of less important emails that accumulate on a daily basis. Table 4 describes the practical implications of our findings for academic staff. The most important aspect of time management for an academic, we believe, is to decide on the nature of her career. What is she trying to achieve and what are her long-term goals? It appears that this process of reflection may be what most drives an academic's effectiveness and well-being. It may be that such reflection leads to greater commitment and motivation, which then translates into an academic's effectiveness and well-being. Next, for the academic it is important to plan and prioritize. Should she spend the next week putting all her lectures into PowerPoint, or should she start that paper for the *Journal of Organizational Stress*? When your purpose is clear (e.g. develop strong research and teaching career), the plan and priorities become easier to decide (e.g. start work on paper). While, according to our research, avoiding interruptions and distractions and being organized are less related to effectiveness and well-being, there are some relatively easy things that can be done, such as setting consultation times and using an in-tray, which are likely to be of some use.

According to our model, a general staff member would be better spending some time, at the start or at the end of each day, clarifying the high-priority tasks rather than trying to get through all the paper on her desk every morning. Table 4 presents the practical implications of our research for general staff. The most important element for general staff is to determine the type of career they want; what aspects of their career they value; and what aspects they would like to change. Once her purpose and goals are clear (e.g. 'I want more administrative and financial work and less people contact'), planning and prioritizing follow. For general staff this might include what training they should do to develop new skills, and what they will concentrate on in their day-to-day work. Again, as with academic staff, while less relevant to effectiveness and well-being, avoiding distractions and being organized may still be useful once the purpose and plans are clear. For general staff it may be useful to keep interruptions to a minimum or to confined to set times, letting some phone calls go to voice mail, reducing the number of meetings and learning to say 'no'.

Again, according to our model, for students it would be better to be clear about the purpose of what they are studying and identifying the high-priority areas rather than simply reading more or reorganizing their notes. Table 4 presents the practical implications of our research for students. Of greatest importance for students is reflecting on what they are studying and where it fits in their life: is it what they want to do and are they doing it for the 'right' reasons? With a clearer motivation for study, it becomes easier for students to plan out a study schedule and set short- and medium-term goals for other areas of their lives. Of most importance for students in planning is to set regular study times. This allows for time off, instead of students always feeling they should be studying. Avoiding distractions was not found to be related to either students' effectiveness or well-being, and this probably reflects the constantly changing and less

Table 4. Practical implications of our findings for academics, general staff and students

	Academics	General staff	Students
Essential Having a clear purpose	Spend time deciding on the nature of your academic career: ● What is important in your job and in your life? ● What are you trying to achieve? ● Is your priority teaching, research or administration? ● Do your actions reflect your purpose? ● Where do family/friends and health fit in?	Spend time deciding on the type of career you want and what you want to get out of it: ● What is important in your job and in your life? ● What aspects do you want more of? ● What aspects do you want less of? ● How does you current job help you get these things?	Spend time deciding on the type and nature of study you are undertaking: ● Where will it take you? ● Do you enjoy it? ● Are you motivated? ● Are you doing it for the right reasons? ● Does it fit realistically into your life at present (e.g. other commitments)?
Very useful Planning and prioritizing	Set out a list of goals for the future (e.g. 2 years) and work backwards: ● What do you hope to achieve in the next 6 months? ● What do you hope to achieve in the next month/week/day? ● Make a list ● Prioritize ● Write times in your diary	Develop a 'work and career' plan: ● What are the steps necessary to get there? ● Put time lines on them ● Make a list ● Prioritize ● Write times in your diary ● What do you *need* to achieve in next month/week/day?	Develop a plan showing how much time you have available for work, study, family, etc.: ● Map out your study commitments ● Decide when you can study ● Set deadlines ● Write times in your diary ● Identify the most important topics and assignments
Somewhat useful Avoid interruptions and distractions	Try these strategies: ● Set consultation times and stick to them ● Use a 'do not disturb' sign ● Use a different office when you are trying to write	Try these strategies: ● Only read and answer emails at specific times of day ● Let your phone go to voice mail, so you can get concentrated work done ● Don't say 'yes' to anything—say 'I'll get back to you'	Try these strategies: ● Study in a quiet location ● Study at set times ● Don't study at 11 o'clock at night ● Turn off mobile phone (well, at least for high-priority study!)
May be helpful Being organized	Try these tools: ● Use an in-tray ● Develop a filing system ● Develop an organizational system	Try these tools: ● Use an in-tray ● Develop a filing system ● Develop an organizational system	Try these tools: ● Organize readings ● Set up study systems

structured life of the student. Nonetheless, it is probably beneficial for students to try to stick to set study times and to keep their study material organized.

In summary, our findings show that some time management behaviours are able to predict perceived effectiveness and work-related morale and distress better than others, and this in turn leads to practical implications for academic and general staff and students. However, it should be noted that our study is based on a correlational design, and therefore claims of causality cannot be definitive without further investigation. This model therefore is based on the most likely interpretation of our data. In addition, future investigation is required to assess whether the same findings apply to actual effectiveness at work, rather than just perceived effectiveness.

Similarly, future studies will be advised to utilize larger sample sizes, in order to assess whether these findings can be generalized across the university population. If the results of the current study are supported by future research, and these time management behaviours are found to influence feelings of effectiveness, morale and distress, it has important implications for the well-being and happiness of university staff and students. However, given the limited empirical evidence to guide a busy and stressed academic community, the current study provides much-needed guidance and assistance to those of us who sit daily at our desks staring at a mound of papers and asking: 'where do I start?'

References

AUT. (2003). *Survey of members.* London: AUT.

Bliss, E. C. (1991). *Getting things done: The ABCs of time management.* New York: Scribner.

Booth, A. (1997). *Better time management in 21 days.* Sydney: Prentice-Hall.

Boyd, S., & Wylie, C. (1994). *Workload and stress in New Zealand universities.* Wellington: New Zealand Council for Educational Research/Association of University Staff of New Zealand.

Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology, 83*(3), 405–410.

Collis, J., & Leboeuf, M. (1995). *Work smarter, not harder.* Sydney: HarperCollins.

Court, S. (1996). The use of time by academic and related staff. *Higher Education Quarterly, 50,* 237–260.

Covey, S. R. (1989). *The 7 habits of highly effective people.* New York: Simon & Schuster.

Cross, G., & Carroll, D. (1990). *Goodwill under stress: Morale in UK universities.* London: Association of University Teachers.

Daniels, K., & Guppy, A. (1994a). An exploratory study of stress in a British university. *Higher Education Quarterly, 48,* 135–144.

Daniels, K., & Guppy, A. (1994b). Occupational stress, social support, job control, and psychological well-being. *Human Relations, 47,* 1523–1544.

Doyle, C. (1998, July). *The work experience of senior academic women: Stress, coping, career progression.* Paper presented at 1st International Work Psychology Conference, Institute of Work Psychology, University of Sheffield, UK.

Doyle, C., & Hind, P. (1998). Occupational stress, burnout and job status in female academics. *Gender, Work and Organisation, 5,* 67–82.

Dua, J. K. (1994). Job stressors and their effects on physical health, emotional health, and job satisfaction in a university. *Journal of Educational Administration, 32,* 59–78.

Early, P. (1994). *Lecturers' workload and factors affecting stress levels.* Slough: NFER.

Fontana, D. (1994). *Managing time.* Brighton, Victoria: Wrightbooks.

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work and Stress, 15,* 53–72.

Hall, B. L., & Hursch, D. E. (1982). An evaluation of the effects of a time management training program on work efficiency. *Journal of Organizational Behavior Management, 3,* 73–96.

Hart, P. M., Griffin, M. A., Wearing, A. J., & Cooper, C. L. (1996). *Queensland Public Agency Staff Survey.* St. Lucia, Queensland: QPASS.

Hogan, J. M., Carlson, J. G. & Dua, J. (2002). Stressors and stress reactions among university personnel. *International Journal of Stress Management, 9,* 289–310.

Jackson, C., & Hayday, S. (1997). *Staff attitudes at the University of Central Lancashire.* Brighton: Institute for Employment Studies.

Jex, S. M., & Elacaua, T. C. (1999). Time management as a moderator of relations between stressors and employee strain. *Work and Stress, 13,* 182–191.

Lakein, A. (1973). *How to get control of your time and your life.* New York: Penguin.

Landy, F. J., Rastegary, H., Thayer, J., & Colvin, C. (1991). Time urgency: The construct and its measurement. *Journal of Applied Psychology, 76,* 644–657.

Ling, J., Heffernan, T. M., & Muncer, S. J. (2003). Higher education students' beliefs about the causes of examination failure: A network approach. *Social Psychology of Education, 6*(2), 159–170.

Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology, 75,* 309–409.

Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology, 82,* 760–768.

Mackenzie, A. (1997). *The time trap* (3rd ed.). New York: Amacom.

Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies, 16*(1), 41–51.

Sherman, J. R. (1989). *Stop procrastinating—get to work.* Los Altos, CA: Crisp.

Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C. (2005). Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education Research & Development, 24*(1), 41–61.

Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J. & Boyd, C. (2003). Occupational stress in Australian university staff: Results from a national survey. *International Journal of Stress Management, 10,* 51–63.

Winefield, A. H. & Jarrett, R. J. (2001). Occupational stress in university staff. *International Journal of Stress Management, 8,* 285–298.