Academic Life: Monitoring Work Patterns and Daily Activities[1]

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Abstract

Academics are reported to be working longer hours and have less time for research because of increasing administrative and teaching demands. The traditional pattern of the academic enterprise appears to have changed. To explore whether this is indeed the case, the Experience Sampling Method [ESM], a research technique devised by Mihaly Csikszentmihalyi and his colleagues (1993), was used in a pilot study to monitor the working lives of 22 university academics from two multi campus universities in Australia. Participants were asked to complete a specifically devised Experience Sampling Form [ESF] on receipt of an SMS message sent to their mobile phones six times a day for one week. Information was gathered about the activities being undertaken and the respondents' feelings about these activities. Work related tasks reported were sorted into the 17 different categories of academic work devised by Kreber (2000). The findings were examined by gender, university of employment, working hours, and by level of academic appointment.

Introduction[2]

There is much anecdotal evidence that academics now face intolerably high teaching loads, suffer increased stress, and have little time for research (e.g., Hundloe 2002, Illing 2001, Ketchell 2002). A range of factors in the Australian higher education scene contributing to the changing emphases of universities and the roles of those who work in them have been identified and include: enrolment growth, knowledge explosion, globalisation, technology, government funding, corporatisation and managerialism, and perceptions of the academic profession (Anderson, Johnson & Saha 2002, Coaldrake & Stedman 1998, 1999, Marginson 2000). 'In the main, academic work has stretched rather than adapted to meet the challenges posed by transformations of the higher education

sector' (Coaldrake 1999, p. 3). According to Marginson (2000), the transformation that the academic profession is experiencing 'has yet to be adequately researched and analysed' (p. 23).

Some focused data about academics' (changing) work patterns have been gathered (e.g., Anderson, Johnson & Saha 2003, Martin 1999, McConville & Allport 2000, McInnis 1999, Subramaniam 2003, Talib 2001, Winefield, Gillespie, Stough, Dua & Hapuararchchi 2002, Winter, Taylor & Sarros 2000). Typically there has been a heavy reliance on self-report and survey data. Anderson et al. (2002) also used group interviews and, in an appendix to the report, included one academic's estimate of a year's workload. Collectively the studies reveal that academics work long hours (a working week of 50 hours or more is often reported – compared with an average 8.5 hours per day reported for US academics in 1933 by Wilson 1979), spend increasing amounts of time on enterprise income and administrative activities, teach more and larger classes, have less time for reflective and research activities, and report increased levels of stress and decreased levels of work satisfaction. Anderson et al. (2002) noted that 'Australian academics are experiencing levels of job dissatisfaction, low morale, stress and burnout unknown ten or twenty years ago' (p. 96). Coaldrake and Stedman (1999) claimed that 'many academics feel burdened by the increasing weight of expectations placed upon them, in contrast to their ideal of determining the parameters of their own working lives' (p. 9), yet were still intrinsically motivated by their work. Bellamy, Morley and Watty (2003) also found that despite deteriorating working conditions, business academics were not seeking to leave their positions.

In this article we report data from a recently conducted pilot study in which a comprehensive data gathering method, the Experience Sampling Method [ESM] devised by Csikszentmihalyi and his colleagues (e.g., Csikszentmihalyi, Rathunde & Whalen 1993), was used to monitor the daily lives of 22 academics from Schools of Education at two multi-campus universities in Victoria, Australia. The specific aims of the study were (1) to determine the effectiveness of the ESM for capturing the activities and feelings of academics in and beyond the workplace setting and (2) to chart the daily activities of a group of academics to obtain more accurate information about the regular tasks, activities, and responsibilities they undertake and their feelings about these activities.

Academic Work

Academic work has been defined in various ways – most broadly in terms of teaching, research, administration, and services to the profession and the community. McInnis (1999) in Australia and Kreber (2000) in Canada are among those who have used broader and more detailed descriptions of academic work activities. A comparison between the two different sets of groupings is provided in Table 1. The considerable

Based on Kreber (2000)	Based on McInnis (1999)
1. Learning about new developments in one's discipline	Keeping up to date in one's field; own professional development
2. Counselling students on program and career issues	Pastoral care of students
3. Off-campus lectures and conference presentations to professional societies	Off-shore academic work; presentation of research at conferences
4. Public talks, consulting, and community service	Community service; consultancy; marketing and promotional activities; industry liaison
5. Informal conversations with colleagues	——
6. Reviewing and evaluating the work of colleagues (manuscripts, grant applications, etc)	Research/Scholarship
7. Formal instruction	Teaching classes; undergraduate teaching; postgraduate coursework teaching; off-shore academic work; postgraduate thesis supervision; thesis supervision; (International exchange programs?)
8. Networking with colleagues	——
9. Advising, mentoring, and assisting colleagues	Supervising casual and junior staff
10. Conducting research	Research/Scholarship; research activity
11. Preparing for teaching	Teaching related activity; designing and scanning in on line materials; (International exchange programs?)
12. Writing books, articles, monographs, grant proposals	Research/Scholarship; publication of research findings
13. Learning about one's teaching	Keeping up to date in your field; own professional development
14. Preparing and conducting evaluations of students' work	Teaching related activity; administrative work; research supervision; postgraduate thesis supervision
15. University and departmental committee work	Administrative work
16. Being a member of a professional association	Research/Scholarship
17. Advising students on assignments, projects, and theses	Teaching related work; thesis supervision; post graduate thesis supervision

Table 1
Descriptions of academic tasks

overlap between the two sets of descriptors is noteworthy, given that they were devised independently to describe the work of academics from different countries and disciplines. The comparisons also proved helpful when the data in this study were coded, i.e., facilitated coding decisions about responses not readily categorised.

In this article we have relied particularly on the categories described by Kreber, refined or supplemented by the categories derived from McInnis (1999) when this added clarity or removed ambiguity.

The Experience Sampling Method

The Experience Sampling Method [ESM] was developed some 30 years ago by Mihaly Csikszentmihalyi. The ESM offers a sustained method for capturing not only an individual's activities over an extended period of time, but also that individual's reactions to, and beliefs about, those activities. According to Csikszentmihalyi (1997), the ESM can provide:

> a virtual film strip of daily activities and experiences. We can trace a person's activities from morning to night day by day over a week, and we can follow his or her mood swings in relation to what the person does and who he [sic] is with (p. 15).

The ESM has been used in a variety of settings to describe the pattern and quality of individuals' daily lives, including: monitoring of life stressors (Nicolson & van Eck 1996) and moods in natural settings (Delespaul & de Vries 1996, Minor, Glomb & Hulin 2001), and in school settings (Bishay 1996, Jordan & Nettles 1999, Larson & Richards 1994, Ly 1998).

The ESM was adopted in the present study as it was considered to have the potential to provide richer and more comprehensive data than the more conventional survey methods used to gather data on academic work patterns. In being able to provide a sustained overview of the activities in which the participants would be engaged over a one week period, it was also considered less intrusive and less resource intensive than shadowing, a technique that can be used to study the typical day of individuals at work (e.g., Kephart & Schultz 2001).

Using the Experience Sampling Method

As already indicated, the ESM allows insights into the motivations, attitudes, and beliefs associated with an individual's behaviours, through extensive monitoring of activities over an extended period of time. In response to a signal, typically sent five

to seven times daily over a period of one week, participants chart the course of their daily lives and experiences by filling out a detailed report of their current activities, companions, thoughts, and feelings on the specially designed Experience Sampling Form or ESF. Different means have been used to send signals to participants, for example, electronic pagers carried by participants (Csikszentmihalyi & Whalen 1993) or watches that were 'randomly programmed to page the wearer five times throughout the school day' (Bishay 1996, p. 148). Each method produced a broad picture of the daily lives and experiences of the participants through completion of ESFs on receipt of signals.

Response rates are typically high. Miner, Glomb and Hulin (2001), who used palmtop computers to contact participants, commented that 'our own experience dictates that participants respond to and complete the … administered questionnaire about 75-85% of the time they are signaled' (p. 6), a response rate representative of that reported in other studies. A further indication of the quality of information gathered via the ESM can be inferred from data supplied by Mittelstaedt (1995) who used an exit interview to elicit participants' responses to the summary of their activities as captured by the ESM technique:

> 27 individuals (64%) rated the ESM profile as very accurate, 13 persons (31%) rated the profile as an accurate indicator of (their activities), and two (5%) felt it was only somewhat accurate. Overall, 30 individuals (95%) felt the ESM technique provided information that was an accurate or very accurate picture of their (activities) (p. 1).

The Study

The sample
All academics employed in Schools of Education in two multi campus universities in Victoria, Australia were invited to participate in the study. Both universities were 'Gumtree' institutions, defined by Kayrooz, Kinnear and Preston (2001) as universities 'built in the 1960's and 1970's, consequent to the Martin report but before Dawkins created the unified national [Australian] system' (p. 9). The volunteer group agreeing to be involved comprised 22 academics, representing a 30% response rate. There were 8 males and 14 females, with seniority levels ranging from level A (Assistant Lecturer) to level E (Professor)[3].

Method and instruments
The study spanned the last two weeks of the teaching period of second semester, 2002, as it was convenient to commence the ESM monitoring mid-week. The 22

participants were sent SMS phone messages six times a day for one week between the hours of 7.30am and 10pm on weekdays, and between 9am and 10pm on the weekend days. The times the signals were sent differed each day but one message per day was sent within the following time periods: 7.30am to 10am, 10am to midday, midday to 2pm, 2pm to 4pm, 4pm to 6pm, and 6pm to 10pm. A typical message read as follows: 'DLA study. 2.50pm Tuesday. Message 4. Complete ESF now' i.e., the SMS message included the time it was sent, the day of the week and the message number for the day. We relied on technology available through Link Communications P/L that allowed the same SMS message to be sent simultaneously to the mobile phones of the 22 participants via a single email message. The cost involved was small: 22c per message to each mobile phone at the time of our study. It was expected that participants would receive the SMS messages simultaneously and complete the appropriate ESF on, or as soon as possible after, receipt – preferably within half an hour. Occasionally messages to some participants were delayed, apparently because of congestion on the carrier used by those participants. Such delays could be monitored by comparing the entries for time sent (part of the SMS message) and time the message was received (recorded on the ESF). Prior to the week of monitoring, participants were asked to complete a background information sheet listing biographical and work detail data.

Excerpts from the *Experience Sampling Form* we used are shown in Figure 1. Respondents, it can be seen, had the opportunity to describe and comment on the activities being undertaken as well as on the attitudes, beliefs, emotions, and moods elicited by those activities.

All information collected via the ESF was transcribed and coded in two different ways: according to the categories described by Csikszentmihalyi (1997) and those used by Kreber (2000). Details of these categories are shown in the results section and in the case study which concludes the article.

Results

Response rate – general comment

When they received the SMS messages, participants could clearly choose whether or not to complete an ESF. It might be argued that the data are thus readily biased in the direction of what participants decide that the researchers should learn about their activities and that some might choose not to pass on certain information. With 22 academics completing six ESFs per day over seven days, there was the potential for 22 x 6 x 7 = 924 complete sets of data – a sufficiently large set to minimise the effect of an occasional biased response. In our study the overall response rate was very high

TUESDAY   Message No. 1 2 3 4 5 6 (circle as appropriate)

Date:_____ Time received/read:_____ Time filled out:_____

As you were contacted:
(You may have been engaged in an academic pursuit (teaching, research, administration, preparation), household chore, leisure activity, driving between campuses, etc. Any of these are relevant for the purposes of this study)

Where were you?_____

Who were you with?_____

What were you doing?_____

What were you thinking (about)?_____

Tick the column which best describes how you would rate:

	Very low	Low	Average	High	Very high
The challenge of the activity					

Tick the column to indicate your response to each of the following:

	Not at all	A bit	Average	Quite a lot	Very much
Was this activity important to you?					
Do you wish you had been doing something else?					
Were you satisfied with how you were doing?					

In the table below you are asked to describe your mood when you were contacted. Two words, emphasising the extremes of a continuum, are given for each line. Tick the appropriate column which best describes your mood along that continuum.

	Very	Quite	NEITHER	Quite	Very	
alert						drowsy
irritable						cheerful
interested						bored
stressed						relaxed
competitive						cooperative
distracted						focussed

If you had the choice when you were contacted:

What would you prefer to have been doing?_____
_____

Any other comments:_____
_____

Figure 1
Extracts from the 'Experience Sampling Form'

– approximately 95 %. This exceeded the response rate cited by Miner et al. (2001) as well as our expectations of completion of 'at least' four of the six sheets each day. We interpreted the high response rate as indicative of the ease of completion of the instrument and the group's strong commitment to the study, an inference reinforced by unsolicited but not isolated comments such as 'What a great study – it's shown me just how much I do each day – even on the days when I feel I'm getting nothing done'.

Response rate – compared with earlier work

Given the small sample size, it seemed particularly useful to compare our findings with those of earlier research. Csikszentmihalyi (1997) summarised behaviour patterns 'based on daytime activities reported by representative adults and teenagers in recent U.S. studies' (p. 9), under a variety of headings. Comparisons between responses reported by American samples of adults and teenagers and those obtained from our sample are shown in Table 2, in percentages which reflect the number of times participants were engaged in that activity when contacted. Since profiles differed by age, gender, social class, and personal preference, minimum and maximum percentages are given for the U.S. sample.

Category	Response pattern US sample	Response pattern Pilot study sample
Working or studying	20-45%	56%
Talking, eating, daydreaming, while at work	4-15%	1.9%
Housework and related activities	8-22%	6.9% (up to 8% for the females in our sample; up to 15% for the males)
Eating	5%	5%
Daily travel	6-9%	10.1%
Leisure & social activities	20-43%	15.8%

Table 2
Comparison of selected activities reported in earlier
**work and by our sample**

Thus, as can be seen from Table 2, as a group, the participants in our study spent a greater proportion of their time working (as reflected by their engagement in that activity when they were contacted) than reported for a diverse American sample (Csikszentmihalyi 1997) and less time off task during working hours. The proportions of time spent eating and doing housework and related activities were respectively the same as, or within the range reported by Csikszentmihalyi. More time was spent by our sample travelling, possibly a reflection of the geographically extensive work environments experienced by those working in a multi campus university and less

time in leisure and social activities – an inevitable consequence of the large proportion of time involved in work activities.

Data analyses using the 17 Kreber categories of academic work

Of all the responses provided by the participants, 56% were classified as work (or study) related. The responses that were identified as being work-related were re-categorised into the 17 categories of academic work described by Kreber (2000), (see Table 1). These data were then analysed by several variables: participant gender, university of employment, and participants' academic level to explore whether differences were evident by these grouping factors. Since the sample size was small, no statistical testing was undertaken. Trends in the data were examined by plotting separate bar graphs for each variable of interest to illustrate percentage responses to each Kreber category.

A separate analysis was undertaken to explore the types of work-related activities that participants undertake in and out of office hours – office hours were taken as 9am – 5pm on weekdays. These data were examined by participant gender and by university of employment.

Kreber academic work-related activities: by gender
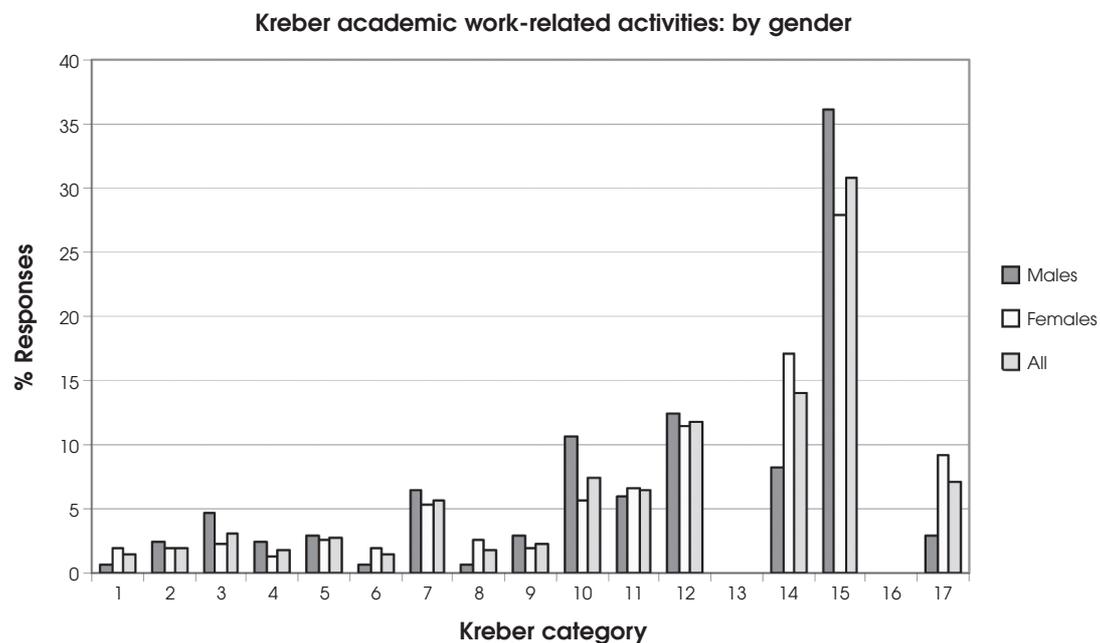
**Figure 2
Participants' work-related responses by gender (and for all participants)**

Work-related activities by gender

In Figure 2, the percentages of responses to each of the 17 Kreber (2000) academic work-related activities are shown for male and female participants. Gender was considered an important variable to examine as there has historically been a gender gap favouring men in the higher education sector, particularly with respect to levels of appointment (e.g., Allen 1994, Monash University 2004), and power differentials as noted by Marginson (2000).

The data in Figure 2 reveal similar patterns in the responses of males and females for the majority of Kreber categories. However, there appear to be differences with respect to the proportion of responses to a few items: 3 (off-campus lectures and conference presentations to professional societies), 10 (conducting research), 14 (preparing and conducting evaluations of students' work), 15 (university and departmental committee work, including administrative work via email), and 17 (advising students on assignments, projects, and theses). While the small sample precludes definitive conclusions being drawn, males were more likely than females to have been at off-campus lectures, conferences or professional societies (3), engaged in research (10) and committee work (15); and females more likely than males to be engaged with students preparing and evaluating their work (14), and advising them on aspects of their work (17). Unlike the findings reported by Subramaniam (2003) for her sample of academic accountants, our participants did not comment on gender-linked restrictions or pressures in their work.

It is noteworthy that there were no participants who were engaged in learning about their teaching (13), or doing work for a professional association (16) during the seven days of monitoring.

Work-related activities by university of employment

In Figure 3, participants' work-related responses to the 17 Kreber (2000) categories by university of employment are shown.

The pattern of activities reflected by responses of participants from the two universities is very similar. The largest differences found were for categories: 3 (off-campus lectures and conference presentations to professional societies), 4 (consulting and community service), 5 (holding informal conversations with colleagues), 11 (preparing for teaching), 12 (writing books, articles, monographs, grant proposals), 14 (preparing and conducting evaluations of students' work), and 17 (advising students on assignments, projects, and theses). Participants from University A were more likely than those at University B to be at off-campus lectures, conferences or professional societies (3), providing consultancies or community service (4), preparing for teaching (11) and advising students on aspects of their work (17); University B academics were

more likely than University A participants to be having informal chats with colleagues (5), doing academic writing of some sort (12) and evaluating student work (14). The differences in some of these activity levels may be partially explained by the differences in the demands associated with the teaching cycles of the two institutions.
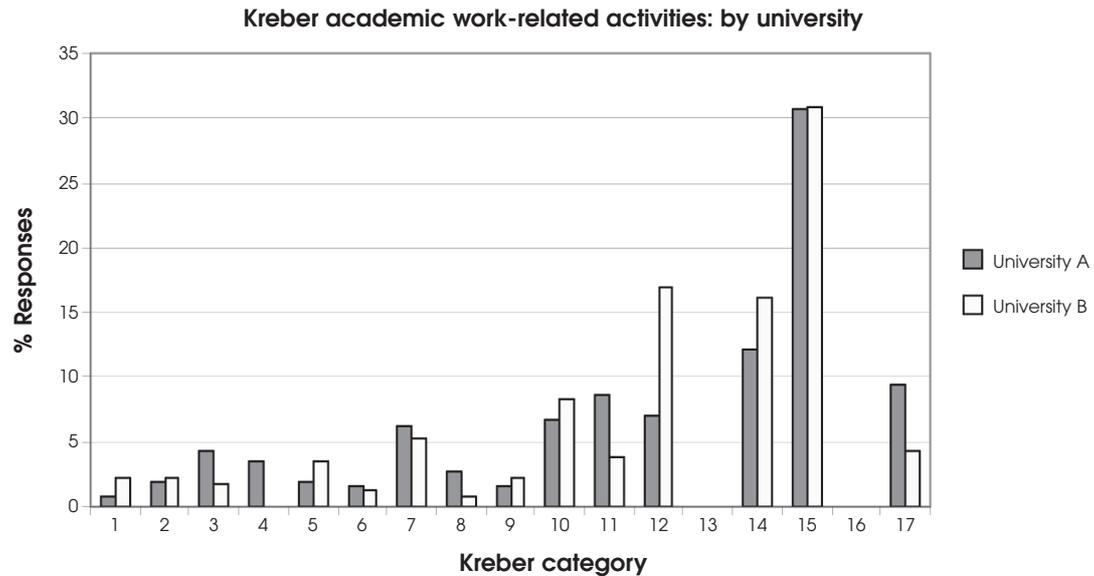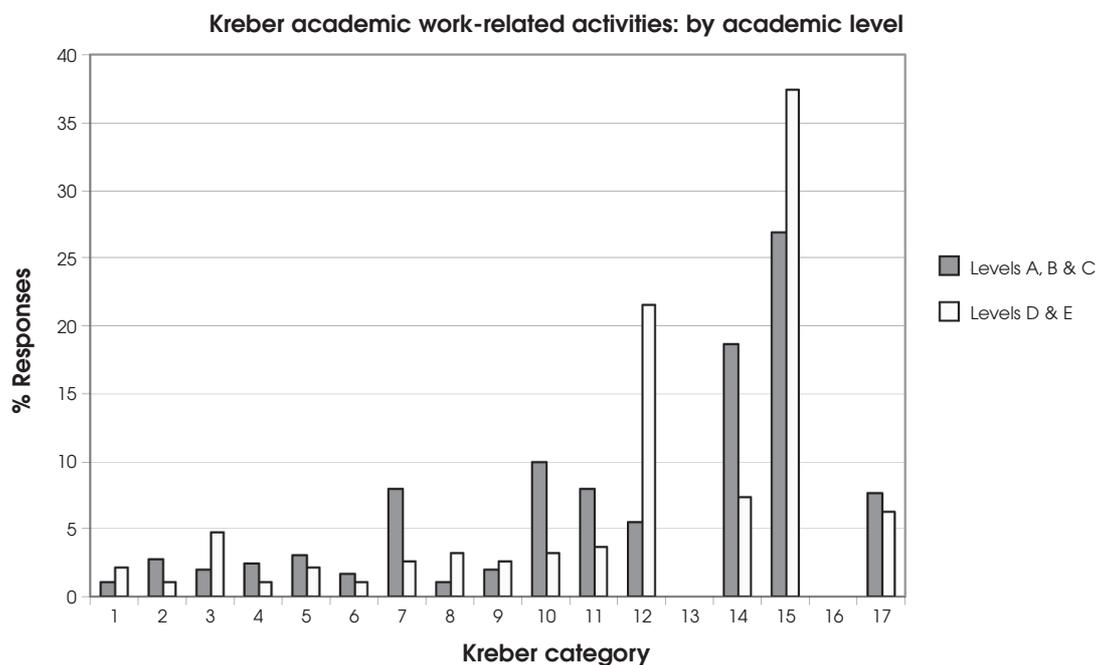

Figure 3
Participants' work-related responses by university of employment

Work-related activities by academic level

The data were also examined by level of seniority, i.e., academic levels of appointment. Since the sample was small, data from participants at Levels A, B and C were combined, and data from participants at Levels D & E were combined. Participants' work-related responses to the 17 Kreber (2000) categories by levels of appointment are shown in Figure 4.

It is clear from Figure 4 that academics at different levels of appointment were engaged in the same range of activities. However the different proportions of responses falling within each of the Kreber categories suggests that they spend different amounts of time engaged in these various activities. For example, it is evident that the Levels D & E academics spent more time at off-campus lectures, conferences and professional societies (3), undertaking academic writing (12) and in meetings (15); the Level A, B and C academics spend a greater proportion of their time counselling students (2), in formal instruction (7), conducting research (10), preparing for teaching (11), and preparing and evaluating student work (14).
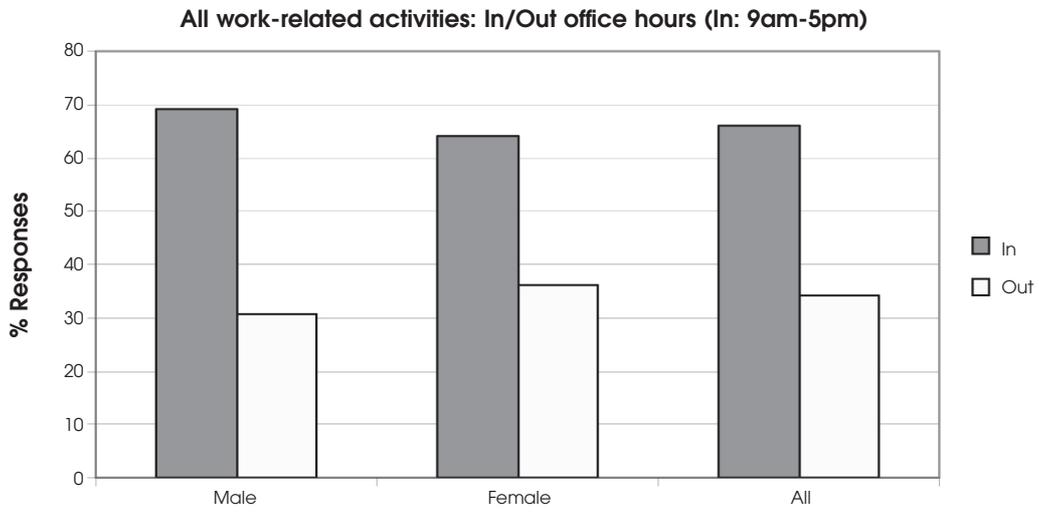
Kreber academic work-related activities: by academic level

Figure 4
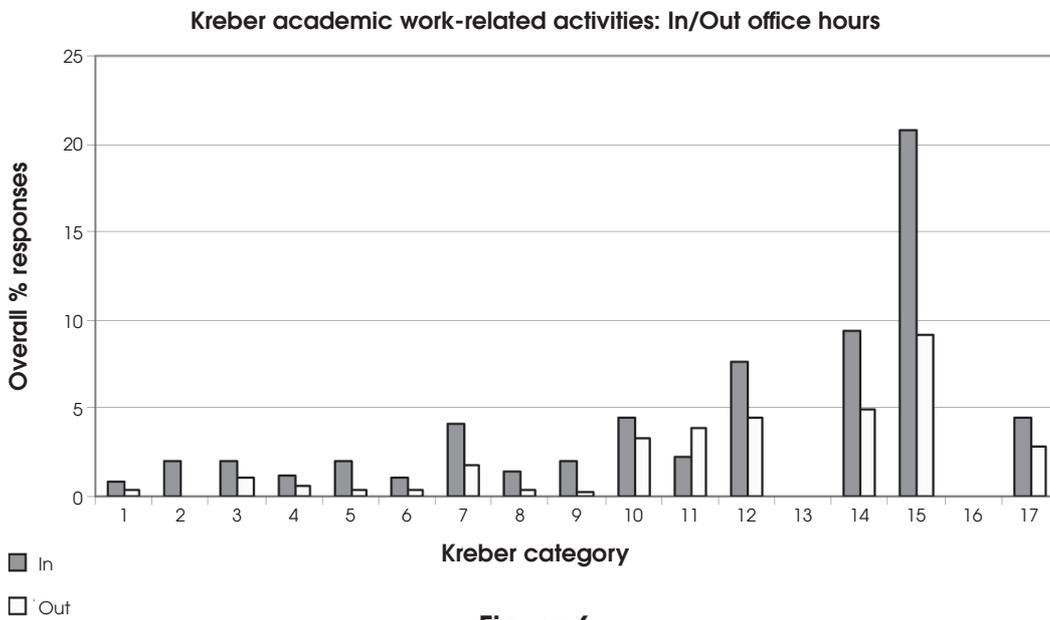**Participants' work-related responses by levels of academic appointment**

Work: In and out of office hours

As already indicated, we defined 'in' working hours as between 9am and 5pm on weekdays. Participants received signals on weekdays about four times during office hours and twice out of office hours; all six signals on weekend days were out of office hours. Thus there were about equal numbers of signals in and out of office hours during the week of monitoring. The graph in Figure 5 shows the proportions of the work-related responses in which male and female participants reported being engaged in work-related activities in and out of office hours.

The data in Figure 5 indicate that about 65% of all work-related activities reported were undertaken during office hours; 35% were outside office hours. Although the pattern for males and females was very similar, females appeared to be more likely than males to be engaged in work-related activities outside office hours. The work-related responses were categorised into the 17 Kreber categories and split into whether they were undertaken in or out of office hours. The findings are shown in Figure 6. Of particular interest here are the following findings: participants were more likely to be engaged in preparing for teaching outside office hours than in office hours (11) and many university and / or departmental meetings were held outside office hours (15).

All work-related activities: In/Out office hours (In: 9am-5pm)

Figure 5
**Work-related activities engaged in by males and females
in and out of office hours**

Kreber academic work-related activities: In/Out office hours

Figure 6
**Participants' work-related responses by Kreber category
in and out of office hours**

How much time do academics spend working

As discussed earlier, 56% of all the responses received were categorised as work-related. Over the entire week of monitoring, signals were sent out covering a total of 98.5 hours: 7.30am – 10pm on weekdays (i.e., 14.5 hours per day); 9am – 10pm on weekend days (i.e., 13 hours per day). Hence, it could be argued that the academics were engaged in work-related activities 56% of the 98.5 hours or about 55 hours per week. An alternative way of inferring the time spent working is to consider that the working week comprises 40 hours (9am – 5pm weekdays) and that about 35% of the work-related responses were outside working hours. Hence, on top of the 40 official hours of work an additional 35% was spent on work, that is 40 hours + 14 hours = 54 hours. From both methods, it can be inferred that academics (in our sample) appear to work about 55 hours per week.

To paint a richer picture of academics' working lives, we trace Sue's[4] activities over one week and, where supplied, her feelings about those activities. Affective responses were elicited in both open and closed format. The former are reported in conjunction with the relevant activities; the latter are summarised in Table 5.

Sue's week: A snapshot of academic life

Sue is aged between 50-59 years, has been employed full time at her current university, a city campus, for 12 years, and is an Associate Professor (Level D). She holds a number of substantive administrative positions. Her teaching load includes the supervision of four PhD students and two Masters students.

Sue, like seven of the other participants in the pilot study, completed all Experience Sampling Forms [ESFs], i.e., the maximum total of 42 for the week. When contacted via SMS message, Sue was most often engaged in work related activities (64.2% of the times contacted), driving (9.5% of the times), doing housework and eating (both 7.1% of the times). As noted elsewhere in the article, the period of monitoring covered after office hours and the weekend as well as regular office hours – defined as between 9 am and 5 pm Monday to Friday. Sue was engaged in work related activities over 40% of the times (42.8%) she was contacted after hours and time spent on leisure activities was relatively rare (9.5% of the times contacted). A more detailed breakdown illustrating her engagement in each of the categories coded is illustrated in Table 3.

Office hours were taken up in meeting with students, handling emails, working on a grant and tender submission, and other administrative activities related to her teaching. Reading draft copies of students' research, working on the grant and tender submission, handling emails and journal editing occupied her outside normal office hours.

Categories of Activities% of times contacted	Total	
Productive Activities		**66.6%**
Working at work, or studying	64.2%	
Talking, eating, daydreaming while at work	2.3%	
Maintenance Activities		**23.8%**
Housework (cooking, cleaning, shopping)	7.1%	
Eating	7.1%	
Grooming (washing up dressing)	0	
Driving, transportation	9.5%	
Leisure Activities		**9.5%**
Media (TV and reading)	4.7%	
Hobbies, sports, movies, restaurants	4.7%	
Talking, socialising	0	
Idling, resting	0	

Table 3
Percentage of times contacted: Sue's responses
(Csikszentmihalyi's categories)

Sue's working activities were coded using Kreber's (2000) categories. Details of the percentage of time she spent on specific tasks during the monitored week (as inferred from her activities when contacted) are illustrated in Table 4.

Applying for grants and tenders and writing journal articles, it can be seen from Table 4, were time consuming activities – the highest in Sue's week (39.2%). Like several other participants in the study, Sue considered submitting grant applications an integral and important part of an academic's activity, one that required a high level of skill and time (during and beyond office hours), and with potentially high rewards: '(gaining) an ARC [Australian Research Council] grant would be good' (Sue 6:3[5]). Editorial work was similarly regarded as important, requiring high skills, and needing to be done whenever time could be found. Sue was working on the journal out of hours because '… it is the last issue of (Journal X) we are editing. It is running late (as usual) as we have been distracted by other tasks' (Sue 3:6).

As already indicated, reading students' research drafts was another task often carried out outside normal office hours and one that took up a lot of time (17.7%, categories 14 and 17). This activity was also not factored into work load calculations:

Element/ work time	Description	% of Category
1	Learning about new developments in one's discipline	3.5%
2	Counselling students on program and career issues	3.5%
3	Off-campus lectures and conference presentations to professional societies	0%
4	Public talks, consulting, and community service	0%
5	Informal conversations with colleagues	0%
6	Reviewing and evaluating the work of colleagues (manuscripts, grant applications)	0%
7	Formal instruction	0%
8	Networking with colleagues	7.1%
9	Advising, mentoring and assisting colleagues	0%
10	Conducting Research	0%
11	Preparing for teaching	0%
12	Writing books, articles, monographs, grant proposals	39.2%
13	Learning about one's teaching	0%
14	Preparing and conducting evaluations of student's work	3.5%
15	University and departmental committee work	28.5%
16	Being a member of a professional association	0%
17	Advising students on assignments, projects and theses	14.2%

Table 4
Percentage time spent by Sue on academic work:
Kreber's (2000) categories

> It is hard to find time to read student drafts so I tend to do it after hours. Research paper supervision goes unrecognised in teaching loads even though it is VERY time consuming (1:6).

Dealing with emails took up considerable time for Sue, as well as for many of the other participants, and was regarded with some ambivalence.

> Monitoring emails is essential nowadays as much communication is only by this means. It can be fun – hearing from colleagues/friends, finding out nice things – but it can also be incredibly time consuming (Sue 1:1).

Counselling students on program and career issues constituted a small percentage (3.5%) of Sue's work activities and while she considered this activity to be slightly important, because she 'preferred to be doing paperwork', Sue did find it very satisfying as the 'student is applying to work on an education project in Fiji which is exciting' (Sue 1:2).

In common with other participants in the study, Sue was engaged in various maintenance activities throughout the week. Such work was typically recorded on the weekend or after 5.00 pm and included tasks such as cleaning, washing clothes and preparing dinner for her family and herself. Sue viewed these tasks as personal necessities, which at times provided their own rewards.

> Shopping on Saturday mornings is a routine ritual – quite cathartic at times… Found a possible top to go under my new summer suit! (Sue 3:2).

Leisure Activities constituted a small percentage of Sue's time over the week, a pattern that was shared with other academics in the study. Relaxation consisted of: watching television, playing on the computer with her son, and attending the gym. This last activity she considered very important and something that she wished she had more time to do:

> I manage to get to the gym on Saturday and Sunday afternoons. I wish I could get organised enough to get there during the week too (Sue 3:4).

Even this brief synopsis indicates that Sue's week is crowded with work related activities, the demands of which can not be handled during office hours alone and frequently impinge on personal and family activities. Possible tensions between these demands are inevitable:

> (Just now my son) came home from school and wanted some "Mum" time. At this time it was fine. I'll have to pick up work later (Sue 1:5).

Yet, Sue appears to be relatively content with her life as an academic, as can be seen from a summary of her moods when contacted and engaged in work related activities (see Table 5).

These activities generated far more positive than negative responses, for Sue as well as for most of the other participants. Sue's negative feelings seemed to be restricted to networking with colleagues (category 8); writing books, articles, monographs, and grant proposals (category 12); and university and departmental committee work (category 15). However, these activities were also associated with positive feelings. For example, alert, happy, cheerful, active, interested, clear, and satisfied were among the adjectives checked by Sue as she described how she felt when engaged in activities classed as category 12. Activities clustered in categories 8 and 12 also elicited ambivalent, rather than exclusively positive or negative, affective responses.

	Very	Quite	Neither	Quite	Very	
Alert	2 (1)*, 8 (1), 12 (8), 15 (6), 17 (2). **18**	1 (1), 8 (1), 12 (2), 14 (1), 15 (2), 17 (1). **8**	12 (1), 17 (1). **2**			**Drowsy** / Total Entries 28
Happy	2 (1), 15 (2), 17 (1). **4**	1 (1), 8 (1), 12 (4), 15 (5), 17 (1). **12**	8 (1), 12 (7), 14 (1), 15 (1), 17 (2). **12**			**Sad** / Total Entries 28
Irritable	8 (1), 12 (2). **3**	12 (1). **1**	12 (4), 14 (1), 15 (3), 17 (3). **12**	1 (1), 8 (1), 12 (4), 15 (2), 17 (1). **9**	2 (1), 15 (3).	**Cheerful** / Total Entries 28
Active		8 (2), 12 (9), 17 (1). **12**	1 (1), 2 (1), 12 (2), 14 (1), 15 (7), 17 (3) **11**	15 (1) **1**	**4**	**Passive** / Total Entries 28
Lonely			12 (6), 14 (1), 15 (3), 17 (2). **15**	8 (1), 12 (4), 15 (2), 17 (2). **9**	1 (1), 2 (1), 8 (1), 12 (1), 15 (3). **7**	**Sociable** / Total Entries 28
Interested	1 (1), 2 (1), 8 (1), 12 (6), 15 (2). **11**	8 (1), 12 (2), 14 (1), 15 (2), 17 (2). **8**	12 (3), 15 (4), 17 (2). **12**		**7**	**Bored** / Total Entries 28
Clear	1 (1), 2 (1), 8 (1), 12 (5), 15 (3). **11**	8 (1), 12 (2), 14 (1), 15 (5), 17 (4). **13**	12 (1) **1**	12 (2) **2**	12	**Confused** / Total Entries 28
Stressed	12 (3) **3**	8 (1), 12 (2), 15 (1). **5**	12 (6), 14 (1), 15 (4), 17 (4). **15**	1 (1), 2 (1), 8 (1), 15 (3). **6**	**1**	**Relaxed** / Total Entries 28
Competitive	12 (3) **3**	8 (1), 12 (3), 15 (1). **5**	12 (3), 15 (3). **6**	1 (1), 8 (1), 12 (2), 14 (1), 15 (2), 15 (2), 17 (4). **11**	2 (1), 15 (2). **3**	**Cooperative** / Total Entries 28
Distracted			12 (2), 15 (1), 17 (2). **5**	1 (1), 8 (1), 12 (8), 14 (1), 15 (5), 17 (2). **18**	2 (1), 8 (1), 12 (1), 15 (2). **5**	**Focussed** / Total Entries 28
Satisfied	1 (1), 2 (1), 15 (1). **3**	8 (1), 12 (5), 14 (1), 15 (4), 17 (3). **14**	12 (4), 15 (1), 17 (1). **6**	12 (2), 15 (2). **4**	8 (1). **1**	**Dissatisfied** / Total Entries 28

Table 5
Summary of Sue's moods when contacted during work related activities

Final comments

The activities captured by the Experience Sampling Method [ESM] not only resonate well with those described for academics in earlier studies (e.g., McConville & Allport 2000, McInnis 1999) but provide a richer and more comprehensive picture of their daily lives than is typically obtained through other data gathering techniques. They also confirm Coaldrake's (1999) view that even though academic work is increasingly complex and fragmented, academics 'remain intrinsically motivated… but many feel they are under growing pressure' (p. 3). How academics balance their individual needs with institutional demands, within their professional and private spheres, has been touched on in Sue's case study. More of this fine-grained research on academics' lives is called for.

The application of the Kreber (2000) categories of academic work to the ESF data revealed a number of thought-provoking findings and trends. For example, there was much overlap in the work profiles of male and female academics. However, some apparent gender-stereotyped differences were noted, with females spending more time on student-related tasks and males more involved in scholarly activities. There were some differences in the activities undertaken according to university of employment. However, this may be attributed to the timing of the study and slight variations in work cycles of the two institutions. By academic level of appointment greater differences were apparent. The more senior academics (levels D and E) spent much time in committee work and selected scholarly activities; the more junior staff members (levels A, B and C) were more frequently engaged in student-related activities. The working week of over 50 hours for academics reported in the popular press and in some earlier research was supported in this study.

The Kreber (2000) categories proved useful in disaggregating the components of their academic work. Space constraints did not allow for a detailed description of the affective responses accompanying each activity for our full sample. However, in the case of Sue, reference was made to her feelings as she undertook various tasks, both academic and personal. This case study demonstrates that the ESM can trace an individual's activities and accompanying emotions simultaneously. The information gathered in this pilot study was informative per se, and sufficiently rich to warrant further study with a larger sample and across a broader range of tertiary institutions. In follow up work, interviews with selected participants will allow verification of the accuracy of the ESM data as perceived by participants, further refinement of the work categories, as well as more extensive probing of themes identified.

Endnotes

[1] An earlier version of this paper was presented at the NZARE – AARE Conference, held in Auckland, November 29 – December 3, 2003.

[2] We gratefully acknowledge the help of Sally Knipe in the coding and analyses of the data.

[3] In Australia there are five academic levels of seniority: level A (Assistant Lecturer); level B (Lecturer); level C (Senior Lecturer); level D (Associate Professor); level E (Professor).

[4] A pseudonym is used in the case study.

[5] This excerpt appeared as a response to the message received on day six, third contact (coded 6:3).

[6] 2(1) indicates that Sue recorded herself as very alert on one occasion when she received a SMS message as she was engaged in Kreber category 2 (counselling students on program and career issues).

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