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DIARIES, LOGS AND CRITICAL INCIDENTS

On the face of it, diaries are an attractive way of gathering information about the way individuals spend their time. In research, diaries are not personal records of engagements or journals of thoughts and activities, but records or logs of professional activities. They can provide valuable information about work patterns and activities, provided diary keepers are clear about what they are being asked to do, and why.

They almost always cover an agreed time span – a day, a week, a month, or occasionally much longer – depending on what information is required. At certain specified times, 'on the spot' or retrospectively, respondents are asked to say what they did and in some cases, why. Instructions need to be explicit. Do you really want to know that someone had a cup of tea, paid the milkman or had a bath, or are you interested only in specifically job-related activities?

Completing diary forms can be time-consuming and irritating for a busy person who has to keep stopping work to make an entry and if respondents are not fully in sympathy with the task, or have been press-ganged into filling in diary forms, they will probably not complete them thoroughly, if at all.

As in all research activities, it is essential to contact and preferably to meet the people who will be giving up their time, so that you can explain the purpose of the exercise fully, discuss any possible

difficulties and, if possible, resolve them. Reluctant diarists will rarely provide usable data, so preliminary consultation is of the utmost importance. As with any other form of data collecting, some form of check with diary keepers is often desirable and sometimes essential if interest is to be maintained.

In any diary exercise there can be problems over representativeness. Was this day of the week typical of others or is Monday always the crisis day? Is this week exceptional? Oppenheim draws attention to this problem and reminds us that:

> The respondents' interest in writing up the diary will cause them to modify the very behaviour we wish them to record. If, for instance, they are completing a week's diary of their television viewing behaviour, this may cause them to engage in 'duty viewing' in order to 'have something to record', or they may view 'better' types of programmes in order to create a more favourable impression.
>
> (Oppenheim 1992: 252)

This may well be true, but many other methods of data collection can also have an effect on normal behaviour, as many researchers have discovered during the course of their investigations.

The diary-interview method

There are many different ways in which diaries are used. They can be standalone methods of data collection or be part of a larger study incorporating interviews, questionnaires and observation. In 1977, Zimmerman and Wieder used diaries in their ethnographic study of the counter-culture in the USA as a *preliminary* to interviewing in cases where it was not at first clear what were the right questions to ask. In an article on their **diary-interview method**, they discussed the role of diaries as 'an observational log maintained by subjects which can then be used as a basis for intensive interviewing' (Zimmerman and Wieder 1977: 481).

The potential for diaries as question-generating devices is clear, but Zimmerman and Wieder took this process a step further. They viewed the use of a diary, in conjunction with the diary interview,

as an approximation to the method of participant observation, including: the length of time involved; the fact that any observer, even a participant, may have an effect on normal behaviour; and, in some studies, moral, legal or ethical constraints. They proposed the use of the diary interview method 'for those situations where the problems of direct observation resist solution, or where further or more extended observation strains available resources' (p. 481).

They asked their respondents to record in chronological order the activities in which they engaged over a seven-day period, following the formula what/when/where/how? The 'what?' involved a description of the activity or discussion recorded in the diarists' own categories. 'When?' involved reference to the time and timing of the activity, with special attention to recording the actual sequence of events. 'Where?' involved a designation of the location of the activity, suitably coded to prevent identification of individuals or places. The 'how?' involved a description of whatever logistics were entailed by the activity (p. 486).

Clearly, diarists must be of a certain educational level to understand the instructions, let alone complete the diary. They must also have time. If you are asking colleagues to cooperate by completing diaries, be very sure that the diary is the best way of obtaining the information you need and that you can convince your diarists that what they are doing is likely to be of practical use.

Variations in diary use and design

There are many variations in the way diaries are structured, the time over which they are conducted and the detail required, as will be seen in the following accounts of the primary pupils' food diary, the supply teachers' diary and time log, the general practitioners' time logs, the asthma treatment diary and the heads of department critical incidents diary.

The primary pupils' food diary

Burgess incorporated diaries as a method of data collecting in many of the research projects he conducted over the years. In his chapter 'On diaries and diary keeping' in Bennett, Glatter and Levaćič (1994), he discusses two very different diary studies. The first (Morrison and Burgess 1993 and Burgess and Morrison 1993) related to a primary pupils' food diary study. The Zimmerman and Wieder what? when? where? how? approach was again adopted. The pupils were asked:

> What did you eat and drink today?
> When did you eat and drink today?
> Where did you eat and drink today? (at school, home, somewhere else?)
>
> (Burgess and Morrison 1993: Appendix)

Other items were added, namely whether they had enjoyed a celebration, like a birthday, on any day and whether they liked what they had eaten or drunk. As the diary was to be completed by children, a specific approach needed to be devised.

> First, it was important to talk with pupils to explain what it is that had to be done. Secondly, the time period over which a diary would be kept was limited to one week including a weekend . . . Inside the diary there were a series of instructions which were included in a covering letter addressed to each pupil.
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> (Burgess 1994: 304)

The supply teachers' diary and time log

In the second study, Burgess worked on a very different and far more detailed diary study concerning the experience of and relationship amongst teachers, substitute teachers and pupils when regular teachers were unable to take a timetabled class. Sheila Galloway and Marlene Morrison also worked on the project and conducted the fieldwork (Morrison and Galloway 1993). A

three-column grid was devised, the 'time' in the first column, the 'main activities' in the second and 'other' in the third. The purpose of this **time grid** or **time log** was to provide a framework within which supply teachers could record what happened and when, but which also gave them freedom to develop their ideas. The researchers felt that this format allowed the diary writers to 'place limits on the extent to which they give access to their world and their work' (Burgess 1994: 308).

The general practitioners' time log

Sutherland and Cooper also used a time log as part of their investigation into ill health and job dissatisfaction among general practitioners (GPs) working in the UK. GPs were asked to complete what amounted to a detailed record of how they spent their day, in order to identify the amount of time spent on various activities, the necessity (or otherwise) and purpose of those activities. The log consisted of six columns, with the headings of start time, duration, activity, time problem (who/what/why?), outcome, feelings/reaction/further action (Sutherland and Cooper 2003: 184). After three or four days of entries, or when the log was completed, the doctors were asked to rank the importance of the activities, which could well have been the most difficult part of the log exercise for professionals who might have found everything they did important.

Busy doctors were being asked to complete full-day records of their activities, to include reasons for any time problems, what happened as a result of time delays, how they felt about the delays (angry/frustrated/pleased?) and what action was taken. It had to be a log which could be 'easily completed with minimum effort' (p. 66) and no doubt the diarists had to be convinced there was some purpose to the exercise. In fact, the diary exercise was designed to: 'highlight interruptions, failure to delegate, and the ways in which other people disrupted your schedule. Ultimately, it should be possible to use your time log to identify the source of disruptions and enable you to prioritize key activities' (Sutherland and Cooper 2003: 67). It was anticipated that identification of problem areas would enable doctors to produce an action plan to

improve their time management behaviour and to learn how to 'Work smarter not harder' (p. 69). I think many stressed GPs would feel that the possibility of an improved, less stressful professional life would be worth the effort of completing the log.

The asthma treatment diary

Bowling (2002: 426) reports on two interesting but very different diary studies carried out by Hyland and Crocker (1995) and by Hyland (1996) who carried out diary-with-questionnaire studies into the impact of asthma treatment on patients. Patients were asked to complete 'quality of life' diaries over a six-month period but in short time slots. The first asked patients to complete daily diaries over a two-week period. This was followed by a request for them to produce a diary for the first week of every month for six months and finally, the researchers sent out questionnaires three and six months after treatment. They concluded that 'the diaries proved to be better longitudinal correlations with the physiology of the respondents in comparison with the questionnaires, while the questionnaires had better cross-correlations with physiology' (Bowling 2002: 426).

So, as always, the selection of the data-collecting instruments depends on the purpose of the study, the type of information needed, *and* the willingness of respondents to spend the necessary time completing diaries, questionnaires or being interviewed.

The heads of department critical incidents and problem-portfolio logs

In many ways, the **critical incidents technique** adopts the same, or similar processes adopted by Burgess in his supply teachers' study and by Sutherland and Cooper in their GP time log. Both attempted to identify essential and important aspects of work behaviour and both were concerned with which tasks were 'critical' and which were 'non-critical'. Oxtoby also used a job diary/log in his study of how heads of department (HoDs) in further education colleges in England and Wales spent their

time and at first considered the possibility of asking diarists to identify 'critical incidents' in their working day. He defined a critical incident as being a task or an incident which makes the difference between success and failure in carrying out important parts of the job (Oxtoby 1979: 239). He writes that:

> The idea is to collect reports as to what people do that is particularly effective in contributing to good performance and then to scale the incidents in order of difficulty, frequency and importance to the job as a whole. The technique scores over the use of diaries in that it is centred on specific happenings and on what is judged to be effective behaviour. But it is still laborious and does not lend itself to objective quantification.
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> (Oxtoby 1979: 239–40)

The use of job diaries/logs is perhaps the most simple and widely accepted way of finding out how time is spent in any group or institution, but as Oxtoby discovered:

> Self-recording can be inaccurate – many of the shorter episodes tend to get omitted – and compiling a detailed diary is usually a tiresome and onerous business. Although it is undoubtedly valuable in terms of enabling people to make more effective use of their time, a diary does not provide much reliable information about the skills or qualities developed. Moreover, the prospect of using diaries to compare differences between large numbers of staff and their jobs is extremely daunting, if only because of the difficulties in handling the data. There are snags, therefore, in employing job diaries to analyse the diversity of HoD activities.
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> (Oxtoby 1979: 240)

Eventually, he decided on a 'problem portfolio' approach originally advocated by Marples (1967) in which respondents were asked to record information about how each problem arose, methods used to solve it, difficulties encountered, and so on.

As will be apparent from the above, there can be problems in the use of diaries as a method of gathering evidence, not least the time respondents need to complete the forms. However, diaries can produce a wealth of interesting data and are relatively simple to administer – at least if there are only a few diarists. Analysis of completed forms is not so simple, however, so, as always, you will need to consider how responses will be analysed *before* you put your subjects to the trouble of filling in the diaries. If you are considering using diaries as part of your project, you may wish to consult the checklist at the end of this chapter before you distribute them.

Personal research diaries

Personal research diaries or logs come into a different category from the above. These are for you and can be invaluable in tracking the progress of your research, recording names, addresses, notes of telephone calls, good ideas you had in the middle of the night – anything that happens (or might happen). From the start of any research or any major writing job, I always carry a notebook around, small enough to fit into a pocket. Everyone has different ideas about what should go in and what should be left out. I have no difficulty in deciding because I include everything. Rough notes, target dates (and targets achieved or not achieved), dates of interviews, dates questionnaires were distributed (and returned). Names and telephone numbers of people I have spoken to or met. Difficulties experienced, advice to myself not to do something in this or that way again! Reminder about what I must ask the librarian. A note about how I might resolve the problem of . . . something or other, which occurred to me when I was sitting on a bus. If I hadn't written it down at that time, I should in all probably have forgotten it the next day. I might have remembered that I had a good idea while sitting on a bus but . . . what on earth was it? A reference (new to me) that someone told me about when I was having a sandwich in the cafeteria. Times I left home to see someone and time returned, if I remember. Every entry with a date. Do this tomorrow . . . Write this up immediately! Transfer this reference to the main list of references. I recall that one

student considered my way of jotting down everything was disorganized. I suppose it is, but I do star and highlight items that need to be given further thought and as I've said numerous times in this book, we all have our own ways of working so adopt ways of doing things that seem to work for you. As far as I am concerned, the only rule is that *you start your diary, log (call it what you will) as soon as you start your research and keep it going*.

The ethics of diary use

Burgess (1994: 308) expresses concern about the extent of intrusion into diary writers' lives and urges researchers to be aware of this possibility. For example, in the food diary, he asks researchers to consider the extent to which the exercise constitutes intrusion into the lives of the children and their families before selecting the diary approach. He draws our attention to the fact that if the purpose of the supply teacher diary is 'to gain access to material that would otherwise be hidden from the researchers' view . . . to what extent is such a device intrusive on the lives and work of teachers?' (p. 308). I suppose it can equally be said that interviews, questionnaires and observations can also intrude. Researchers frequently use diaries as one of several methods of data collecting in their investigations. All I can say is that the impact of our research on the respondents must always be considered before decisions are made about which approach to adopt and that the same ethical considerations should apply to diary studies as for any other method or technique.

Diaries, logs and critical incidents checklist

1	Decide what you need to know.	List all the items about which information is required.
2	Ask yourself why you need this information.	You may decide you don't need it after all.
3	Is a diary or critical-incidents checklist the best way of obtaining the information?	Would another approach be better?

4	Diary completion is not generally a suitable tool for use with people of limited educational background.	Make sure your respondents will be able to understand what is required and to fulfil your requirements.
5	Instructions must be precise.	Diarists must be quite clear about what you want them to do.
6	Make sure respondents know *why* they are being asked to carry out this chore and what you plan to do with the information.	Allow time at the planning stage to discuss with your respondents what is involved.
7	Always pilot your diary before you distribute it to your respondents.	No matter how busy you are, this must be done.
8	Decide how you propose to deal with responses *before* you ask for diaries to be completed.	
9	Try to find time to check progress with the diarists.	If you are asking people to carry out this task for more than one day, evidence seems to indicate that a solicitous inquiry about how things are going may help them to keep on with the task.
10	Remember to get permission to approach your diarists.	
11	Write up your findings as soon as you can.	Your pilot exercise will give you some ideas about likely main headings and analysis.
12	Completing a diary is a chore. Don't forget to thank your respondents.	Give them feedback if you can, but don't promise anything if you are unlikely to have to time to do it.

Further reading

Bowling, A. (2002) *Research Methods in Health: Investigating Health and Health Services*, 2nd edn. Maidenhead: Open University Press. Ann Bowling, writing about the use of diaries with patients, refers to two major diary exercises relating to a trial of asthma treatments. See Hyland, M.E. and Crocker, G.R. (1995) 'Validation of an asthma quality of life diary in a clinical trial'. *Thorax*, 50: 724–30. Also, Hyland, M.E. (1996) 'Diary assessments of quality of life', *Quality of Life Newsletter*, 16: 8–9.

Burgess, R.G. (1994) Chapter 21, 'On diaries and diary keeping', in N. Bennett, R. Glatter and R. Levačić (eds) *Improving Educational Management through Research and Consultancy*. London: Paul Chapman Publishing, in association with The Open University. In this chapter, Burgess discusses the use of logs, diaries and journals, and includes examples of the supply teacher project considered in this chapter and also of an interactive video use diary. He includes ethical questions relating to intrusion into the lives of respondents.

Hart, E. and Bond, M. (1995) *Action Research for Health and Social Care: A Guide to Practice*. Buckingham: Open University Press. Pages 201–4 give two extracts from diary studies, one relating to outpatients' clinic experiences; the second an extract from a log.

Hayes, N. (2000) *Doing Psychological Research: Gathering and Analysing Data*. Buckingham: Open University Press. Chapter 9, 'Analysing documents' (pp. 147–55), gives useful guidance about the advantages, disadvantages, design and analysis of diary studies. Worth consulting.

Morrison, M. (2002) Chapter 13, 'Using diaries in research', in M. Coleman and A.R.J. Briggs (eds) *Research Methods in Educational Leadership and Management*. London: Paul Chapman Publishing. This chapter provides examples of extracts from several diaries and includes sections on researchers' and research informants' diaries, the design and analysis of diaries and combining diaries with interviews.

Sutherland, V. and Cooper, C.L. (2003) *De-stressing Doctors: A Self-management Guide*. London: Butterworth Heinemann.