

The Household, Income and Labour Dynamics in Australia (HILDA) Survey and Quality of Life Measures

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1. Introduction

Most industrial nations now conduct large-scale, representative panel (i.e., longitudinal) surveys of households and the members of those households. Moreover, while these surveys have traditionally focused on income and demographic dynamics (see Haisken-DeNew 2001, p. 359), a number collect data on broader socio-economic issues, such as psychological well-being, living conditions and life satisfaction.

Australia, however, is a notable exception. While longitudinal data collections do exist in Australia, they either focus on relatively small sub-groups of the population or involve relatively small samples. Included among the former, for example, are the Longitudinal Surveys of Australian Youth (LSAY), which follow samples of young people,¹ the Longitudinal Survey of Immigrants to Australia (LSIA), which is restricted to recent immigrant arrivals, the Survey of Employment and Unemployment Patterns (SEUP), which had a focus on job seekers, and the Australian Longitudinal Survey of Women's Health (ALSWH), which follows three female age cohorts. Moreover, with the exception of the ALSWH, these surveys were all deliberately designed as relatively short-life panels. For example, the SEUP covered just four years while the first LSIA cohort was followed over a three- to four-year period. Furthermore, the focus in all of these surveys is on individuals rather than households and hence the data collected do not allow individual respondents to be linked to data on other related individuals. Finally, these surveys generally include, at most, very limited measures of quality of life.

In contrast, those panel surveys that exist where the measurement of quality of life is important, such as the Australian Quality of Life Panel Study, which ran over the period 1981 to 1989 (Headey and Wearing 1992), and the International Social Science Survey of Australia, which has gradually evolved into a panel after starting out as a repeated cross-section (see Kelley and Evans 1999, p. 302), involve very small samples.² Further, they are generally difficult to use due to the lack of documentation.

Australian policy-makers and researchers thus do not have access to data that are both representative of the Australian population (or at least a significant proportion of it) and provide information on the dynamic nature of events and how they interact in influencing the changing behaviour and fortunes of Australian households, families and individuals. This has been consistently identified as a major problem in reviews of policy-relevant research

literature in areas such as the labour market and social policy (e.g., Creedy 1994; Barr 1999, pp. 22-23; Norris and Wooden 1996, p. 107; Wooden 1997, pp. 262-263).

Assessing the extent of poverty in Australia, for example, has long been plagued by the problem that income varies over the life cycle and hence at any particular point in time, households and individuals may appear income poor, even though this would not appear to be reflected in their consumption behaviour. Conventional cross-sectional data are not well placed to help with this type of research question since they only provide measures of net rather than gross change.

It is against this background that, in 1999, the Commonwealth Government committed funds for the conduct of the first three waves of a major new longitudinal survey – the Household, Income and Labour Dynamics in Australia (or HILDA) Survey. The management of the HILDA Survey was subsequently put out to tender, and eventually culminated in the project being awarded (in August 2000) to the University of Melbourne. More specifically, a team based at the Melbourne Institute of Applied Economic and Social Research is managing the HILDA Survey. The winning tender also involves the significant involvement of the Australian Council for Educational Research (ACER) and the Australian Institute of Family Studies (AIFS).

One of the main aims of this paper is to provide an outline of the HILDA Survey methodology. It highlights the key parameters that underpin the design of the HILDA survey and discusses the development of the survey instruments.³ With respect to survey content, particular attention is paid to the quality of life measures included. First, however, we briefly discuss the importance of panel data for quality of life research.

2. Panel data and research on quality of life

The broad area of quality of life and subjective well-being is one that has been the subject of considerable scrutiny in recent decades. Nevertheless, a glaring weakness remains the predominance of cross-section correlational designs. As observed by Diener et al. (1999, p. 277) in their review of research into subjective well-being: ‘SWB [subjective well-being] research is limited by the almost exclusive reliance on cross-sectional correlational designs with inadequate tests of causal hypotheses’. It is thus unsurprising that this literature is dominated by concerns with the types of individual traits that are associated with subjective

well-being and less so with the impact of different life events on happiness. Only with panel data that collects data from the same individuals over time can we hope to understand the impact of different life events on quality of life measures and establish in which direction causation runs.

Other advantages from the use of panel data include:

- (i) the facilitation of a more accurate assessment of quality of life over individual lifetimes;
- (ii) the ability to control for unobserved individual heterogeneity (such as personality traits),⁴ and
- (iii) the potential to investigate the consequences of happiness and unhappiness, a much under-researched area (but see Veenhoven 1988).

Of course, retrospective histories could be collected from members of cross-sectional surveys. This approach, however, suffers from problems associated with how respondents recall events in their past. Retrospective data thus generally decline in accuracy the longer the period that respondents are asked to recall. That said, it is now well established that recall is not a simple linear function of time – ‘different types of things appear to be forgotten at different rates’ (Sudman, Bradburn and Schwarz 1996, p. 184). The collection of useful retrospective data will thus generally require quite complex questionnaire designs involving the use of cues (for cued behaviours) and calendars to assist in the dating of events, and which provide response times that are longer than is usual in survey research. And ultimately we still cannot be sure that responses are not biased. Do, for example, respondents tend to recall pleasant events more easily than negative one and hence leading them to view the past through “rose coloured glasses”? Alternatively, is recall just a function of the significance of the event experienced?

Measuring life events is thus very problematic using retrospective collections. Some researchers, however, go much further and rely on recall based measures of well-being. This is especially common in opinion poll type surveys that ask respondents to indicate not just how satisfied they are with various aspects of their life, but how their current levels of satisfaction have changed compared with some earlier point in time. Such data are of extremely dubious value. Not only are there problems associated with recall bias, but responses about the past are inevitably affected by current experience. Thus unhappy people are much more likely to say that they are less happy than compared with some point in the past even though they may have been just as unhappy at the earlier reference point.

Longitudinal designs thus represent an obvious alternative to obtaining more accurate about events and attitudes over respondent lifetimes. And while cross-section designs have been the overwhelming methodology of choice in this area, the incidence of research utilising panel designs has been growing. Indeed, such research was pioneered in Australia by Headey and Wearing. Their research on the impact of life events on subjective well-being and the process by which people adapt to different life events has been especially important (Headey and Wearing 1989).

The sample used in the Headey and Wearing research, however, was extremely small – just 942 persons in their first wave, declining as a result of attrition to 502 by the fifth and final wave. By contrast, the national household panel studies, which the HILDA Survey is seeking to follow, are extremely large. The Panel Study of Income Dynamics (PSID) in the US, generally acknowledged as the first significant survey of this type, began with a sample of 4800 family heads. The German Socio-Economic Panel (GSOEP) which commenced in 1984, and the British Household Panel Survey (BHPS), which commenced in 1991, were even larger – between 5000 and 6000 households. Moreover, these studies conducted interviews with all adults in the household, meaning the effective sample of individuals was more than twice as large again.

The GSOEP is of particular interest because it has been collecting data on a multi-item life satisfaction measure since the very first wave. Such data thus provide the potential to examine in great detail the process by which individuals and their families adapt to major life events. To date, analysis of these data, despite their wide availability, has largely been dominated by economists who have traditionally been reluctant to use self-report measures of well-being. Nevertheless, this has been gradually changing. Economists have been especially interested in the effects of unemployment. While it is well established in cross-section data that subjective measures of well-being are much lower for the unemployed, only with panel data can it be established whether unemployment precedes declines in life satisfaction, and whether or not those effects persist. Gerlach and Stephan (1996), Winkelmann and Winkelmann (1998) and Clark, Georgellis and Sanfey (2001), for example, have all used the GSOEP data to confirm that unemployment is associated with significantly lower levels of satisfaction with life in the future. Clark et al. (2000) go further and show that the effect persists, even after return to work. Further, they report evidence of habituation, with the effect of unemployment attenuated for those who have experienced more unemployment in the past. Similar results

have been reported using a measure of self-esteem in another large panel data set, the National Longitudinal Study of Youth in the US (Goldsmith, Veum and Darity 1996).

Of course with long-running panels there is considerable scope to examine the long-term impacts on life satisfaction and other quality of life measures of many other life events. Included here, for example, would be changes in household composition (e.g., as a result of child birth, divorce and deaths in the family), moving house, changing jobs, retirement and major changes in health status. The impact of less discrete changes, such as changes in income can also be examined, as Ravallion and Lokshin (2001) do using panel data from the Russian Longitudinal Monitoring survey. Certainly, as will be seen below, the HILDA Survey instruments have been designed with these objectives in mind.

3. The design of the HILDA Survey

Overview

The panel design being implemented for the HILDA Survey shares many similarities with the designs used in household panel studies conducted overseas, and in particular the German GSOEP and the BHPS.⁵ Thus, like the BHPS, the sampling unit would be the household, and members of those households would be tracked over an indefinite life. Assuming participants can be traced each year and are prepared to cooperate, individuals would only drop out of the sample in the event of death, emigration from Australia, the acquisition of some disability that prevented further participation (such as the onset of dementia), and incarceration.

However, and in contrast to the conventional longitudinal design involving a single cohort, in this design it is possible for the overall sample to grow in size. That is, the sample is automatically extended over time by “following rules” that add to the sample any new children of members of the selected households (including both biological and adopted children) as well as new household members resulting from changes in the composition of the original households.

Compared with other possible designs, such as a classic single cohort panel (e.g., the NLSY in the USA) or a repeated medium-life panel (e.g., the LSIA and LSAY in Australia, or the Survey of Labour and Income Dynamics — SLID — in Canada), this design is generally thought to be superior in terms of delivering high quality information about family, income and labour dynamics. The lengths of medium-life panels, for example, are often too short to

provide an understanding of some of the issues and questions that of highest priority in the HILDA Survey.

An important feature of the proposed design is the hierarchical nature of the data structure, with all individual participants grouped into a larger unit — the household. Household-based data sets thus permit analysis of the behaviour of both individuals and households (and indeed, other units of analysis are also possible, such as couples, families, and income units within households). Moreover, this data structure is ideal for the development and testing of models in which household characteristics and dynamics are thought to shape individual behaviour, and similarly where the characteristics and behaviour of individual household members are thought to influence outcomes observed for households.

Reference population

The reference population for the first wave of the HILDA Survey is all Australian residents who live in private households. That is, and consistent with most previous longitudinal surveys of this type, the scope of the population for sample selection at the first wave will exclude most persons living in institutions (such as hospitals and other health care institutions, military and police installations, correctional and penal institutions, convents and monasteries, and boarding schools) and other non-private dwellings (such as hotels and motels).⁶ Further, to ensure that all members of the in-scope population have the same probability of selection, dwellings that are not primary places of residence (e.g., holiday homes) are also excluded.

For cost reasons, persons who live in remote and sparsely populated areas will be excluded from the sample. The Australian Bureau of Statistics (ABS) adopts the same practice in its supplements to the monthly Labour Force Survey. This exclusion results in about 80,000 persons being omitted from the scope of the HILDA Survey.

Note that while all members of the household are defined as members of the sample, interviews will only be conducted with those persons who are at least 15 years of age (on June 30 in the year the survey wave commences). Some limited information about younger persons (e.g., their date of birth, sex, presence of long-term health conditions or disabilities, and contact arrangements with parents if their parents are separated), however, will be collected from an appropriate adult member of the household.

Data collection unit

The data collection unit is the household. Following the ABS, this is broadly defined as “a group of people who usually reside and eat together” (ABS, *Statistical Concepts Library*, ABS Cat. No. 1361.30.001), with emphasis given to the making of common provision for food.

The ABS makes the further observations about households.

- A household resides wholly within one physical dwelling. A group of people who make common provision for food but are living in two separate dwellings are two separate households.
- Lodgers, who receive accommodation only (not meals), are treated as a separate household.
- Boarders, who receive accommodation and meals (board), are treated as part of the household.

In general, persons who live in more than one household will only be treated as members of the household where they spend most of their time.

We do, however, vary from the ABS practice in how children attending boarding schools and halls of residence while studying are treated. Specifically, while these dwellings are out of scope, such individuals are treated as members of sampled households provided they spend at least part of the year in the sampled dwelling.

Note that just because the unit of data collection is the household does not mean that the unit of analysis will also be confined to the household. As Creedy (1994, p. 63) has emphasised, since household composition will change over time, researchers will typically use the individual as the unit of analysis, attributing to individuals the characteristics of the household in which each person lives (see also Duncan and Hill 1985). Indeed, in terms of tracking sample participants over time, it is the individual that is the most relevant unit.

Sample representativeness and following rules

Obviously the intent is to select a sample that is, with the exception of the exclusions noted above, representative of Australian households and residents. Nevertheless, even if this achieved in wave 1, there is the strong possibility that the sample will become increasingly

less representative of the population over time. One reason for this is that the nature of the sample changes systematically through attrition. The experience with the Panel Study of Income Dynamics (PSID), possibly the world's most well known household panel (and certainly one of the longest running), however, suggests that in well-managed surveys, such concerns take a long time to assume significant proportions. Fitzgerald, Gottschalk and Moffit (1998), for example, have shown that 21 years on, and despite a loss of 50 per cent of the original sample, the sample still retained its cross-sectional representativeness.

This outcome, however, was no accident, and reflects the presence of following rules that are designed to ensure that the sample replaces itself in the same manner as the population (Duncan and Hill 1989). In the BHPS, for example, persons not included in the first wave but who subsequently became members of households containing an original sample member (e.g., as a result of birth or marriage, or because of other changes in household composition and formation) become eligible for sample inclusion. We propose to adopt similar following rules in implementing the HILDA.

Essentially, eligibility for sample inclusion after wave 1 can occur in the following ways.

- (i) A child is born to, or is adopted by, an 'original' or 'continuing sample member'. This child automatically counts as an original sample member and information about that child will be collected from parents until age 15 (after which they too will become eligible for interview).
- (ii) An original sample member moves into a different household with one or more new people. These new people will now become eligible for interview, but are only treated as 'temporary sample members'.
- (iii) One or more new people move in with an original sample member. Again, these new people will now become eligible for interview, and are counted as temporary sample members.

All temporary sample members remain in the sample for as long as they remain in the same household as the original sample member. Temporary sample members, however, are converted to continuing sample members if they become the parent of a new original sample member birth.

As in the BHPS, we would expect that all continuing sample members would be traced and followed in subsequent waves, including persons who move into institutions. The only exceptions here would be those persons who cease to have residence in Australia or are in prison at the time of the interview. These sample members, however, may still be interviewed at subsequent waves should their status change (i.e., they return to Australia or are released from prison). Temporary sample members, on the other hand, are only followed for as long as they remain living with, or are converted to, a continuing sample member.

It is important to realise, however, that the use of these following rules do not guarantee that the panel will remain representative in a cross-sectional sense. As explained in Henstridge (2001), most following rules systems will still cause the age distribution of the sample to diverge from that of the population. Ultimately, the only way to adjust for this divergence is through the use of appropriate weights.

Other potential problems with the representativeness of the sample relate to the treatment of:

- (i) persons with illness conditions and disabilities that render them unable to be interviewed;
- (ii) persons with English language difficulties; and
- (iii) recent immigrants.

The first problem will be at least partially addressed through obtaining assisted interviews wherever possible. That said, it is recognised that there is likely to be little value in persisting with interviews of elderly persons who, because of age-related conditions, are unable to participate meaningfully in the interview. The second problem will again be handled wherever possible through assisted interviews. Where this is not possible, bilingual interviewers may be used, though financial considerations mean that foreign language interviewing will only be available for a handful of the most common languages and only in a small number of cases. The third problem is even more difficult to address, though in the short- to medium-term it is not expected that the under-representation of recent immigrant arrivals will seriously bias the representativeness of the sample. In the longer-term serious consideration will need to be given to adding a 'refresher' sample of recent immigrant arrivals.⁷

Interview frequency

Interviews will be conducted on an annual basis, at least during the first three years of the survey. This seems to be accepted international practice.

The main weakness with annual surveys, of course, is that the data collected may provide only limited information about dynamics that occur within the year. That is, while it will provide extensive information about the situations of households and their members at yearly intervals, it is less likely to provide detailed information about changes in status and behaviour between interviews. For example, many people who commence an unemployment spell exit unemployment within six months of entering it.⁸ Further, many (about one quarter of job seekers in the year ended February 1999) experience more than one spell of unemployment within the year. Given these dynamics, there is a danger of missing a significant amount of important information with survey dates a year apart. The main way this being dealt with is through asking questions at each wave about the labour market histories of the respondents over the course of the previous year.

Mode of data collection

In general, international practice is that during the first few waves at least, panel surveys are conducted on a face-to-face basis. Face-to-face interviewing is generally thought to be more successful in eliciting cooperation, which is vital during the earliest years of the panel when sample member identification with the study is still developing.⁹ Unfortunately, the initial budget for this study together with the expected sample size precludes conducting face-to-face interviews in all three waves. At the moment the most likely scenario is that face-to-face interviews will be conducted in the first two waves followed by computer assisted telephone interview (CATI) in subsequent waves. This, however, could change.

Apart from eliciting greater rates of respondent cooperation, use of face-to-face interviews provides other advantages. First, more difficult questions that are not easily asked over the telephone can be posed with the use of show cards and other visual aids. This is of particular significance to the HILDA Survey given the difficulties likely to be associated with collecting income data, and especially the components of income, over the telephone. Second, face-to-face interviews provide more opportunity for respondents to check records to verify their answers.¹⁰ Third, compared with CATI, more data can be collected with a face-to-face interview (i.e., direct face-to-face contact tends to be associated with greater interviewee attention, thus facilitating the collection of more accurate data over longer interviews).

The main downside of face-to-face interviewing is that it is much more expensive and thus will mean a smaller sample size. As a consequence, the data may not provide sufficient

numbers of observations to analyse important sub-groups within the population, including those of particular interest to the Commonwealth (such as persons in receipt of certain types of benefits). Other disadvantages include:

- (i) greater difficulties supervising interviewers and hence maintaining ‘control’ over the interview process;
- (ii) respondent discomfort from the physical presence of strangers within the home; and
- (iii) a loss of statistical efficiency from having to use a clustered design.

Sampling

The use of face-to-face survey methods in wave 1 dictates some form of direct physical sampling which, in turn, almost always involves a clustered sample design (to minimise travel costs). The sampling frame is thus an area-based frame consisting of Census Collection Districts (CDs), each of which typically consists of approximately 200 to 250 households.

In total, the initial sample in wave 1 consists of 488 randomly selected CDs. This sample of CDs was stratified by State, and within States, by metropolitan and non-metropolitan regions. Despite the region-based stratification, however, the smaller States and Territories were not over-sampled. This reflects both the focus of the HILDA on producing nation-wide population estimates, and our view that any benefits from a differential probability approach to sampling are outweighed by the negative impacts on overall statistical efficiency.

Trained interviewers visited each of the selected CDs (in June 2001) to provide a full listing of all private residential dwellings within the CD boundaries. A random starting dwelling was then chosen for each CD with further dwellings selected according to a pre-defined skip pattern and a randomly determined route. The intent was to select an average of 23 dwellings per CD. The actual number selected, however, varied depending on projected variations across CDs in response rates and in occupancy rates.

In total, the initial sample comprised over 11,000 dwellings, making it larger than the initial sample sizes in most other studies of this type, including the PSID, the GSOEP and the BHPS. Multiple households within dwellings means the effective sample is even larger, with all households at dwellings with three or fewer households selected into the sample, and up to three randomly selected households at dwellings with more than three households.

In addition to facilitating control over the sample selection process, the pre-enumeration of the selected CDs provided two other key advantages. First, it enabled us to mail a primary approach letter and brochure about the study to all selected households in advance of an interviewer arriving at the door. Second, it provided us with the necessary data from which to calculate sample selection probabilities.

3. Response and attrition

Wave 1

We have been aiming to achieve completed interviews with at least one household member at 70 per cent of all households selected into our wave 1 sample. Further, in 65 per cent of sampled households, we were hoping to obtain interviews with all members of those households aged 15 years and over. These target response rates were based largely on ‘best-practice’ international experience. For example, in the first wave of the BHPS (conducted in 1991) at least one interview was completed at 74 per cent of eligible households, with complete coverage of eligible adults achieved in 69 per cent of households. Similarly, at the commencement of the PSID, 76 per cent of households were reported as being successfully interviewed in the first year (Brown, Duncan and Stafford 1996, p. 158).¹¹

The 65 per cent full household response rate, however, was based on the assumption that we would be using proxy interviews where in-scope sample members were unavailable during the interview period. Concerns about ensuring we had obtained informed consent, however, caused us to abandon pursuing proxy interviews and hence it is expected that we will fall short of our 65 per cent target.

Furthermore, outcomes from a Dress Rehearsal of the survey conducted in June 2001 suggest that these response rates are ambitious, with interviews only being conducted successfully at 55 per cent of sampled households. Nevertheless, there are at least three reasons not to get too pessimistic about this outcome. First, the Dress Rehearsal sample was concentrated in Sydney, and it is well established that survey response rates are relatively low in Sydney (see Bednall, Cavenett and Shaw 2000). Second, the fieldwork period for the Dress Rehearsal was relatively short. Third, unlike the Dress Rehearsal, a cash incentive – up to \$50 for every household where all household members are successfully interviewed – will be used in wave 1 of the HILDA Survey to encourage respondent cooperation.¹²

The difficulty of obtaining high response rates, though, cannot be understated. Moreover, there are a number of factors that pose particular difficulties for HILDA compared with previous surveys. First, the fieldwork for the first wave of the HILDA Survey is being undertaken during a period when there are many other survey organisations competing for respondent time. Most obviously, it was commenced in the wake of the 2001 Census, which might be expected to create some hostility towards yet another government-sponsored data collection initiative. Further, with a Federal Election taking place during the field period, there is a higher than normal risk of sample members being asked to participate in opinion poll surveys.

Second, in terms of delivering complete household coverage (i.e., obtaining personal interviews with all in-scope household members), the length of the fieldwork period for the first wave of the HILDA Survey is, at just 4 months, comparatively short. Most other household panel surveys have fieldwork periods that stretch to 9 months and beyond.

Finally, and most importantly, there is a growing amount of evidence from around the world that indicates that respondent cooperation with survey organisations is declining. Bednall, Cavenett and Shaw (2000), for example, report evidence from a large long-running US telephone-based opinion survey that reveals a marked rise in refusal rates during the 1990s, after being relatively stable during the 1980s. Even more relevant for the HILDA Survey, both the GSOEP and BHPS have in recent years added new samples to their studies, and in both cases the rates of response were well down on the initial response rates reported for their original samples.

In wave 9 of the BHPS, conducted in 1999, two additional household samples were recruited in Wales and Scotland. Partial coverage was only achieved at 63 per cent of the selected sample, which represents an 11 percentage point decline compared with the rates achieved in 1991. Further, the proportion of households where complete adult coverage was obtained fell even further – 54 per cent compared with the 69 per cent reported eight years earlier.

Similarly, in 2000 the GSOEP added a major new fresher sample. As with the BHPS, achieved response rates were much lower than those reported for the original sample surveyed in 1984. Interviews were obtained at only 51 per cent of their new households sampled in 2000, compared with 63 per cent in 1984.¹³

Non-response, and the consequent potential for respondent bias, is thus likely to be a major issue for the HILDA Survey.

Waves 2 and 3

In a longitudinal design there is potential for non-response at every wave. At one level this is less problematic than non-response at wave 1. In particular, since we have detailed information on the characteristics of all respondents at wave 1, it should be easier to apply weights to the data to compensate for any bias this non-response gives rise to. Such procedures, however, are only likely to be effective in the short-run. Over the longer-term it is important to minimise attrition because of the potential for the ‘movers’ to be quite different from the ‘stayers’ in ways that may not be observable at wave 1. Further, high rates of attrition have obvious detrimental effects on sample size.

International experience tends to suggest that attrition is highest in the first two years of the survey and then stabilises. Indeed, in the PSID, attrition rates fall to as low two to three per cent by wave 3. Fourteen per cent of the sample, however, was lost in wave 2 (Brown et al. 1996, p. 158).

Attrition rates in most other studies are, if anything, higher. Again we can point to the experience with the BHPS. In that survey, interviews were conducted with 88 per cent of the wave 1 respondents in wave 2. By wave 8 the proportion had fallen to 68 per cent. A good proportion of the attrition by wave 8, however, was due to deaths or because the sample member had moved out of scope. In total, after adjusting for deaths and movements out of scope, 75 per cent of the original sample remained in scope at wave 8.

The preceding discussion, however, is based on surveys that used face-to-face interviews, at least in the first few waves; attrition rates can be expected to be higher when using CATI (which may be used for HILDA from wave 3 on). Certainly, and as noted earlier, response rates are lower in cross-section surveys that use telephone methods.

Strategies being implemented as part of the HILDA Survey which are intended to minimise attrition include the following:

- The inclusion of tracking questions in the questionnaire seeking contact details (postal addresses, telephone numbers, and email addresses), information on future movement intentions, and names of relatives and friends not living at the same address.

- Sending a thank you gift (a calendar) to all interviewees following the interview, together with change-of-address cards for notification of any intended moves.
- Maintaining contact with participants between survey waves through a respondent newsletter providing summary information about the study.
- Maintaining a 1800 telephone number so that participants can contact the fieldwork agency and/or the Project Director / Survey Manager.
- Seeking forwarding addresses or telephone numbers from non-sample members at the address or telephone number of the original sample member.
- Using the electronic White Pages and Australia Post to pursue contact details for persons who have changed address.

4. Survey content and instruments

The primary objective of the HILDA Survey is to support research questions falling within three broad and inter-related areas. These are:

- (i) income dynamics — with a particular focus on how households respond to policy changes aimed at improving financial incentives, and interactions between changes in family status and poverty;
- (ii) labour market dynamics — with a focus on low-to-middle income households, female participation, and work-to-retirement transitions; and
- (iii) family dynamics — focusing on separation and divorce and socio-economic status, and on links between income support and family formation and breakdown.

There were, however, a broad range of other topics that it was hoped that the HILDA Survey would cover which did not fall neatly within these three areas. Included here, for example, were neighbourhood effects, social participation, and health outcomes. Moreover, it was recognised from the outset that objective outcome measures of “life success” needed to be complemented by more subjective measures.

The survey instruments

In wave 1 the HILDA survey comprises four main instruments. These are as follows:

- (i) the Household Form;
- (ii) the Household Questionnaire;
- (iii) the Personal Questionnaire; and

(iv) an individual Self-completion Questionnaire.

The Household Form (HF) provides information obtained prior to interview or which can be observed prior to making contact with members of the household, as well as recording basic information about the composition of the household immediately after making contact. In effect, it is a type of “master document” that helps the interviewer determine who they need to interview, as well as alerting them to what sections of the Person Questionnaire are relevant for each respondent.

The type of information recorded on this form includes:

- (i) dates and times of each visit;
- (ii) outcome of each visit;
- (iii) for refusing households, reason for refusal;
- (iv) number of households at the address;
- (v) whether the residence is in-scope (that is whether it is a private residence and is occupied on an ongoing basis);
- (vi) household composition – name, date of birth, age and sex of all household members;
- (vii) other selected personal characteristics of household members (e.g., health/disability status, marital status, English language ability, labour force status); and
- (viii) relationships between household members.

Interviewer observations – for example, on the type of residence and its condition – are also recorded here.

The Household Questionnaire (or HQ) collects information about the household rather than about individual household members per se, and only has to be administered to one member of the household. In practice, however, interviewers are encouraged to be flexible. If more than one household member wishes to be present at the interview this is perfectly acceptable; indeed, it should improve the quality of data collected. Further, interviewers are given the flexibility to deliver part of this interview to one household member and part to another. Indeed, this is often required given the HQ includes questions on child care that needed to be asked of the primary care giver.

Key data items collected here cover the following:

- (i) housing characteristics (number of bedrooms, ownership status and value);

- (ii) details of mortgages, home loans and rent payments;
- (iii) vehicle ownership;
- (iv) household grocery and food expenditures; and
- (v) child care arrangements.

The combined time spent in the household administering this schedule together with those details within the HF obtained directly from household members is expected to average 10 minutes.

The Person Questionnaire (or PQ) is administered to every person aged 15 years and over (on 30 June) in the household, and is expected to average 35 minutes. It will provide the bulk of the HILDA Survey data items. The structure of this questionnaire, together with examples of the types of issues covered, is summarised in Table 1. As can be seen, the main life satisfaction measure will be administered as part of this instrument.

Additional data will be collected via a self-administered questionnaire (SCQ). It is hoped that, in most cases, the SCQ will be collected by the interviewer, but we are also allowing for these questionnaires to be returned to the fieldwork company by mail.¹⁴

The SCQ comprises six main sections. These are as follows:

- A General health and well-being (the SF-36 Health Survey);
- B Lifestyle and living situation
- C Personal and household finances
- D Attitudes and values about work
- E Your job and the place where you work
- F Parenting

It thus includes a range of measures relevant to the measurement of quality of life. The questionnaire is 16 pages long and is expected to take 20 to 25 minutes to complete.

Quality of life measures

As indicated above, a life satisfaction measure is included in the PQ. It is based on the measure used in the GSOEP, and first administered in 1984, which employs an 11-point scale with labelled anchor points at the extremes.¹⁵ The content of the scale, however, was mainly informed by Cummins (1996) who has identified seven main domains of life satisfaction;

Table 1: Structure of the Person Questionnaire

<i>Section</i>	<i>Types of issues covered</i>
A Country of birth and language	Birthplace Year of arrival in Australia (if born overseas) English language background Aboriginality
B Family background	Parental presence at age 14 Age when first left home Parents' birthplace Parents' occupation
C Education	Age left school and highest year of school attended Post-school qualifications obtained Current educational activities
D Employment history and status	Numbers of years since left full-time education Summary measures of labour force history Current labour force status Current employment status Time since last worked, if not currently employed Characteristics of last job, if not currently employed
E Persons in paid employment	Characteristics of main job (occupation, hours, tenure, etc.) Employer characteristics (industry, size, sector) Perceived employment prospects Job satisfaction Retirement intentions
F Persons not in paid employment	Job search activity Types of difficulties experienced in finding a job Desire to work (if not looking) Reasons for not looking for work (if not looking) Reservation wage Perceived employment prospects
FG Calendar	History of employment, job search and education history since July 1 of preceding year Mutual obligation activities
G Income	Current income from: wages and salaries government pensions and benefits Financial year income from: wages and salaries government pensions and benefits businesses savings and investments other sources Credit card use

Table 1 (cont'd)

<i>Section</i>	<i>Types of issues covered</i>	
H	Family formation	Characteristics of children Child support payments Patterns of contact parents and children (where they live apart) Likelihood of having children
J	Partnering	Marital history De facto relationships Marriage intentions (for persons in de facto relationships)
K	Life situation	Health status Life satisfaction Attitudes to life in Australia Reasons for moving (if moved in last 12 months)
T	Tracking	Contact details Movement intentions Names of friends / relatives
Z	Interview situation	Respondent cooperation and understanding Problems affecting interview

namely material well-being, health, productivity (or achievement), safety; community; and emotional well-being. The items selected for inclusion in this scale were thus intended to cover all of these domains. The intimacy domain, however, which was represented by satisfaction with intra-family relationships, was removed to a separate question included within the SCQ. This was justified on the grounds that some respondents were uneasy with answering questions about relationships in a face-to-face interview, often with other household members present or within earshot.

The measure included within the PQ includes eight items. These are:

- (i) the home in which you live;
- (ii) your employment opportunities;
- (iii) your financial situation;
- (iv) how safe you feel;
- (v) feeling part of your local community;
- (vi) your health;
- (vii) the neighbourhood in which you live; and
- (viii) the amount of free time you have.

In addition, there is the customary overall life satisfaction item.

In a pre-test administered in June/July 2001 and involving 328 respondents, inter-item correlations among these nine items were found to be reasonably high, suggesting that, if desired, they could be combined to form a relatively homogeneous scale.¹⁶

As noted above, a comparable set of items concerned with satisfaction with family relationships, and using an identical scale, is included within the SCQ. Specifically, respondents are asked to rate their satisfaction with their relationship with eight different types of potential family members.

The SCQ also includes version 1.0 of the SF-36, a 36-item health survey providing summary measures of eight separate health concepts, including physical functioning, general health, vitality and mental health (see Ware et al. 1993).¹⁷

5. Timetable

The fieldwork for wave 1 commenced in late August 2001 and runs until mid-December, facilitating a public release of the wave 1 data during the second half of 2002.

In later waves the fieldwork period will be extended through to April. That is, the fieldwork period will run from September through to April each year. This longer fieldwork period is consistent with the practice in the BHPS, and is needed to maximise the likelihood of locating and interviewing all sample members. This longer fieldwork period, of course, will mean data releases in later years will also occur later. At this stage it is expected that public releases of the wave 2 and wave 3 data, together with the relevant longitudinal data files, will take place by the end of 2003 and 2004 respectively.

6. Confidentiality and data access

Risk of disclosure

As with all unit record data sets, there is a risk that the identity of some respondents will be revealed through the information collected in the survey. This risk, however, is even higher with longitudinal data because of the large array of events and transitions that will be documented over the lifetime of sample members.

Solutions to the risk of disclosure are still being explored with the project sponsor, the Commonwealth Department of Family and Community Services (FaCS). It is inevitable, however, that some of the information collected will not be made available on the public-use file. In particular, some variables may be provided in a form that is more aggregated than that in which it was collected. This, for example, would include occupation and residential location variables.

We would, however, expect that users who are able to demonstrate a strong need for any data that have been removed would still be able to access that data, but only after agreeing to a stringent set of use conditions concerning access, security and disposal of the data, and only if they can satisfy FaCS that those conditions are likely to be met.

Dissemination

The confidentiality issue can also be handled through regulating user access to that data. Again this is an issue that we are still exploring with FaCS. However, it is our hope that the data access policy will not be too restrictive.

The GSOEP provides one model. There the principal end product is a public-use micro-data file with front-end software (e.g., SAS or SPSS) that will allow users to select variables and sub-populations of interest. Data releases occur each year with data from subsequent waves merged into the earlier waves. These public-use micro-data files are made available to bona fide researchers and research organisations on a CD-Rom for a nominal charge. All users are required to sign an agreement that specifies conditions under which the data are to be used and stored.

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Endnotes

- ¹ This survey program combines and builds on the earlier cohorts within the Youth In Transition, Australian Longitudinal Survey and Australian Youth Survey programs.
- ² The IsssA has a large number of cases, but in any one wave the typical number of cases is quite small. The 1999 wave, for example, had just 1672 respondents, and only around a third of these had been followed for more than 5 years.
- ³ More information about the HILDA Survey can be obtained from the HILDA Survey web site. At this site updates about the progress of the survey in the field can be obtained. In addition, copies of all the survey instruments can be viewed and downloaded. Also available is a series of Discussion / Technical Papers that provide more specialised information about aspects of the HILDA. The web site address is:
<http://www.melbourneinstitute.com/hilda/>.
- ⁴ With cross-section data the only individual characteristics that can be controlled for are those that are observed and measured. In contrast, with panel data, all differences across individuals that are time invariant can potentially be held constant.
- ⁵ Extensive documentation on the GSOEP and the BHPS can be found on the world wide web. Their respective web addresses are:
<http://www.diw.de/English/gsoep>
<http://www.irc.essex.ac.uk/bhps/index.htm>.
The key features of these and other international household panel studies are also briefly summarised in Haisken-DeNew (2001) and Wooden (2001).
- ⁶ Note that long-term caravan park residents are treated as residing in private dwellings.
- ⁷ Immigrant refresher samples have been added to both the PSID and the German Socio-Economic Panel. In both cases, however, these new samples were not considered warranted until after the survey had been running for many years. The German study commenced in 1984 with the immigrant refresher added in 1994 and 1995. The PSID has been running since 1968 and the new immigrant sub-sample was only added in 1997 (though a Latino supplement was added in 1990 only to be discontinued five years later).
- ⁸ According to data from the ABS Survey of Labour Force Experience for the year ended February 1999 (ABS cat. no. 6206.0), 64 per cent of persons who had been looking for work during that year spent less than 6 months of the year engaged in job search. These data, however, will understate unemployment duration given they do not pertain to completed spells of unemployment.
- ⁹ Response rates in surveys employing face-to-face interviews have generally been found to be higher than surveys using other methods. In a meta-analytic review involving 28 different studies where telephone and face-to-face methods were compared, de Leeuw and van der Zouwen (1988) reported an average response rate for face-to-face interviews of 75 per cent. This compared with an average of 69 per cent for the telephone interview method. Further, both Australian and UK evidence suggests that the gap may be even greater (Collins et al. 1988, Donovan et al. 1997). Indeed, in the Australian study reported by Donovan et al. (1997) the reported response rates for telephone interviews was just 46 per cent, compared with 57 per cent for face-to-face interviews.
- ¹⁰ Though interview time constraints is likely to mean that such records checking is likely to be discouraged.
- ¹¹ The 76 per cent response rate reported for the PSID does not take into account the fact part of the sample was derived from an earlier survey, 25 per cent of which refused to allow their names to be sent to the PSID survey team. Adjusting for this would reduce the actual response rate to 69 per cent.
- ¹² Some indication of the potential effectiveness of cash incentives is provided by an experiment undertaken in conjunction with the National Adult Literacy in the USA in the late 1980s, and reported in Groves and Couper (1998, p. 281). That study found that a US\$20 per head incentive was associated with a 71% response rate, compared with 64% among those not offered any cash incentive.
- ¹³ As reported in personal correspondence from Dr John Haisken-DeNew. Note that unlike the BHPS, in the GSOEP incomplete households are excluded from the responding sample for the first wave.
- ¹⁴ In the Dress Rehearsal, completed SCQs were received from 77% of all individuals interviewed.
- ¹⁵ The anchor point labels used in the GSOEP are “Totally unhappy” and “Totally happy”. For the HILDA these have been changed to “Completely dissatisfied” and “Completely satisfied”.
- ¹⁶ The mean inter-item correlation was 0.31.
- ¹⁷ Not surprisingly given the extensive development and testing of the SF-36, pre-test reliabilities for all scales was extremely high, ranging from 0.79 to 0.89.