

Financial Implications of Death of a Partner

Appendices A-F: Design, Research Methods and Instruments

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Appendix A Design of the Quantitative Component

A.1 Introduction

As explained in the main body of our report (2.2), the quantitative component relies on secondary analysis of existing data sets. When preparing our research proposal, several longitudinal surveys held in the ESRC Data Archive were reviewed including the British Household Panel Survey (BHPS), the English Longitudinal Survey of Ageing (ELSA), and the UK Retirement Survey (RS). These surveys vary somewhat in design, geographical coverage, and purpose yet all provide representative data, covering a wide range of financial topics at both the individual and household level, and identify people before and after the death of a partner. However, the BHPS offers several important advantages for our study:

- The BHPS interviews all adults aged 16 and over in sample households, enabling us to include bereaved partners across all age groups. In contrast, the RS sample was aged between 55 and 69 at baseline and the ELSA sample concentrates on people age 50 and over. Although most deaths occur in older age groups, we were particularly keen to include bereaved families with dependent children.
- BHPS respondents are interviewed approximately every 12 months, providing a reasonably fine-grained picture of change over time. ELSA interview waves are conducted two years apart, while the interval between the RS baseline and follow-up survey was between four and five years. A short time interval is preferred not least because of the raised risk of mortality immediately following bereavement and its association with poor financial and material well-being (Gjonça et al., 2006; Stroebe et al., 2007).
- The BHPS has been running since 1991 and we estimated at the proposal stage that it would yield a sufficiently large sample for robust analysis of over 550 couples where one partner died. Sample numbers were much smaller in the RS (105 new widows and 37 new widowers; Disney et al., 1997: 163). ELSA had conducted only two interview waves when our study commenced and these had generated insufficient numbers of bereaved partners for detailed analysis (Banks et al., 2006). As ELSA gathers pace, the researchers expect to produce a data set on the final year of respondents who have died. This will be based around a so-called end-of-life questionnaire, administered from wave two onwards, to surviving members of the same household (personal communication, Sheema Ahmed, ELSA Administrator, March 2008).

Additionally, the RS is now somewhat dated, spanning the years 1988 to 1994, and has been well used to explore the impact of death of a partner on household incomes (Disney *et al.*, 1997; Johnson *et al.*, 1998, reviewed in Chapter 1).

For these reasons, the British Household Panel Survey was the preferred source of quantitative information for our study. The study sample was constructed from the first fourteen annual waves covering the period 1991 to 2004 (Institute for Social and Economic Research, University of Essex, 2006). The BHPS is a general purpose survey of the population living in a nationally representative sample of around 5,000 private households in England, Scotland and Wales, and more recently Northern Ireland (Lynn, 2006). When the panel was recruited in 1991, around 10,000 adults aged 16 years and over were interviewed. The sample for subsequent waves includes all adults enumerated at Wave 1, plus their natural descendants on turning 16 and other adults living in their household. Because the sample is augmented in this way, the BHPS remains broadly representative of Britain's non-institutional population as it changes over time.

As well as using the BHPS, the study drew on data from the Office for National Statistics Longitudinal Study (LS). The LS database covers approximately one per cent of the population of England and Wales. It contains information from censuses conducted since 1971 which are linked to vital events such as deaths of sample members and their spouses. Although providing a relatively limited range of information, the strengths of the LS include a large sample size and low non-response rates. Accordingly, data from the LS were used to evaluate the representativeness of the BHPS study sample (detailed in Appendix B.8).

This appendix goes on to describe how the study sample was constructed from BHPS data sets and considers implications for the analysis and interpretation of findings. We then explain how the LS data were organised to focus on partner bereavement and, in a final section, use these data to estimate the number of couples separated by death.¹

A.2 Identifying bereaved partners

The quantitative component required a sample of couples where one partner died with survey data organised longitudinally as a series of successive interviews before and after bereavement. Although the BHPS was not designed for studying bereavement consequences, like most longitudinal surveys, deaths of sample members are recorded to account for sample loss between successive interview waves. From Wave 2 onwards, interviewers are expected to trace all individuals enumerated at the previous wave to establish their whereabouts and determine eligibility for interview. Deaths of sample members are recorded on the basis of

¹. Data from the LS are also being used to provide historical context for the research reported here by exploring the changing circumstances of partner bereavement between 1971 and 2001. These findings do not form part of this report, which describes research funded by the ESRC, and will be published separately.

information supplied by other household members or neighbours, or obtained from wider enquiries. Some deaths are also reported to the Research Centre in response to publicity about each round of interviews before fieldwork commences.

The BHPS may not record all deaths of sample members although fewer partner deaths (and deaths in other multi-person households) may go unrecorded than deaths of people living alone. However, identification of partner deaths depends largely on tracing bereaved partners or other members of bereaved households. Informants may be lost to follow-up for the usual reasons including refusal to participate, address not found, no contact, and poor health, frailty or infirmity. In the case of partners there is an additional reason why deaths may be under-reported: death of a partner is associated with increased risk of mortality and morbidity in the early weeks and months after loss (Stroebe *et al.*, 2007). Hence, the timing of follow-up interviews may be crucial to obtaining a full account of partner deaths.

From the information available in the BHPS data sets, bereaved partners were identified in three steps:

- First, all deaths recorded at Wave 2 and at each subsequent wave were identified.
- Second, the relationships between each deceased person and all other members of their household at the preceding wave were established.
- Third, all deceased persons who were living as a couple with someone in the same household at the preceding wave were selected, and they and their partner included in the study sample.

This process identified households at Wave 1 and at each subsequent wave (up to the penultimate wave) that contained a couple where one partner died before the next interview wave. Table A.1 illustrates the process across the 14 waves of data available at the time this study commenced, covering the period 1991 to 2004. Each pair of successive waves, one before and one after bereavement, is highlighted: waves labelled B1 refer to the wave *before* bereavement when both partners were enumerated; those labelled A1 refer to the wave *after* the death of a partner when the bereaved partner was traced.

All couples identified during this process were included in the study sample, whether legally married or cohabiting, and whether partners were the same or opposite sex. Same-sex partners might feel uneasy about affirming their relationship to relative strangers and hesitate to reveal their relationship to survey interviewers (Heaphy and Yip, 2006). So it is likely that not all same sex couples where a partner died would be identified. In the event, two men living with partners of the same sex were included in the study sample.

From Table A.1 it can be seen that information collected at Wave 1 describes the pre-bereavement circumstances of couples where a partner died before Wave 2. Information from Waves 2 to 13 describes not only the circumstances of bereaved partners, but also the circumstances of couples where a partner died before the next wave. Wave 14 provides information on the circumstances of partners bereaved since Wave 13.

Waves flanking the pre-bereavement wave (B1) and the post-bereavement wave (A1) are labelled B3 and B2, and A2 and A3, and represent interview waves before and after bereavement respectively. A study period defined by three waves before and after bereavement was chosen for pragmatic and substantive reasons. As described below, the number of couples and bereaved partners available for analysis decreases the further away one moves from the time of the partner's death. A relatively short pre-bereavement and post-bereavement period therefore helps to maintain the integrity of the study sample. Although the financial consequences of a partner's death may be felt for many years, it was reckoned that a post-bereavement period longer than two or three years would increasingly capture events and changes not directly or necessarily connected with bereavement. Such events, which might include bereaved partners reaching pension age or their children reaching adulthood and possibly leaving home, would likely affect their financial circumstances through changing levels and sources of income. Limiting the follow-up period after bereavement would lessen such effects. Moreover, the qualitative component was not intending to interview bereaved partners more than two or three years after their partner's death.

Table A.1 Identifying pre-bereavement (B) and post-bereavement (A) interview waves*

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	No. of
	Wave	couples													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	at B1
1991	B1	A1	A2	А3											50
1992	B2	B1	A1	A2	А3										58
1993	В3	B2	B1	A1	A2	A3									47
1994		В3	B2	B1	A1	A2	А3								42
1995			В3	B2	B1	A1	A2	А3							38
1996				В3	B2	B1	A1	A2	А3						37
1997					В3	B2	B1	A1	A2	A3					49
1998					1	В3	B2	B1	A1	A2	А3				63
1999							В3	B2	B1	A1	A2	A3			84
2000						•		В3	B2	B1	A1	A2	А3		52
2001									В3	B2	B1	A1	A2	А3	87
2002									1	В3	B2	B1	A1	A2	67
2003											В3	B2	B1	A1	82

^{*} Shaded cells indicate the interview wave immediately before (B1) and after (A1) the death of a partner.

It can be seen from Table A.1 that not all pre-bereavement or post-bereavement waves are covered because some lie outside the period defined by the availability of data from the BHPS. Thus, the circumstances of couples two or three years before a partner died between Waves 1 and 2 are unknown because the BHPS sample had not been formed then. Similarly, when the study commenced, information on the circumstances of partners bereaved between Waves 13 and 14 was not available for the second or third year following bereavement. Observations of these couples and individuals are 'censored' by the study period time frame.

The final column of Table A.1 shows the number of couples identified at each wave labelled B1 where the death of a partner is reported at the following wave labelled A1. For example, 50 partners were bereaved between Waves 1 and 2, 58 between Waves 2 and 3, and so on. Numbers vary somewhat from year to year but generally increase in the latter years of the study period, reflecting the addition of new samples for Scotland, Wales and Northern Ireland (as described in A.3.3 below). Altogether 756 couples where a partner died were identified; this total includes two individuals who were bereaved twice.

In this sample, death of a partner could have occurred at any time between 1991 and 2004; however, the study aims to follow people not by calendar year but before and after bereavement. The calendar year observations were therefore reorganised into pre-bereavement and post-bereavement periods. Table A.2 illustrates the process: observations from interview waves (or calendar years) were 'pooled' to organise the study sample according to the number of waves before and after bereavement, that is from B3 through A3.

Table A.2 Pooling the study sample

Pre-bereavement		er of waves l		Number of waves after bereavement		
wave (B1)	Three	Two	One	One	Two	Three
1991	censored	censored	B1	A1	A2	A3
1992	censored	B2	B1	A1	A2	A3
1993	В3	B2	B1	A1	A2	A3
1994	В3	B2	B1	A1	A2	A3
1995	В3	B2	B1	A1	A2	A3
1996	В3	B2	B1	A1	A2	A3
1997	В3	B2	B1	A1	A2	A3
1998	В3	B2	B1	A1	A2	A3
1999	В3	B2	B1	A1	A2	A3
2000	В3	B2	B1	A1	A2	A3
2001	В3	B2	B1	A1	A2	A3
2002	В3	B2	B1	A1	A2	censored
2003	В3	B2	B1	A1	censored	censored
Number of couples or bereaved partners	648	706	756	756	674	607

The number of couples or bereaved partners enumerated at each stage is shown in the final row of Table A.2. By definition, all bereaved partners are observed at the wave immediately before bereavement (B1) and after (A1). The full sample (N=756) was enumerated at both these points. Fewer couples and bereaved partners were observed before B1 or after A1 because of the effects of censoring described above. As shall be observed below, these totals were reduced further by sample loss and other factors. However, if contact with individuals is re-established after a gap of one or two years, they are included at the appropriate point in the sequence B3 through A3; the only requirement is that all couples and bereaved partners are enumerated at the wave before and after bereavement (B1 and A1). This kind of study design is sometimes called an unbalanced panel: meaning that respondents are not required to be interviewed at every wave included in the sample.

A.3 Implications of the study design

The process of identifying couples in the BHPS where one partner died raised several implications for the proposed analysis and the interpretation of findings. Some considerations stemmed from the design of the BHPS and the definitions it employs; others arose from the way the sample for this study was constructed.

These implications and, where applicable, the measures taken to address them are described in the following sub-sections.

A.3.1 BHPS follow-up rules

The follow-up rules devised by BHPS researchers determine who remains in the sample from one wave to the next (Taylor, 2006: A4-5 to A4-6). In brief, all members of households enumerated in Wave 1 become permanent sample members, and interviewers attempt to trace those who are resident in England, Scotland and Wales at each subsequent wave. They are called Original Sample Members (OSMs).

From Wave 2 onwards, the sample also includes children born to or adopted by OSMs and other members of households where an OSM lives. Children born to or adopted by an OSM automatically become permanent sample members in their own right (and are interviewed on turning 16). In contrast, other new entrants count as sample members only so long as they continue to live in the same household as an OSM: they can include cohabitants and lodgers, and are known as Temporary Sample Members. Some Temporary Sample Members become permanent sample members even if they no longer reside with an OSM. They include individuals who become parents with an Original Sample Member of a new birth or adopted child (who also becomes a permanent sample member). Otherwise, Temporary Sample Members are not traced on leaving the household of an Original Sample Member.

Irrespective of sample loss therefore, the BHPS sample is not constant over time: individuals join and leave according to the rules on new entrants and whether they are followed-up. This has implications for investigating individual and household circumstances, particularly in the post-bereavement period.

Crucially, some bereaved partners would not be followed after the death of their partner. They include partners who entered the panel after Wave 1 as Temporary Sample Members and did not become parents of an OSM birth or adopted child, or no longer lived with an Original Sample Member. Thus, bereaved partners who were deemed to be Temporary Sample Members and lived alone after the death of their partner, or in a household with no Original Sample Members, would be considered out-of-scope and lost to follow-up. However, bereaved partners who continued to live with, say, a child of the OSM partner who had died (that is, the bereaved partner's step child) would remain in the panel because they still shared a household with an OSM, even though they themselves were considered to be Temporary Sample Members.

The BHPS follow-up rules are applied at every interview wave. Consequently, bereaved partners who were counted as Temporary Sample Members may be excluded from follow-up at any point in the post-bereavement period (A1 to A3)

depending on whether they continued to live with an Original Sample Member. As far as is known, no more than 15 bereaved partners (two per cent overall) were excluded by the follow-up rules and their loss is unlikely to significantly influence the findings reported here.

A.3.2 BHPS household definition

In the BHPS a household comprises 'one person living alone, or a group of people who either share living accommodation or share one meal a day, and who have the address as their only or main residence'. In addition, at least six months continuous residence during the year is required to be considered a household member.

These requirements exclude some couples from those 'at risk' of partner bereavement. They include partners who normally lived apart and maintained two separate addresses, and partners who currently lived apart for six or more months a year because of working arrangements, travelling abroad, or admission to hospital or other institutional settings including prison. In these circumstances, BHPS interviewers would not record any details of the non-resident partner unless they were themselves an Original Sample Member and were traced and interviewed at their current address. Even where both partners are traced however, there is no mechanism in the survey procedures for identifying them as a couple: they would be recorded as living in separate households at separate addresses. With no record of the relationship between partners living at different addresses, individuals could not be identified as bereaved and enter the study sample if their partner died.

The BHPS records instances where partners are not resident, although it is not known whether they maintained separate addresses (more or less permanently), or currently did not meet the residence requirements. Across the study period, less than one per cent of respondents in a relationship reported that their partner lived elsewhere. Their low prevalence suggests that exclusion from the study sample of couples who did not live together would not substantially alter the findings.

Table A.3 shows that a majority of BHPS respondents who reported non-resident partners were women (55 per cent) and over half were aged under 60 (58 per cent). The young age profile indicates that there might have been very few instances of couples living apart where one partner died. However, deaths among two groups of non-resident partners might be under-represented in the study sample because of the six month qualifying rule for identifying co-residents. One group would include deaths amongst older partners in health and residential care settings; another group would include what might be considered unexpected deaths amongst younger partners which are likely to be violent or accidental in men under 40, or due to cancer, heart or liver disease in women and men under 60 (Willets et al., 2004).

Table A.3	Respondents with non-resident partners by age and gender
	(per cent)*

	Women	Men	All
Under 30	12	16	14
30 to 39	13	8	10
40 to 49	16	15	16
50 to 59	21	14	18
60 to 69	13	12	13
70 to 79	14	24	19
80 to 89	11	12	11
Base	370	306	676

^{*} Pooled weighted results, Waves 1 to 14. Based on respondents' self-assessed marital status (married or living as a couple) and whether living with partner.

A.3.3 BHPS extension samples

Since the start of the BHPS in 1991, new samples have been added to the initial sample. They include:

- The UK European Community Household Panel (ECHP), which started in 1994, became part of the BHPS from 1997 onwards but ended in 2001, when funding was discontinued (BHPS Waves 7 to 11 inclusive).
- Extension samples for Scotland and Wales were added to the BHPS from 1999 (Wave 9 onwards) to permit separate analysis following devolution.
- The Northern Ireland Household Panel Survey was established in 2001 and became part of the BHPS that year (Wave 11 onwards).

Individuals in the extension samples for Scotland, Wales and Northern Ireland are treated as Original Sample Members and new entrants are subject to the BHPS follow-up rules described above. Sample membership status of individuals in the ECHP, that is whether they are treated as permanent or temporary members of the BHPS, depends on their membership status in the ECHP. Thus, members of the initial ECHP sample in 1994 are treated as Original Sample Members and new entrants from that date are determined according to the BHPS follow-up rules.

Consideration of sample origin is important because the extension samples boost sample sizes in the devolved countries relative to that of England. Moreover, both the ECHP and, from knowledge of household income distributions in the devolved countries, the extension samples, over-represent low income households in the enlarged BHPS. Any analysis that includes all sample members would be influenced

by the particular socio-demographic characteristics and circumstances of individuals from the different sub-samples; consequently, the results would not be representative of the UK. One solution would be to exclude bereaved partners who were drawn from the new samples; another would be to weight the samples during analysis to reflect their relative sizes in the UK as a whole.

Excluding bereaved partners from the new samples would reduce the study sample by a substantial margin (Table A.4). It was therefore decided to include all bereaved partners, whatever their sample origin, and to weight the samples accordingly. Further details of the sample weights used in the analysis are discussed below (A.3.6).

Table A.4 Sample origin of bereaved partners

Sample	Number of bereaved partners	%
BHPS	546	72
Scotland	63	10
Wales	75	8
UK ECHP	38	5
Northern Ireland	34	4
Total	756	100

Apart from the need for weighting, including bereaved partners from the new samples in the study design exacerbates the problem of censoring described above. If the interview wave at which couples from the new samples joined the BHPS turned out to be the wave immediately before one partner died (B1), or two waves before that happened (B2), information on their pre-bereavement circumstances at B3 or B2, or both, would not be available. In other words, the sample available for investigating the pre-bereavement circumstances of new sample members would be reduced.

The new samples added to the BHPS are intended to be representative of the populations from which they are drawn. As a consequence, they cover the full age range and generate a non-negligible number of bereavements where information on the couple's circumstances in the years before the death of a partner is not available. Further details are given in Appendix B.3.

A.3.4 Timing the annual round of BHPS interviews

BHPS interviews have been conducted every year since 1991. The annual round starts in early September and roughly eight out of ten respondents are interviewed by the end of October. Fieldwork is mostly completed by mid-December although a few interviews may be conducted in the first three months of the following year (Lynn, 2006: Table 21; Taylor, 2006: A4-8). Because the fieldwork period extends over three or more months, successive interviews are only approximately 12 months apart and partner deaths can occur at any time between successive interviews. Consequently, the interval between the death of a partner and the pre-bereavement and post-bereavement interviews varies somewhat.

The date of interviews in relation to the death of a partner may be critical to monitoring and evaluating the financial consequences of bereavement. Interviewers are expected to record the date of each interview they undertake and the date of death of any deceased participants. Both month and year are required to estimate the interval between the two sets of dates. However, date of interview and date of death had to be imputed in some cases:

Across the three waves before bereavement (B3 to B1) and the three waves following bereavement (A1 to A3), records of interview dates were missing for 148 households, representing two per cent of households enumerated at those points. Although the fieldwork period may span three or more months, missing dates of interviews were imputed as September of the year in which households were contacted. September marks the start of fieldwork and imputing that month is likely to introduce least errors in relation to the actual date of interviews. In a handful of cases, the imputed month was varied to ensure that it fell on the 'right' side of the known date of the death of a partner. Thus, imputed dates were checked to ensure that B1 interviews occurred before the death of a partner and A1 interviews occurred after.

Dates of partner deaths were missing in 127 cases, representing 17 per cent of all recorded partner deaths. In 100 cases, both month and year of death were missing; in a further 27 cases, the year but not the month of death was known. If the month and year of death were both missing, the date of death was imputed as midway between the fieldwork periods immediately before and after bereavement (B1 and A1 respectively). For example, where a partner died between Waves 2 and 3, which started in September 1992 and September 1993 respectively, the date of death was imputed as March 1993.

Where the year but not the month of death was known, different months were imputed depending on whether the year corresponded to the Wave year before (B1) or after (A1) bereavement. For example:

- 1. Where a partner died between Waves 2 and 3, which started in September 1992 and September 1993 respectively, and the year of death was recorded as 1992, the month of death was imputed as December. This ensured that imputed dates of death could not occur before the pre-bereavement interviews (B1).
- 2. Where a partner died between Waves 2 and 3, which started in September 1992 and September 1993 respectively, and the year of death was recorded as 1993, the month of death was imputed as March that is, midway between the start of the pre-bereavement and post-bereavement waves.

Partly influenced by these decisions on imputed dates, Table A.5 shows that partner deaths occurred half way on average between successive interview waves: that is, interviews immediately before (B1) and after (A1) the death of a partner took place within six months of bereavement on average. Since successive interview waves are around 12 months apart, interviews conducted two waves before and after the death of a partner are within ± 18 months of bereavement, and interviews conducted three waves before and after the death of a partner are within ± 30 months of bereavement on average. Most interviews (72 per cent overall) took place within a four month window (SD= ± 4) either side of each interview point (B3 to A3 inclusive).

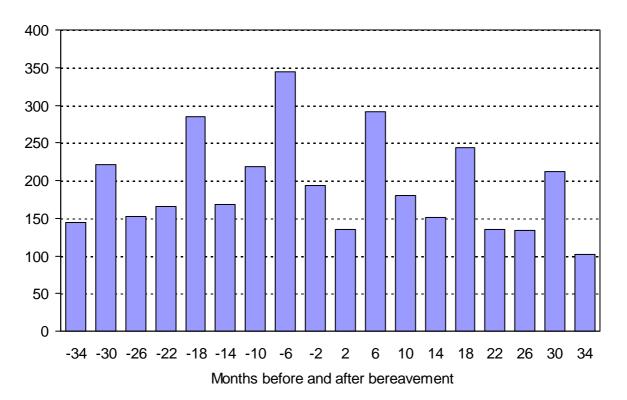
Table A.5 Number of months between date of interviews and partner's death

	Waves before bereavement			Waves after bereavement		
	Three	Two	One	One	Two	Three
	(B3)	(B2)	(B1)	(A1)	(A2)	(A3)
Mean	-29.8	-18.0	-6.2	6.6	17.8	29.6
Standard deviation (SD)	4.0	4.0	3.9	3.7	3.8	3.9
Responding households	518	618	756	606	530	448

These observations suggest that distinguishing three points in time before bereavement (B3 to B1) and three points in time following bereavement (A1 to A3) provides an imprecise representation of the timing of interviews in relation to the death of a partner. Variations around these points could mask the pattern, timing and duration of bereavement outcomes. Although findings would, for the most part, be presented by the number of waves before and after bereavement (B3 through A3), it was recognised that this schema may misrepresent the trajectory of some bereavement outcomes and responses. It was therefore decided to test the sensitivity of key findings to the timing of interviews in relation to date of bereavement. A more detailed chronology than the six point schema was therefore developed and is illustrated in Figure A.1. This figure shows the number of

households interviewed at four month intervals before and after the death of a partner, and provides 18 measurement points which might be used for charting outcome measures.²

Figure A.1 Number of responding households by number of months before and after bereavement



The schema shown in Figure A.1 can provide a fairly precise account of the timing and duration of bereavement outcomes; however, it was recognised that a strictly chronological framework may not always be appropriate. There is considerable variation in trajectories of bereavement phenomena that is unrelated to measures of calendar time. The circumstances and place of death, the quality and stability of the relationship, the family context, social environment and personal resources of bereaved partners can each influence the course of bereavement outcomes in different ways (Archer, 1999). Whether partners were bereaved say, 5, 10 or 20 months ago may not provide useful information about their financial difficulties and financial needs. Key transitions and turning points in the experiences of bereavement are likely to provide more useful markers than the mere passage of time: the qualitative component would help identify such markers.

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². Although it would have been possible to use the actual number of months to represent the interval between interviews and partner bereavement, this level of detail was considered to be unwarranted because, as already noted, dates of bereavement and dates of interviews had to be imputed in some cases.

A.3.5 Secular trends

Although the study design focuses on changes across the years immediately before and after the death of a partner, the survey data were collected in calendar time spanning the years 1991 to 2004 (Table A.1). The timing of each wave of interviews raises three implications for the analysis.

Firstly, the prevailing context at each interview wave and contemporary trends may influence or constrain interviewees' responses. Across the study period for example, the number of cohabiting couples increased, as did the extent of home ownership and personal debt, the contribution of private and occupational pensions to post-retirement incomes, and life expectancy generally (Ermisch and Murphy, 2006; Falkingham and Grundy, 2006).

Such trends might affect the financial consequences of partner bereavement over time. One approach in these circumstances would be to include the passage of time as a continuous variable representing successive interview waves from 1991 to 2004 (as in Table A.1). Secular changes in financial consequences associated with partner bereavement could then be evaluated directly. However, we found no firm evidence of time trends in financial outcomes across the study period: for example, in the extent of household income change or the likelihood of poverty following death of a partner. Nor were any significant differences found in household income change or income poverty levels around bereavement, between the first half of the BHPS study period (1991 to 1997) and the second half (1998 to 2004). These findings increase confidence in regarding the study sample as broadly representing the circumstances of couples where one partner died that prevailed throughout the 1990s and beyond.

Secondly, the effects of more abrupt changes or discrete events might need to be identified in the analysis. These may include changes in policy and practice. In 2001 for example, new bereavement benefits were introduced, payable to women and men under pension age widowed on or after 9 April that year. Bereavement Benefits replaced Widows Benefits, which was payable only to women widowed up to and including 8 April 2001, doubled the tax-free lump sum payable immediately on a partner's death, and improved entitlement to income support.

These benefit changes could make a difference to the financial consequences of the death of a partner, especially for widowed men under pension age. It would therefore be important to distinguish between partner deaths that occurred before and after April 2001 (that is between BHPS waves 10 and 11) when evaluating levels and sources of bereaved partners' incomes. In the event, no such effects were observed. The BHPS questionnaire was not updated during the study period to reflect changes to Widow's Benefit, and respondents' answers may be confused because they may not have known the names of different benefits. Another policy changes, the

introduction of Pension Credit, was first covered in Wave 14 (2004), the last year of the study period.

Thirdly, the effects of inflation across the study period need to be taken into account. Between September 1991 when fieldwork for Wave 1 started and January 2006, the 'before housing costs' price index increased by over 40 per cent (Bardasi *et al.*, 2007, Appendix). Many of the outcome variables are based on monetary values. To derive comparable measures of income and expenditure, all monetary values were therefore expressed in January 2006 prices (see further Appendix C).

A.3.6 Sample weights

To ensure that the survey data are representative of the population living in private households, BHPS research staff developed weights for each wave to adjust for sample design, non-response, and sample loss between successive waves. There are separate weights for respondent individuals and for all enumerated individuals and households, as well as different weights for cross-sectional and longitudinal analysis.

Although much of the analysis reported here focuses on changes over time, it was not possible to use the BHPS longitudinal weights because these are estimated only for those interviewed at all waves. As described above (A.2), bereaved partners were identified between pairs of succeeding waves and there was no requirement for them to have been members of the original panel formed in 1991. To have restricted the study sample to Wave 1 members would have resulted in the loss of almost one third of bereaved partners (236 out of 756). In comparable circumstances, other researchers have used the appropriate cross-sectional weights (e.g. Böheim and Taylor, 2003, 2004; Burgess *et al.*, 2000).

Table A.6 shows the weights used in the analysis according to the wave at which data were collected; they also take into account the new samples added to the BHPS since 1991 (see A.3.3 above). The enumerated weight was applied in most analyses because this enabled use of household and proxy information where respondents had not been personally interviewed. Separate weights were assembled for both bereaved and deceased partners and used accordingly. Sample weights were scaled to maintain the original sample size (N=756). Although the findings in this report have been weighted, the unweighted bases are shown throughout: these indicate the number of interviews achieved.

Table A.6 Individual cross-sectional weights used in the analysis (variable names)

Source	Enumerated weight	Respondent weight
Wave 1	axewght	axrwght
Wave 2	bxewght	bxrwght
Wave 3	cxewght	cxrwght
Wave 4	dxewght	dxrwght
Wave 5	exewght	exrwght
Wave 6	fxewght	fxrwght
Wave 7	gxewghte	gxrwghte
Wave 8	hxewghte	hxrwghte
Wave 9	ixewtsw1	ixrwtsw1
Wave 10	jxewtsw1	jxrwtsw1
Wave 11	kxewtuk1	kxrwtuk1
Wave 12	lxewtuk1	lxrwtuk1
Wave 13	mxewtuk1	mxrwtuk1
Wave 14	nxewtuk1	nxrwtuk1

The impact of weighting was explored using key measures of household financial circumstances (described in Appendix C). As an example, Table A.7 shows mean net equivalised incomes for weighted and unweighted samples. Compared with unweighted estimates, the main effect of weighting was to increase slightly the average amount and variability of men's household incomes after bereavement (A1). However, weighting does not alter the conclusion of no significant overall change in men's incomes following the death of a partner (paired t-test, P>0.05). On the whole, men's financial circumstances were somewhat more sensitive to sample weighting than those of women: as Table A.7 shows, the effect of weighting on women's household incomes was negligible.

Table A.7 Net equivalised household income before (B1) and after (A1) bereavement by gender (£s per week)

	Women				Men			
-	Unweighted		Weighted		Unweighted		Weighted	
	B1	A1	B1	A1	B1	A1	B1	A1
Unpaired samples								
Mean	£328	£293	£325	£286	£323	£354	£320	£370
Standard error	12	14	12	13	13	23	14	29
Sample size	350	358	351	366	219	188	220	188
Paired samples								
Mean	£336	£303	£334	£299	£333	£350	£333	£368
Standard error	14	17	14	16	16	26	17	34
Sample size	ze 279		284		161		16	1
Paired t statistic	Paired t statistic -2.27		-2.59		0.76		1.1	9
P (2-tailed test)	0.0	2	0.0)1	0.45		0.24	

The purpose of using sample weights is to ensure that the study sample is more or less representative of partners bereaved between 1991 and 2004 inclusive. That is mainly an empirical question and the representativeness of the weighted sample is evaluated in Appendix B.8.

A.4 Household change

This study concentrates on the financial consequences of the death of a partner. Other household changes, often closely associated with financial issues, might occur around the same time and could affect bereaved partners' financial position and economic well-being. Of particular concern were changes in household size and composition, including respondents who moved to another household, for example an adult child's household, following the death of their partner.

To take account of such changes when comparing household incomes and expenditures over time, the usual practice is to apply an 'equivalence scale' to facilitate direct comparison of the financial circumstances of households of different size and composition (Levy et al., 2006; see also Appendix C). An alternative approach to control for household change, particularly when investigating non-monetary outcomes such as housing tenure, is to distinguish between 'intact' and 'non-intact' households. Intact households were defined as those in which there were no observable changes in composition other than the death of a partner. This definition rests on the identity of each household member, not the number of people in the household, or where they live. A household would not be defined as intact simply because the number of people was unchanged: someone moving out could

have been replaced by a different person moving in. To be considered intact, household members must remain together and not be joined by anyone else. Similarly, households that moved to a different address remain intact if there was no change in membership. Hence, the only change in size and composition that occurs in intact households is attributable solely to the death of a partner. Accordingly, intact households were identified between the interview wave immediately before bereavement (B1) and at the first (A1), second (A2) and third (A3) interviews after bereavement.

Although the definition of 'intact' households aims to control for changes in household composition, it refers to bereaved partners' circumstances at two interview points. What actually happens *between* interviews is not precisely known: individuals may move out and return, or join and leave intact households at any time. For present purposes, such unobserved mobility probably matters little because the analysis focuses on respondents' personal and household circumstances around the time of their interviews. However, it is worth noting that households identified as intact between B1 and A2 were not necessarily intact at A1; and intact households between B1 and A3 were not necessarily intact at A1 or A2.

In the event, the vast majority of households remained intact following the death of a partner, in most cases reflecting a shift from a two-person to a single person household, but also including households with dependent or adult children who remained with the bereaved partner (Table A.8). Consequently, findings were often not sensitive, statistically speaking, to the distinction between intact and non-intact households. However, the changes leading to a non-intact household may be a particular response to the death of a partner and may shape bereaved partners' economic well-being.

Table A.8 Intact households following bereavement (per cent)

	A1	A2	A3
Intact	95	91	86
Non-intact	5	9	14
Unweighted base	606	530	448

A.5 The Longitudinal Study

The Longitudinal Study (LS) links census records and vital registration for around one per cent of the population of England and Wales (Blackwell *et al.*, 2003; Brassett-Grundy, 2003). It is constructed from data routinely collected by the Office for National Statistics. The original sample of approximately 500,000 individuals or 'LS members' was drawn from the 1971 census and updated at the following 1981, 1991 and 2001 enumerations. The sample has been maintained by including new

births and recent immigrants; it also contains information on events such as births to sample mothers, cancer registrations, and deaths of LS members and people married to them.

The LS was used to identify bereaved partners across the 30 year period, 1971 to 2001. Post-bereavement cohorts and pre-bereavement cohorts respectively included LS members whose spouse or partner died in the period spanning 24 months before and 24 months after each census enumeration. Bereaved partners were identified by a trawl of the annual death files and their identification relies on matching their date of birth in census records and death registrations. The latter record details of legally married couples only, and therefore partner bereavement in the LS refers specifically to widow(er)hoods (Hattersley and Creeser, 1995).

Both pre-bereavement and post-bereavement cohorts were constructed for the 1981, 1991 and 2001 censuses; only a pre-bereavement cohort could be identified in 1971 because prior events have not been added to the initial sample. Table A.9 shows sample sizes of each cohort. The choice of a two year window either side of each census for identifying bereaved partners was adopted as a compromise between the need for sufficiently large cohorts for sub-group analysis, and the need to ensure that circumstances enumerated in the census were not too far removed from those at the date of death.

Table A.9 Number of bereaved partners in the LS study sample

Census	Cohort	Women	Men	Total
1971	Pre-bereavement	3,120	1,446	4,566
1981	Post-bereavement	2,595	1,282	3,877
	Pre-bereavement	2,773	1,430	4,203
1991	Post-bereavement	2,688	1,229	3,917
	Pre-bereavement	2,836	1,347	4,183
2001	Post-bereavement	2,631	1,133	3,764
	Pre-bereavement	2,644	1,267	3,911

Census information on bereaved partners and their household circumstances was collated for each cohort; census information on deceased partners was also linked to pre-bereavement cohorts. Additionally, it was possible to calculate the ages of bereaved and deceased partners at the time of death from vital registration records.

These cohorts can be used to examine trends over time and bereavement consequences. Time trends in the circumstances of couples separated by death can be investigated across the 30 year period using data from the pre-bereavement cohorts. Comparisons of pre-bereavement and post-bereavement circumstances

provide a provisional indication of bereavement consequences. Findings from these analyses, including an evaluation of the cohort design, will be reported separately. In this appendix, data from the LS are used to estimate the number of couples separated by death.

It is recognised that the LS data present limitations and challenges for investigating bereavement (Hattersley and Creeser, 1995). These include gaps in linking death registration and census records of LS members; restriction to legally defined, opposite sex partners (see further below); and uncertainty about whether personal and household circumstances, including marital status, reported in a census prevailed at the time of death. The linking of death registration and census records during the 1970s and 1980s was incomplete and varied according to whether the surviving spouse was a women or a man. Variations arose because the names and dates of birth of widowers were always recorded on registration of a death, whereas those of widows were recorded only when they were informants of the death. As a consequence, the identification of bereaved partners during the early years of the LS was more complete where the surviving spouse (the LS member) was a man (Hattersley and Creeser, 1995, sections 6.1.3.7 and 7.3.3.1). Linkage rates for the number of recorded widow(er)hoods in the LS as a proportion of the number expected, have improved since then: from 77 per cent in the first decade of the LS to 94 per cent between 2001 and 2004.3 Linkage rates have also improved at a faster rate for bereaved women and, since the late 1990s, have exceeded those of bereaved men.4

Despite the limitations of the LS, there is currently no comparable, large-scale sample for exploring partner bereavement at the population level. LS data from the 1991 and 2001 census enumerations were therefore used to estimate the number of couples where one partner died (Appendix A.6). They were also used to assess the representativeness of the BHPS study sample (see further Appendix B.8).

A.6 Estimating the number of couples separated by death

Although the number of couples where one partner dies is not precisely known, official mortality statistics provide a useful benchmark. These show that more than 215,000 deceased persons were recorded as 'married' by civil registration authorities in Great Britain during 2004, including over 195,000 in England and Wales (GRO(S), 2005; ONS, 2006). The actual figure could fall either side of that number because

³. That is, the recorded number of widow(er)hoods of LS members as a proportion of the expected number of widow(er)hoods occurring to LS members estimated from official mortality figures.

⁴. Widow(er)hoods by sex 1971 to 2004: pdf document available at http://www.ons.gov.uk/about/who-we-are/our-services/longitudinal-study/data-quality/event-sampling-and-linkage/widow-er-hoods/index.html#Equation.

marital status on registration of death is an ambiguous category and official definitions have yet to reflect the diversity of family forms. Separated, unmarried cohabitation, same sex partnerships,⁵ and 'living apart together' are not recognised in the registration process. As a consequence, some people recorded as married at the time of death may not have been in a relationship or not married to the partner with whom they were living; and some people recorded as single, widowed or divorced may have been living with a partner.

In contrast, census enumerations record people's living arrangements, including unmarried cohabitation, as well as their legal marital status. We therefore used the ONS Longitudinal Survey (LS), which links census records and death registrations, to explore the living arrangements of people before they died. Table A.10 compares the census defined marital status of LS sample members who died within two years of the 1991 and 2001 censuses with the marital status record on the registration of their death. The table is organised according to whether or not LS members were living in a couple at the time of the census, distinguishing between married and cohabiting couples. It shows for example that 4,643 people were regarded as living in a married couple in the 1991 census, although their marital status recorded at the time was not always consistent with that description.

Comparisons of marital status at census enumeration and death registration reveal some expected and unexpected shifts. Thus, 223 people in a married couple at the time of the 1991 census were recorded as widowed when they died, indicating that their partner may have died before them. Among cohabiting couples, a net decrease in the number of single or divorced people, matched largely by an increase in the number of married people, draws attention to likely changes in their legal marital status following the census. Changes in marital status among those living in communal establishments are perhaps less reliable because details registered on death may have been informed by members of staff rather than close relatives. They indicate for example a decrease in the number of married people which, on the face of it, was associated with an increase in those regarded as divorced (or single after the 2001 census) but no increase in the widowed group.

⁵. Deaths of registered same sex partners have been recorded in the LS following implementation of the Civil Partnership Act (2004), which legally recognised registered same sex partnerships in the UK.

Table A.10 Living arrangements of LS members at census by marital status at census and marital status at date of death

	1991	Died before	2001	Died before
	census	1 May 1993	census	1 May 2003
Married couple				
Single	7	8	0	5
Married	4,633	4,375	4,089	3,890
Widowed	0	223	0	174
Divorced	3	9	0	9
Separated	n/a	n/a	3	n/a
Not stated	n/a	28	n/a	14
Total	4,643	4,643	4,092	4,092
Cohabiting couple				
Single	26	22	51	46
Married	19	26	19	51
Widowed	17	14	50	51
Divorced	36	30	104	87
Separated	n/a	n/a	14	n/a
Not stated	n/a	6	n/a	3
Total	98	98	238	238
Individual or lone parent				
Single	814	788	743	739
Married	166	107	97	151
Widowed	3,084	3,104	3,272	3,268
Divorced	342	339	455	478
Separated	n/a	n/a	100	n/a
Not stated	n/a	68	n/a	31
Total	4,406	4,406	4,667	4,667
Communal establishment				
Single	288	281	288	307
Married	179	141	240	209
Widowed	1,131	1,128	1,394	1,375
Divorced	30	52	66	90
Separated	n/a	n/a	7	n/a
Not stated	n/a	26	n/a	14
Total	1,628	1,628	1,995	1,995

	1991	Died before	2001	Died before
	census	1 May 1993	census	1 May 2003
All LS members				
Single	1,135	1,099	1,082	1,097
Married	4,997	4,649	4,445	4,301
Widowed	4,232	4,469	4,716	4,868
Divorced	411	430	625	664
Separated	n/a	n/a	124	n/a
Not stated	n/a	128	n/a	62
Total	10,775	10,775	10,992	10,992

Notes:

n/a means the category was not available.

Married includes those who have remarried.

Single in the 2001 census is defined as never married.

Separated (but still legally married) is recorded only in the 2001 census.

Not stated was available as a category only at registration of death.

The question arises: how many people had a partner at the time of death and how does this estimate compare with those recorded as married when their death was registered? Focusing on LS members identified in the 2001 census, we have assumed that the number of couples separated by death comprise the following groups:

- 3,890 people in a married couple at the census and recorded as married at death.
- 238 people in a cohabiting couple at the census. This may be an overestimate if cohabitation was a relatively transitory arrangement.
- 54 people representing the net increase in the number of individuals and lone parents recorded as married between the census and date of death. This figure may underestimate the extent of repartnering in this group through unmarried cohabitation.
- 209 married people who were living in communal establishments at the census.

Adding these figures together indicates that 4,391 people might be assumed to have been part of a couple, though not necessarily co-resident, when they died. This figure is somewhat higher than the 4,301 recorded as married on death, suggesting that official mortality statistics represent around 98 per cent of couples were one partner

died.⁶ Different sets of assumptions would of course produce slightly different estimates. Moreover, apart from couples where one partner lived in residential care, or both lived in different establishments, the LS does not account for unmarried couples who lived apart.

The number of couples where one partner died is probably always likely to be higher than indicated by those recorded as married when death is registered mainly because registration fails to take account of unmarried couples (and unregistered same sex couples). However, we might conclude that the number of couples where one partner died in 2004 is probably closer to 220,000 than the 215,000 in the official mortality statistics. If recent trends in unmarried cohabitation continue, the disparity between the two estimates will increase (Haskey, 2001a). Marital status projections currently point to an increasing number of cohabiting couples, increasing more than fourfold in older age groups between 2011 and 2031, and an increasing proportion of couples who are cohabiting (ONS, 2005).

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⁶. This estimate can be compared with one derived from the BHPS study sample in which 96 per cent of couples are recorded as legally married at the interview before one partner died (Chapter 3.2.2). The BHPS figure may be an underestimate because some cohabitants could have married before the death of a partner. However, the two samples are not directly comparable: the BHPS figure is based on co-resident couples in private households which, unlike the LS sample, would exclude married couples where one or both partners lived in a communal establishment (see Appendix A.3.2). Additionally, the BHPS figure includes same sex couples, the LS does not. Neither sample adequately counts couples where one partner usually lived elsewhere.

Appendix B Participation and Attrition in the Quantitative Study Sample

B.1 Introduction

This appendix describes the way individuals participate in the BHPS and how the composition of the sample varies across successive waves. Particular attention focuses on reasons for non-participation and whether sample loss might influence the findings and conclusions drawn from the analysis. A concluding section considers the representativeness of the study sample by comparison with what is known about the population of couples where one partner died. Although the study sample suffers from the usual threats to coverage and integrity, we conclude that it offers a reasonably good approximation to the population of couples where one partner died.

B.2 Survey participation

At each interview wave, sample members agree to participate in the survey or not, and information from or about them may be obtained in different ways. All individuals in responding households, that is households where at least one individual agrees to participate, are enumerated. Basic socio-demographic information including date of birth, sex and marital status is collected about each household member and details of the accommodation, such as tenure, housing costs, and consumer durables, are recorded in a household questionnaire. This information will usually be provided by one informant. Additionally, all adults aged 16 and over in responding households are invited to give a personal, face-to-face interview. Telephone interviews may be conducted with individuals not present when the interviewer calls; sometimes information may be provided by proxy informants if individuals are unable or unwilling to be interviewed in person, for example if they are too ill to participate. Although telephone and proxy questionnaires ask identical questions to those in the face-to-face interview, the coverage of topics is limited and some topics from the full questionnaire are omitted altogether.

Thus, information about couples and bereaved partners varies in depth and scope depending on whether they gave face-to-face, telephone or proxy interviews, or were simply enumerated as household members. How they participated may vary from one wave to the next, and during each interview participants may refuse or be unable to answer particular questions. Additionally, some participants are lost to follow-up for various reasons, including application of the BHPS rules on sample membership described in Appendix A.3.1.

Loss of participants, for whatever reason, may introduce two problems for the analysis:

- First, by reducing sample numbers below that required to produce robust results for the sample as a whole or for sample sub-groups; and
- Secondly, by biasing or skewing the analysis to reflect particular sample subgroups.

The first issue can be addressed by estimating confidence intervals for key statistics (Gardner and Altman, 1989), or by using non-parametric methods and measures (e.g. medians instead of means). This appendix concentrates on the second issue: bias.

The possibility of bias arises from systematic or non-random variation in sample loss; that is, where sample loss is associated with particular characteristics and circumstances of couples and individuals that might affect the financial consequences of the death of a partner. For example, if bereaved partners in younger age groups were most likely to be lost to follow-up, findings would be skewed towards the experiences of older people for whom paid employment offered fewer prospects for improving their financial well-being.

Non-response within enumerated households can also affect the quality of the information gathered. The financial outcome measures used in the analysis are based on information collected from individual participants. Full participation of all household members is important because levels and sources of household incomes can then be based on the sum of individuals' reported incomes rather than imputed amounts (Taylor, 2006).

The next two sections describe the extent to which households and individuals participated in the BHPS and the reasons for non-participation. Later sections consider whether sample loss is associated with particular sub-groups in the study sample.

B.3 Household interview outcomes

Table B.1 shows the extent to which households participated before and after the death of a partner, and the reasons for non-participation. In most households (65 per cent overall), all eligible adults were interviewed in the pre-bereavement and post-bereavement period. A further 11 per cent of households provided information on some members in the household questionnaire and by proxy or telephone interviews.

As we shall observe, information obtained by proxy or telephone more often relates to household members other than the bereaved partner (compare Tables B.1

and B.2). Analyses that rely on information obtained from full interviews with bereaved partners may therefore by unaffected by lack of complete information on other household members. However, the lack of complete information from households in which some eligible members were not interviewed directly affects the sample available for certain analyses, even when the bereaved partner provided a full interview. This is because net income data have been estimated only for households in which all eligible household members gave full interviews. Households where one or more adult members refused to be interviewed, or in which some information was sought by proxy, were excluded from these estimates (Bardasi *et al.*, 2007: 2). The analysis of non-response reported later in this appendix therefore considers the impact on the analysis of households lacking complete information (B.7).

By definition, all households participated in the survey at the wave immediately preceding bereavement (B1) because this reflects the way the sample was derived. Overall, fewer than one in ten households were lost to follow-up because of refusals, deaths or moving out-of-scope, including those excluded by the BHPS follow-up rules. However, sample loss from these factors was concentrated in the post-bereavement period (A1 to A3) where they accounted for around 18 per cent of all households.

New entrants include partners and couples who joined the original BHPS sample after Wave 1; most came from the samples for Scotland, Wales and Northern Ireland that were added in the late 1990s (see Appendix A.3.3). Altogether, 128 couples were first enumerated within one or two years of the death of a partner: 45 at B2 and 83 at B1, thereby limiting the information available on their pre-bereavement circumstances.

The number of censored observations is also shown Table B.1. As described in Appendix A.2 (Table A.2), censored observations refer to couples where a partner died before BHPS Wave 3, or after BHPS Wave 12. Information on the prebereavement circumstances of the former is missing at B3/B2 and on the post-bereavement circumstances of the latter at A2/A3.

Table B.1 Household interview outcomes

	Before bereavement			After bereavement		
-	В3	B2	B1	A1	A2	A3
Complete information						
Every eligible member interviewed	437	504	569	546	496	416
Partial information						
Some interviewed, some proxied	37	52	88	6	9	4
Some interviewed or proxied,						
some non-contacts/refusals	39	52	82	24	14	17
Household composition form and questionnaire only		1				
Proxy taken at original address		1	1	3		
Telephone interview only	5	8	16	27	11	11
Refusal/no interview						
Refusal to research centre		2		26	17	8
Refusal to interviewer		3		65	24	8
Permanent refusal				1	17	21
No interview because of age, infirmity or disability				10	13	14
Not followed						
Institutionalised				2	3	4
Moved out of scope					1	1
Whole household deceased				25	15	13
Only non-sample members resident				11	2	2
Not followed from previous wave						
(all deceased, non-member,						
permanent refusal, etc.)					40	71
New entrants at B2/B1						
Not entered sample	128	83				
Censored						
Outside study period 1991-2004	108	50			82	149
Other						
Documents missing or unusable	1					
Address not found				3	9	11
Address occupied but no contact	1			7	3	6
Total	756	756	<i>7</i> 56	756	756	756

Figure B.1 plots the main categories shown in Table B.1 (excluding 'Other'). As noted above, all households provided some information in the wave immediately before the death of a partner (B1). The lack of full information on some household members is most evident in the pre-bereavement period; refusals and lost to follow-up mainly occur after bereavement. Censoring reduces the sample available before and after the interview waves that immediately precede or follow bereavement, B3/B2 and A2/A3 respectively.

100% 80% 60% 40% 20% 0% В3 B2 В1 A1 А3 A2 Interview wave before (B) and after (A) bereavement ■ Complete information Partial information Refusal Not followed Not entered sample Censored

Figure B.1 Household interview outcomes

B.4 Individual interview outcomes

Although households may be enumerated and provide information on each member, not all adults are necessarily interviewed: some eligible respondents may refuse to participate and others may not be available for interview or could be interviewed only by proxy or telephone.

Table B.2 shows interview outcomes of respondents who were bereaved between B1 and A1. Immediately before bereavement (B1), 93 per cent of these respondents gave full interviews. Across all waves, 72 per cent of bereaved partners gave full interviews. This is a somewhat higher response rate than the proportion of households providing complete information on all eligible members (65 per cent as

reported in B.3), indicating that information obtained by proxy or telephone more often relates to household members other than the bereaved partner.

In earlier pre-bereavement waves (B3/B2), fewer partners gave interviews mainly because of censoring or not having entered the sample. After bereavement, fewer bereaved partners gave full interviews, again because of censoring but also because of refusals, lost contact and not being followed. Among the latter were respondents who themselves had died, and a smaller number who were not followed because they fell outside the BHPS follow-up rules (see Appendix A.3.1). These outcomes are summarised in Figure B.2 (excluding 'Other').

Table B.2 Individual interview outcomes

	Before bereavement		nent	After bereavement		
-	В3	B2	B1	A1	A2	А3
Interview						
Full Interview	495	584	700	564	509	427
Proxy interview	8	8	18	7	7	3
Telephone interview	4	6	13	26	11	10
Refusal/no interview						
Refusal	11	22	24	101	45	23
Permanent refusal				1	17	21
No interview because of age, infirmity or disability					10	12
Other non-interview	2	3	1	19	12	17
Not followed						
Moved out of scope					1	1
Institutionalised				1	3	4
Temporary sample member (TSM)				11	2	2
Deceased				26	17	15
Not followed from previous wave (died, TSM, permanent refusal, etc.)					40	71
New entrants at B2/B1						
Not entered sample	128	83				
Censored						
Outside study period 1991-2004	108	50			82	149
Other						
Lost computer generated interview						1
Total	756	756	756	756	756	756

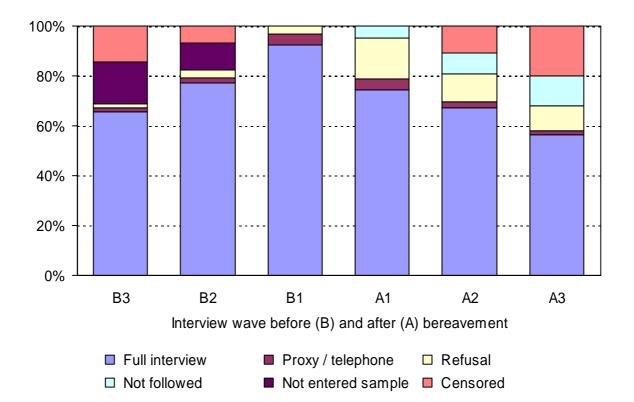


Figure B.2 Individual interview outcomes

B.5 Longitudinal interview outcomes

So far we have examined whether and how households and individuals participated at the three interview waves before and after the death of a partner. Participation at these waves was considered independently of their participation at the preceding or following waves. However, key questions addressed by this research focus on changes over time and require analysis of financial and economic variables measured for the same individual on several different occasions. It is therefore important to consider survey participation continuously over consecutive interview waves.

Table B.3 shows the extent to which households participated in successive waves before and after bereavement. Focusing on participation immediately before (B1) and after (A1) bereavement, it can be seen that all eligible sample members participated on both occasions in 58 per cent of the households in which a partner died. That proportion rises to 80 per cent if households in which only some members participated on both occasions are included. As the number of waves before and after bereavement increases, the extent of household participation falls dramatically reflecting the impact of censoring, new entrants and sample loss. If censoring is ignored, 40 per cent of households, rather than the 25 per cent as shown in the table, have all eligible members interviewed from B3 to A3.

Table B.3 Longitudinal household interview outcomes (per cent*)

Waves before (B) and	Number of	Every eligible	Some or all
after (A) bereavement	successive	member	members
	waves	interviewed (%)	interviewed (%)
B1 to A1	2	440 (58)	606 (80)
B2 to A2	4	299 (40)	403 (53)
B3 to A3	6	189 (25)	269 (36)

^{*} Base=756

Table B.4 shows the extent to which respondents participated in successive interview waves before and after bereavement. Thus, 74 per cent gave full interviews in the wave immediately before *and* immediately after the death of their partner (B1 to A1). As the study window widens, survey participation falls dramatically with only one in three partners giving six full interviews across the three waves before and the three waves after bereavement. The inclusion of proxy or telephone interviews makes little difference to individual participation rates.

Table B.4 Longitudinal individual interview outcomes (per cent*)

Waves before (B) and after (A) bereavement	Number of successive waves	Full interviews only (%)	Full, proxy or telephone interviews (%)
B1 to A1	2	557 (74)	593 (78)
B2 to A2	4	380 (50)	400 (53)
B3 to A3	6	250 (33)	264 (35)

^{*} Base=756

These findings show that diminishing sample size potentially limits the scope for longitudinal analysis, more so for sub-samples defined by age, gender and other characteristics. Clearly, greatest interest focuses on changes immediately surrounding bereavement (B1 to A1) when most individuals and households participated. Interpretation of longer term changes beyond A1 is subject to greater caution.

B.6 Lost to follow-up

From Table B.1 above it can be observed that one in five enumerated respondents (150 out of 756, or 20 per cent) were lost to follow-up after the death of their partner,

that is between interview waves before (B1) and after (A1) bereavement. The main reasons for sample attrition were refusals including those who could not be interviewed because of age, infirmity or disability (13 per cent), and death (three per cent). Raised attrition rates might be expected in a follow-up sample with recent experience of bereavement, health problems associated with old age, and increased risk of mortality following the death of a partner (Stroebe *et al.*, 2007). Not surprisingly therefore, the overall rate of attrition between interview waves before (B1) and after (A1) bereavement (20 per cent) is considerably higher than wave on wave attrition rates for BHPS Wave 1 respondents, which are typically less than five per cent (Lynn *et al.*, 2006, Tables 67 and 68).

Table B.5 shows how the overall attrition rate varies according to the personal characteristics and household circumstances of respondents before the death of their partner (B1); a chi-square test shows the association between attrition and each of these factors in turn. The data were weighted to represent all couples where one partner died, at the wave before bereavement (B1), as described in A.3.6. These findings indicate that sample loss is statistically associated (P<0.05) with:

- Social position of current or most recent job (Registrar-General's social class and socio-economic group).
- Qualifications (highest academic and highest educational qualification).
- Household composition (household size and household type).

Table B.5 Association between sample characteristics before bereavement (B1) and whether lost to follow-up after bereavement (A1)

Sample characteristics at B1	Lost to follow- up at A1 (per cent*)	Chi- square	Degrees of freedom	Significance level (P)
Age group		1.67	3	0.64
Under 55 years	15			
55 to 64 years	21			
65 to 74 years	20			
75 years and over	19			
Gender		2.67	1	0.10
Women	17			
Men	22			
Marital status		0.93	1	0.34
Lawful spouse	19			
Live-in partner	26			
Ethnicity		0.32	1	0.57
White	17			
Other ethnic group	25			

	Lost to follow-	Chi-	Degrees of	Significance
Sample characteristics at B1	up at A1 (per cent*)	square	freedom	level (P)
Registrar-General's social class	(100.00)	9.14	4	0.06
Registrar-General's social class (including not known)		36.81	5	0.00
Professional, managerial and technical occupations	13			
Skilled non-manual	10			
Skilled manual and Armed Forces	20			
Partly skilled occupations	15			
Unskilled occupations	20			
Registrar-General's social class	43			
Socio-economic group		15.25	4	0.00
Socio-economic group (including				
not known)		40.00	5	0.00
Higher and lower managerial and professional	15			
Intermediate occupations, small employers and own account				
workers	10			
Lower supervisory and technical	11			
Semi-routine occupations	13			
Routine occupations	25			
Socio-economic group not known	42			
Highest academic qualification		3.85	2	0.15
Highest academic qualification (including not known)		24.90	3	0.00
A Level and above	11	21.00	J	0.00
O Level or CSE	12			
None of the above	17			
Academic qualification not known	48			
Highest educational qualification		5.34	2	0.07
Highest educational qualification (including not known)		26.24	3	0.00
A Level and above	13	20.21	O .	0.00
Other educational qualification	11			
No educational qualification	18			
Educational qualification not	.0			
known	48			
Housing tenure		0.37	2	0.83
Owned outright	18			
Owned with mortgage	20			
Rented	18			

Sample characteristics at B1	Lost to follow- up at A1 (per cent*)	Chi- square	Degrees of freedom	Significance level (P)
Household size		11.90	2	0.00
Two persons	21			
Three persons	13			
Four or more persons	4			
Household type		7.70	2	0.02
Couple no children	20			
Couple dependent children	7			
Couple non-dependent children				
and Other	11			
Number of physical health problems		3.15	4	0.53
None	14			
One	17			
Two	16			
Three	17			
Four or more	23			
Employment status		0.90	1	0.34
In paid work	16			
Not in paid work	20			
Household current net income quintile		6.95	4	0.14
Highest	10			
2nd	19			
3rd	21			
4th	13			
Lowest	20			
Car or van available for private use		1.80	2	0.41
None	17		_	
One	20			
Two or more	15			
All	19			

^{*} Within each category of each variable or characteristic, percentages sum to 100 with those not lost to follow-up.

An important question is how far sample loss may bias the analysis. Biased estimates of financial consequences can arise if the personal and household characteristics associated with sample attrition are also associated with financial

consequences. One way of investigating the impact of attrition is to compare the distribution of pre-bereavement characteristics and circumstances of respondents with those who were enumerated in the following interview wave.

Table B.6 shows the distributions of all enumerated respondents at the wave immediately before the death of their partner (B1); those who were enumerated at the subsequent wave (A1); and those who were not enumerated following bereavement. The most important comparison is between the total or baseline sample at B1 and the follow-up sample enumerated at A1. Cell residuals were also estimated to show the degree of departure from the sample proportions expected at A1. Residuals equal to –2 or more, help to identify sub-groups that might be underrepresented when analysing change between the interviews conducted before and after bereavement.

Inspection of cell residuals indicates that the following sub-groups were probably under-represented in the follow-up sample:

- Respondents in routine occupations (current or most recent job).
- Respondents whose social position is not known (Registrar-General's social class and socio-economic group unknown).
- Respondents whose qualifications are not known (highest academic and highest educational qualification unknown).
- Respondents in two person households, that is households containing only a couple.

Although the under-representation of these sub-groups is statistically significant, the degree of under-representation is relatively small. The sample of bereaved partners observed at A1 does not differ markedly from the original baseline sample. None of the differences between the baseline sample at B1 and the follow-up sample at A1 are greater than ±2.5 percentage points and 36 out of 54 differences, two-thirds, are less than ±1 percentage point. Sample attrition is therefore unlikely to affect the conclusions drawn from these data.

Table B.6 Sample characteristics before bereavement (B1) by sample status after bereavement (A1) (per cent¶)

Sample characteristics at B1	Total sample at B1	In sample at A1	Not in sample at A1
Age group			
Under 55 years	15	16	12
55 to 64 years	18	17	20
65 to 74 years	30	30	32
75 years and over	37	37	36

Sample characteristics at B1	Total sample at B1	In sample at A1	Not in sample at A1
Gender			
Women	64	66	58
Men	36	34	42
Marital status			
Lawful spouse	96	97	95
Live-in partner	4	3	5
Ethnicity			
White	99	99	98
Other ethnic group	1	1	2
Registrar-General's social class§			
Professional, managerial and			
technical occupations	20	21	16
Skilled non-manual	26	28	15
Skilled manual and Armed Forces	20	20	24
Partly skilled occupations	18	18	15
Unskilled occupations	9	8	11
Registrar-General's social class			
not known	7	5*	19
Socio-economic group§			
Higher and Lower managerial and			
professional	19	19	16
Intermediate occupations, small			
employers and own account workers	22	23	13
Lower supervisory and technical	12	13	8
Semi-routine occupations	22	23	16
Routine occupations	19	17*	28
Socio-economic group not known	7	5*	18
Highest academic qualification	,	3	10
A Level and above	14	15	9
O Level or CSE	15	15	11
None of the above	67	67	69
Academic qualification not known	4	2*	11
Highest educational qualification	4	2	11
A Level and above	21	22	16
	22	24	15
Other educational qualification			
No educational qualification	53	52	58
Educational qualification not known	4	2*	11

Sample characteristics at B1	Total sample at B1	In sample at A1	Not in sample at A1
Housing tenure			
Owned outright	54	54	54
Owned with mortgage	17	17	19
Rented	29	29	27
Household size			
Two persons	83	80*	92
Three persons	10	11	7
Four or more persons	8	9	1
Household type			
Couple no children	84	82*	92
Couple dependent children	4	5	1
Couple non-dependent children			
and Other	12	13	7
Number of physical health problems			
None	21	22	18
One	29	29	30
Two	24	25	23
Three	14	14	14
Four or more	11	10	15
Employment status			
In paid work	20	20	17
Not in paid work	80	80	83
Household current net income			
quintile			
Highest	11	12	6
2nd	14	13	15
3rd	24	23	29
4th	28	29	21
Lowest	24	23	28
Car or van available for private			
use			
None	36	37	34
One	50	49	55
Two or more	14	15	12

^{*} Adjusted standardised residual less than or equal to –2.0.

[¶] Column percentages sum to 100 within each variable or characteristic.

[§] Based on current or most recent job.

B.7 Lost to full participation

As observed in Sections B.3 and B.4 above, members of some participant households did not provide full interviews but participated by telephone or proxy, or had only basic demographic information recorded in a household questionnaire. Lack of full participation by all household members is an important consideration when analysing their financial circumstances because net income variables have been estimated only for households in which all eligible members gave full interviews (Bardasi *et al.*, 2007). Overall, 75 per cent of households participated fully at the interview wave before bereavement (B1) and 72 per cent at the following wave (A1). It is therefore important to assess the extent to which incomplete participation might bias the analysis.

In Table B.7 the characteristics and circumstances of respondents who were members of fully participant households at interview waves immediately before (B1) and after (A1) the death of their partner, are compared with those of all respondents enumerated at B1. To aid interpretation, cell residuals were estimated by comparison with households where one or more eligible members did not provide a full interview.

Inspection of residuals indicates that the following sub-groups were probably underrepresented when investigating net household incomes at the wave before bereavement (B1):

- Respondents aged 55 to 64 years.
- Women.
- Ethnic minority groups.
- Respondents whose social position is not known (Registrar-General's social class and socio-economic group unknown).
- Respondents whose qualifications are not known (highest academic and highest educational qualification unknown).
- Mortgagees.
- Households with three persons.
- Couples with non-dependent children and Other 'complex' households.
- Respondents with two or more cars or vans.

Under-representation of fully participant households was less widespread at the wave immediately following bereavement (A1) but included some of the same subgroups that were under-represented at the wave before bereavement, for example:

- Respondents whose social position is not known (Registrar-General's social class and socio-economic group unknown).
- Respondents whose qualifications are not known (highest academic and highest educational qualification unknown).

- Mortgagees.
- Households with three persons.
- Couples with non-dependent children and Other 'complex' households.

Respondents in skilled manual and routine occupations were also under-represented at the wave following the death of their partner.

Although statistically significant, some residuals are driven by highly skewed distributions. This is the case for example with the ethnic minority category which comprises no more than 1.1 per cent of the baseline sample, so minor departures from that figure can easily produce large residuals. The residuals attached to those whose social position or qualifications are not known can be treated as unsurprising in the sense that information on these characteristics are gathered only in face-to-face interviews which, if not obtained, define households that do not fully participate. In other cases, the degree of under-representation is quite small where differences between the total sample and participating samples are no more than two percentage points including for example those aged 55 to 64, or paying a mortgage; in fact, no differences exceed four percentage points.

It is difficult to draw firm conclusions about the impact of non-participation on the analysis. Broadly speaking, the experiences of those in poorer material or economic circumstances (in routine jobs or with reduced access to private transport for example), or those at greater risk (with mortgage commitments for example), might be under-represented in the fully participant sample. In that case, the analysis is likely to produce rather more conservative conclusions and less likely to exaggerate the financial consequences of the death of a partner.

Table B.7 Sample characteristics before bereavement (B1) by household participation before (B1) and after bereavement (A1) (per cent¹)

Sample characteristics at B1	Total	Full	Full
	sample at	participation	participation
	B1	at B1	at A1
Age group			
Under 55 years	15	15	15
55 to 64 years	18	16*	17
65 to 74 years	30	30	31
75 years and over	37	39	37
Gender			
Women	64	61*	66
Men	36	39	34

Sample characteristics at B1	Total sample at B1	Full participation at B1	Full participation at A1
Marital status			
Lawful spouse	96	96	97
Live-in partner	4	4	3
Ethnicity			
White	99	99	99
Other ethnic group	1	1*	1
Registrar-General's social class [§]			
Professional, managerial and technical			
occupations	20	23	22
Skilled non-manual	26	25	28
Skilled manual and Armed Forces	20	19	19*
Partly skilled occupations	18	19	18
Unskilled occupations	9	9	9
Registrar-General's social class not known	7	5*	4*
Socio-economic group [§]			
Higher and Lower managerial and professional	19	21	20
Intermediate occupations, small employers and own account workers	22	22	24
Lower supervisory and technical	12	11	13
Semi-routine occupations	22	22	23
Routine occupations	19	19	17*
Socio-economic group not known	7	5*	4*
Highest academic qualification			
A Level and above	14	15	16
O Level or CSE	15	16	15
None of the above	67	69	67
Academic qualification not known	4	0*	1*
Highest educational qualification			
A Level and above	21	22	23
Other educational qualification	22	23	24
No educational qualification	53	54	51
Educational qualification not known	4	0*	1*
Housing tenure			
Owned outright	54	53	55
Owned with mortgage	17	15*	16*
Rented	29	32	29

Sample characteristics at B1	Total	Full	Full
Gample characteristics at D1	sample at	participation	participation
	B1	at B1	at A1
Household size			
Two persons	83	87	84
Three persons	10	6*	8*
Four or more persons	8	7	8
Household type			
Couple no children	84	87	86
Couple dependent children	4	4	5
Couple non-dependent children and Other	12	9*	10*
Number of physical health problems			
None	21	20	21
One	29	29	30
Two	24	25	25
Three	14	14	13
Four or more	11	11	10
Employment status			
In paid work	20	19	20
Not in paid work	80	81	80
Car or van available for private use			
None	36	38	38
One	50	50	48
Two or more	14	12*	14

^{*} Adjusted standardised residual less than or equal to -2.0.

B.8 Representativeness of the study sample

Following the award of an ESRC grant, we were encouraged to evaluate the composition of the BHPS study sample against the population of bereaved partners, or a more representative data set. This section describes our approach. Such an evaluation was considered particularly important because we planned to weight the study sample for design effects, non-response, and sample loss between successive waves. Despite the longitudinal study design, we could not use the BHPS longitudinal weights and had, instead, to rely on cross-sectional weighting (see Appendix A.3.6). There was also concern about the impact of including bereaved partners from the so-called extension samples, described in Appendix A.3.3, which have been added to the BHPS since it commenced.

[¶] Column percentages sum to 100 within each variable or characteristic.

[§] Based on current or most recent job.

There is no national register of couples separated by death against which to assess the representativeness of the BHPS study sample; however, official mortality records provide a useful starting point. When a legally married person dies, details of their surviving spouse are recorded on the death registration alongside other information about the deceased person. Since 1971, death registrations have also been linked to census records as part of the Office for National Statistics Longitudinal Study (LS) (Brassett-Grundy, 2003).

The LS, therefore, can provide details of bereaved partners' circumstances gathered in population censuses conducted between 1971 and 2001, as described in Appendix A.5. Here LS data from 1991 and 2001 are used to examine the representativeness and composition of the BHPS study sample. Comparisons with the LS provide a somewhat imperfect test of representativeness because the LS itself is subject to sampling error. The scope of the LS also differs from that of the BHPS. The LS covers England and Wales and includes the institutional population as well as private households. Partners in cohabiting or same-sex relationships are not counted in official mortality statistics and therefore not included in the LS, while deaths of legally married but separated partners may be recorded. However, there is currently no better data set for evaluating the representativeness of the BHPS study sample. Key strengths of the LS data set include its large sample size and low non-response rates.

The following series of tables compare weighted data from the BHPS study sample at the interview wave immediately before bereavement (B1) with the circumstances of LS partners who were bereaved within two years of the 1991 and 2001 censuses. Household circumstances recorded on census day may not hold precisely at the time of bereavement, although the age distributions of LS members detailed below relate to date of bereavement as recorded on the death registration. However, if BHPS study sample estimates, which were expected to typify the circumstances of bereaved partners from 1991 to 2004, fall between or close to those for the 1991 and 2001 LS bereavement cohorts, it might be supposed that the study sample approximates the contemporaneous population of couples where one partner died.

Tables B.8 and B.9 show, respectively, the ages of bereaved partners, distinguishing between those under pension age and over (women: 60, men: 65) and the proportion of women in each age group. The findings indicate that the age distribution of men in the study sample matches well, and falls between, that of the LS cohorts for 1991 and 2001. Women in the study sample have a slightly younger age profile than expected: 24 per cent are under pension age whereas the proportions in the LS are

⁷. That is, using the pre-bereavement cohorts for 1991 and 2001 described in Appendix A.5 (Table A.9).

⁸. We therefore used both the pre-bereavement and post-bereavement cohorts for 1991 and 2001 to calculate age distributions. It is estimated that more than nine our of ten expected widow(er)hoods among LS sample members have been identified since 1991 (see Appendix A.5).

closer to 20 per cent (Table B.8). Hence, women over pension age are slightly underrepresented in the study sample: 76 per cent compared with an expected 80 per cent. Moreover, the proportion of women in the pensioner age group is five percentage points below that estimated from the LS data (Table B.9).

Table B.8 Age by gender (per cent)

	Women			Men		
	1991	BHPS	2001	1991	BHPS	2001
Under pension age	21	24	20	29	26	24
Pension age and over	79	76	80	71	74	76
Unweighted base	5,524	486	5,275	2,576	270	2,400

Table B.9 Women by age (per cent)

	1991	BHPS	2001
Per cent women			
Under pension age	61	62	64
Pension age and over	70	65	70
Total	68	64	69
Unweighted base			
Under pension age	1908	185	1624
Pension age and over	6192	571	6051
Total	8100	756	7675

Age differences between women in the BHPS study sample and the LS cohorts could not be explained by the absence of cohabiting partners in the LS. Although younger couples in the study sample were more likely to have been unmarried cohabitants, bereaved women were less likely than bereaved men to have cohabited before their partner died. To have an effect, cohabitation would have been more likely to produce a younger age profile among men in the BHPS study sample than in the LS.

Compared with the LS therefore, pensioner women are slightly under-represented in the BHPS study sample. One way to minimise potential bias is to stratify analysis of the BHPS data by age and sex. This was always our intention: the financial circumstances and income sources of women and men, above and below pension age, are often quite different and best examined separately.

Table B.10 to B.12 draw comparisons between the BHPS study sample and the LS bereavement cohorts on three variables closely associated with a household's

financial resources and material well-being: social class (based on current or most recent job), home ownership and job status. In a way, social class and home ownership also reflect material resources accumulated across the life course.

The social class distributions of the BHPS study sample and the LS cohorts are remarkably similar (Table B.10). However, the social class distribution of women in the study sample matches the profile of the 1991 cohort more closely than that of the 2001 cohort. Among male manual workers, the study sample shows a slightly larger ratio of men in social class IIIM relative to social classes IV or V.

Table B.10 Registrar General's social class by gender (per cent)*

	Women					
	1991	BHPS	2001	1991	BHPS	2001
Class I and II	23	22	25	28	28	29
Class III non-manual	33	33	35	9	9	9
Class III manual	8	10	10	38	41	38
Class IV and V	36	35	30	25	22	23
Unweighted base	906	309	1464	624	137	615

^{*} Under 75 years.

There are also some differences between the BHPS study sample and the LS in the distribution of house tenures, although study sample proportions often fall between the LS estimates for 1991 and 2001 (Table B.11). Comparisons with the LS indicate that the BHPS study sample might over-represent women in households paying a mortgage and under-represent their male counterparts. However, differences between the BHPS and the LS in the distribution of housing tenure were no more than five percentage points.

Table B.11 Housing tenure by gender (per cent)

	Women			Men		
_	1991	BHPS	2001	1991	BHPS	2001
Owned outright	50	53	61	48	56	57
Owned with a mortgage	17	20	15	19	12	17
Social rented	27	22	19	27	26	23
Private rented	6	5	5	7	6	3
Unweighted base	2628	477	2252	1259	260	1094

Comparisons of the BHPS study sample with the LS bereavement cohorts show that more women in the study sample were working. We can only speculate on the

reasons that might account for such a difference. Examination of the impact of sample attrition shows that those remaining in the BHPS include disproportionate numbers of people in employment at Wave 1, which might have boosted their representation in the study sample (Lynn, 2006: Table 69). By comparison, census records, which often rely on completion by a household informant, may underestimate women's employment rates. Whatever the explanation, the implications are that the study sample might over-represent the experiences of women who gave up paid work when a partner died, and under-represent the financial difficulties faced by women who were dependent on their partners' earnings or benefit income when separated by death.

Table B.12 Employment status by gender (per cent)*

	Women			Men		
	1991	BHPS	2001	1991	BHPS	2001
Working	54	63	55	67	68	65
Not working	46	37	45	33	32	35
Unweighted base	625	124	482	408	80	311

^{*} Under pension age.

Broadly speaking, differences between the BHPS study sample and the LS cohorts are not large although we have noted certain points where interpretation of findings may need to be sensitive to particular differences. Together with the quality assurance standards upheld in the BHPS design (Lynn, 2006), and the findings on sample loss discussed in B.6 and B.7 above, we feel reasonably confident that the study sample broadly represents the circumstances of couples in the 1990s and beyond where one partner died.

Appendix C Quantitative Outcome Measures

C.1 Introduction

This appendix describes the outcome measures and key variables that were derived from the British Household Panel Survey (BHPS) data sets and used in the quantitative study. Much of this information is provided in BHPS user guides and manuals (Bardasi *et al.*, 2007; Levy *et al.*, 2006; Lynn, 2006; Taylor, 2006; Institute for Social and Economic Research, University of Essex, 2006); therefore, only brief details are summarised here.

Unless stated otherwise, all measures were derived from data gathered in all 14 interview waves available at the time this study commenced. Question wording and response categories of the original BHPS variables were checked for consistency across waves, recoded where required, and then allocated to the sequence of interviews before and after bereavement (B3 to A3) described in Appendix A (Table A.1).

C.2 Net household income

Although the BHPS gathers detailed information on the gross income of each adult household member, it does not ask about payment of tax and other liabilities. However, income net of tax more closely reflects people's financial resources and is more widely used as a measure of economic welfare than gross income (Smith and Middleton, 2007). For that reason, BHPS researchers developed a micro-simulation model using information about individual and household characteristics to estimate tax liabilities and produce net household income estimates (Bardasi *et al.*, 2007; Levy *et al.*, 2006). Key definitions and terms, and implications for the present analysis, are described below:

• Both 'current' and 'annual' incomes are estimated but the former are preferred because they are based on information for people who were present in the household during the income reference period. Current income measures focus attention on transitory changes in income that more closely reflect changes in household composition between annual interview waves. They help ensure that levels and sources of income relate to household and individual circumstances enumerated at the time of each successive interview. Annual income estimates provided at the first interview following a partner's death would cover the last months of his or her life and any income he or she received, producing an erroneous picture of the association between the timing of household change and income, and the financial effects of death of a partner (Burkhauser et al., 1986).

- 'Net income' approximates 'disposable' income (though before housing costs see below). It is estimated by summing cash income from all sources (income from employment and self-employment, and other market income, plus social security and social assistance receipts and private transfers such as maintenance payments) minus direct taxes (including income tax and National Insurance contributions) and occupational pension contributions. These components are summed across all household members enumerated at the time of each interview wave to produce household income variables. Most income components are measured for the month prior to interview, or the most recent relevant period. All income estimates used in this report have been converted to £s per week.
- Current net income 'before housing costs' means that housing costs have not been deducted. This is the same definition as the income measure used in official low income statistics (DWP, 2002). One drawback of measuring income before housing costs is the assumption that housing costs are at the discretion of households and reflect the consumption decisions they make. This assumption may not hold, especially for tenants in social housing. However, we wanted to consider housing costs and other aspects of housing consumption explicitly (C.10 below). Some concern has also been expressed about the quality of data on housing costs which might limit the usefulness of income estimates after housing costs (Levy et al., 2006: 116; Zaidi, 2001; Zaidi and Burchardt, 2003).

The BHPS definition of current net income is the same as the before housing costs income measure used in official British low income statistics and is therefore of considerable policy interest (DWP, 2002). In some analyses, net incomes were adjusted or equivalised to take account of household size and composition. Following equivalisation, incomes can be compared directly across different types of household or for households that change over time, including before and after the death of a partner. The McClements 'before housing costs' equivalence scale, which has scale rates that depend on the number of adults and the number and age of dependent children, was used as this facilitates comparison with other studies (e.g. Zaidi, 2001); it was also commonly used by the Department for Work and Pensions until 2007 (Levy et al., 2006).

Measuring income at the household level implies that members of the same household pool and share resources equally or in proportion, overlooking the possibility that resources are often distributed unequally within households and between partners (Pahl, 1989). However, household income is arguably a more reliable measure of economic welfare since individuals share at least some resources with household members and benefit from household level expenditure, for example on heating and maintenance (Zaidi, 2001: 12). Focusing on the household

⁹. Net income estimates are not produced for individual household members.

¹⁰. The main exceptions are employment earnings which are 'usual earnings', and income from investments and savings which are annual estimates.

unit is also appropriate when investigating the financial consequences of death of a partner. Johnson *et al.* (1998: 200) argue that in such situations 'simply looking at the individual's income would be inadequate. The personal income of a woman tends to increase following the death of her husband, but this does not mean that she becomes better off. In considering widows, it is important to compare their income after widowhood with the total of their and their husband's incomes before his death'.

No adjustment was made to household income for additional spending associated with disability, such as the costs of personal care, heating and laundry, and other needs (Zaidi and Burchardt, 2003). Adjusting for extra costs would reduce disposable household incomes, especially in low income households before the death of a partner. In such circumstances, the present analysis probably underestimates the potential effect of bereavement on 'boosting' the disposable incomes and standard of living of bereaved partners.

Net household incomes were not estimated where one or more household members did not fully participate in the survey because the BHPS researchers did not want to rely on imputed values (Levy *et al.*, 2006). This restriction reduces sample sizes somewhat, including before the death of a partner when both adults in the couple were expected to participate. However, the assessment reported in Appendix B.7 indicates that such losses should not bias analysis. Throughout this report, income estimates have been indexed to January 2006 by applying the before housing costs monthly price index (Levy *et al.*, 2006: Appendix).

C.3 Original and gross household incomes

'Original' and 'gross' incomes were estimated to investigate the impact of social security provision and direct taxation on household incomes (cf. Jarvis and Jenkins, 1999). 'Original' income is income from market sources including earnings from paid employment and private pensions before the addition of state benefits, pensions and allowances, and before the deduction of taxes and National Insurance contributions. 'Gross' income is original income plus state benefits, pensions and allowances, and represents income from all sources before taxes and National Insurance contributions are deducted.

Jarvis and Jenkins (1999: 239) equate original, gross and net income with their North American counterparts as follows:

- Original income corresponds to pre-tax pre-transfer income.
- Gross income corresponds to pre-tax post-transfer income.
- Net income corresponds to post-tax post-transfer income.

Comparisons of original and gross income focus attention on the impact of social assistance whereas comparisons of gross and net income focus on the impact of direct taxation.

C.4 Sources of income

The net household income variables produced include estimates of household income derived from five sources (Bardasi *et al.*, 2007; Levy *et al.*, 2006):

- Net labour income that is gross earnings from paid employment, self employment and occasional work, including tax credits, less income tax, national insurance contributions and pension contributions.
- Benefit income including receipts from all state pensions and benefits.
- Pension income from private sources (occupational and personal pension schemes).
- Investment income including income from savings and receipts from rented property.
- Other income transfers including education grants, sickness insurance, maintenance, foster allowance, payments from Trade Unions and Friendly societies, and from absent family members.

Most households in the study group received income from two or more sources. An account of the contribution of each source to total household net income (before payments of local taxes) identified the combinations shown in Table C.1.

Table C.1 Main sources of household income before bereavement (B1)

Main sources of income	Definition	Per cent
1. Benefits including state pension	60 per cent or more from benefit income	50
Benefits including state pension and private pension	30 per cent or more from benefit income and 30 per cent or more from private pension income	19
3. Paid employment	60 per cent or more from paid employment	15
Paid employment and benefits including state pension	30 per cent or more from paid employment and 30 per cent or more from benefit income	8
Private pension or investment or both	60 per cent or more from investment income; or 60 per cent or more from private pension income; or 30 per cent or more from investment income and 30 per cent or more from private pension income	7
	Unweighted base	569

These five combinations account for 91 per cent of households for which net income variables had been derived at the wave before bereavement (B1). Other combinations were considered but each accounted for less than five per cent of households; they were grouped together as 'Other' sources of income (nine per cent overall). There was some overlap between categories two and one and between two and four affecting a handful of households (under five per cent); these categories were retained because they allowed separate consideration of those households that supplemented state benefits and pensions with occupational and personal pensions, and labour market earnings respectively.

It will have been observed from the above that BHPS researchers grouped together all social security receipts including income from state benefits and pensions. For some purposes, detailed exploration of particular income sources reported was required. Accordingly, individual benefits or groups of similar benefits were identified; thus, benefits awarded on grounds of disability were formed into two groups:

- The term 'disability benefit' covers receipt of attendance allowance, mobility allowance, or disability living allowance (care component, mobility component, or both) which are awarded to cover the extras costs often associated with disability.
- The term 'work-related disability benefit' covers receipt of any of the following (and their predecessors): severe disablement allowance, invalidity pension, industrial injury (or disablement) allowance, war disability pension, disability tax credit (disability working allowance), or incapacity (invalidity) benefit.

Although BHPS data are considered adequate for estimating household incomes, researchers have expressed concern about measurement error in reported receipts of income from individual sources, particularly when investigating income change and stability over time (Lynn, 2006: 80). For that reason, no attempt was made to investigate flows on and off particular state benefits, or to use actual amounts of income from specific benefits or other sources to account for changes in household incomes. Instead, the statistical association between household income change and whether or not income was derived from particular sources, including those that were lost or gained when a partner died, was assessed using regression techniques and analysis of variance. In addition, we recognise that the BHPS data sets used here, which cover the period 1991 to 2004, do not adequately represent recent changes to the benefit system and state pension provision, including the introduction of bereavement benefits and pension credits.

Information about the receipt of state retirement and occupational pensions and some social security receipts (e.g. housing benefit or rent rebate) could be collected in proxy interviews. Responses to these proxy questions were combined with those given by full respondents. In general, social security benefits are described by their current name rather than a previous label: for example, carer's allowance includes the former invalid carer's allowance and job seeker's allowance includes what was

formerly unemployment benefit. In addition, widow's benefits which were replaced by bereavement benefits in April 2001 have been combined as follows: Widow's Allowance with Bereavement Allowance, and Widowed Mother's Allowance with Widowed Parent's Allowance.

C.5 Relative household income

To distinguish high and low income households, relative income was defined according to households' contemporaneous position in the overall net income distribution, adjusted for differences in household size and composition using the McClements equivalence scale (before housing costs). The lowest income group contained the poorest fifth of households in the population; the highest income group contained the richest fifth of households. Quintile groups were calculated separately for each survey year. This definition of relative household income provides an indication of financial or economic well-being among sub-groups in the population and has been widely used in studies of low income and economic disadvantage (e.g. Jenkins and Rigg, 2004; Rigg and Sefton, 2006; Taylor *et al.*, 2004).

C.6 Income poverty

A household was defined as income poor if its current net equivalised income was less than 60 per cent of the contemporaneous median household net equivalised income. This is the most widely used measure of income poverty, including official publications and statistics (Smith and Middleton, 2007). However, to overcome the limitations of a single income threshold, the intensity of poverty was represented by three levels:

- Near poor less than 70 per cent but 60 per cent or more of median household income.
- Poor less than 60 per cent but 50 per cent or more of median household income.
- Very poor less than 50 per cent of median household income.

Those described as poor or very poor are below the official poverty line.

C.7 Household income change

Changes in household income following death of a partner were measured as differences in income between interviews before and after bereavement. Three measures of household income change were derived:

- Differences in current net household incomes (not equivalised for household size and composition). This measure represents the actual increase or decrease in net weekly household incomes. Actual changes in household income levels are likely to correspond to the amount people have in mind when asked to assess by how much their incomes changed after the death of a partner. They may also correspond to the amount by which household budgeting regimes have to be adjusted.
- Percentage differences in current net household incomes (non-equivalised). This measure shows the actual increase or decrease in net household incomes as a proportion of net household incomes before bereavement. It captures the notion that changes in income are likely to be more keenly felt in low income households. A change of say £50 may have quite different implications for households with pre-bereavement incomes of £250 a week than for those with £500 a week. In the former, £50 represents twice the proportion of their income as in the latter: 20 and ten per cent respectively.
- Differences in current net household equivalised incomes. Equivalisation adjusts incomes for household size and composition, taking into account the death of a partner and any other household changes. It attempts to relate incomes to needs and reflect changes in living standards and economic well-being. As an example, a couple's net weekly household income of £200 before the death of a partner drops to £122 a week following bereavement. That represents an absolute change of –£78 a week, or a decline of 39 per cent. According to the McClements equivalence scale however, a single person household income of £122 a week meets the same financial needs as a couple's weekly household income of £200.¹¹ In this case, there has been no change in the bereaved person's financial well-being. Thus, examining changes in equivalised incomes focuses attention on disproportionate increases or decreases in household incomes following the death of a partner.

Each measure was based on weekly household net incomes which more or less equate with households' disposable incomes. Following inspection of histograms, each variable was trimmed to remove extreme values and ensure the skewness index was close to zero (range ±0.85). Across the three measures described above, the number of trimmed cases were 13, seven and two respectively.

C.8 Income inequality

Following common practice, the Gini coefficient was used to measure household income inequality. Generally speaking, the Gini coefficient indicates the degree of

¹¹. A head of household is rated 0.61 and a spouse 0.39 on the 'before housing costs' equivalence scale (Taylor, 2006: Table 29). Thus, a single person household's financial needs are estimated to be equivalent to 61 per cent of those of a couple household.

departure from a perfectly even distribution of income: the higher the coefficient, the more unequally household income is distributed. So the Gini coefficient ranges from zero representing perfect equality (every household has the same income) to 1.0 for complete inequality (one household has all the income and the rest has none). The Gini coefficient can also be expressed as a percentage by multiplying by 100.

C.9 Subjective financial circumstances

As well as estimating level and sources of income for constructing the more objective measures described above, BHPS respondents are asked to assess their financial circumstances subjectively. Three self-assessed measures of financial status are available:

- Financial situation individuals' perception of their overall financial situation was assessed by asking: 'How well would you say you yourself are managing financially these days?' Respondents are given the choice of five responses: 'living comfortably', 'doing alright', 'just about getting by', 'finding it quite difficult', and 'finding it very difficult'.
- Change in financial situation perceived change in individuals' financial situation
 was assessed by the question: 'Would you say that you yourself are better off or
 worse off financially than you were a year ago?' If respondents answered 'better
 off' or 'worse off', they were asked why that was the case. Respondents could
 also be recorded as saying 'about the same'.
- Financial expectations for the year ahead respondents' financial expectations
 were gathered by asking: 'Looking ahead, how do you think you will be financially
 a year from now?' Three responses are offered: 'better off', 'worse off' or 'about
 the same'. Following Wildman (2003), the 'don't know' category was included in
 the analysis to represent respondents who felt 'uncertain' about their future
 financial position.

C.10 Expenditure patterns

Individuals' economic well-being can be measured by the resources at their disposal as well as their patterns of expenditure or consumption. Much of the analysis focuses on net income as a measure of individuals' and households' resources but it is often argued that household consumption is a more reliable guide to economic well-being over the longer term (Blundell and Preston, 1995; Ringen, 1988). This is because individuals can smooth consumption over time by borrowing when incomes are low and saving or repaying debt when incomes are higher: in this way, they can achieve a steadier standard of living even though their incomes may fluctuate (Brewer *et al.*, 2006). In focusing on expenditure patterns we also wanted to provide a context for

exploring particular consumption issues associated with bereavement (Gentry *et al.*, 1995).

The BHPS gathers information on three areas of expenditure: household spending on food and fuel, as well as rent or mortgage payments for accommodation. Each is described in turn.

C.10.1 Food expenditure

To explore the impact of partner bereavement on household consumption requires, ideally, a comprehensive measure of expenditure, but the BHPS only collects comparable information in all waves on food expenditure. Arguably however, food spending is a good proxy for total household expenditure: Finch and Kemp (2006: 44) show, for example, that food spending as a proportion of income is closely correlated with overall expenditure as a proportion of income. Food is also a necessary commodity and smoothing expenditure on food is likely to be a priority even when incomes vary. As Smith (2006: C137) argues, 'if households do not smooth spending on food, they are unlikely to smooth other forms of spending'.

During interviews for the BHPS, informants who help complete the household questionnaire are asked approximately how much their household spends each week on food and groceries. They are told to include all food, bread, milk, soft drinks, etc. but to exclude pet food, alcohol, cigarettes and meals out.

In the first wave, respondents were asked to estimate the amount spent on food to the nearest pound; in subsequent waves, they were invited to indicate their household's weekly food expenditure from a card showing 12 bands ranging from under £10 to £160 and over. To obtain weekly spending amounts, responses from Wave 1 were first grouped into the bands used in other waves, and then mid-point values were assigned for the band reported at each wave. Amounts were subsequently indexed to January 2006 prices using the before housing costs monthly price index and, where appropriate, equivalised using the McClements scale.

C.10.2 Fuel expenditure

Information on household fuel costs has been gathered in different formats since the BHPS commenced. During the first five waves, from 1991 to 1995, expenditure on gas and electricity related to the last account payment; household informants were also asked to estimate how much they spent on these fuels in the 'last week'. Spending on oil for central heating was estimated for the 'last year'. This information was converted to monthly estimates and combined to represent total household spending on fuel. No information on fuel expenditure was collected in Wave 6, but

from Wave 7 onwards respondents were asked to estimate how much the household had spent on domestic fuel in the 'last year'.

In the event, it was decided to use the BHPS derived variable 'monthly fuel expenditure on oil/gas/electricity'. This measure was chosen because it is more likely to be consistent with household composition and circumstances at the time of interview and should therefore be more sensitive, than annual fuel costs, to changes following death of a partner. The drawback is that this variable is available for Waves 1 to 5 only, reflecting the circumstances of bereaved partners in the early 1990s, and reducing the number of households available for analysis accordingly. For the analysis, monthly fuel costs were adjusted for inflation using the 'before housing costs' monthly price index and expressed in January 2006 prices.

The definition of fuel poverty is where a household needs to spend more than ten per cent of its income on fuel to maintain satisfactory heating and other energy services (Centre for Sustainable Energy, 2007). Although this definition has been accepted and used by successive government departments with responsibilities for fuel poverty issues, there is no consensus on what constitutes household income. Here, a household is defined as fuel poor when it spends more than ten per cent of its net income (C.2) on oil, gas and electricity.

C.10.3 Housing costs

At each wave, the BHPS gathers information to estimate net monthly housing or accommodation costs: that is, mortgage payments and rent after deducting housing benefit. However, the BHPS does not ask about other housing costs such as house repairs and maintenance, or buildings insurance. As for other monetary values in the analysis, housing costs were adjusted for inflation using the 'before housing costs' monthly price index and expressed in January 2006 prices.

Additionally, the BHPS gathers information on whether respondents were 'finding it difficult to keep up with their housing payments ... in the past 12 months'. If they answer in the affirmative, further questions ask whether such difficulties had required them to 'borrow money' or to 'cut back on other household spending in order to make the payments'. They are also asked whether they had found themselves 'more than two months behind' with rent or mortgage payments.

C.11 Credit and debt

From Wave 5 onwards, household informants were asked whether anyone in their household currently made repayments on hire purchases or loans. They were asked to include social fund loans but to exclude mortgage loans which are dealt with

separately (see above C.10.3). Those answering in the affirmative were then asked: to what extent was the repayment of such debts and the interest a financial burden on your household? In answering this question they were asked to select one of three responses: 'a heavy burden', 'somewhat of a burden' or 'not a problem'.

No information was gathered on the reasons for taking out a hire purchase agreement or loan, or the commodities purchased with the money obtained. These questions are likely to have focused respondents' attention on formal credit agreements and commercial loans rather than, for example, deferred payments to funeral directors. Less formal payments within families and between friends were addressed separately in the interview questionnaire (C.12 below).

Additional questions on types and amount of debts, including use of credit cards and loans from private individuals, were asked in Waves 5 and 10 only, so longitudinal comparisons before and after bereavement are not possible. Only a handful of respondents reported large debts of £5,000 or more, too few for analysis, with no indication of whether or not these were considered problematic. These additional data on debts were not explored further.

C.12 External transfers

External transfers cover current payments made by BHPS respondents to any person who does not live in the same household. These data were used to explore their financial commitments within the wider family and how these changed after the death of a partner. They do not include payments on behalf of a partner who was living elsewhere before death, in a nursing home for example.

Respondents are prompted to consider five types of payment: maintenance, alimony or child support; household bills and expenses; payments for education; spending money or allowance; and repayment of a loan. 'Other' kinds of payment could be noted but pocket money for children and payments to charity are specifically excluded. Although not made explicit in the survey question, regular payments rather than one-off sums of money seem to be implied. As well as the purpose of such payments, respondents are also asked to indicate their relationship to the recipient.

C.13 Lump sum payments

The BHPS questionnaire asks respondents whether they have received 'any payments or payments in kind' since September of the previous year, which in most cases would have been in the past 12 to 15 months. They are shown a list of

common payments and asked to indicate which ones they received. In the context of our research, interest focused on receipt of three types of payment:

- Life insurances payouts.
- Inheritances or bequests.
- Pension payouts.

The actual circumstances of each payment are not known so we cannot be sure when examining respondents' circumstances in the post-bereavement period whether any were received in respect of the death of a partner. The question on lump sum payments was asked in Wave 5 and from Wave 7 onwards.

C.14 Money management

A question on money management was addressed to respondents with a spouse or partner in the first five interview waves of the BHPS. Following Pahl (1989), six arrangements were described and respondents were asked which one came closest to the way they organised their household finances. The six options were described as follows:

- I look after all the household money except my partner's personal spending money.
- My partner looks after all the household's money except my personal spending money.
- I am given a housekeeping allowance. My partner looks after the rest of the money.
- My partner is given a housekeeping allowance. I look after the rest of the money.
- We share and manage our household finances jointly.
- We keep our finances completely separate.
- Some other arrangement.

A follow-up question asked who in the couple had 'the final say in big financial decisions'.

C.15 Savings

Information on whether or not respondents saved any money, and how much, has been gathered at every wave of the BHPS. The question is worded as follows: 'Do you save any amount of your income for example by putting something away now and then in a bank, building society, or Post Office account other than to meet regular bills?' They are asked to include share purchase schemes, personal equity plans, individual savings accounts, and particular vehicles such as TESSA accounts.

Typical monthly savings amounts are recorded and these were indexed to January 2006 prices using the before housing costs monthly price index.

Savers were also asked to indicate their main reason for saving. This was an openended question with no prompts; answers were recorded verbatim and coded into 12 categories plus 'other' after survey fieldwork had ended. Only one reason was recorded at Waves 1 and 2, and two reasons thereafter.

C.16 Service contacts

Respondents are asked at each interview whether they have had contact with various health and social care services since 1 September of the previous year. These included:

Social care services Home-help

Meals on wheels

Social worker or welfare officer

Community health services Health visitor

District nurse Chiropodist

Alternative medical practitioner (e.g. homeopath,

osteopath)

Psychotherapist (including psychiatrist or analyst

Speech therapist
Occupational therapist

Physiotherapist

Health check-ups or tests

Chest or other x-rays

Blood pressure
Cholesterol test
Blood test
Cervical smear.
Breast screening
Other specified

C.17 Psychological distress

Psychological well-being is assessed in the BHPS using the 12 item version of the General Health Questionnaire (GHQ12), a widely used measure with demonstrable validity and reliability (Goldberg and Williams, 1991). It asks respondents about their recent experience of symptoms known to be indicative of anxiety and depression, social dysfunction, and loss of confidence and self-esteem. Symptoms covered in the

questionnaire include: ability to concentrate, sleep normally, enjoy daily activities, and make decisions.

Bereavement is associated with various psychological reactions indicative of a complex emotional syndrome (Stroebe *et al.*, 2007). Thus, the GHQ might be considered more appropriate for measuring psychological well-being than instruments for detecting depression alone because it covers a wide range of symptoms. Neither the wording nor administration of the GHQ items is explicitly linked to bereavement or any other specific event or role change. The GHQ12 is robust to retest effects, making it a reliable instrument for measuring changes in psychological distress with a one-year interval between applications (Pevalin, 2000).

Psychological well-being can be represented in two ways using the GHQ. When completing the 12 item questionnaire, respondents are invited to rate the intensity of each symptom on a scale from 0 to 3. These symptom scores can be summed to scale the severity of psychological distress: the higher the score the greater the severity of distress (range from 0 to 36). The GHQ12 can also be scored by counting the number of symptoms presented (range 0 to 12). Validity studies indicate that presenting four or more symptoms is associated with an 80 per cent probability of a formal psychiatric diagnosis (Goldberg *et al.*, 1997). This threshold is used to identify respondents with 'high distress' scores and to monitor changes over time.

Onset of distress is identified in respondents with no more than three GHQ symptoms at one interview, say before the death of a partner (B1), who present high distress scores at the next interview, after bereavement (A1). Recurring or persistent distress refers to respondents with high distress scores who report four or more GHQ symptoms at successive interviews, say before (B1) and after (A1) bereavement. The GHQ was designed to detect long-standing disorders as well as undifferentiated distress and transient variations; however, recurrent episodes of generalised distress may be associated with significant clinical impairment, which can disrupt personal and social functioning (Pezawas, Wittchen, Pfister, Angst, Lieb and Kasper, 2003).

C.18 Satisfaction with housing

BHPS respondents are asked a number of 'life satisfaction' questions, one of which covers their current accommodation. They are asked to rate on a seven point scale how dissatisfied or satisfied they are with their house or flat. The rating scale ranges from 'not satisfied at all' (1), though 'neither dissatisfied nor satisfied' (4) to 'completely satisfied' (7).

Appendix D Research Methods: Qualitative Component

D.1 Preliminary exploration

The aims of the preliminary qualitative exploration were to help inform the qualitative researchers about the salience of issues for enquiry among bereaved people in different circumstances; to explore ways of recruiting people to take part in interviews, and to help equip the researchers to conduct the main stage fieldwork in the most appropriate and sensitive way.

D.1.1 Informal discussions with bereaved people

A number of opportunities for discussions with people whose partner had died arose early in the project, during August and September 2006. People in the researchers' professional and private networks learned about the research, and said they would like to help by telling the researchers about their experiences. In informal discussions in a variety of settings, the researchers explored generally the salience and importance of economic and financial issues; the time parameters perceived as relevant, and ways of dealing with concerns and problems that arose. Topics covered included experiences before and after a partner died in relation to income, expenditure, employment decisions, accommodation, dealing with regulatory authorities such as the Department for Work and Pensions and local authorities, paying for a partner's care during illness preceding death, and funeral arrangements. The researchers asked participants directly about the best time to invite bereaved people to take part in a research interview, and how best to encourage and support people prepared to take part.

Participants suggested that specific issues for exploration in the main fieldwork might include:

- money management patterns within households
- dealing with housing assets
- match between expectations and outcomes, for example occupational pension entitlement for survivors
- debts (sometimes not known about during the partner's lifetime)
- Wills, living wills, financial expectations of other family members, and conflicts of interest
- financial symbolism, for example patterns of charitable giving by the surviving person, in memory of their partner
- financial responsibilities for the deceased partner's children from other relationships.

Those who spoke to the researchers emphasised the importance of patience, confidentiality and unconditional respect when conducting interviews. They mentioned the need to spend sufficient time listening to a person's 'story' about the death of their partner, for example details about development and treatment of illness. Such things might not be immediately relevant to the research topic, but were an important part of the way people constructed their experience of bereavement. The researchers must be ready to listen and respond in a positive way. Ways of ending interviews would also be important. For some people it might be helpful to talk about any positive experiences or developments in their life since the death of a partner. The researchers must be ready to spend the amount of time that seemed appropriate to participants, and some interviews might take guite a long time.

These informal discussions were valuable, and we are grateful for the generosity of the people concerned. The researchers continued, during the study period, to take opportunities which arose for further informal discussions with bereaved people, to build general understanding and gain fresh insights.

D.1.2 Exploring feasibility and good practice in recruiting participants for 'before and after' interviews

In the original research design the intention was to conduct a small number of interviews with people whose partners were receiving palliative care, and to return (by invitation) some months after the death. This, it was proposed, would help throw light on whether people anticipating their partner's death thought about the financial implications, whether they made plans in advance, and whether what happened after the death reflected previous expectations. Members of the Advisory Group and the assessors for the internal university ethics committee felt this approach was feasible and not unethical, but required great sensitivity and care and careful preparation and piloting.

The researchers worked with staff in a London hospice during October/November 2006 to plan and conduct an exploratory exercise as part of this preparatory work. This large London hospice provides in-patient care mainly for symptom and pain control, or short break respite care, following which patients often return home for community nursing and support, or transfer to a nursing home. There is also a day-care hospice provision, and an extensive bereavement support service.

The aim of this exploratory exercise was to inform the researchers about the salience of the issues for enquiry among people at the end of life and those who care for them; and to help equip the researchers to conduct main stage interviews in the most appropriate and sensitive way. Objectives were to conduct a small number of informal discussions with people similar to those who would be recruited in the main stage study. The researchers would explain they were planning research on financial

and economic issues at the end of life, and were seeking help and advice about this. The aim was to ask which issues seemed important and should be included in the research; which issues interested people and which issues people were ready to talk about, including readiness to talk about the possibility or likelihood of their partner dying. The researchers would also ask about the best way to invite people to take part in interviews, and explore issues such as the timing of invitations, the approach taken in letters, the appropriate length of interviews, tape-recording and how best to keep in touch with people.

The researchers worked closely with a senior member of the hospice staff with wide research experience. The hospice's independent research ethics committee approved a proposal for the preparatory work and for some of the main fieldwork.

First, one of the researchers met with two members of the social work team, for a general discussion about the research, and to hear their views about financial issues that might be important to families in touch with this hospice. Most of the local population were described as being in low income groups, and many of the patients were elderly. Funerals were known to be a major expense, causing financial hardship and debt.

The researchers and hospice staff then designed a letter for distribution to people whose partners were receiving hospice care, seeking help with planning some research on financial matters, and inviting people who would like to take part to get in touch with the researcher. The letters were addressed 'Dear hospice user' and included a sheet of information about the researchers, and a proforma and envelope for reply. This approach was designed to preserve confidentiality for people. No names were passed to the researchers by the hospice; the aim was that people would be able to take part in the research without hospice awareness.

The senior hospice staff member undertook to explain to relevant social workers and nursing staff the purpose of this specific exercise, in the context of the overall study. This happened in personal discussions and staff meetings, and the person concerned felt that there was general interest and support for the research. Six letters of invitation were given to nursing staff and social workers, for distribution to people whose partners were currently receiving in-patient care and believed by clinical and nursing staff to be close to the end of life. Staff were expected to use some discretion here, and not give letters to people observed to be in acute distress, or those with limited spoken English (the hospice serves areas with strong representation of minority groups).

Response was relatively slow and the senior member of staff gave a second batch of invitation letters to nursing staff and social workers, with further encouragement to give out the letters, and then took four further invitations onto a ward and gave these personally to relevant people.

Overall, three people sent reply slips saying they would like to take part, giving personal addresses and telephone numbers. The researcher made telephone contact with two of these people, who showed understanding of the financial focus of interest, and said they had things to say. However, in both cases the relative receiving hospice care was their mother, not their partner, and interviews were not arranged. Hospice staff were informed that this had happened (without disclosing names), and undertook to offer support should anybody tell them they were disappointed, frustrated or even angry about this outcome of their offer of help.

The third person who replied by post proved hard to contact by telephone. It seemed likely that most of their time was spent on the ward with their partner. After discussion with hospice staff and careful consideration of ethical issues including confidentiality and the need to acknowledge immediately the respondent's interest and offer of help the researcher told staff the name of the person, who was recognised as currently on the ward. Staff spoke to the person and made an appointment for the research meeting to take place later that day, on the ward. The discussion eventually took place in a side room on the ward. The person concerned was happy with the arrangements made and gave generous help. The approach was informal, and the researcher made notes by hand, with agreement.

This whole preliminary exercise was most valuable, and there were a number of useful lessons:

- Some people who receive an invitation via hospice staff to take part in discussion
 with a researcher about financial issues to do with caring for people receiving
 hospice care are interested, and ready to take part. They are prepared to send
 reply slips, giving telephone numbers, and ready to arrange interviews when
 contacted. Some people's relatives die before the researcher makes contact.
- Some people prepared to take part are hard to contact by telephone, however, because they do not go home much at this stage, and are selective in giving out numbers of mobile phones. Contacts may be mediated via the hospice, but there are confidentiality issues here.
- Interviews arranged on hospice premises are convenient to some participants, but may attract attention and interventions from other people who want to be helpful in ways that compromise confidentiality and may have other impacts on the person interviewed.
- Recruitment via third parties may not be straightforward. Despite careful preparation and information giving at the hospice, some invitations were given to inappropriate people (people caring for mothers, not partners). It proved hard to get firm information about actual numbers of invitations distributed. It was possible that some 'gate-keeping' by staff took place in addition to the discretionary decisions suggested by the researchers.

 Research interviews about financial issues with people whose partners are receiving end-of-life hospice care can provide rich details about current financial circumstances and issues, relevant to the topics of enquiry.

However, and this is important, this interview did not provide any information relevant to anticipation of bereavement, or any thoughts or plans about financial and economic circumstances after their partner's death. The person concerned constructed and managed discussion about the future with a focus on what they hoped would happen later that week, when their partner would go home to receive community nursing. There was ready agreement to the researcher getting in touch again later on, but no acknowledgement that this was likely to be after their partner had died. The researcher felt it was not open to her to suggest this.

D.1.3 Implications of the lessons learned

The lessons learned included a number of ethical and practical implications for the main stage study. While only one full interview had been achieved, so many issues had emerged during this exercise that the researchers were left in doubt about their original proposal for some 'before and after' interviews. The researchers' main concern was how they could recruit people whom they were confident were ready to acknowledge to the researcher that their partner's life was limited. While hospice staff might be confident that a person knew they were facing imminent bereavement, and indeed have talked about this at length with the person concerned during the period of support, the researchers could not assume that this person's level of cognitive awareness, and capacity and readiness to discuss such things, were directly transferable from the hospice context to the research interaction proposed.

There were additional concerns about seeking informed consent. A standard invitation letter and project information sheet, making clear the research focus on financial implications of bereavement, sent from a university to a person facing imminent death of their partner would be, we believed, unethical. The preparatory exercise had tried a staged approach to recruitment and consent, initially asking people to take part in research about the financial issues facing people using hospice services, and during this discussion, asking if they would be prepared to talk to the researcher again later. For some people, this approach would probably lead to their agreement at the time to take part in another later interview (as was the case in the pre-pilot interview). In some cases, therefore the outcome might well be 'before and after' interviews with the same person. However, such people would not have known that the real purpose of their recruitment for the first interview was to go forward into a study of bereavement, and thus could not be said to have given informed consent to the first interview.

The additional issue that might arise was how to deal with data from people who took part in a first interview but declined to take part in the second interview which focused on the impact of bereavement. The researchers felt that it would be unethical to collect this kind of sensitive data but not use it.

The research team thus perceived various potential negative outcomes for some people who discovered the focus of the researchers' interests only after taking part in a 'before' interview.

Given these concerns about the original proposal for 'before and after' interviews, the researchers considered omitting this component from the main stage. Had the person interviewed in the preliminary exercise been approached only once, after the partner's death, and agreed to take part, it seemed likely that they would remember many of the financial issues to do with the caring period. We know from previous research (Corden et al., 2001) that people retain clear memories of details of financial budgeting while caring for a family member – there is clear recall, into the year following the death, of costs of and outlay on incontinence supplies, bedding, pyjamas, gas bills, taxi fares, etc. People remember salient issues about benefits and financial support from families and charities. The financial information from the person we interviewed could probably have been collected had the interview been conducted in the year after the partner died. Indeed, it might have been richer and more useful as a result of the context of the interview. It would be natural and acceptable to ask such a person, after bereavement, if they had been worried about how long they could maintain the additional expenditure through the caring period. what other expenses they had feared, if they had thought what their benefit situation would be as a single person, and whether they had taken any action in response.

The research team discussed these implications for the research design. Omitting the ten proposed 'before' interviews from the design would free some resources to enable additional interviews with bereaved people. At this preliminary stage in the study early statistical findings suggested it would be useful to look closely at some groups already emerging as at particular financial risk following bereavement – for example, younger women with children. It might be helpful to conduct more qualitative interviews with people in this group than originally planned.

In January 2007 the team sought views from one of the members of the Advisory Group with considerable experience of research with bereaved people, explaining how findings from the preliminary work influenced intention to omit the series of 'before and after' interviews, and conduct more interviews with bereaved people. This approach, the research team suggested, addressed ethical and methodological concerns raised in the preliminary work, and seemed likely to enhance the value of the qualitative element. The Advisory Group member felt that these reconsiderations were appropriate, and fully supported the adjustment of the overall study group.

D.2 The main stage qualitative interviews

This section describes the recruitment of the study group for the main stage qualitative component and goes on to describe the development of the topic guide and conduct of the interviews.

D.2.1 Recruitment to the study group

The study group was built with the intention of including people at different stages of life, when expectations and emotional impact may be very different, as will be their financial circumstances and experiences. Thus the aim was to include men and women across all age groups, covering a range of personal circumstances. There were a number of approaches used in recruiting people, all of which depended on practical assistance from organisations and agencies already in touch with people whose partners had died. Overall, the research team worked with:

- three hospices
- The WAY Foundation
- Age Concern
- Carers UK
- Cruse Bereavement Care
- Bereavement Research Forum
- two church groups
- Cancer Counselling Trust
- Roadpeace.

The researchers had wide professional contacts with hospices and bereavement services, and there was considerable interest here in offering help to recruit people whose partners had received palliative care, or who had used hospice bereavement services. The initial preparatory work was conducted with support from a London hospice, which also gave help in recruiting for the main stage fieldwork. The other two hospices with whom we worked were located in a northern city and the south east respectively.

The WAY Foundation is a self-help and support network for women and men under the age of 50, whose partner had died. This organisation was in touch with people with young children, and people whose partner died suddenly and unexpectedly, groups whom we were keen to include. Age Concern offers a range of services for older people, many of which are organised at local level. Among those older people using Age Concern information and advice centres, luncheon clubs, social and leisure activities or home maintenance services are men and women whose partner has died. We worked with a branch of Age Concern in the north east of the country. Carers UK, similarly, is a national organisation which is organised and offers services

at a local level to people who have a caring role, for example people caring at home for family members who are ill, disabled or frail through old age. Local branches often maintain contact with carers after the death of the person cared for, and so are in touch with some people whose partner died. We worked with three local branches in the North West of the country.

Cruse Bereavement Care is also a national organisation, offering support and services specifically to people with experience of bereavement, and the Cancer Counselling Trust provides information, support and services to people and families affected by cancer. RoadPeace is a national charity supporting road traffic victims. Two churches which had been actively developing the support they offered specifically to bereaved people offered help. These were based in cities in the south and the midlands. A small number of people were recruited with help from professional members of the Bereavement Research Forum.

Different ways of working with these organisations were developed and refined as the study proceeded. In the case of the hospices and the national organisations who had registers which enabled them to identify individual people whose partner had died the approach was broadly as follows.

The researchers sent a copy of the ESRC research proposal with a formal letter to the head office, describing the study and the kind of help sought, and requesting an opportunity for further discussion. There was positive response to all such initial letters, with interest and agreement in principle to be involved. A senior member of the team followed up these initial contacts, usually by arranging a personal meeting with relevant members of the organisation at local level, to discuss in greater detail the kind of help required and how this might be achieved. Two of the hospices and one other organisation had independent requirements for ethical scrutiny at this stage, which involved formal correspondence and exchange of documents, and in one case a decision was sought from the Chair of an NHS Research and Ethics Committee.

The researchers were open to all suggestions from the organisations about ways of inviting relevant people to take part, while maintaining strict confidentiality. 'Relevant people', initially, were defined as men and women whose partner (married or not) had died during the last 18 months. Taking into account advice from the Advisory Group, we suggested that invitations were not sent to people bereaved very recently (in the last six months). This was partly because financial arrangements following a death often take some time to settle down and be understood. Another reason was that we believed our research request at an early stage in grief might be intrusive or unhelpful. As the project developed, however, we found that some people were ready to take part in an interview soon after the death. This happened, for example, for some people whose partners had experienced a long period of illness, and part of the experience of the anticipated death were strong feelings of relief of suffering. In the

later stages of recruitment, the selection criteria were thus relaxed to include people whose partner died very recently, and some others who were keen to take part in the third year after bereavement.

We explained to the organisations offering to help with recruitment that confidentiality was a priority. The aim was for the organisation to distribute information and invitations to relevant people, and for interested people to get in touch themselves with the researchers, giving their contact details. The organisation would not know who responded (unless the people concerned chose to tell them). The research team would have no personal information about people to whom invitations were sent.

One way of doing this was for the organisation to send to named people their own covering letter supporting the research, with the invitation pack provided by the research team. The pack included a project information leaflet, a reply proforma and a stamped addressed envelope (included at Appendix F). This general approach was adopted by the organisations who could identify and were in touch with relevant people, and had appropriate databases of names and addresses which might be used for mail-outs (for example, the hospices, the WAY Foundation, RoadPeace, one local branch of Carers UK).

Not all organisations had registers or databases which specifically identified people whose partner had died, for example Age Concern, and some local branches of Carers UK. One approach developed here was for the organisation to insert a flyer about the research, provided by the researchers, within their regular mail-out to members, for example with the newsletter. Another approach used was for the organisation to distribute invitation packs, as described above, to locations and events visited by their membership, for example putting the packs on counters or on display boards.

At the same time as the researchers were engaged in these discussions with the different organisations, a memorandum was drawn up with each, setting out the working arrangements and responsibilities on both sides. This was the first time the researchers had used such a document (a copy of the general format is shown in Appendix F). The researchers thought it might be helpful to have a formal documented agreement about the parameters of responsibilities on both sides, and how the research team would support an organisation offering help on a voluntary basis. Our understanding is that the organisations concerned appreciated having a joint formal understanding, especially where staff involved had limited experience of working with external researchers.

The work described above was resource intensive. For each organisation taking part, the researchers made one or more initial visits to their offices, followed by telephone, letter and email correspondence throughout the period of involvement. The research team designed versions of the invitation packs or flyers with wording that was

contextually appropriate to each organisation, and helped the organisations design their own covering letters. This work started with the hospices in January 2007, and continued in a rolling programme throughout 2007 and early 2008, drawing in the other organisations as soon as they felt able to take part. When senior staff in organisations were very busy, or needed to consult with local branch managers, it took several months from first contact to their issuing invitations. Each of the hospices and one of the local branches of Carers UK agreed to a second mail-out at the end of 2007. The WAY Foundation distributed a second batch of invitations in early 2008, focusing particularly on fathers and parents of older children, to help extend the characteristics of people in the study group.

It is traditional, in this kind of qualitative study, to offer an assessment of the level of response achieved. This is not easy here. Some people got in touch with the researchers as a result of invitations issued by most of the organisations which helped. Overall, where organisations mailed personal letters to individual people, around three in 12 people subsequently got in touch to arrange to take part in an interview. We do not know, of course, whether all the letters reached the people to whom they were addressed. There was some response to the distribution of flyers in general newsletters, or distribution of invitation packs by passing these down to be dealt with at local events or sites, but this was less successful in achieving participants. The research team had no control of these latter processes, of course, and we do not know how many of the invitations and flyers were actually seen by people whose partners had died.

What we can say is that all these different approaches to recruitment enabled some people whose partner had died and who wanted to share their experiences with a researcher to get in touch in ways which maintained confidentiality. At the end of the interviews, the researchers asked people about the way invitations had reached them, and how acceptable this had been. Everybody said the approach to them had been appropriate. Nobody said they had felt any pressure from the organisation or person who had sent the information about the research. Some said they agreed to take part because they wanted policy makers to know about particular financial or economic experiences which might be dealt with in different ways leading to more positive outcomes for other people. Some said they accepted the invitation because they had not had particular financial concerns; they felt lucky in this respect but wanted to take part if this might help other people. Some people who appreciated help received from a supporting organisation saw taking part in the research as a way of acknowledging that support and 'giving back'. Some people said they had been pleased or just rather curious that a researcher wanted to make a long journey to meet them. Agreeing to take part had been hard for some people, however. Everybody we spoke to was grieving the loss of their life partner, and people weighed up whether they wanted to talk to a stranger about their partner and the circumstances of their death.

There was one reply from a person who did not want to take part in an interview and gave no contact details, but offered help by describing on the reply proforma some of their general financial circumstances. One person made an appointment for an interview, which was first postponed and then cancelled, explaining this as related to health concerns. We purposefully avoided issuing invitations in December, knowing that Christmas is often a difficult time for people who have lost a family member. We also noted that there was very little response to personalised invitations sent out by one organisation in the period leading up to Easter.

D.2.2 Developing the topic guide

The researchers designed a topic guide to steer discussion in the interviews. The topics for discussion were those perceived to be important, from the researchers' review of literature and previous research, from dialogue with Advisory Group members and, importantly, from the informal preliminary discussions with people who had experienced bereavement and hospice social workers. Interviews were designed to cover, generally, people's personal and financial circumstances before and after their partner's death. The focus was on the changes in income and resources and household expenditure that had taken place, and people's experiences and feelings about their financial and economic situations. Of particular interest here were the time periods people perceived as relevant. The researchers asked whether there had been any concerns or problems and how these were dealt with. Within these broad topic areas, the researchers aimed to explore issues such as paying funeral expenses; any conversations with partners about what might happen financially if one of them died; and the need for financial information and advice, before and after the death.

In addition to these policy-related issues, the researchers aimed to explore some areas which might contribute to theoretical understanding of the experience of partner bereavement. The interest here was the role of financial and economic issues and the way these were dealt with, in the process of grieving and the experience of life change due to death of a partner.

The initial topic guide generally worked well in the early interviews. Some adjustments were made as the interview series continued, both in the light of experience of talking to people, and in response to early quantitative findings. As an example here, initial statistical analysis showed that the period immediately after bereavement was a time of considerable financial and economic change. In order to explore this qualitatively, a small adjustment in the topic guide directed the researcher to ask people to compare their current financial situations with those immediately after their partner died, as well as those in the period before death.

A further adjustment was made to the topic guide, after the first 30 interviews had been conducted. A new area of interest had emerged, during the researchers' discussions and interpretations of findings. It seemed that, among couples where one person was involved in what might be called intensive care-giving activities, for example nursing a partner at home through terminal illness or living with a partner with deteriorating Alzheimers, whether that person identified themselves as a 'carer' sometimes had important financial implications. These included delays in claiming attendance allowance or carer's allowance; and making private provision for services that would be available free in a formally recognised 'caring' situation. The team decided to explore further, with people whose partner had experienced a period of illness before death, whether they thought of themselves as a 'carer' and what this meant to them, in the context of marriage or life partnership. Specific questions were designed and included in the final version of the topic guide.

A copy of the final version of the topic guide is included in Appendix F.

D.2.3 Conducting interviews

People interested in taking part in the research sent their names and contact details to the researchers, who got in touch by telephone. The telephone conversations provided opportunities for clarification of the purpose of the research and the topics for discussion, and to answer any questions people had. Nobody changed their mind about taking part at this stage, and appointments were made for interviews, to suit people's preferences. Most people wanted the researcher to visit them at home, but some people at work during the day found it convenient for the researcher to visit their place of employment.

As explained above, only one appointment was postponed and then cancelled.

In several interviews there were children or grandchildren in the room, playing or reading. In all such cases we asked the people concerned how the interviews should be managed and respected their preferences. Some people chose to ask children to play in an adjoining room, and expected the researcher to break off the interview each time the child returned or called for attention. Some people thought that very young children in the room were not listening to the discussion if absorbed in play, or were too young to understand. Some of the most challenging interactions for the researchers concerned were those in which a young child came to the table and talked about their feelings for the parent who had died, and short discussions with older children who arrived home from school during interviews.

There were some ethical issues here. We were not trained to talk to children about a parent's death and had to make immediate pragmatic decisions about handling the situation. As strangers entering the home, we did not know what would be usual or

unusual, helpful or not. When parents said their young child would be absorbed in play and not listening, the researcher concerned was less certain, but negotiating to have the discussion without the child, or remaking the appointment might have been unhelpful, or even harmful. Faced with situations that arose, we conducted the interviews in accordance with the preferences of the parents and grandparents concerned, responding to their cues and leads, especially in discussion about events leading up to death, and in the use of language.

A number of interviews were conducted with family members or a close friend present, at the request of the bereaved partner. These people had been involved in providing support before and after the death and made valuable contributions to discussion. Sometimes the participant explained that they found it helpful to have this support during the research interview, and that knowing their relative or friend would be present had been an influence in their decision to take part.

One interview was conducted with the adult child of the person who had died, rather than his wife, whose age and frailty meant it was not possible for her to take part in an interview. The adult child wanted to contribute to the study, as the person who had full knowledge of the financial and economic impact of the death of one parent on the other, through having run the family's affairs for several years with Power of Attorney for both parents. The person's mother was present during much of the interview, but said she did not want to join in. This elderly person slept during some of the interview, and then went out of the room. The researcher was satisfied that this reflected her choice.

Nearly everybody who took part in an interview gave permission for use of an audio recorder. In a small number of cases the researcher decided to make notes rather than using recording equipment. This happened, for example, when there was loud background noise from construction work in the building. When interviews were not recorded, the researcher dictated a full account of the discussion into recording equipment as soon as possible afterwards, from the notes and her recall. All the recordings were professionally transcribed and returned to the researchers for analysis.

Throughout the interviews, the researcher checked on the acceptability of the issues being explored. Only rarely did people say there was something they did not want to discuss. When this happened it was to do with wishes expressed in a Will. At the end of each interview the researcher checked again that people were happy for their views and experiences to be included in the analysis.

In preparing for fieldwork, the researchers had compiled information sheets containing the contact details of national, and sometimes local, organisations providing bereavement, legal and financial advice and support. This information was then readily available in case discussions during interviews generated requests for

help in locating support. Help was sought from some of the research partners in identifying appropriate local provision. The researchers felt it necessary to refer to these contact information sheets in only a small number of interviews, where people demonstrated a desire to access more bereavement or counselling support but did not know with whom to get in touch.

The researcher also asked people to reflect on the experience of taking part in the research interview. As explained above, everybody had been happy about the way in which they were invited to take part. There were no suggestions that interviews might have been done differently or better, although of course it would have been hard for some people to express such feelings without risking seeming impolite. Some people said they were looking forward to telling curious members of the family about the interview. Some of the older people and those who did not get many visitors said the interview had helped to fill their day. Holding the interview at the participant's home was welcomed, particularly by those who were caring for young children at the same time and by people who felt a familiar place was most appropriate for talking about sensitive and personal matters. Some of those who had initially been uncertain whether they wanted to take part said they did not regret having done so, but were pleased that the occasion was over. Parts of these interviews were hard for everybody who took part, but people had not expected otherwise.

Most people, when asked, said they would like to be told when findings from the research were available. Again, some people would naturally say this when asked, as a negative response might risk seeming impolite. The people who expressed most interest in the findings were people who had strong feelings about their particular experiences such as problems with benefits or mortgage companies; and people particularly interested in research, through their professional backgrounds.

Most of the interviews took between sixty and ninety minutes. In some cases, the researcher spent considerably longer than this at the person's home. In most qualitative research interviews additional time is spent in the kind of social interaction that is normal when a visitor comes to a private home. In this series of interviews, the researchers felt they were sometimes expected to stay longer than usual after the interview. During this time, family photographs were often shown, or items that represented other ways of remembering the person who had died, such as their craft work, sports trophies, home improvements, family pets. Some humorous stories were shared about the person who had died, or their lives. When the researchers planned the interviews, and thought of ways of leaving that would reinforce positive feelings for people who had taken part, they anticipated that social conversation might go in the direction of looking forwards, for example the progress of grandchildren, employment opportunities or plans for the garden. This did happen for some people. Others, it became apparent to the researchers, wanted to look backwards at the life and value of the partner who had died as the last part of interaction with a stranger. The researchers learned how to leave some interview settings by 'holding' and

'staying with' the sadness rather than attempting to turn the direction of people's thoughts according to the researchers' own assumptions of what it meant to end on a positive note.

D.3 Data extraction, display and analysis

The tape-recordings from the interviews were transcribed professionally, and data were extracted from the transcripts alongside any additional notes made by the researchers during or after the interviews.

The 'Framework' method was used for data extraction, display and analysis. Framework is a matrix based method for ordering and synthesising qualitative data, originally developed during the 1980s by the National Centre for Social Research. Ritchie *et al.* (2003) provide a full explanation of the Framework approach currently widely used by qualitative researchers. As described by Ritchie *et al.* (2003) the central component is a thematic framework, which is used for classification and organisation of data according to key themes, concepts and categories. Some of the themes and concepts are issues initially identified by the researchers, within the aims of the enquiry, and some are emergent categories, which evolve through study of the transcripts and development of the researchers' understanding. The main themes divide into a succession of related subtopics, providing an integrated thematic framework.

The thematic framework was drawn up as a series of charts, using Excel worksheets for electronic file management and storage. Themes and topics were displayed as column headings and each interview or case formed a new row in the worksheet. Descriptive comments and explanations from the transcripts were entered in each cell of the matrix accordingly. The charts were then printed on A3 sheets of paper, for visual display and inspection to facilitate interrogation of the data and interpretation. This approach enabled practical management of a substantial amount of qualitative data; and both within-case and across-case thematic analysis. Both the qualitative researchers had considerable previous experience of using Framework.

Data were extracted as soon as possible after each interview, by the researcher who conducted the interview. This meant that all the qualitative material was accessible to each member of the research team as it was collected, and could be constantly interrogated and discussed. The researcher responsible for organisation of the statistical data learned quickly how to access and interrogate the qualitative material displayed using Framework. This shared access to the qualitative data was an important part of the 'mixed methods' approach. It enabled the team to begin exploratory and iterative analysis of both the qualitative and quantitative data, based on shared understanding, soon after the start of the fieldwork. Initial stages of analysis, discussion and interpretation involved all three members of the team. In the

latter stages of the study, there was a planned withdrawal from this process by Nice, according to her smaller time input into the project. However, Nice continued to be consulted as the thematic analysis and interpretation progressed, particularly in relation to the data extracted from interviews she had conducted. Nice was also consulted towards the end of the process when drawing conclusions and practical implications from the results of the analysis.

D.4 Characteristics of participants

Forty-four people took part in interviews; 13 men and 31 women across all age groups:

Age group	Men	Women
30 years and under	-	2
31-40 years	1	7
41-50 years	5	5
51-60 years	1	3
61-70 years	3	11
71-80 years	2	2
81 years and older	1	1
Total	13	31

Among the older people, five men were bereaved when they were over state pension age and ten women. At the time of interview, 15 people (five men and ten women) lived with up to three dependent children each. Most were the natural children of the partner who died, with some children from earlier partnerships and some adopted children. These families included children across the age range, from children under two years to older teenagers, and some families included children with special needs.

People lived in their own homes, in urban, inner city and rural locations across England, with two people in Scotland. Black and minority ethnic groups were not represented.

Appendix E Support for the Research Study

E.1 Project advisory group

The aim in convening an Advisory Group was to provide ready access for the research team to a group of people with a range of relevant specialist knowledge and experience, with whom the team might discuss ethical and methodological matters, early findings, policy implications and routes for dissemination.

The group was composed of eight people who themselves had research expertise in bereavement or financial matters or who represented central government or national voluntary organisations with some responsibility for, or association with, bereaved people. Together, they were knowledgeable about social security benefits, pensions and tax credits; financial products and services; issues important for particular subgroups such as carers and elderly people; and research on dying and bereavement.

The first meeting of the Advisory Group took place in November 2006 in London. There was useful discussion about the parameters of the study and methodological challenges. Some members offered help with recruiting people to take part in interviews. The second meeting was again held in London in April 2008. By this time, the qualitative and quantitative data collection was complete and researchers were beginning to write about the study findings. This meeting proved a valuable forum for discussion about the emerging findings and possible applications in policy and practice.

Throughout the study, Advisory Group members were kept in touch with progress through newsletters and other mailings. Newsletters were circulated in March 2007 and December 2007 and each provided brief summaries of progress in both the quantitative and qualitative elements of the study, as well as 'news' about conferences attended and papers written. Papers presented at conferences were also sent to the Group members to keep them in touch with current developments.

There were also occasions when individual members of the Group were consulted for expert advice and help regarding ethical issues; family and household formation; and money management and transfers within different family contexts. The people concerned gave valuable help in recruitment for interviews, adjustments to the design of the qualitative research, improving the researchers' knowledge in some topic areas and commenting on draft sections of this report.

E.2 Support for the research team

The sensitive nature of the research was expected to make particular emotional and psychological demands on the researchers. In an earlier bereavement research project (Corden *et al.*, 2005) the research team used an innovative model of therapeutic support. This proved helpful, and the same group psychotherapist at The Tuke Centre, York, was engaged to provide support to the research team in this study.

Over the course of the study the researchers took part together in one preliminary meeting and nine bi-monthly group meetings with the therapist. On one occasion, one member of the research team was unable to attend due to ill health. In general, the meetings were useful as a neutral space, to take time away from work tasks and to share experiences of approaching the topics of death and bereavement. The researchers found that they learned much from each other and that this helped to develop relationships within the team, and supported aims in adopting a model of integrated working. Although it was initially envisaged that the support would be most valuable during fieldwork – the time when it was expected that researchers would be most exposed to risks to emotional health – the sessions proved to be equally useful during the early stages of the project, when there were challenges in making visits to hospices and recruiting participants, and towards the end of the study when writing was a priority.

The use of this group support and reflections on its value by the researchers and the therapist will be reported in more depth elsewhere (Corden *et al.*, forthcoming).

E.3 Other sources of help

As the researchers conducted the qualitative fieldwork and were more exposed to the issues affecting bereaved partners, they became aware of gaps in their own knowledge. Individual members of the Advisory Group gave some help and advice here, as described in Part E.2 above. Chapter 6 explains the involvement in the study of Henk Schut and Margaret Stroebe, Department of Clinical and Health Psychology at Utrecht University.

Members of the Department for Work and Pensions provided briefing notes to answer our questions about current policy around bereavement benefits. Additional sources of advice and information included a Registrar, to better understand the process and information-giving when registering a death; and a member of the Low Income Tax Reform Group, to learn more about inheritance, and other tax arrangements and procedures. The researchers also visited a bereavement centre established as a 'one-stop' shop to enable people to register a death and deal with

other matters such funeral payments, benefits, housing tenancies, probate and tax. The generous help and advice received through these informal contacts was valuable.

Appendix F

Research Instruments



Research on the financial implications of the death of a life partner



Heslington, York, YO10 5DD

Telephone: (01904) 321950 Text Telephone: (01904) 321951

Fax: (01904) 321953 E-mail: SPRU@york.ac.uk Website: www.york.ac.uk/inst/spru

[Name of organisation] has agreed to help the Social Policy Research Unit at the University of York in the above ESRC funded research study.

Here we set out the working arrangements and responsibilities agreed.

At the **Social Policy Research Unit**, Anne Corden and Michael Hirst have overall responsibility for the project. Katharine Nice is also a member of the research team. Day to day contact with the team will generally be through Anne Corden, or Kath Nice. In the Unit's main office, Sally Pulleyn provides secretarial and administrative support to this project. Contact telephone numbers and e-mails are:

Anne Corden: Tel. (01904) 321962; E-mail. pac2@york.ac.uk
Kath Nice: Tel. (01904) 321983; E-mail. kn5@york.ac.uk
Sally Pulleyn: Tel. (01904) 321951; E-mail. sap6@york.ac.uk

At **[Name of organisation]**, members involved are [Name of contact. Day to day contact will generally be through [Name of contact]. Contact telephone numbers and e-mail addresses are:

[Contact details]

The help to be given by [Name of organisation] is focused on enabling the researchers to distribute information about the research project to people whose life partner died recently, inviting them to take part in an interview about financial issues.

The team at [Name of organisation] has seen a summary of the research proposal, and discussed with the SPRU team the issues for enquiry and ways in which information and invitations might be given out. [Name of organisation] will receive a copy of the SPRU submission of this project to the relevant university ethics committee, the IRISS (Institute for Research in Social Sciences) Ethics Committee.

In working with [Name of organisation], practicalities and day to day management will be dealt with generally by Anne Corden and [Name of contact], mostly by telephone and e-mail communications, and any visits to [Name of organisation] that will be helpful.

The Social Policy Research Unit will:

- consult and agree with [Name of organisation] on all aspects of the distribution of information and invitations, and content of materials;
- be guided by [Name of organisation] as to the way in which people are told about the research and invited to take part, and respond to suggestions about different approaches;

 consult and agree with [Name of organisation] about the selection of people to be approached;

- supply as much as possible of the information and invitations that may be sent by post, and manage the replies from the University;
- reimburse [Name of organisation] for any costs of postage, or any 'covering letter' written from [Name of organisation] on production of an invoice;
- provide immediate feedback on response to invitations (in terms of numbers of interviews achieved);
- take to all research interviews, information about support available at [Name of organisation] and other local contacts for advice;
- guarantee all staff at [Name of organisation] involved in the project confidentiality and anonymity within written documents, and oral discussion of research findings, unless they specifically request otherwise
- provide a full report, and shorter summary documents, of the findings from the overall study, as soon as these are available in 2008;
- respond, where possible, to requests from [Name of organisation] for help from SPRU, for example filling short speaking slots at staff meetings, or contributing to training events/materials from experience in this project.

[Name of organisation] will endeavour to:

- support the project in the process of identifying people in [Name of area] who may be interested to take part, and distributing information and invitations;
- support the project in explaining the relevance and importance of the research to those colleagues within [Name of organisation] who may be involved, (and any other professionals who ask about the project, or need to know);
- support the project positively to any members of [Name of organisation] who make enquiries following invitations, explaining that SPRU would be glad to talk to them whatever their experience of financial issues;
- respond to anybody who takes part in a research interview, and then makes or renews contact with [Name of organisation] seeking further bereavement support.

Signed on behalf of Social Policy Research U	nit:
Name:	
Signature:	Date:
Signed on behalf of [Name of organisation]:	
Name:	
Signature:	Date:





Research about financial matters for people whose partner has died

We would like to invite you to take part in a research study about financial matters for people whose partner has died. Please read the information here and think about whether you would like to take part.

Who are we?

We are researchers at the Social Policy Research Unit at the University of York. We have experience of talking to people about finances and managing money, and we have talked to many people who are experiencing bereavement. Our names are Anne Corden, Kath Nice and Michael Hirst.

What is the purpose of this research?

When a person's partner has died there are all sorts of changes in financial circumstances to deal with. There may be changes in income, such as pensions, benefits, or for some people earnings. There may be changes in household expenses, or extra expenses including paying for a partner's funeral. If a person's partner was ill before they died, there may still be bills to pay for extra heating or special food. For some people, financial strains and uncertainties make it harder to deal with their grief. Other people may find that, financially, things are alright for them.

So far, there is no research which brings all this together, and so we do not know why financial problems arise for some people, or what might be helpful in dealing with matters to do with money after a partner dies. We want to talk to people about these matters, as part of our research. What we find out will be important for people in government who decide about pensions, benefits and taxes. The research will be useful to bereavement support services in hospices and voluntary organisations. People who give financial advice, like Citizens Advice, will find the research helpful to them.

Why invite me?

We want to talk to people whose partner died during 2006. are helping us by sending this information sheet to people they have been in touch with whose partner died in 2006. We do not know your name yet, or anything else about you.

We would like to talk to people who feel alright financially as well as people who have had problems.

What will be involved if I agree to take part?

One of our researchers, probably Anne or Kath, will get in touch, and make arrangements to come and meet you. This will be at a time and place that suits you in the next few weeks, and will take up to an hour of your time. The things that we would like to talk about are any changes in your financial circumstances after your partner died; how you have dealt with these, and whether there have been any problems about financial matters. You will choose how much you want to say about any of these things.

What will happen to the information?

We will keep the information you give us in a safe place. Everything we discuss with you is confidential. We do not use people's names in any reports and we shall take care that nobody else could identify you. will not know you have taken part in the research, unless you want to tell them yourself.

The information we collect will be put with findings from other parts of this research study and summarised in a report for the Economic and Social Research Council who are paying for the work. We will also send you a summary, if you would like this. In addition, we will share what we find out with government departments, social services, hospice and care services, financial advisers and voluntary organisations, but in all our reports your identity will not be revealed.

What happens next?

If you would like to take part or would like to talk about it a bit more, please fill in the enclosed form to tell us your name and contact details, and post it to us in the prepaid envelope. We will get in touch soon after we receive your form, and if you agree to meet us we will make the arrangements that suit you. The researcher who visits will show you her University of York identity card.

Is there anything for me if I take part?

We are not making payments to people who take part. If you kindly agree to spend time with us you will know that you have taken part in important research which we believe will eventually be helpful to other people who are facing the death of their partner or experiencing bereavement.

ORGANISATION'S HEADED PAPER			
Your ref.			
Personalised name and address	Your address and contact details		
	Date of sending		

Dear [Name]

Important national research

You may recall us contacting you previously to let you know about the Bereavement Services available at [name of organisation].

We are getting in touch now to let you know about some research that is being done, because you might like to think about taking part.

The research is about the financial impact on people whose partner has died, which is an important issue. At [name of organisation] we think the research is valuable and will be useful to help people in the future.

If you are interested in the research, please have a look at the information in the enclosed envelope. If you then feel you would like to take part, the researchers will be very pleased to hear from you. There are details inside about how to contact them. If you are not interested then you do not need to take any further action.

We want to take this opportunity to reassure you that none of your details have been given to the researchers.

Yours sincerely

Name of sender

Response Proforma





Telephone: (01904) 321950 Fax: (01904) 321953 E-mail: SPRU@york.ac.uk Website: www.york.ac.uk/inst/spru

Research on financial issues for people whose partner has died

I have read the information about your research which [Name of Hospice] sent me.

I am interested in talking to one of the research team at the University of York.

Name:		
Address:		
	Postcode:	
Telephone number:		
Mobile number:		

I am happy for a researcher to get in touch with me about this.





Financial Implications of the Death of a Partner

Introduction

- Thanks for taking part
- Refer to project leaflet and remind anything you want to discuss?
- Acknowledge that talking about such things may be sad, and hard to do.
- You will choose how much you want to say about anything.
- Explain how interview will develop: talking together over a number of topics on which we would like to hear about your views and experiences:
 - when your husband died, and your personal circumstances now
 - your general financial circumstances and whether these have changed income

household expenditure
dealing with money management
how easy or hard it was to meet funeral expenses
any financial concerns or problems there have been
what has been or would be helpful for people in similar financial
circumstances as yours.

These discussions usually take up to an hour, but we will spend as long as you choose.

- Is this alright/what was expected? Will any of those topics be specially hard to talk about?
- Seek permission to use tape recorder; explain transcription. We will look at what people we talk to are generally saying, and write a report. It will not be possible to identify you in the report. Confidentiality throughout.
- Any further discussion on these points?
- Ask for signed consent.

1. Personal circumstances

First of all, would you like to tell me a bit about yourself and your (husband) to put me in the picture. (General introductory discussion led by respondent; spend time required by respondent to tell their story; don't seek details - say we would like to talk about that more later on.)

What was your husband's name?

When husband died; circumstances - illness/accident, period of care; ages of both, how long together? children/family?

Employment and paid work? – general pattern of husband; last job/retirement - general pattern of self; last/current job

How long have you been living here? Do you own the house or pay rent?

Be alert to any moves related to husband's death.

And how are you getting on now, I mean generally, without your husband?

Has anything in particular helped you carry on? Spend time as required

How has your own health been?

Thank you. I have a picture now of what has happened for you, and I shall learn more as we go along.

Today's discussion is focused on financial issues.

May we talk generally about your financial circumstances now?

2. General financial circumstances

How are things at the moment, financially?

Invite general discussion to identify salient issues, general overview and emphases, problems perceived.

Do you feel differently now, about your general financial situation, compared with:

- just after your husband died?
- the time before his death?
 (focus on relevant previous time)

Have you had particular concerns about money or financial matters since your husband died? How has this affected you?

Thank you for explaining that.

May we go into some of these things in greater detail now?

3. Income and resources

May we think about the income you have coming in now.

What are your main sources of income now?

Earnings - full time/part time; regularity;

Pensions: state/private/ occupational pension (self or through spouse)

Benefits and tax credits

Do you have any other money coming in? investments, any help from family, charities

For each source of income: how important/valuable is this in terms of financial security?

We are interested in how these kinds of income have changed since your husband was alive? May I ask about your sources of income when you were together?

Earnings - husband and self; full-time/part-time; regularity

Pensions – husband and self – state/private/occupational

Benefits and tax credits

- DLA/AA/CA: identification of need for 'care' / identity as 'carer'

Any other money coming in? investments, help from family, charities

Did your husband have life insurance?

Payment received/pending

Were there any other payments to you or expected as a result of your husband's death?

One-off Bereavement Payment

Pension lump-sums; compensation – how used?

How useful is/were these?

How smoothly did things go, I mean all the changes involved in moving to receiving income on your own account, rather than as a couple?

Time parameters involved

In terms of the way your income comes in and the amount you have are you expecting things to change for you in the future? Do you think about this?

4. Expenditure

We've talked about money coming in. May we talk now about your general expenses? I mean your general day-to-day budgeting. In general, how easy is it to pay for these things now?

Mortgage/rent: explore reasons for any moves

Council tax Insurance

Electricity/gas/oil for home

Food/household needs – do they eat as well/better?

Transport/vehicles/fares – access to transport

Big bills; housing repairs, maintenance

Loan repayments

Family presents/celebrations

(Holiday)

Expenses of dependent children; at home or living apart

Expenses of adult children; at home or living apart

Has it got easier or harder to manage financially since your husband was alive?

Separate and explore: balancing the budget – what has changed

Money management: previous and current roles and responsibilities – what has changed – Power of Attorney

Has your budgeting settled down? Time parameters involved

Has anything been specially helpful in coping, I mean with financial issues?

Have any times been especially hard? So how did you manage to deal with this/during this time?

In terms of your outgoings in the future are you expecting things to change for you? Do you think ahead about this? How far?

Some people have to meet extra expenses during the period when their husband was ill – was this true of you?

Caring expenses – travel, food, heating, bedding, laundry, equipment How did you manage to pay? Outstanding bills/loans During this time, did you see yourself as a 'carer' for your husband?

And your husband's funeral was an extra expense. May we talk about this?

5. Funeral expenses

What kind of funeral did you have?

Talk generally and positively. You will build a picture of likely expenses - undertaker, flowers, gathering for friends, headstone/memorial

How easy was it to pay for this?

Source of funding – husband's estate, savings, family, commercial loan, Funeral Grant/Bereavement Payment
Outstanding bills

Did you have any other one-off expenses related to your husband's death? Legal fees

Thank you very much for telling me about all these things. Its very helpful. We are also interested in whether people had help in dealing with financial matters arising when their husband died, or whether there was information or help they needed but didn't get. May we finish the discussion by talking about this?

6. Advice and information

Did you ever talk to your husband, or anybody else about what might happen financially if one of you died?

Issues discussed/expectations and plans Match with what happened

Did your husband make a will?

Has his estate been settled or ongoing? Issues arising

Did you have any particular help in dealing with money matters when your husband died or since then?

Sources of help; issues for which help needed; outcomes

How easy was it in dealing with all the organisations involved with financial matters?

DWP - local and remote: HMRC

Local authority - housing benefits, social services

Insurance/pensions company/banks/building societies/PO

Solicitors; executors/probate office/Public Guardianship Office

Funeral directors

Debt recovery agencies

Were there times when you would have liked some financial advice or information but didn't get it?

Do financial issues affect grief? In what way?

May I ask if you have been in touch with any services which offer support to people whose husband has died, I mean bereavement support or befriending services?

If not covered already - do you think this kind of service might offer information and advice about financial matters?

7. End

The things you've told me have been very helpful to know. Thank you very much for telling me about your circumstances. Now that you've been talking over all this with me, have you thought of anything that might have been more help or done better for somebody like you, in dealing with financial matters when their husband died?

How might this be made to happen? Whose responsibility?

Is there anything else you would like to say for us to put in our report?

Turn off tape recorder

Would they like to hear some results from the research? Preferred format.

Spend some time reflecting on the discussion:

How do they generally feel now? Did discussion go as expected/what was unexpected? Will they talk it over with anybody? Are they left with concerns or anxieties, or increased sadness? Should the research have been done differently in relation to recruitment/interview.

If judged appropriate, offer information about bereavement support service at hospice or elsewhere; how to get advice from DWP; CAB; faith group or other.

Make a note of above unrecorded discussion.

THE UNIVERSITY of York



[Name and address]

Study of financial issues when a partner dies

Consent Form

I have received the information sheet and understand the purpose of the research and what it involves.	Yes □	No □
I understand that the information I give to the researchers will be treated in strict confidence according to the Data Protection Act.	s Yes □	No □
The research report will include my views along with the views of other people, but I will not be identified.	Yes □	No 🗆
I understand that I can withdraw from the research at any time without giving a reason.	Yes □	No 🗆
I agree to take part in an interview with a researcher	Yes □	No 🗆
Name		
Signature		
Date		