

STUDYING LOW INCOME HOUSEHOLDS: CHALLENGES AND ISSUES

Lynne Chester

Department of Political Economy, University of Sydney, Australia

Email: lynne.chester@sydney.edu.au

Abstract: Studying low income households poses a number of methodological issues. Nevertheless, there are a number of measures which a researcher can take to access “hard to reach” low income households using reliable and valid data collection instruments. Drawing on a study which investigated the impacts of rising energy prices on low income Australian households, this paper discusses the suitability of a mixed methods approach to study low income households along with the strengths and weaknesses of the chosen data collection methods of an online survey, focus groups and interviews. Observations are drawn about the use of intermediaries to recruit low income households, the potential barriers to participation, the impact on the conduct of research by ethics committee requirements, the use of participation rewards and the need for a research design which takes all these issues and more into account.

1. INTRODUCTION

Research on family and domestic groups crosses a number of disciplines such as anthropology, economics, gender and cultural studies, history and sociology. Much of that research focuses on the relationship between the changing forms of social provisioning and the domestic group through which the material needs of individuals are met. The study of households is important because it provides an intermediate analytical step between studies at the micro level of individuals and those at the macro level of socioeconomic development.

A household is usually defined in economic or material terms and is analytically distinct from social relations that constitute a family. In itself, the concept of a household is not theoretically meaningful. It has, however, proven to be analytical useful within diverse theoretical traditions such as Marxist and related historical-structural approaches, the social-historical life-cycle approach and that of neoclassical economics exemplified by Gary Becker.

The household is also a common unit for the collection of empirical data by official statistical collections which provide a useful quantitative data source for secondary analysis. Nevertheless, official statistical collections and secondary analysis cannot answer all questions raised in theoretical or policy debates leading to the design of research to answer those questions, and questions that may concern the structure, characteristics and behaviour of households. Low income households pose particular issues for research design.

Access to “economically marginalised” populations to recruit research participants can be a challenge (Mammen and Sano 2012). Marginal populations are often referred to as “hard to reach” populations (Hurley 2007). Low income households are often labelled as marginal or “hard to reach”. Although there is considerable ambiguity in the use of the latter term, it implies that it is some characteristic of the group making them hard to reach suggesting the group holds a homogeneity which does not necessarily exist. Therefore, use of this term “defines the problem as one within the group itself” (Brackertz 2007: 1). Low income households may be information poor, hold low literacy levels, are vulnerable due to long term illness, disability or age, suffer from domestic violence or actively try to conceal their identity due to a fear of legal authorities because of immigration, taxation or illicit drug abuse, all of which reduce their accessibility for researchers (Shaghaghi et al 2011).

This paper discusses the challenges and issues in studying low income households drawing on a research project which investigated the impacts of rising energy prices on Australian households. The study adopted a mixed methods approach to collect quantitative and qualitative data.

The paper is structured as follows. Section Two outlines the context and purpose of the Australian study. Section Three discusses the reasons for the study using a mixed methods approach in order to access low income households along with the advantages and disadvantages of the chosen research methods which were an online survey, focus groups and interviews. Section Four proceeds to detail the quality of the data collected and the findings illuminated to answer the research questions. Observations are drawn in Section Five about the use of intermediaries to recruit participants, the impact on the conduct of the research by ethics committee requirements, and the rewards provided for participation before concluding with suggestions for methodological approaches which focus on low income households.

2. CONTEXT AND PURPOSE OF THE STUDY

Most Australian households are able to choose the company to supply their electricity. If they do so, the prices paid are set by a 'market contract'. If a household chooses to remain on a 'standard contract' their electricity prices are set by State and Territory government regulators. Some 40% of NSW households, 30% of Victorian and Queensland, and 19% of South Australian households have chosen to remain on 'standard contracts', and thus pay regulated electricity prices (ESC 2012; ESCOSA 2013; IPART 2013). Regulated electricity prices are to be phased out subject to evidence of effective competition. There have been no regulated prices since 2009 for Victorian households, and for South Australian households from February 2013, although electricity companies must provide 'standing offer' electricity prices to those households not on a 'market contract'. The actual electricity prices paid by households under a market contract are not available. The changes in regulated prices, however, are a strong indicator of the experience of all Australian households.

During the five years to 2003-04, NSW regulated household prices showed no real change although there were real increases of 5-11% in all other States and Territories

except South Australia where prices stagnated before leaping 24% in real terms in 2003-04 (ESAA 2003). More substantive increases in regulated household prices have occurred in recent years as each regulator has sought to make prices cost-reflective of supply and “consistent with the Government’s policy aim of reducing customers’ reliance on regulated prices” (IPART 2010: 11).

In the six year period to mid-2013, the average increase in NSW regulated household electricity prices was nearly 108%. This compares to more than 80% in Victoria, Queensland and Tasmania, and slightly less than 80% for households living in South Australia, Western Australia and the Northern Territory. ACT households experienced the smallest increase of slightly less than 71% (Table 1).¹

Table 1: Nominal average increases in regulated household electricity prices, 2007-13 ²

	Annual change						Cumulative change		
	2007-08 (%)	2008-09 (%)	2009-10 (%)	2010-11 (%)	2011-12 (%)	2012-13 (%)	2007-08 to 2010-11 (%)	2007-08 to 2011-12 (%)	2007-08 to 2012-13 (%)
NSW	7.5	7.5	20.2	10.0	17.3	15.7	52.8	79.5	107.9
Victoria	7.3	7.4	13.5	6.0	12	18.0	39.3	56.0	84.0
Queensland	11.4	9.1	11.8	13.3	6.6	11.5	54.0	64.1	83.0
South Australia	12.3	2.5	2.0	18.2	17.4	8.9	38.8	62.9	77.4
Western Australia	0.0	10.0	23.6	10.0	5.0	12.5	49.6	57.0	76.7
Tasmania	15.7	3.9	7.0	15.3	11.0	10.6	48.3	64.6	82.0
NT	4.4	3.4	18.0	5.0	2.8	30.0	33.7	37.5	78.7
ACT	16.7	7.1	6.4	2.4	6.4	17.7	36.2	44.9	70.6

The average annual change *may* understate the actual increase experienced by a household as does the CPI Electricity Price Index for those who live in the eastern States (Table 2).³ Nevertheless, this index shows (except for Canberra) electricity prices clearly outstripping CPI and average weekly earnings. During the same period the Pensioner and Beneficiary Living Cost Index (PBLCI) increased by 16%. The PBLCI informs decisions

¹ The only available Victorian data since 2009 is for average market contract prices. The average real increase for standing contract prices (tantamount to regulated prices) from 2006-07 to 2010-11 was 36% which is comparable to the nominal change shown in Table 1 for regulated prices of nearly 40% in the four years to 2010-11 (ESC 2011).

² These average increases were calculated from published price increases on each State and Territory regulator’s website.

³ The average price increases presented in Table 1 refer to all household consumers whereas the CPI electricity index only covers metropolitan households. This different coverage does not account for such a wide difference for so many households.

about pension indexation rates. Both indices substantively understate actual average electricity price movements for the majority of Australian households.

Table 2: Comparative changes in regulated electricity prices, price indices and average weekly earnings, 2007-12 (%)

2007-08 to 2011-12	Regulated household electricity prices	CPI electricity price index	All groups CPI	Average weekly earnings
NSW	79.5	66.3	14.3	19.1
Victoria	n.a.	59.5	14.2	20.0
Queensland	64.1	49.7	16.0	26.7
South Australia	62.9	50.5	14.7	21.3
Western Australia	57.0	56.9	14.2	33.7
Tasmania	64.6	41.3	13.0	27.2
NT	37.5	34.9	15.2	32.3
ACT	44.9	22.5	14.4	27.1
Australia	n.a.	57.1	14.5	27.5

n.a. = Not available; CPI figures are for each capital city and the weighted average for eight capital cities; Year ending August for full-time adult ordinary time earnings.

Source: Table 1 and ABS (2011b; 2011c).

Around 3.5 million Australian households fall within the two lowest income quintiles (ABS 2011d). Poor households in advanced industrial economies, as in developing countries, spend higher proportions of income and expenditure on energy (Jamasp and Meier 2010a; Khandor, Barnes and Samad 2010). In 2009-10, domestic fuel and power accounted for 2.6% of average weekly expenditure for *all* Australian households. Electricity costs accounted for 75% of this weekly expenditure (ABS 2011e).

This average, however, masks a distinct difference between income groups. As household disposable income rises, a steadily declining proportion is spent on domestic energy. The poorest 20% of households in 2009-10 spent 4% of average weekly expenditure on domestic energy costs, double that of the richest households (Table 3). The comparative weekly expenditure proportions in 2003-2004 were 2.9% for the poorest and 1.5% for the highest income (ABS 2006).

Table 3: Average Australian household expenditure on energy, 2009-10

2009-10	EQUIVALISED DISPOSABLE HOUSEHOLD INCOME QUINTILE						
	Lowest	Second	Third	Fourth	Highest	All	Second & third deciles
% of total households	24.5	18.2	18.1	18.6	20.6	100	21.3
Mean weekly income	\$314	\$524	\$721	\$975	\$1704	\$848	\$429
% of av. weekly expenditure on domestic fuel and power	3.9	3.2	2.8	2.4	2.0	2.6	3.7
% of av. weekly domestic fuel and power expenditure on electricity	76.3	75.0	74.6	75.7	74.3	75.1	n.a.
% of equivalised disposable income on domestic fuel and power	7.0	5.3	4.3	3.7	2.6	3.8	6.5
% of equivalised disposable income on electricity	5.4	4.0	3.2	2.8	1.9	2.9	n.a.

Source: ABS (2011d; 2011f)

Table 3 also shows the disproportionate impact of energy costs by household income quintile. The poorest quintile, actually nearly 25% of Australian households, in 2009-2010 spent, on average, 7% of equivalised disposable income on household energy costs. This is nearly three times the proportion spent by the wealthiest households and represents an upward shift since 2003-2004 when the poorest quintile was found to be spending 2.4 times that of the wealthiest. It is also notable that the second lowest quintile, and a little more than 18% of households, in 2009-10 spent twice the proportion spent by the wealthiest households.

Two cautionary notes need to be made about this data. First, all the energy expenditure proportions have been derived from the *mean* weekly income for each quintile. This means that the derived figures will not be representative of all those within each income quintile and should be treated as indicative only. Second, these figures understate the current situation for low income households because they do not include the effect of the substantial electricity prices increases since mid-2010 (as shown in Table 1).

These trends and data illustrate two critical points. Electricity prices rises are causing low income households to pay higher proportions of income and expenditure to meet energy bills. The severely disproportionate impact on the poorest Australian households is widening over time.

A low income household's capacity to meet escalating energy costs will be influenced by the ability to change its energy demand and housing tenure. The condition of housing influences the demand for energy. Draughty, poorly insulated, inadequately ventilated and older housing causing damp and mould growth, excess cold or excess heat, will directly influence energy use for space heating and cooling. Owner-occupiers *may* be more likely to make energy efficiency improvements given their greater level of control over the home. Many older owner-occupiers will, however, have insufficient financial resources for housing improvements to reduce their energy needs. Renters may not feel the responsibility or right to make housing improvements. Low income renters also face the constraint of not being able to find alternative, affordable and more energy-efficient housing. Low income households have much less capacity to influence housing energy efficiency to reduce their energy demand and stem the growth of energy bills as prices rapidly rise.

The ability of low income households to adjust their energy demand will not only depend on housing conditions and tenure. It also will be influenced by the size, composition and daily activities of the household, as well as the capacity to replace energy-inefficient appliances and adopt different household practices. A number of studies have found that the energy demand of low income households is relatively price insensitive (IPART 2003; Jamasb and Meier 2010b). Consequently, higher electricity prices can be expected to shift low income household expenditure patterns because greater proportions of disposable income are needed for energy bills and less will be available to meet other essentials.

There is limited understanding of the consequences for low income Australian households of the substantive increases in electricity prices which have occurred during the last decade and particularly since mid-2007. A 2004 report starkly described a range of physical and mental health effects, social exclusion and deprivation experienced by 12 low income South Australian households following an electricity price increase around 30 per cent in one year.

... all forgo at least one of the normal essentials of physical health, thermal comfort, adequate nutrition, social contact, access to education or entertainment, or freedom from financial insecurity and mental stress ... usually a combination of two or more of these unmet needs has emerged (Laris and Associates 2004: 9).

Changed household expenditure patterns arising from electricity price increases were also found in 2004 amongst people receiving financial counselling. Half had reduced their spending on food and telephone, whereas 80% or more had cut expenditure on clothing, holidays, movies and sport (UnitingCare Australia 2010). A few years later, more than 70% of financially stressed households were found to be making sacrifices to meet electricity price increases and 10% were unable to meet the cost (Wesley Mission 2010). Electricity and gas bills have been found also to be the greatest cause of rental arrears (63%) in Victorian low income households (Sharam 2007).

A not-for-profit organisation, which distributes government vouchers to assist those having difficulty with the payment of energy bills, reported in 2008 that 80% of these were seeking assistance for electricity bills (Babbington and King 2008). Nearly 40% of the two lowest household income quintiles were unable to pay electricity, gas or telephone bills on time during 2010.⁴

The media also has reported cases of hardship such as parents going without food in order to pay energy bills.

There has been, however, no substantive contemporary evidence base to inform policymaking of the consequences for low income households of escalating energy prices. Are increasing amounts of income needed to pay energy bills and is expenditure being foregone on other essentials? Are escalating energy bills, as found in the UK and Europe, contributing towards evidence of hardship such as inadequate nutrition, poor physical and psychological health, and social exclusion? What are the constraints on changes to energy use behaviour and practices of these households? What is the impact of housing conditions on the energy use of low income households? What is the extent of relief provided by government and energy company hardship programs? These are the questions which this study was designed to answer.

The aim of the study was to contribute to redressing these knowledge gaps. Specifically, the study sought to investigate: the affordability and payment of low income household energy bills, the ability for low income households to change their energy use, and the strategies adopted by these households to manage higher energy bills in order to determine the consequences for the well-being and lifestyle of rising energy prices for poorer Australian households.

⁴ Prices for gas and telecommunications did not increase at the same rate as electricity during this period (ABS 2011g). Thus it was assumed that electricity bills were a significant contributor to this outcome.

3. THE STUDY'S RESEARCH DESIGN

3.1 A mixed methods approach

The study used a mixed methods approach to collect quantitative and qualitative data. Different views of reality are provided by different research methods. Each method provides a different “slice” of reality (Denzin 1997). “[N]o single method can ever completely capture all the relevant features of that reality; consequently, [we] must learn to employ multiple methods in the analysis of the same empirical events” (Denzin 1989: 13) to partially overcome the inherent weakness or bias inherent in single methods, data sources, perspectives and observers. By utilising both quantitative and qualitative methods, the study reduced the limitations of one technique or source and increased the validity of the empirical reality presented in the research findings. Also, different data types yield different aspects of the study’s object and “a single, totally consistent picture” should not be expected (Patton 2002: 560). The advantage of using more than one research method and more than one data source is to deepen the interpretative base and ameliorate, as far as possible, the limitations of using a single method or data source.

Quantitative data was required to estimate the proportions of disposable income needed by low income households to pay rising energy bills, and determine any correlation with household characteristics, geographic location, the condition of housing and household expenditure priorities.

Access to a sufficient number of low income households to provide statistically significant data is difficult without considerable resources and the assistance of government agencies. One option was a reply-paid mail questionnaire distributed by Centrelink, the Federal Government agency responsible for income support payments such as the age and disability pensions, unemployment benefits and family allowances. Those dependent on income support payments fall within the lowest income quintile. A mail questionnaire was ruled out because the risk of an insufficient response rate was considered high for the following reasons: a questionnaire may have been incorrectly perceived as a covert method by Centrelink to check on people’s circumstances in order to cancel income support payments; and, many low-income households have low literacy skills and are time poor (Demi and Warren 1995). The study also had limited funding which was not enough to

conduct a mail questionnaire on a scale to provide a statistically significant sample of all income support recipients (around 7.5 million Australians).

A sampling frame does not exist for low income households i.e. a list of households from which a probability sample may be selected.⁵ Therefore a random selection of participants was not an option and recruitment relied on some form of nonprobability sampling such as snowballing or self-selection often through community agencies (Babbie 2007; Mammen and Sano 2012). Snowball (or accidental) sampling is suitable for small exploratory studies of marginalised groups such as the criminal or those suffering AIDS. The researcher relies on one subject providing the name of another subject, and so on. This method has a number of weaknesses such as representativeness of the participants from which to make claims of generality of the findings, and the time and difficulty of finding a suitable number of participants. It is for these reasons that self-selection of participants was deemed more suitable to collect the quantitative data through the least costly method of an online survey.

Qualitative data was required to determine the impacts of rising energy bills on housing choices, health, social inclusion and other determinants of well-being. A qualitative approach allows researchers to “understand lived experiences and ... interpret the understandings and shared meanings of people’s everyday social worlds and realities” (Limb and Dwyer 2002: 6). Qualitative methods provide a fuller picture of how factors such as income and household structure are reflected in daily practices, understandings, and behaviour (Barbour 2008). This picture was required to determine if rising electricity bills impact on housing choices, health, social inclusion, and other determinants of well-being for low income households. The study’s qualitative methods were focus groups and in-depth interviews.

Face-to-face discussion is the most appropriate method to gain detailed and contextual insights into the well-being, health and lifestyle of low income households as a result of paying significantly higher energy bills. Focus groups tap into participants’ perceptions, attitudes and opinions. More than one focus group is necessary because of the serious risk that a single group “will be too atypical to offer any generalizable results” (Babbie 2007: 309). In-depth semi-structured interviews allow for the probing of views and opinions to explore the subjective meanings that respondents ascribe to concepts or events because “interviewing offers researchers access to people’s ideas, thoughts and memories”

⁵ A probability sample is one in which selection typically involves some form of random selection.

(Reinharz 1992: 19). Deeper information or knowledge can be obtained by interviews about lived experiences and situations which a focus group does not necessarily lend itself to because some participants may dominate discussion, hide their real opinions or be reluctant to participate.

3.2 The recruitment of participants

The study's target population was low income households. The study defined low income households as those with a weekly income equivalent to or less than the income quintile of the Federal Minimum Wage (FMW). FMW workers are strongly represented in the lowest income quintiles (Healy and Richardson 2006). Australian Bureau of Statistics data has consistently shown the FMW falling within the second household income quintile (ABS 2010, 2013).

The Australian Council of Trade Unions (ACTU) agreed to promote the online survey through unions who represent workers receiving the lowest level of wages, including those earning the Federal Minimum Wage. The Australian Council of Social Services (ACOSS) and their State-based organisations, the Council on the Ageing (COTA) and the Public Interest Advocacy Centre (PIAC) also agreed to promote participation in the study through their respective constituent member organisations and websites. These peak organisations were selected because of their roles concerning the provision of information to and advocacy on behalf of low income households who are the focus of this research: ACOSS, the peak body of the community services and welfare sector, advocates on behalf of people affected by poverty and inequality; PIAC, a law and policy not-for-profit organisation, is a longstanding consumer advocate on a range of public interest issues which include the provision of energy services; and, the COTA advocates on behalf of older people to improve their well-being and circumstances. These organisations also have extensive networks of community agencies and organisations in direct contact with low income households experiencing hardship and crisis, including those agencies that deliver assistance - on behalf of State governments – to those experiencing difficulties with the payment of energy bills.

Details of the online survey were provided to the ACOSS, the ACTU, the COTA and the PIAC for distribution through their member organisations and networks (Box 1).

Box 1: Information provided by peak organisations about the online survey

SURVEY OF LOW INCOME HOUSEHOLD ENERGY USE AND AFFORDABILITY

The impact of higher energy bills for low income households is being investigated by a researcher from the University of Sydney. Why? There is no comprehensive picture of the pressures and circumstances of low income households following substantial rises in electricity and gas prices. The findings will be used to develop policies to assist low income households. [NAME OF ORGANISATION] will also have access to the findings for our own use.

An online survey is being used to collect information about household energy use, the size of energy bills, the income needed to pay these bills, and the consequences for low income households of rising energy costs.

Participation is voluntary. The survey will take about 15-20 minutes to complete and is available from 1 February.

We are seeking your assistance to encourage low income households to complete the survey and for them to tell their family and friends about the survey. Attached is a one-page sheet about the survey which you may find useful to print out and make available to low income households with whom you have direct contact.

Further details and the survey can be found at: www.householdenergyuse.com.

A website was created at which the online survey was made available from 1 February to 30 November 2012.⁶ The online survey was completed by 372 respondents of which 82 per cent were complete.

Focus groups and in-depth interviews were conducted in the capital city of the four most populous states of Queensland, New South Wales (NSW), Victoria and South Australia, and the regional centres of Wagga Wagga (NSW), Toowoomba (Queensland) and Port Augusta (South Australia). The Victorian regional centre of Bendigo was also selected. However, no focus groups were conducted at this location due to recruitment issues which are discussed below.

Covering the four largest States and including regional centres enabled determination of the presence or influence of any significant locational differences. Low income households have been found to have a higher representation in non-metropolitan locations and their 'energy impoverishment' experience may differ from those located in capital cities (ABS 2013).

Participants were recruited through local community agencies and organisations located in inner and outer suburbs of the capital cities and which dealt with those on low incomes and experiencing difficulties or hardship. Not all these agencies provided material aid in the form of food or emergency assistance. Some were referral agencies such as the

⁶ www.householdenergyuse.com.

Redfern Legal Centre in inner Sydney and the Neighbourhood Justice Centre in the inner Melbourne suburb of Collingwood.

Organisations were contacted by telephone to determine their willingness to voluntarily assist and provided with A3 posters advertising the study, and copies of a 1-page information sheet and the Participation Information Statement, which were displayed at front counters. Dates, times and locations for the focus groups and interviews were also advised in advance to the organisations assisting. Low income households who wished to participate could leave their details with the community organisation or contact the research team on an 1800 number organised for this phase of the study.

All focus group discussions and interviews were conducted in October and November 2012, and held at the rooms of assisting organisations because these locations were familiar and accessible to participants. Each group discussion and interview lasted for about one hour's duration and were audio recorded for subsequent transcription. Each participant was provided with a \$50 "essentials" supermarket voucher as an acknowledgement of their time and contribution to the study.⁷

The study's design allowed for a maximum of three focus groups to be conducted in each of the four capital cities and one in a major regional centre of each State (16 focus groups in total). A maximum of 28 in-depth interviews (five per capital city, two per regional centre) was also set. Thus, depending on the willingness of low income households to be involved and the effectiveness of recruitment, the study's design allowed for a maximum of 172 participants through focus groups and interviews.

Across the four most populous States of Australia, 130 participants were recruited. Forty-eight (37%) participants were from South Australia, 35 (27%) from New South Wales, 24 (18%) from Victoria, and the remaining 23 (18%) were from South Australia.

The lower numbers than planned were for the focus group discussions and can be attributed to a number of factors. Some potential participants indicated their willingness to be involved but were a 'no show' on the scheduled day. Many of the assisting organisations mentioned that their clients were very time-poor due to caring responsibilities or other circumstances, and held low level literacy and/or English-language skills. Hence, to give up at least an hour was not possible and the two-page Participant Information Statement (required by the University of Sydney's Human Research Ethics Committee) was overwhelming. Some regional community organisations did not wish to display the A3

⁷ An "essentials" voucher can be spent on any supermarket item other than alcohol and tobacco.

poster so information about the study was only made available on a case-by-case basis at the discretion of the front counter worker. Other reasons offered by community workers were: suspicion that the study was collecting information for taxation, immigration, public housing or Centrelink purposes; embarrassment to admit to payment difficulties with household energy bills and more generally their living circumstances especially when children were involved; and, some past research projects had not shared findings with participants, so there was a reluctance to 'help again' because it would change their circumstances. In the case of the Victorian regional centre of Bendigo, the anecdotal evidence was that the study's potential participants had 'research fatigue' from previous projects. It is also notable that Victorian households have not experienced the same rapid escalation in electricity prices as other States, are less reliant on electricity as a fuel source than other Australian households and have access to more generous hardship assistance than in other State or Territory jurisdictions.

In total, 99 people participated in focus group discussions. The size of focus groups ranged from two to 11 people although the more common group size was around seven or eight participants. Although the number of group participants was less than anticipated, the overall number and their geographic distribution provides sufficiently robust results from which to draw credible conclusions which are discussed in Section 4.

Thirty-one participants were interviewed individually, either face-to-face or by telephone, which was three more than planned. It was decided to undertake these additional interviews to provide data for regional Victoria given the difficulties experienced recruiting in Bendigo. The type of interview was determined by the availability of the interviewee to meet face-to-face. In the majority of cases (68%), caring responsibilities, medical conditions, limited transport access or the hours of part-time/casual work meant that a telephone interview was preferred by the interviewee.

3.3 The online survey

An online survey provides a more cost-effective option compared to a mail questionnaire although this data collection method does not capture the nearly 1.5 million low income households who do not have home internet access (ABS 2011a).

The representativeness of respondents is a particular issue for online data collection. A range of strategies were used to maximise responses from low income households. The study's website explained the low income household focus of the research

and this was directly placed above the survey entry button. The survey was advertised through peak community and welfare organisations with extensive networks in direct contact with households experiencing hardship and crisis, including those agencies that deliver assistance - on behalf of State governments – to those experiencing difficulties with energy bills. Participants were given the opportunity to win a \$50 supermarket voucher, which will be of greatest interest to a low income household, and to reduce the possibility of non-Australian households responding, the survey website page discussed which households are eligible and the second survey question required provision of the household's residential postcode. If this question was not completed, survey completion was not possible.

The survey questions sought information about:

- the characteristics of the household (such as location, how many people, how many children);
- the size and type of housing (such as how many rooms, what is the home made from);
- the household energy use (such as household appliances, if able to reduce energy use);
- and
- household energy bills and their impact (such as the cost, any payment difficulties, the impact on spending for other essentials).

The survey questions were drafted using SurveyMonkey, a minimal cost online service which has a number of advantages: implementation and analysis costs are minimal, data is received in a predictable and consistent format, and responses can be generated very quickly (Mann and Stewart 2000: 70-74). To maximise the response rate and reliability of answers, the online questionnaire was designed to be easy to navigate and user friendly, with a clear and logical question order, and answer options were placed under each question (Russell and Purcell 2009: 120-121).

Ethics approval for the online survey was obtained from the University of Sydney's Human Research Ethics Committee in December 2011.

A pilot survey was conducted during December 2011 to test the competency of the questionnaire, to gain feedback on the clarity of question wording and instructions, to determine if any important issues had been overlooked and to verify the data collector settings provided by SurveyMonkey. The pilot was administered as a participatory survey; that is, respondents were informed that it was a pre-test of a full scale survey. In addition to completing the questionnaire, respondents were asked to provide comments about the ease

or difficulty in answering questions, the clarity of instructions, the length of time to complete, and if any other matters should be covered.

Thirty-two respondents completed the pilot survey. Respondents included the researcher's colleagues and their family and friends, located within the capital cities of Sydney and Melbourne, and regional Queensland. After reviewing the results of the pilot survey, and respondent comments, some minor adjustments were made to the questions and instructions.

A one-page information sheet about the survey and the Participant Information Statement were made available through the study's website.

3.4 The focus groups and interviews

The interview is one of the principal methods to collect qualitative data, is very flexible as a data collection tool and has many different types. The data collection requirements will determine the type of interview most suitable (Fontana and Frey 1998). As Punch (2001: 176) states "different types of interview have different strengths and weaknesses, and different purposes in research. The type of interview selected should therefore be aligned with the strategy, purposes and research questions".

A number of interview typologies are evident in social science research.⁸ The key factors which differentiate types of interview are the degree of structure used and the extent to which the interview is standardised across interviewees. Structured interviews are often associated with survey research with each person asked the same pre-established question in the same way, the interviewer's neutral role strongly promoted, little room for deviation from the interview schedule, and usually a limited set of response categories (Fontana and Frey 1998; May 2001; Punch 2001). This type of interviewing is claimed to permit comparability between responses and the validity of responses is purportedly enhanced through the reliance upon a uniform structure. The semi-structured interview is a little more flexible with the interviewer able to seek information beyond the answers given to pre-specified questions. The interviewer "asks certain major questions the same way

⁸ Patton (2002) proposes three main types of open-ended interview: the informal conversational, the general interview guide approach and the standardised open-ended interview. 'Standardized', 'semi-standardized' and 'non-standardized' are the terms used by Fielding (1993) whereas Minichiello et al (1990) use a continuum based on the degree of structure involved, the tighter structure and standardization on the left and the opposite at the right hand end. Fontana and Frey (1998) use a classification of structured, semi-structured and unstructured.

each time, but is free to alter their sequence and probe for more information” (Fielding and Thomas 2008: 256).

The endpoint of the interview typology is the unstructured interview which provides a greater breath than the other types given its open-ended character. The interviewer has a list of topics in outline form – an interview guide - but the sequence and wording of questions, about each topic, is decided during the course of the interview (Fielding and Thomas 2008; Patton 2002). This type of interview enables the interviewee to answer in their own words, their own frame of reference, as well as enabling a greater understanding of the interview focus from the interviewee’s point of view. The unstructured interview allows the perspective of the person being interviewed to be taken into account (Bryman 1988) and the interviews remain fairly conversational. It is for these reasons that unstructured interviews were used for this study.

Ethics approval for the focus groups and interviews was obtained from the University of Sydney’s Human Research Ethics Committee in September 2012. The focus group and interview questions sought to understand the pressures and circumstances that low income households may be facing such as ⁹:

- How has a household managed to pay higher energy bills?
- Has any assistance been sought to help pay energy bills?
- Are there household items which are not purchased so that energy bills are paid?
- Has daily life been affected by rising energy bills? Have household members been affected?
- Does a household consider that their standard of living has changed?
- Are any difficulties faced in trying to reduce energy use at home?
- How is the affordability of energy bills viewed in relation to other household expenditures?

An interview guide was prepared prior to conducting the interviews (see Appendix A) and each participant was provided with the Participation Information Statement prior to signing the Participant Consent Form (see Appendix B).

A number of probes were also designed. “Probing involves follow-up questioning to get a fuller response; it may be verbal or non-verbal ... [because] our objective is to have a guided conversation” (Fielding and Thomas 2008: 260). Considerable care was taken to ensure that all probes were as neutral as possible, did not encourage a particular response

⁹ A list of the focus group and interview topics and questions are at Appendix A.

from the interviewee and hence, did not lead to bias. The ‘probes’ essentially were a reminder list of things to ask about for each of area of the interview guide.

The questions were open-ended and interviewees were encouraged to “communicate their underlying attitudes, beliefs and values, rather than a glib or easy answer” (Fielding and Thomas: 258), to respond in their own terms, their own length and depth. No particular sequence of questions was followed for each interview, the probes acting to ensure that all things were covered.

The researcher acted as the interviewer. Given that the non-standardised format adopted for questions was discursive, it was important for the researcher to establish rapport with each of the interviewees (Fontana and Frey 1998; Keats 1988; Minichiello et al 1990; Patton 2002; Punch 2001). However, care was taken to ensure that the rapport established did not undermine the researcher’s neutrality. “Rapport is a stance vis-à-vis the person being interviewed. Neutrality is a stance vis-à-vis the content of what the person says” (Patton 2002: 365). Rapport was established which conveyed understanding by the researcher without passing judgement on the responses of interviewees. This was facilitated through the phrasing of questions given the importance of questions to the structure and control of interaction in an interview (Minichiello et al. 1990). Both descriptive and structural questions were used, the latter allowing the researcher to explore areas in greater depth.

The researcher’s communication and listening skills were also important given the unstructured nature of the interviews (Keats 1988; Minichiello et al. 1990; Punch 2001), the importance of establishing rapport with each interviewee and the need to ensure that the researcher found “not the truth per se but rather the truth as the informant sees it to be” (Minichiello et al. 1990: 128).

Each focus group and interview was audio taped and transcribed verbatim. The transcripts were read through several times to obtain an overall sense of the content. The data derived from the interviews provided the researcher “with a means of analysing the ways in which people consider events and relationships and the reasons they offer for doing so” (May 2001: 144-45). A picture was constructed from each interviewee’s account and their experiences of it. A qualitative data analysis software package – Nvivo – was used which permitted the identification of trends and themes in the data.

4. THE STUDY'S FINDINGS

There has been limited understanding of the impacts and consequences for low-income Australian households of the substantive increases in household energy prices since mid-2007. The average increase in Australian household electricity prices from 2007 to 2013 was nearly 83% with the highest experienced by NSW households (108%) and the lowest average increase for those living in the ACT (71%). The study presented a substantive evidence base of the lived experiences of low-income households as a result of rapidly rising household energy bills. Survey respondents were highly representative of the Australian population in terms of location, income, dwelling type, and housing tenure. Focus group and interview participants were highly representative of the poorest 20% of households which are nearly 25% of all Australian households, the majority of which are dependent on pensions and allowances. Participants included indigenous Australians, those from a non-English speaking background, full-time students, those with a disability or long-term illness, sole parents, the unemployed and age pensioners.

There has been anecdotal reporting by the media, welfare agencies, community organisations and charities of the deleterious effects of rising energy prices. The findings of this study indicate the nature of these damaging effects is widespread and systemic. The well-being, health and lifestyle of low-income Australian households are suffering from the cumulative effects of ever-increasing electricity bills over a sustained period of many years which has compounded the circumstances of these vulnerable households. Never or rarely leaving home, using only one room, shorter (or occasionally, no) showers, watching less television, going to bed fully clothed (or early) to avoid the use of heating, families using a common sleeping room when cold, rarely having friends or extended family at home to avoid using cooking appliances and/or the room temperature being uncomfortable – these are some of the ‘strategies’ that the study found that low-income households have adopted to ‘manage’ their energy use as they endeavour to control the size of bills. These actions are far more extreme than the commonly promulgated measures to improve household energy efficiency.

As a result of cutting expenditure on essentials such as food and reallocating expenditure on other items to be able to pay energy bills, and making relatively severe changes in household practices to reduce the size of energy bills, these households were found to be suffering physical discomfort, reduced physical and mental well-being,

loneliness and social isolation, strains within household relationships, and distress about the social and emotional well-being of children.

The awareness of energy efficiency measures was found to be strong and nearly all households have tried to reduce their energy use in response to rising energy bills. Barriers to further reductions in energy consumption were found to be no financial capacity to afford energy saving appliances or household repairs/improvements (which is most problematic for renters), the need for health-related use of heating and cooling and life support equipment, and the presence of children. Households are loathe to cut heating or cooling too much in case it affects the health of children or exacerbates existing health vulnerabilities.

Consistent with past studies, it was also found that household energy expenditure as a proportion of disposable income is much higher for poorer households and declines as income rises. The findings also show the acute differential between the poorest and wealthiest households.

The dominant policy measures to assist low-income households with energy bills are rebates, concessions and temporary financial assistance provided by State and Territory governments, generally as an absolute amount (lump sum) rather than a proportion of a household energy bill as is the case only in Victoria. At least 2.3 million low-income households are regularly receiving some form of concession or rebate on their electricity bill. Yet all States record a higher proportion of residential disconnections for the non-payment of bills in 2011-12 compared to 2007-08 which strongly signals the increasing ineffectiveness of these measures.

Payment plans and hardship policies are further types of assistance for households experiencing energy hardship. Under the new, and partially implemented, National Energy Customer Framework energy retailers are required to implement customer hardship programs which are generally framed around payment arrangements for energy bills owing, ongoing use and the avoidance of disconnection. Households who have used such plans to date generally consider the payments were unaffordable being set too high and not reflecting their capacity to pay.

Overall, the study's findings pose a number of critical issues for government and policymakers. There is strong evidence of the inability of low-income households to become more energy efficient. Effort to reduce household energy use is widespread but has been highly concentrated on low-cost practices like the installation of low-energy light

bulbs. The barriers to reducing energy consumption mean the scope for further and substantive improvements in the energy efficiency of these households are highly constrained. More minor changes to household energy behaviour will not result in sufficiently significant changes to be reflected in lower energy bills and will undoubtedly aggravate already diminished levels of health and well-being.

A problematic relationship between low-income households and energy retailers was also found by the study. This relationship is framed by companies providing customer information on websites, the use of 1300 or 1800 numbers for customers to make telephone contact, and the customer experience encountered when discussing payment difficulties or a payment plan. Nearly 1.5 million low-income households do not have home internet access. From 1 January 2015 calls from mobile phones to an 1800 number will be free. In the meantime, call costs pose a significant barrier to contact and information.

A further critical policy issue highlighted by the study is the purpose of energy bill assistance. Current assistance, the monetary value of which varies considerably across Australia, is reactive. Assistance is directed at the bill which is the end-point of household energy use. Thus this assistance does not help low-income households manage their energy use to achieve the maximum possible energy efficiency level for their circumstances. Measures for widespread, long-term improvements to the energy efficiency of housing occupied by low-income households are also non-existent. Energy efficiency measures are limited in scale and focus on household behavioural practices to reduce energy use.

Energy hardship is caused by a conjunction of factors – low income, energy prices, the condition of housing, and the capacity to adopt different household practices to manage energy use given its size, composition and needs. This study provided strong evidence of the current extent of energy hardship and the need for current reactive policies to provide an improved level of assistance until preventative and remedial policies are successively implemented. The threshold question for policymakers, which this study illuminated, is whether there is the political will to directly address and eliminate energy hardship or whether the only form of assistance will remain reactive, fragmented and increasingly ineffective.

5. OBSERVATIONS AND CONCLUDING COMMENTS

Low income households are difficult to access for research because there is no sampling frame from which to randomly sample. However, there are approaches which can recruit sufficient numbers of participants to yield robust results from which to make generalised claims. As the Australian study of low income households demonstrates, the use of an online survey combined with focus groups and interviews designed to cover the capital city and a regional centre in the four most populous States meant that representativeness was heightened.

The recruitment of participants through self-selection increases the possibility of bias although this can be ameliorated by ensuring a wider geographic representation. Self-selection through community organisations also raises the possibility of bias. The Australian study chose a range of different welfare and community organisations with direct contact with low income households. Some regional community organisations, however, did not wish to display the A3 poster so information about the study was only made available on a case-by-case basis at the discretion of the front counter worker. Hence the recruitment was subject to an element of bias when staff exercised judgement as to whether someone may or may not be interested in participating in the study.

During the study's recruitment phase, many community organisations referred to past research projects which had not shared findings with participants and thus suggested there may be a reluctance to participate again. The study asked participants if they wished to receive feedback and a summary of findings was posted or emailed to all those wanting feedback. A full copy of the study's report also was provided to all organisations who assisted with study.

Ethics approval was required for the study by the University of Sydney's Human Research Ethics Committee. The approval mandated a two-page Participant Information Statement which many prospective participants found overwhelming. Low income households have lower levels of literacy, cognitive, negotiation and communication skills. Consequently a researcher needs to give careful consideration to the potential impact on recruitment and retention of the materials used to promote participation.

The focus groups and interviews were held in locations easily accessible to the participants both in terms of public transport access and mobility, and in familiar facilities and meetings rooms. They were also conducted at times to suit participants, particularly

those with caring responsibilities, and depending on the time of day, light lunches and morning or afternoon teas were provided. It was felt that these measures would assist the involvement of low income households. Access to public transport and buildings, unfamiliar surroundings and inconvenient appointment can each act as a barrier to participation.

Mention should also be made of the \$50 supermarket voucher provided to focus group and interview participants and a random draw of survey respondents. The vouchers (a pre-paid plastic card) were provided as an acknowledgement of the time given by participants. Ethics approval required that the A3 poster promoting the focus groups and interviews made no mention of the voucher although it was permitted for inclusion in the Participation Information Statement. When contacting community organisations about the study, the researcher referred to the voucher for each participant.

There is a considerable literature on participation rewards, their effect on response or participation rates and if they are coercive or exert undue influence. Incentives or rewards have been found to have a positive effect on response rates, and pre-paid monetary incentives more effective than promised in-kind incentives (Hansen 2006). Singer and Bossarte (2006) contend that incentives are never coercive but may exert influence in surveys on violence and injury. Careful consideration was given by the study to the amount of the participation reward and the form in which it was provided. It was concluded that an amount of \$50 was a good balance between being not excessive and not tokenistic. Some participants were noticeably more vocal than others but there is no evidence that this can be attributed to the reward of the supermarket voucher.

In conclusion, studying low income households poses a number of methodological issues. Nevertheless, there are a number of measures which a researcher can take to access “hard to reach” low income households using reliable and valid data collection instruments. Careful thought and attention about the potential barriers to participation by those on low incomes needs to inform the research design to ensure sufficient participation and representativeness, and reduce the possibilities of bias. The use of self-selection through community organisations, participation rewards and data collection methods suitable to the task can yield robust findings to answer the research questions. By taking these issues into account, studies can be strengthened to provide strong insights for policymakers into the circumstances and needs of low income households.

REFERENCES

- Australian Bureau of Statistics (ABS) (2013), *Household income and income distribution Australia*, Cat. 6523.0.
- (2011a), *Household use of information technology: Australia 2008-09*, Cat. No. 8146.0
- (2011b), *Consumer price index, Australia, September 2011*, Cat. 6401.0.
- (2011c), *Average weekly earnings, Australia, August 2011*, Cat. 63012.0.
- (2011d), *Household Income and Income Distribution Australia*, Cat. 6523.0.
- (2011e), *Household Expenditure Survey Australia, Summary of Results, 2009-10*, Cat. 6530.0.
- (2011f), *Household Expenditure Survey Australia, Summary of Results, 2009-10*, Cat. 6530.0.
- (2011g), *2010 General social survey: Summary results, Australia*, Cat. 4159.0.
- (2010), *Household income and income distribution*, Cat. No. 6523.
- (2006) *Household Expenditure Survey Australia: Detailed Expenditure Items, 2003-04 (reissue)*, Cat. 6530.0.
- Babbie, Earl (2007), *The Practice of Social Research*, Eleventh edition, Thomson Wadsworth: Belmont, California.
- Babbington, Sally and Sue King (2008), *Helping with cost of energy*, Report of Anglicare Sydney's 2006 EAPA Data Collection, Policy Unit Research Paper, Sydney: Anglicare.
- Barbour, Rosaline (2008), *Introducing qualitative research*, Los Angeles: Sage.
- Brackertz, Nicola (2007), 'Who is hard to reach and why?', *ISR Working Paper*, January 2007, Accessed 10 October 2012 from <http://www.sisr.net/publications/0701brackertz.pdf>
- Demi, Alice S. and Nancy A. Warren (1995), 'Issues in conducting research in vulnerable families', *Western Journal of Nursing Research*, 17(2): 188-202.
- Denzin, Norman K. (1997), 'Triangulation in educational research', in Keeves, J.P. (ed.) *Educational research, methodology, and measurement: An international handbook*, 2nd edition, New York: Pergamon, pp. 318-22.
- Electricity Supply Association of Australia (2003), *Electricity prices in Australia 2003/04*, Sydney South: ESAA.
- Essential Services Commission (ESC) (2012), *Energy retailers comparative performance report – pricing 2011-12*, September, Melbourne: ESC.
- (2011), *Energy retailers comparative performance report – pricing 2010-11*, December, Melbourne: ESC).

- Essential Services Commission of South Australia (ESCOSA) (2013), *Performance of the South Australian retail energy market – market development, July-December 2012*, Adelaide: ESCoSA.
- Fielding, Nigel and Hilary Thomas (2008), 'Qualitative interviewing', in Nigel Gilbert (ed.) *Researching social life*, Third edition, London: Sage Publications, pp. 245-265.
- Fontana, Andrea and James H. Frey (1998) 'Interviewing: the art of science', in *Collecting and Interpreting Qualitative Materials*, eds Norman. K. Denzin and Yvonna S. Lincoln, Thousand Oaks: Sage Publications, pp. 47–78
- Hansen, Kasper M. (2006), 'The effects of incentives, interview length, and interviewer characteristics on response rates in a CATI-study', *International Journal of Public Opinion Research*, 19(1): 112-121.
- Healy, Joshua and Sue Richardson (2006), *An updated profile of the minimum wage workforce in Australia*, Research Report No.4/06, Australian Fair Pay Commission.
- Hurley, Michael (2007), 'Who's on whose margins?' in Marian Pitts and Anthony Smith (eds), *Researching the Margins: Strategies for Ethical and Rigorous Research with Marginalised Communities*, Houndsmill, Basingtoke: Palgrave Macmillan, pp. 161-189
- Independent Pricing and Regulatory Tribunal (IPART) (2013), *Review of regulated retail prices for electricity, From 1 July 2013 to 30 June 2016: Electricity – Final Report*, June, Sydney: IPART.
- (2010), *Review of regulated retail tariffs and charges for electricity 2010-2013: Electricity – Final report*, March 2010, Sydney: IPART.
- (2003) *Inclining block tariffs for electricity network services*, Discussion Paper 64, Sydney, IPART
- Jamasb, Tooraj and Helena Meier (2010a) *Energy spending and vulnerable households*, *Cambridge Working Paper in Economics 1109*, Faculty of Economics, University of Cambridge.
- (2010b) *Household energy spending and income groups: Evidence from Great Britain*, *Cambridge Working Paper on Economics 1011*, Faculty of Economics, University of Cambridge.
- Keats, Daphne M. (1988), *Skilled interviewing*, Hawthorn: Australian Council for Educational Research.
- Khandker, Shahidur R., Douglas F. Barnes and Hussain A. Samad (2010) *Energy poverty in rural and urban India: are the energy poor also the income poor?* *World Bank Policy Research Working Paper No. 5463*, Washington DC, World Bank.

- Laris, Paul and Associates (2004), *Powering poverty: A report on the impact of the 2002-03 electricity price rises on 12 low income households in South Australia*, Adelaide: Western Region Energy Action Group.
- Limb, Melanie and Claire Dwyer (2002), *Qualitative methods for geographers*, London: Arnold.
- Mammen, Sheila and Yoshie Sano (2012), 'Gaining access to economically marginalized rural populations: Lessons learned from nonprobability sampling', *Rural Sociology*, 77(3): 462-482.
- Mann, Chris and Fiona Stewart (2000), *Internet communication and qualitative research*, Los Angeles: Sage.
- May, Tim (2001), *Social research: Issues, methods and process*, Third edition, Buckingham: Open University Press.
- Minichiello, Victor, Rosalie Aroni, Eric Timewell and Loris Alexander (1990), *In-depth interviewing: Researching people*, Melbourne: Longman Cheshire.
- Patton, Michael Q. (2002), *Qualitative research and evaluation methods*, Third edition, Thousand Oaks, California: Sage Publications.
- Punch, Keith F. (2001), *Introduction to social research: quantitative and qualitative approaches*, London: Sage Publications.
- Reinharz, Shulamit (1992) *Feminist Methods in Social Research*. New York: Oxford University Press.
- Russell, Brenda and John Purcell (2009), *Online research essentials*, San Francisco: Jossey-Bass.
- Shaghghi, Abdolreza, Raj S. Bhopal and Aziz Sheikh (2011), 'Approaches to recruiting 'hard-to-reach' populations into research: A review of the literature', *Health Promotion Perspectives*, 1(2): 86-94.
- Sharam, Andrea (2007), 'What the gas and electricity arrears of private low income tenants can tell us about financial stress', *Journal of Economic and Social Policy*, 11(2): 23-38.
- Singer, Eleanor and Robert M. Bossarte (2006), 'Incentives for survey participation: When are they "coercive"?'', *American Journal of Preventive Medicine*, 31(5): 411-418.
- UnitingCare Australia (2010), *Response to April 2010 AER Issues Paper: Developing National Hardship Indicators*, June.
- Wesley Mission (2010), *Making ends meet: Financial stress is not just about money*, The Wesley Report, Number 8, October.

APPENDIX A: FOCUS GROUP AND INTERVIEW TOPICS/QUESTIONS

Ability to pay energy bills

1. Electricity and gas prices have increased markedly, in recent years. Does paying electricity or gas bills ever pose a problem for you?
2. If so, how often is paying energy bills a problem? (For example, occasionally if other unexpected expenses crop up? Or seasonally - for example, only in the colder months or hotter months? Or is paying energy bills always difficult?)

Assistance to help pay energy bills

3. What forms of assistance does your energy company provide if you are having trouble paying a bill?
4. Are you aware of any other forms of assistance for households like yours who are having trouble paying energy bills? Who provides it? What kind of help is offered? Is it enough, in your view? What other forms of assistance do you think that people having trouble paying energy bills need that is not available at present?

Energy usage

5. Has the amount of electricity or gas you use changed in response to rising energy bills? If so, how? Have you cutback on the use of particular appliances, for example?
6. Are there any features of the house or flat in which you live that you think might make it hard to reduce your energy use – for example, built-in appliances in your home, or poor insulation, draughts, or lack of blinds and curtains, etc?
7. Are there any other factors that affect the amount of electricity or gas you use – for example, health issues, or medical appliances? Children and their activities?
8. Do you know of any government or other programs to help you decrease energy use or increase energy efficiency? Have you been able to get help through these programs? Has it made a difference? Is there anything that might help you to reduce the amount of energy you have to use at home, if it was available, or affordable?

Impact on household expenditure, daily life and well-being

9. How does difficulty in paying energy bills affect you and your household?

10. Have you cut back on any other items of expenditure in order to pay your energy bills?
If so, what kinds of things have you cut back on? What have you cut back on most?
11. If you have cut back on other types of expenditure in order to pay energy bills, does this affect your daily life and activities, or those of other members of your family/household? In other words, does it affect what you are able to *do*? If so, how?
12. If you have cut back on other expenses in order to pay energy bills, does this affect your physical and mental well-being, or that of other members of your family/household? If so, how? In other words, how does it affect how you or your family/household *feel*, health-wise, or emotionally?
13. Have you ever been disconnected from electricity or gas because you were unable to pay your bill? If so, what have you done to get re-connected and how has this affected you or your family/household?
14. Do you think your standard of living has changed because of the need to spend more of your income on higher energy bills?
15. How do you view the affordability of your energy bills compared to your other household expenditures?

**APPENDIX B: PARTICIPANT INFORMATION STATEMENT AND
CONSENT FORM**

Dr Lynne Chester
Chief Investigator

Room 451
Merewether Building (HO4)
The University of Sydney
NSW 2006 AUSTRALIA
Telephone: +61 2 9351 5044
Facsimile: +61 2 9351 8596
Email: lynne.chester@sydney.edu.au
Web: <http://www.sydney.edu.au>

THE IMPACTS FOR LOW-INCOME HOUSEHOLDS OF RISING ENERGY PRICES

Phase 2: Impacts and consequences of higher energy prices

PARTICIPANT INFORMATION STATEMENT

(1) What is the study about?

Australian household energy use has increased substantially in the last decade and electricity prices have risen rapidly in recent years. Further sizeable increases in energy prices are forecast. At present, there is a limited understanding of the impacts for low-income households of rising electricity prices. The media and emergency relief providers have reported cases of hardship providing a snapshot of difficulties being experienced. Energy ombudsmen have reported an escalation in household complaints and disconnections. But we do not have a coherent understanding of the consequences of significantly higher energy bills for those households with low incomes. This study is investigating the impacts for low-income households of higher energy bills and is being conducted in two phases. Phase 1, an online survey, investigated the relationship between energy use and housing conditions, and the amount of income needed to pay energy bills. Phase 2, this project, involves interviews and group discussions with low-income households about the impact of energy bills on their well-being, health, and lifestyle.

(2) Who is carrying out the study?

The study is being conducted by Dr Lynne Chester of the University of Sydney with the assistance of Dr Fiona Taylor.

(3) What does the study involve?

This phase of the study involves interviews and group discussions. Participants will be asked about the impact and consequences of higher energy bills on their daily lives, well-being, health, and lifestyles.

The interviews and group discussions will be arranged by the researchers and held at rooms in community organisations located close to public transport. Group discussions will involve nine volunteers and be guided by Dr Fiona Taylor, one of the researchers. The interviews will be one-on-one with Dr Fiona Taylor.

The interviews and group discussions will be recorded on audio (voice) recording equipment so that the information can be analysed by the researchers. To protect the privacy of volunteers, strict participant confidentiality and privacy is assured. Only the researchers will have access to these recordings, and the names of participants or contact details will NOT be made available to anyone else.

(4) How much time will the interviews or group discussions take?

The one-on-one interviews and group discussions will each take about one hour. Volunteers can choose to participate in either the group discussion OR the one-on-one interviews so participation in the study will involve a maximum of one hour of each participant's time.



(5) Can I withdraw from the study?

Participation in the interviews or in the group discussions is completely voluntary. You are not under any obligation to consent and – if you do consent – you can withdraw at any time without it affecting your relationship with the researchers, the University of Sydney or the agency from which you obtained this information sheet.

If you are being interviewed, you can stop the interview at any time if you do not wish to continue. The audio recording will be erased and the information provided will not be included in the study. If you take part in a group discussion and wish to withdraw after the group session has commenced, it will not be possible to exclude your individual voice from the audio recording.

(6) Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to the information provided by participants. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report. All data will be published and presented in aggregate form.

(7) Will the study benefit me?

We cannot and do not guarantee or promise that you will receive any benefits from the study. The study has the strong support of many community, charitable and welfare sector organisations. The findings of the study will be of central value to their work and advocacy. The findings will also be written up for publication and used to make submissions to government.

Each participant will be provided with a \$50 voucher redeemable at a major supermarket in recognition of their contribution to the study.

(8) Can I tell other people about the study?

You are welcome to tell other people about the study. You can choose to receive feedback about the study and its findings from the researchers.

(9) What if I require further information about the study or my involvement in it?

When you have read this information, Dr Chester will answer any questions you may have. If you would like to know more at any stage, please feel free to contact Dr Chester at lynne.chester@sydney.edu.au or on 02 9351 5044.

Should you wish to participate in an interview or group discussion, please give your contact details to the front counter where you collected this information statement. Your contact details will be forwarded to the research team, who will then contact you directly by phone to make arrangements for your involvement. Alternatively you may ring the research team on **1800 126 208**.

(10) What if I have a complaint or concerns?

Any person with any concerns or complaints about the conduct of the research study can contact The Manager, Human Ethics Administration, University of Sydney, on +61 2 8626 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep