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The physical, social and economic health and wellbeing of women with dependent children, following relationship breakdown

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Abbreviations

ABS	Australian Bureau of Statistics
ALSWH	Australian Longitudinal Study on Women's Health (also known as Women's Health Australia)
ANOVA	Analysis of variance
CES-D 10	Centre for Epidemiologic Studies Depression Scale (10 items)
CSA	Child Support Agency
DOCS	Department of Community Services (NSW)
FTB (A)	Family Tax Benefit Part A
FTB (B)	Family Tax Benefit Part B
HECS	Higher Education Contribution Scheme
HES	Household Expenditure Survey
JET	Jobs Education and Training scheme
MCS	Mental health Component Score
PCS	Physical health Component Score
PPS	Parenting Payment Single
SF-36	Medical Outcome Short Form Health Survey
SIHC	Survey of Income and Housing Costs

Terminology

In results and discussions pertinent to analyses of the ALSWH young cohort data¹:

Sole mothers:	Women who were not living with a partner or spouse, who did not indicate that they were married or living in a de facto relationship, and who were living with a child or children aged less than 16 years.
Partnered mothers:	Women who were living with a partner or spouse, who did not indicate that they were divorced or separated, and who were living with a child or children aged less than 16 years.
Unpartnered childless women:	Women who were not living with a partner or spouse, who did not indicate that they were married or living in a de facto relationship, and who were not living with a child or children aged less than 16 years.
Partnered childless women:	Women who were living with a partner or spouse, who did not indicate that they were divorced or separated, and who were not living with a child or children aged less than 16 years.

In results and discussions pertinent to analyses of the ALSWH mid-aged cohort data:

Sole mothers:	As above, but excluding women who indicated they were widowed or single
Partnered mothers:	As above
Unpartnered childless women:	As above
Partnered childless women:	As above

¹ Refer to Appendix B for a full explanation of how these categories were developed

Section 1: Introduction

Twenty percent of Australian families with children under 15 years of age are headed by a sole mother (Australian Bureau of Statistics [ABS], 2003). Around 27 percent of 18-year-olds have spent a period of their childhood in a family headed by a sole mother (de Vaus & Gray, 2003). Sole motherhood has been associated with poorer health and higher stress (eg. Franz, Lensche, & Schmitz, 2003; Whitehead, Burstrom, & Diderichsen, 2000), which in turn have been partly attributed to the lower economic status associated with sole motherhood (Hope, Power, & Rodgers, 1999; Lipman, Offord, & Boyle, 1997).

The purpose of this project was to shed light on the experience of Australian sole motherhood, with a particular focus on those women who became sole mothers as a result of separation or divorce. Specifically, the project aimed to:

1. Determine the characteristics of women who were raising children without a partner following separation or divorce, including:
 - Demographic characteristics
 - Economic status
 - Education
 - Paid employment status
 - Income
 - Economic wellbeing
 - Psychological and physical health
2. Determine the impact of economic status on the health of women raising their children alone after separation or divorce
3. Describe any geographic differences in the economic and health correlates of sole motherhood
4. Examine other factors that arise in the course of the project that impact on the health and wellbeing of women raising their children alone after separation or divorce

To meet the project aims, both quantitative and qualitative methods were used. Cross-sectional and longitudinal analyses of data collected by the Australian Longitudinal Study on Women's Health (ALSWH, also known as Women's Health Australia) were conducted, and a series of qualitative focus group interviews were undertaken with sole mothers. The methods are described in the second section of this report, as are the demographic details of the participants.

Sole motherhood has been associated with lower economic status. For example, past investigations found that Australian sole motherhood was associated with lower education levels than those found in the general population (Rodgers & Wilson, 1998; Carlile et al., 2002), lower paid employment participation rates than those found for partnered mothers (Gray, Qu, Renda, de Vaus, 2003), financial hardship among recipients of government benefits (Bray, 2001), and a high risk of poverty compared to other OECD countries (Christopher, England, Smeeding, & Phillips, 2002). This project used the measures available in the ALSWH to investigate sole motherhood and economic status: education, paid employment participation (including occupation, hours spent in paid work), and income. Economic wellbeing was assessed by two measures: ease of income management and degree of financial stress. For ease of reference, findings for economic status were divided into four

sections: education (Section 3), paid employment (Section 4), income (Section 5), and economic wellbeing (Section 6). Each section includes an overview of the subject area, quantitative results and qualitative findings. At the conclusion of each section, the results of the quantitative and qualitative investigations are integrated and discussed in light of past research.

Sole motherhood has been related to poorer psychological and physical health (Jayakody, Danziger, & Pollack, 2000). It has been suggested that this relationship might be mediated by the lower economic status associated with sole motherhood (Hope, et al., 1999; Lipman, et al., 1997). The current project used well-validated measures of both psychological and physical health, and was able to control for potential confounding demographic variables, and for economic status. In addition, the ALSWH data allowed for a longitudinal examination of health status, while the qualitative analysis pointed to additional areas that warranted further investigation. The psychological and physical health of sole mothers are described in Section 7.

The experience of being a sole mother in a non-urban location is likely to be different from that experienced by sole mothers in urban areas. For example, unemployment among women has been shown to be higher in non-coastal compared to coastal areas of NSW (Hall, 2000). The current project involved a descriptive analysis of ALSWH data that compared urban with non-urban sole motherhood. The qualitative focus groups were conducted in inner and outer metropolitan areas, a large regional centre, several smaller regional centres, and a remote centre. The contrasting experiences of sole mothers from these different areas were analysed. Issues to do with sole motherhood and area of residence are described in Section 8.

The qualitative research pointed to a number of areas that were deserving of further investigation. These included the impact of discrimination and stigma, social support, intimate partner abuse and women's future economic plans. Where possible, these areas were supplemented with quantitative analyses of ALSWH data. The findings of these additional analyses are included in Section 9.

A number of abbreviations were used throughout this report and are listed on page ix. The term 'sole mother' was used to describe women who were raising their children without a partner. However, in the quantitative analyses slight differences in the measurement of sole motherhood occurred due to data considerations (see page ix & Appendix B). Other quantitative data considerations and limitations are described in the following section, and apply to all of the analyses reported herein that were conducted with ALSWH data.

Section 2: Method

This project used both quantitative and qualitative methods. The quantitative method involved analyses of data collected as part of the Australian Longitudinal Study on Women's Health (ALSWH). The qualitative method involved collection of data from focus groups conducted in nine towns and suburbs across NSW. This section of the report includes descriptions of the methods used to recruit participants, the measures that were used, and a description of the demographic characteristics of the participants.

Quantitative method

The quantitative analyses used data that were collected as part of the ALSWH. ALSWH is a longitudinal survey of the health and well-being of three cohorts of Australian women, and has been described in detail elsewhere (Brown et al., 1998; Lee, 2001). The project uses mailed surveys to collect self-report data on health and related variables from three cohorts of Australian women, who were aged 18-23 years (young), 45-50 years (mid-age) and 70-75 years (older) when the project began in 1996. Over 40,000 women were randomly selected from the Australian population, with the national health insurance database (Medicare) as the sampling frame, and systematic over-sampling of women living in rural and remote areas. The project is designed to run for twenty years, with the overall goal being to conduct a series of interlocking data analyses. The data are used to develop an understanding of factors that affect the health and well-being of women, in order to inform Australian government health policy (Lee, 2001). The research conducted within the main body of this report has used data from the first and second young and mid-aged cohort surveys. Towards the conclusion of the current project, data from the third ALSWH survey of younger women became available. Although time constraints prevented the inclusion of these data in the main analyses, preliminary analyses were conducted using data from the first three young ALSWH surveys. These analyses are provided in Appendix A.

Participants

The first young survey (also referred to as Young Survey 1) data were collected by ALSWH in 1996. At the time of Survey 1, the young cohort was aged from 18-23 years. Of the women who were randomly selected from the Medicare database and invited to participate, 14,792 completed Survey 1 (response rate of 41%). The second young survey data were collected in 2000. At the time of Survey 2, the young cohort was aged from 22-27 years and 9689 women participated (response rate of 70% [Lee, 2001]).

The first mid-aged survey (also referred to as Mid-aged Survey 1) data were collected by ALSWH in 1996. At the time of Survey 1, the mid-aged cohort was aged from 45-50 years. Of the women who were randomly selected from the Medicare database and invited to participate, 14,100 completed Survey 1 (response rate of 54%). The second mid-aged cohort survey was conducted in 1998. At the time of Survey 2, the mid-aged cohort was aged from 47-52 years and 12,338 women participated (response rate of over 90% [Lee, 2001]).

Measures

The ALSWH surveys are available in full on the ALSHW website:

<http://www.newcastle.edu.au/centre/wha>

Relationship status

Relationship status refers to the status of women as belonging to one of four groups:

- Unpartnered with dependent children (sole mothers)
- Partnered with dependent children (partnered mothers)
- Unpartnered without dependent children (unpartnered childless women)
- Partnered without dependent children (partnered childless women)

Being partnered was defined as living with a partner, living in a defacto relationship, or as being married. Dependent children were defined as being less than 16 years of age. Relationship status was calculated for Surveys 1 and 2 of the young and mid-aged cohorts (4 surveys in all). The methods used to compile this measure are described in detail in Appendix B.

Separation from a partner was determined for both the young and mid-aged cohorts and was used as a measure in the longitudinal analyses. For the purposes of assessing changes in demographics, economic status and health that occurred post-separation, two groups of women in the young and mid-aged cohorts were identified and compared:

- Women who were partnered mothers at Survey 1, and sole mothers at Survey 2
- Women who were partnered mothers at Surveys 1 and 2, and who had not experienced divorce or separation

Demographic characteristics

The variable 'age' was calculated in whole years from the participants' years of birth. Respondents were coded as living in an urban, rural, or remote location using a classification system developed by the Australian Department of Primary Industries and Energy and the Department of Human Services and Health (1994).

Women were asked in which country they were born. These were classified by ALSWH as being Australia, other English speaking country, Europe, Asia, and 'other'. Small frequencies were noted for some responses; therefore, this variable was dichotomously scored as being born in an overseas country, or Australia. Women were asked if they were of Aboriginal or Torres Strait Islander origin. This variable was dichotomously scored as being of Aboriginal or Torres Strait Islander origins, or as not being of Aboriginal or Torres Strait Islander origins.

Economic status

The following measures were used to assess different aspects of economic status.

Education

Respondents were asked to indicate the highest qualification they had received, with response options: no qualification, School Certificate, Higher School Certificate, trade/apprenticeship, certificate/diploma, university degree, higher university degree. Some categories were collapsed due to low numbers: Trade/apprenticeship was collapsed with certificate/diploma; and university degree was collapsed with higher university degree.

Paid employment participation

In the ALSWH surveys, occupation type is a measure of past, current, or potential occupation. That is, in the young cohort surveys, women were asked to respond with their current occupation or the occupation they were studying for. In the mid-aged cohort surveys, women were asked to indicate their current or past occupation (i.e. ‘what is/was your main occupation...’). As such, occupation reflects the type of work the respondent has, or will have, the capacity to undertake. The occupation variable was the same for Survey 1 young and mid-aged cohorts; while subcategories were added for the second young survey. The second mid-aged survey utilised a free-response measure, which was unsuitable for this type of analysis and was therefore omitted.

In the first young cohort survey, and the first and second mid-aged cohort surveys women were asked how many hours they spent in paid work. In the second young cohort survey women were asked how many hours they spent in various activities in the previous week, including part time and full time paid work. Response options for all surveys included: 1-15; 16-24; 25-34; 35-40; 41-48; or 49+ hours.

In all four surveys, women were asked how happy they were with the time they spent in paid work. Response options differed between the first and second surveys. First survey response options included: happy as it is, would like to do more, would like to do less, and N/A (don’t do this). In the second surveys, the N/A category was removed, and women were asked to indicate their paid work preference even if they were not currently undertaking paid work.

In the second surveys, women were asked two additional questions. Those who had indicated that they would like to spend fewer hours in paid work were asked to indicate why they would like to do fewer hours. Response options were slightly different for the young and mid-aged cohort surveys. Response options for the young cohort included: child care, other family reasons, health reasons, and would like more time for myself; and for the mid-aged cohort included: family reasons, health reasons, would like more time for myself. Women who responded that they would like to spend more hours in paid work were asked, in the second surveys, why they did not do more hours of paid work. Response options for the young cohort survey included: unable to find a suitable job, child care, other family reasons, health reasons, partner prefers they don’t work (more), language difficulties; and for the mid-aged cohort: unable to find a suitable job, family reasons, health reasons, partner prefers they don’t work (more), language difficulties.

In the first young and mid-aged cohorts surveys, women were asked to indicate their main employment status with two paid work response options: full time paid work and part time/casual paid work.

The second young cohort survey asked women to indicate how many hours they had spent in various occupations in the past week, including full time paid work, part time paid work, and casual paid work. This item included a response option of ‘don’t do this activity’. A variable was created for the second young cohort survey to measure paid work, so that full time paid work, part time paid work, and casual paid work were indicated by any number of hours indicated on the response options. Women who worked in both a full time and part time or casual positions were coded as ‘full time’. Part time and casual work were collapsed into a single category. In this way, the measure was similar to that used in the earlier surveys.

The second mid-aged cohort survey asked women to indicate their main and secondary occupation status, with two paid work response options for each item: full time paid work, and part time or casual paid work. For the purposes of the current enquiry, a response of full time work to either

item was coded as ‘full time’; a response of part time or casual paid work to either item, in the absence of a response of full time paid work, was coded ‘part time/casual’; all other responses were coded as ‘not in paid work’.

Income

Respondents were asked what their personal gross weekly income was as a part of the second surveys. Response options for the young survey included: no income; \$1-\$119; \$120-299; \$300-\$499; \$500-\$699; \$700-\$999; \$1000-\$1499; \$1500 or more. Response options for the mid-aged survey included: no income; \$120-\$299; \$300-\$499; \$500-\$699; \$700-\$999; \$1000-\$1499; \$1500 or more. Responses of ‘don’t know’ and ‘don’t want to answer’ were coded as missing data. Among the young cohort only 33 women had an income in the ‘\$1500 or more’ category; among the mid-aged cohort only 143 women had this response. Therefore the final two categories were collapsed into a new category: \$1000 or more per week, for both surveys.

Another measure of income is eligibility for a Health Care Card. Health Care Cards are available through Centrelink to people who qualify as being in need of financial assistance. To qualify for a Health Care Card the applicant must meet means test requirements, which are adjusted for the presence of dependent children. As such the presence of a Health Care Card can be used to indicate the presence of low economic means. Participants in the second young survey were asked if they had a Health Care Card.

In the second mid-aged survey, women were asked to indicate the sources of their own and of their spouse’s income. Response options included: wage or salary; own business/farm/partnership; superannuation or private income; government pension or allowance. Respondents were instructed to select as many responses as were applicable.

Economic wellbeing

Economic wellbeing was assessed by two measures. The young cohort first survey, and both mid-aged surveys asked respondents to indicate how well they were able to manage on their available income. Response options were: impossible; difficult all of the time; difficult some of the time; not too bad; and easy. Each survey for both cohorts asked women to indicate how stressed they were about money, with response options of: not at all; somewhat; moderately; very; and extremely stressed (there was a further response option of ‘not applicable’ for this item, which was coded as missing data).

Health

Psychological health

The second ALSWH surveys asked respondents about various aspects of their psychological health. In the young cohort survey, women were asked if they had experienced depression or episodes of intense anxiety in the previous 12 months, with response options of ‘rarely’, ‘sometimes’, or ‘often’ (an omitted response was scored as ‘never’). The mid-aged cohort survey asked women to indicate if they had experienced depression or anxiety in the previous 12 months with response options of ‘never’, ‘rarely’, ‘sometimes’, or ‘often’.

Current psychoactive medication use was also assessed in the second surveys. Women were asked if they had taken medication for nerves (eg. Valium, Serapax, Ducene), to help with sleep (eg. Normison, Mogadon), or for depression (eg. Prozac, Aropax) in the previous four weeks. Responses were scored so that having taken any of the relevant medication scored one, and not having taken any of the relevant medication scored zero.

The CES-D 10 was used to measure current depression. The 10 item scale asked how often certain feelings had been experienced during the last week. The CES-D 10 uses a four point scale (where 0 = ‘rarely or none of the time’; 1 = ‘some or a little of the time’; 2 = ‘occasionally or a moderate amount of the time’; and 3 = ‘most or all of the time’). Higher scores equate to more depressive symptomatology (range = 0-30), where scores equal to or greater than 10 indicate the presence of clinical depression (Andresen et al., 1994).

In the second survey of young women, respondents were asked ‘In the past week, have you been feeling that life isn’t worth living?’; and, ‘In the past six months have you ever deliberately hurt yourself or done anything that you knew might have harmed or even killed you?’ (modified from Beck, Schuyler, & Herman, 1974). Response options were yes/no.

Psychological health was assessed by the Mental Health Component Score (MCS) of the Medical Outcome Short Form Health Survey (SF-36 [Ware & Sharebourne, 1992]). All of the eight areas of functioning and health measured by the SF-36 are used to calculate the MCS. The mental health subscales were more heavily weighted than the other subscales in the calculation of the MCS (Ware & Davies, 1995). Scores ranged from 0 – 100, with higher scores reflecting better psychological health. The MCS has very good reliability, and has consistently demonstrated validity in use with random samples (Ware & Davies, 1995).

Physical health

Women in all surveys were asked if they had ever received a diagnosis of various medical conditions. In the first young cohort survey the listed conditions included: diabetes, heart disease, hypertension, low iron, asthma, a sexually transmitted disease, cancer, or ‘other’ major illness. Several conditions were added to the second young cohort survey: gestational, Type I or Type II diabetes; hypertension during pregnancy; hypertension not during pregnancy; endometriosis; urinary tract infection; chronic fatigue syndrome; and Hepatitis B or C. The number of medical conditions was summed for each survey, resulting in scores that ranged from 0-8 for the first young cohort survey, and 0-15 for the second young cohort survey.

In the mid-aged cohort first survey, listed medical conditions included: diabetes, heart disease, hypertension, stroke, thrombosis, low iron, asthma, bronchitis/emphysema, osteoporosis, cancer (measured by 5 items for: breast, cervical, lung, bowel & skin), and ‘other’ major illness. In the second mid-aged cohort survey, the diabetes item was split into two new items: Type I and Type 2 diabetes; and ‘lung cancer’ was replaced with ‘other cancer’. The number of medical conditions was summed for each survey. This resulted in a range of scores from 0-15 for the first survey and 0-16 for the second survey. Across the four surveys, low numbers of women had more than three medical conditions, and since scores were not normally distributed, the measures were categorically recoded to reflect: zero, one, two, or three or more medical conditions.

In each survey women were asked if they had experienced any of a range of physical symptoms over the previous 12 months, with response options on a four point Likert scale: ‘never’, ‘rarely’, ‘sometimes’, or ‘often’. The first and second young surveys asked about allergies, aches and pains, urinary symptoms, bowel problems, gynaecological problems, skin and sleep problems using 16 items. Scores for the scale were summed for each survey, resulting in a range of possible scores from 0-48, where higher scores reflected more symptoms that were experienced more frequently. For the first young survey the symptoms scale had good internal reliability (Cronbach’s alpha = 0.75), and a range of 0-44. For the second young survey, the symptoms scale had good internal reliability (Cronbach’s alpha = 0.79), and a range of 0-42.

The first and second mid-aged surveys asked about allergies, breathing, aches and pains, digestive problems, fracture, urinary, bowel and menstrual problems, hot flushes, and skin, eye, hearing and sleep problems using 25 items. Scores for the scale were summed, resulting in a range of possible scores of 25-100, where higher scores reflect more symptoms that were experienced more frequently². For the first mid-aged survey the symptoms scale had very good internal reliability (Cronbach's alpha = 0.82), and a range of 25-94; while the second mid-aged survey had similar reliability (Cronbach's alpha = 0.80), and a range of 25-84.

Physical health was measured by using the Physical Component Score (PCS) of the SF-36 (Ware & Sharebourne, 1992). The SF-36 measured eight areas of health and functioning, all of which were used to calculate the PCS, with the physical health subscales (physical functioning, role-physical, and bodily pain) weighted more heavily than the remaining subscales (i.e. social functioning, general health, vitality, role emotional, mental health; Ware & Davies, 1995). Possible scores ranged from 0 – 100, where higher scores reflected better health. The PCS has excellent reliability ($r = 0.92$), and has consistently demonstrated validity in use with random samples (Ware & Davies, 1995).

Procedure

The following information was summarised from Lee (2001) and Brown et al. (1998). The mailing procedure was based on the Dillman protocol (Dillman, 1978). For Survey 1, potential participants were mailed introductory materials and the survey, along with a reply paid envelope in April 1996. A week after the initial mail-out, potential participants were sent a card that thanked them for their participation and reminded those who had not returned their surveys to do so. Two weeks later, women who had chosen not to participate, or whose packages had been returned unanswered, were removed from the potential participant pool. Four weeks after the first mail-out a second package of study materials was sent to women who remained in the potential participant pool. Four weeks after that, a final reminder card was mailed to potential participants who had not responded. This procedure was completed in September 1996. Due to the confidentiality requirements of using the Medicare database, the study team was unable to use normal follow-up recruiting procedures.

Participants were all provided with a toll free enquiry telephone number. Women were also given the opportunity to complete the survey by telephone if they experienced difficulty with the written questionnaire. In addition, interviews were made available in the participant's own language. The ALSWH was widely publicised during the data collection period in order to raise public awareness.

The women who participate in the ALSWH are tracked by the ALSWH team in order to minimise the drop-out rate (Lee, 2001). All participants were asked to provide the contact details of someone who would always know where they were should they move. Every mail-out is sent with a 'change of address' card and when it becomes apparent that a participant has moved (eg. a newsletter returned 'addressee unknown'; non-response to a substudy or survey), steps are immediately taken to trace the whereabouts of the participant (Lee, 2001).

Young Survey 2 was mailed to participants in 2000, Mid-aged Survey 2 was mailed to participants in 1998. Two weeks later, reminder/thank you notes were sent to all participants. Reminder notes were sent to women who had not responded four weeks after the first reminder/thank you notes

² For the mid-aged surveys, responses of 'never' scored 1; 'rarely' scored 2; 'sometimes' scored 3; and 'often' scored 4.

were mailed. Two weeks after that, all women who had not responded to the second survey were telephoned.

Data analysis

SPSS (v. 11) was used for all quantitative data analyses. ALSWH data were weighted to account for the deliberate over-sampling of women from rural and remote locations in all analyses where area of residence was not included in the model. A variety of different quantitative analyses were conducted, and these are described in the relevant sections.

Data limitations and considerations

The ALSWH samples are broadly representative of Australian women within the targeted age groups. However, compared to census data, women who were living in relationships (married or de facto), and those who were born in Australia or other English speaking countries were over-represented, and indigenous women were under-represented (Brown et al., 1998). Among the mid-aged cohort, women in the paid workforce were over-represented; whereas among the young cohort, women in the paid workforce were under-represented (Brown et al., 1998). There was also a tendency for women with higher education to be over-represented. It is also possible that ALSWH participants may respond to survey questions that portray themselves in a 'good light'. However, all survey based research is potentially susceptible to this type of response bias.

The cross sectional analyses conducted for this report result in descriptions of associations between variables found at a particular point in time. Therefore, no causal or temporal inferences can or should be made from the cross sectional results. Many of the tables included in this report show cross sectional results for Survey 1 and Survey 2 of the ALSWH. The women who participated in Survey 2 were a subset of the women who participated in Survey 1. Therefore, some changes over time may be associated with selective drop-out. In a detailed study of the attrition rates and characteristics among ALSWH data, non-respondents to Survey 2 were found to be more likely than respondents to smoke and to have lower socioeconomic status (as measured at Survey 1; Young, Powers, & Bell, 2004). However, this study concluded that measures of association calculated using ALSWH data may still be valid, despite selective attrition.

Throughout this report the term 'childless women' refers to women who did not have children living with them who were aged under 16 years. However, among the mid-aged cohort, many women would have had children living with them who were aged 16 years or older. A further note regarding the mid-aged cohort data concerns the longitudinal analyses. A low number of mid-aged mothers had separated after Survey 1. Therefore, longitudinal analyses conducted with the mid-aged cohort data are limited to descriptive, non-inferential statistics.

Income was measured at Survey 2, but not as a part of Survey 1. A high level of missing data on this variable was noted, particularly among the mid-aged cohort. In addition, participants may have underestimated their income. Furthermore, the income measure used in this report includes the income of the respondent only, and not the income of partners. Therefore, the income of partnered women will not reflect total available household income.

Participant characteristics

Relationship status

Cross-sectional analyses participants

The least frequent relationship status category was that of sole motherhood, across all of the surveys. Sole mothers comprised between two and three percent of each sample. Unpartnered childless women formed the majority of the young cohort surveys. Partnered childless women formed the majority of both mid-aged surveys. It must be kept in mind that children were defined as being less than 16 years of age; many mid-aged women had older children living with them. As will be noted from the data in Table 1, the percentage of women with children increased for young women from Survey 1 to Survey 2; and decreased for mid-aged women from Survey 1 to Survey 2.

Table 1: Frequencies and percentages for relationship status in each of the four ALSWH surveys

Relationship status	Survey							
	Young 1		Young 2		Mid-aged 1		Mid-aged 2	
	N	%	N	%	N	%	N	%
Sole mothers	331	2	285	3	377	3	291	2
Partnered mothers	694	5	1181	12	3188	23	2036	17
Unpartnered childless	9699	66	4609	48	1694	12	1493	12
Partnered childless	2198	15	3357	35	7333	52	6785	55
Missing data	1861	13	266	3	1504	11	1651	14
Total	14783		9697		14096		12257	

Note. The percentages in each column may not sum to 100% due to rounding.

Longitudinal analyses participants

At the time of the second young cohort survey, unweighted frequency analysis showed that 73 women who were sole mothers had been partnered mothers at the time of the first survey, and 385 women who were partnered mothers had been partnered mothers at the time of the first survey. Of these 385 women, 46 indicated that they had experienced divorce or separation within a year or more than a year prior to the second survey. The responses of these women were excluded from the analyses. The responses of the 73 mothers who had experienced separation were compared to the responses of the 339 partnered mothers who had not experienced separation or divorce since the first survey.

At the time of the second mid-aged survey, which was only two years after the first mid-aged survey, 38 women who were sole mothers had been partnered mothers at the time of Survey 1, while 1693 women were partnered mothers at both surveys.

Demographic characteristics of cross-sectional analyses participants

Descriptive analyses were conducted to determine the demographic characteristics of sole mothers compared to other women. All analyses were univariate and cross-sectional.

Age

Differences in age between relationship status categories were analysed using the Kruskal-Wallis test, whereby scores were ranked regardless of group membership, and the mean rank for each group was calculated. Significant differences between groups were indicated by a Chi Square calculation. The Kruskal-Wallis test is the non-parametric equivalent of a one-way analysis of variance (ANOVA), and was appropriate in this instance because screening analyses revealed that the data for age by relationship status did not meet the homogeneity of variance assumption required for ANOVA.

There was a significant association between relationship status and age in both the first and second young cohort surveys. Inspection of the mean ranks and ages in Table 2 revealed that, in both surveys, sole mothers tended to be younger than partnered mothers, and older than unpartnered childless women.

Table 2: Young Surveys 1 and 2, mean ages and standard deviations, and mean ranks for relationship status.

Relationship status	Survey					
	Young 1			Young 2		
	M age	SD	M rank ^a	M age	SD	M rank ^b
Sole mothers	21.13	1.31	7468	25.06	1.47	5225
Partnered mothers	21.59	1.32	8544	25.41	1.41	5843
Unpartnered childless	20.48	1.46	5831	24.40	1.44	4086
Partnered childless	21.30	1.40	7820	24.92	1.45	4955

a. $\chi^2(3, 12,849) = 912.32, p < 0.001$

b. $\chi^2(3, 9399) = 528.94, p < 0.001$.

Age was significantly associated with relationship status in the mid-aged cohort surveys. Inspection of the mean ranks and ages (see Table 3) revealed that mid-aged mothers in both surveys tended to be younger than childless women. Across the four surveys the size of age differences was small, which was to be expected given the age ranges within each survey sample.

Table 3: Mid-aged Surveys 1 and 2, mean ages and standard deviations, and mean ranks for relationship status

Relationship status	Survey					
	Mid-aged 1			Mid-aged 2		
	M age	SD	M rank ^a	M age	SD	M rank ^b
Sole mothers	47.33	1.38	3862	49.23	1.45	3040
Partnered mothers	47.24	1.42	3744	49.31	1.46	3194
Unpartnered childless	47.85	1.46	4751	49.89	1.52	3962
Partnered childless	47.91	1.46	4919	49.88	1.49	3939

a. $\chi^2(3, 9105) = 365.66, p < 0.001$.

b. $\chi^2(3, 7536) = 173.42, p < 0.001$.

Area of residence

The number of women living in remote areas was quite small compared to urban and rural regions. In cross tabulation analyses, this resulted in low frequencies in some cells, particularly those for sole mothers (as low as $n = 4$). Therefore, rural and remote categories were collapsed in the following analyses, and referred to as ‘non-urban’. Since area of residence was used as a dichotomous variable, logistic regressions were used to calculate the odds for each relationship status category of living in a non-urban area. In all analyses, the responses of partnered childless women were used as the reference category.

At the time of the first young survey, being a sole mother was not significantly associated with living in a non-urban area, relative to partnered childless women. As will be noted from Table 4, a similar percentage of sole mothers and partnered childless women lived in non-urban areas. This situation had changed when Survey 2 was conducted. At this time, sole mothers had over twice the odds of living in a non-urban area, relative to partnered childless women. This was accounted for by a higher percentage of sole mothers residing in a non-urban area at Survey 2, and a lower percentage of partnered childless women residing in a non-urban area at Survey 2.

Table 4: Young Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of living in a non-urban region by relationship status category

Relationship status	Survey							
	Young 1				Young 2			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	330	35	1.16	0.91, 1.48	272	44	2.33	1.81, 3.00
Partnered mothers	694	46	1.84	1.54, 2.19	1142	44	2.31	2.00, 2.66
Unpartnered childless	9683	20	0.55	0.50, 0.61	4408	20	0.74	0.66, 0.82
Partnered childless	2196	32	1.00		3261	25	1.00	

Note. Percentages refer to the percentage of women in each category who lived in a non-urban area. For example, 35% of the 330 women who were unpartnered with children in the first young survey lived in a non-urban area.

As Table 5 shows, relationship status was significantly associated with area of residence among the mid-aged cohort surveys. The results for mid-aged women were quite different from those for young cohort women. Across both surveys, the relationship status categories had decreased odds of living in a non-urban area relative to partnered childless women. There was very little change in the percentages of women per category who were living in a non-urban region from the first to the second survey, although changes may be masked by similar numbers of women moving into and out of relationships and non-urban areas.

The results show that compared to other women in their age cohorts, sole mothers aged 22-27 years had increased odds of living in a non-urban area; while mid-aged sole mothers had decreased odds of living in a non-urban region. These results might reflect the general trend found among non-urban women, whereby non-urban women have children at an earlier age than urban women. Non-urban mid-aged sole mothers may have had their children at an earlier age and would therefore be more likely than urban sole mothers to have children aged over 16 years.

Table 5: Mid-aged Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for living in a non-urban region by relationship status category

Relationship status	Survey							
	Mid-aged 1				Mid-aged 2			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	376	22	0.64	0.50, 0.83	289	25	0.70	0.54, 0.92
Partnered mothers	3181	26	0.78	0.71, 0.86	2023	26	0.77	0.69, 0.86
Unpartnered childless	1679	22	0.65	0.57, 0.73	1486	23	0.64	0.56, 0.73
Partnered childless	7303	31	1.00		6724	32	1.00	

Note. Percentages refer to the percentage of women in each category who lived in a non-urban area.

Country of birth

Logistic regression analyses were used to determine the odds of being born overseas. In all analyses, the responses of partnered childless women were used as the reference category. Table 6 contains a summary of the young cohort survey results. Sole motherhood was not significantly associated with overseas birth in either of the young surveys, relative to partnered childless women.

Table 6: Young Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of overseas birth by relationship status category

Relationship status	Survey							
	Young 1				Young 2			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	325	6	0.70	0.44, 1.11	283	7	1.08	0.67, 1.75
Partnered mothers	691	11	1.27	0.96, 1.67	1176	8	1.32	1.03, 1.69
Unpartnered childless	9627	11	1.22	1.04, 1.43	4569	11	1.70	1.44, 2.01
Partnered childless	2128	9	1.00		3338	6	1.00	

Note. Percentages refer to the percentage of women per relationship category who were born overseas.

As with the young cohort surveys, results for the mid-aged surveys revealed no significant association between sole motherhood and overseas birth, relative to partnered childless women in both the first and second mid-aged cohort surveys (see Table 7).

Table 7: Mid-aged Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of overseas birth by relationship category

Relationship status	Survey							
	Mid-aged 1				Mid-aged 2			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	370	29	1.05	0.83, 1.32	287	22	0.74	0.56, 0.99
Partnered mothers	3156	35	1.42	1.30, 1.56	2015	34	1.35	1.21, 1.50
Unpartnered childless	1675	31	1.15	1.02, 1.29	1480	26	0.92	0.81, 1.04
Partnered childless	7252	28	1.00		6706	27	1.00	

Note. Percentages refer to the percentage of women per relationship category who were born overseas.

Summary

While young cohort sole mothers tended to be younger than partnered mothers, they were older than unpartnered childless women in both young cohort surveys. Results for the mid-aged cohort surveys showed that mothers, whether partnered or unpartnered, tended to be younger than childless women. By the time of the second young cohort survey, young sole mothers had increased odds of living in a non-urban region relative to partnered childless women, as did partnered mothers. By contrast, mid-aged women with children had decreased odds of living in a non-urban region relative to partnered mothers. For both the young and mid-aged cohorts, there was no significant association between sole motherhood and overseas birth, relative to partnered childless women.

Demographic characteristics of longitudinal analyses participants

Among the young cohort, there was no significant difference in age between mothers who separated ($M = 25.82$, $SD = 1.32$) and those who remained partnered ($M = 25.80$, $SD = 1.22$), $F(1, 324) = 0.02$, $p = .906$.

Area of residence at Survey 2 was not associated with separation among the young cohort, $\chi^2(1, 401) = .09$, $p = 0.763$. However, change in area of residence was just significantly associated with separation, $\chi^2(1, 401) = 8.18$, $p = .042$. As shown in Table 8, mothers who separated were more likely to have moved to a non-urban area than mothers who remained partnered. However, the numbers of women involved were small, so this result should be viewed with caution. The majority of women, 93 percent of those who remained partnered and 88 percent of those who separated, did not change areas.

Table 8: Results of cross tabulation analysis for separation by change in area of residence among the young cohort

Area status	Remained partnered		Separated	
	N	%	N	%
Stayed urban	92	28	20	29
Moved to non-urban	3	1	4	6
Moved to urban	20	6	5	7
Stayed non-urban	216	65	41	59
Missing data	8		3	
Total	339		73	

Among the mid-aged cohort³, the mean age of mothers who remained partnered was 49.24 ($SD = 1.45$), and the mean of mothers who separated was 49.45 ($SD = 1.62$). The majority of mid-aged women in both groups did not move from the type of area that they were living in at Survey 1. Two of the women who separated (6%), and 12 women who remained partnered (1%) moved to a non-urban area, while 1 woman who separated (3%) and 10 women who remained partnered (1%) moved to an urban location.

³ The low number of mid-aged mothers who separated from a partner meant that descriptive analyses only were conducted in the longitudinal analyses of mid-aged cohort data.

Qualitative method

Sampling frame

The sampling frame was originally designed to include women who were raising their child or children aged 16 years or under, who were separated or divorced from the child/ren's other parent, and who were not currently living with a partner. Difficulties with recruiting (described below) led to the introduction of broader inclusion criteria. Therefore, the sampling frame included women who were living with their children and who were not currently living with a partner.

Recruitment

Posters advertising the research were distributed to women's centres, local health and community centres, libraries, preschools, child minding centres, playgroups, shopping centres, adult education centres (eg. universities, TAFE), Centrelink offices, Department of Community Services (DOCS) service centres, and other social services that were available in the targeted areas, such as family support services.

The initial response to the posters was very low. The reasons that underlie the low response may include childcare difficulties, concerns over privacy in a group situation, a lack of familiarity with research procedures and a resulting lack of trust in the process, and a lack of time.

The level of advertising was increased by requesting coverage from local newspapers and radio stations. Internet based resources were used, whereby the poster was sent to mailing lists and discussion groups that were concerned with sole motherhood. In addition, the researchers contacted local services to ask for their advice concerning the recruiting of women for the focus groups. In many cases, local non-government agencies responded by telephoning people on their client lists and asking women directly if they would like to attend a focus group. This resulted in an increase in responses and attendance.

Each of the women who contacted the researchers with an enquiry about participating was asked if they knew of anyone else who might be interested in taking part. Thus women were recruited by advertising, contact from local support services, and 'snowballing'.

Focus group schedule

The schedule was centred on three main areas of inquiry:

- Economic concerns related to separation/divorce and raising children without a partner
- The impact of economic concerns on health and wellbeing
- The impact of the local area on lifestyle, health and wellbeing

The questions on the schedule were open ended. Where appropriate, participants were prompted in order to elaborate on the areas of interest (eg. Can you tell me more about ...? How did you feel about...? What happened next?). After the first focus group, a question was added that asked about women's future plans, particularly about how they felt about retirement and superannuation.

Demographics Survey

Participants in the focus groups completed a short survey. The purpose of the survey was to assess the composition of the focus groups with regard to age, children's ages, the length of time participants had been sole mothers, and about employment, income, country of birth and place of residence.

Procedure

Nine areas were selected based on statistics from the 2001 Census (summarised in Appendix C). To increase the chances of interviewing a diverse range of women, a wide range of areas was selected based on distance from capital cities, population, age, family make-up, and economic indicators (employment, median rents/mortgage repayments, and median household income).

Advertising was commenced in each area approximately four to five weeks prior to the focus group. Potential participants who contacted the researchers were sent Information Statements. Women who wished to participate were booked into a focus group. A reminder telephone call was made by the researchers to the participants the day before the group was to be held. Focus group venues included private function rooms, community centre rooms, and conference rooms. Each venue was investigated for its suitability. Criteria included privacy, comfort of the participants, ease of access by public transport, and availability of refreshments

Each focus group started with introductions and the participants were thanked for their attendance. After participant queries were answered, written consent to participate was obtained. At this point the tape recorder was switched on and the focus group schedule was followed. Participants were reimbursed \$30 each to contribute to the costs of transport and childcare incurred as a result of attending the group.

Data analysis

Audiotapes were transcribed verbatim and entered into the QSR NVivo qualitative analysis program. Initially, data were coded for the subject areas that were the focus of the enquiry, that is, all segments of data that pertained to education, employment, income, economic wellbeing, health, and area of residence were coded. Each subject area was then examined for themes and issues that arose for that specific area. The complete set of focus group data were then subjected to a thematic analysis, which led to additional themes and issues that are reported in Section 9.

Data limitations and considerations

Although the focus group study was conducted with women from a diverse range of backgrounds, the participants did not necessarily constitute a representative sample. Therefore, focus group findings are useful in offering possible explanations for quantitative findings, and as an exploratory method for determining areas for future research.

Participant characteristics

A total of 48 women attended focus group discussions. Table 9 describes the attendance for each group. Women's ages ranged from 20 to 56 years, with an average age of 37.2 years. A similar number of participants were in their thirties and forties, fewer women were in their twenties, and fewer still were in their fifties. The participants had between one and four children, with an average

of 1.8. Children's ages ranged from four months to 34 years, with an average age of 8.8 years. Women had been sole parents from between four months and 26 years; the average length of time as a sole mother was 7.6 years.

The majority of women (N = 40) were Australian born, while eight women were born in other English speaking countries. Three women who attended groups mentioned during the focus group sessions that they were of Aboriginal origins. None of the women who took part came from a non-English speaking background.

Table 9: Focus group area types (populations) and participant attendance numbers per group

Group No.	Bray's Area Classification (population)	N	%
1	Urban non-capital (100,000+)	3	6.3
3	Rural (10 – 40,000)	5	10.4
4	Inner capital	3	6.3
5	Rural (10-40,000)	4	8.3
6	Inner capital	4	8.3
7	Rural (non-urban – 40,000)	3	6.3
8	Outer capital	5	10.4
9	Outer capital	6	12.5
10.1	Rural (non-urban & 10 – 40,000)	3	6.3
10.2	Rural (non-urban & 10 – 40,000)	8	16.7
11	Urban non-capital (100,000+)	4	8.3

Women were asked to indicate all their sources of income (see Table 10). The majority of the participants were receiving at least some of their income from a government source. Less than half were receiving child support, while 37.5 percent were earning a wage or salary. Twenty one women, or 44 percent, indicated that they were undertaking paid employment. Of these, eight were employed full time, five were employed part time, and eight were casually employed.

Table 10: Focus group participant sources of income

Income source	N	%
Wage/salary	18	37.5
Own business/farm	1	2.1
Private/superannuation	0	0
Child support	20	41.7
Government pension or allowance	38	79.2
Austudy/Abstudy	4	8.3
Other	4	8.3

Women were asked to indicate the highest education qualification they had received. Their responses are described in Table 11. The majority of women had received a certificate or diploma. Of all the participants, 17 percent (N = 8) indicated that they were currently undertaking further study.

Table 11: Participant qualifications at the time of the focus group

Qualification	N	%
None	2	4.2
Year 10	11	22.9
Year 12	5	10.4
Trade	1	2.1
Certificate/diploma	16	33.3
Degree	10	20.8
Higher degree	1	2.1

Women were asked two questions about their income. The first asked how they managed on their available income, and the second asked them to indicate their gross average weekly income. The frequencies of responses to these items are reported in Tables 12 and 13. Most women were inclined to respond that they found it difficult all, or some of the time to manage on their available incomes. However, there were responses for all of the available response categories. Similarly, responses for gross weekly income covered all of the response categories. Of the women who attended focus groups, most (31; 65%) were in rental accommodation. However, the groups also included women who owned their own homes (4; 8%), were purchasing a home (10; 21%), and who were boarding (3; 6%).

Table 12: Income management among participants

Income management	N	%
Impossible	2	4.2
Difficult all the time	21	43.8
Difficult some of the time	19	39.6
Not too bad	5	10.4
Easy	1	2.1

Table 13: Focus group participant's gross weekly income

Gross weekly income (\$)	N	%
<200	3	6.3
200-299	5	10.4
300-399	9	18.8
400-499	9	18.8
500-599	7	14.6
600-699	3	6.3
700-799	4	8.3
800-899	2	4.2
900-999	2	4.2
1000 +	2	4.2

The results of the demographic survey indicated that the focus group discussions included women from a diverse range of backgrounds. Age ranges of women and their children were wide, as was

the range of years since women had become sole parents. Economic indicators, income management, gross income, and housing, were also diverse. Women from non-English speaking backgrounds did not take part in the focus groups. With this important exception, the composition of participant groups was considered adequate to describe the experiences that women had encountered as sole mothers.

Section 3: Education

Sole mothers have been found to have low levels of education in overseas research (eg. Cairney & Wade, 2002; Franz, et al., 2003; Weitoft, Hagland, & Rosen, 2000) and also in Australian investigations (Rodgers & Wilson, 1998; Carlile et al., 2002). For example, among parents in receipt of Parenting Payment Single (PPS) 74 percent had an education level of Year 10 or less, while 11 percent had a recognised post-secondary school qualification (Carlile et al., 2002). Furthermore, education levels among sole parents in receipt of PPS were significantly lower than those found among the general population (Carlile et al., 2002).

Lower education levels have been associated with increased financial hardship and deprivation (Bray, 2001) and with poorer health among sole mothers (Lahelma, Arber, Kivelä, & Roos, 2002). Past US based research has indicated that higher education among sole mothers was associated with higher earnings and lower levels of financial strain (Jackson, Brooks-Gunn, Huang, & Glassman, 2000).

A possible explanation for the association between financial hardship and lower education levels among sole parents, is the proposition that lower education acts as a barrier to participation in the paid workforce (Burke, 2001; Jackson, Tienda, & Huang, 2001; Rodgers & Wilson, 1998). For example, based on a review of overseas literature, Kalb (2003) concluded that sole parents appeared to be in need of further education, based on findings that indicated low education levels and an association between low education and unemployment status among sole parents in the US. In Australia, lower education levels, defined as a lack of post-school qualifications, have also been associated with lower paid employment participation (Rodgers & Wilson, 1998); while qualitative research has identified access to further education as a determinant of future paid employment among Australian sole mothers (Morehead, 2002).

Some evidence of the impact of higher education levels on paid employment participation was found in a study of separated parents with 'shared care' custody arrangements, whereby those parents who had higher levels of education were more likely to be undertaking paid work (Dickenson, Heyworth, Plunkett, & Wilson, 1999). However, other research has found that all other things being equal, higher education of sole mothers resulted in very little increase in the probability of paid employment participation among sole mothers, relative to partnered mothers (Gray, Qu, de Vaus, & Millward, 2002).

There is some evidence that Australian sole parents may take steps to increase their education levels. Among PPS recipients, 40 percent indicated that they had plans to undertake further study, while 12 percent of the sample were currently students (Carlile et al., 2002). In another study that compared four groups of government income support recipients (unemployed, sole parents, partners/carers/parents, disabled/sick), sole parents were the most likely to be undertaking further education (Landt & Pech, 2000). Undertaking further education appeared to be largely motivated by the desire to increase paid work prospects. For instance, among sole parents in receipt of PPS, those who were studying indicated that they were doing so to improve their chances of obtaining paid work, or to improve skills related to the paid work they were doing (Carlile et al., 2002).

Several barriers to further education among sole mothers have been suggested by past research. For example, the financial cost of courses may deter sole parents from undertaking further education (Carlile, et al., 2002). In addition, the age of the youngest child has been found to have an

association with education levels among sole but not partnered mothers; as the age of the youngest child increased so did the education level of sole mothers (Gray et al., 2002). Therefore, the presence of young children may prevent sole parents from undertaking further education. The association between poorer health and lower education levels (Lahelma et al., 2002) may be indicative of poorer health preventing further education. No research was found that indicated factors that may have assisted Australian women in undertaking further education. However, research concerned with paid employment has indicated that childcare, social support, and flexibility in employment arrangements are important factors for sole mothers who undertake paid work (Morehead, 2002). It is possible that the same factors play a role in sole mothers' ability to undertake further education.

Past research has suggested that undertaking further education might result in both positive and negative outcomes for sole mothers. Completing further education among a group of sole mothers in the US was found to have positive outcomes for their children, including increased aspirations for their children's education, increased aspirations in their children, and an increased ability to help with children's homework (Burns & Scott, 1997). On the other hand, findings from Gray et al. (2002) suggested that further education may not lead to increased paid employment participation; while another study found that undertaking education while on government support benefits can lead to a delayed entry into paid employment, while the student completes their course (Saunders, Brown, & Eardley, 2003).

The current study examined the education levels of sole mothers relative to those of other women for both the young and mid-aged cohorts of the ALSWH. A longitudinal examination of the ALSWH data was conducted to determine the changes in education status that occurred when mothers experienced separation from their partners. Qualitative data were then examined with the purpose of elaborating on the experiences of sole mothers in seeking, maintaining and completing further education.

Quantitative results

Cross-sectional associations between relationship status and education

Univariate results

Relationship status was significantly associated with education across all four surveys (see Table 14). The results for the four surveys are illustrated in Figures 1 to 4. In each graph, the percentages shown refer to the percentage of women per relationship status category who had achieved the relevant education level (eg. Fig. 1, 50% of partnered mothers had reached Year 10 or less). For each graph, the marker (◆) represents percentages for sole mothers, while the other relationship categories are represented by bars.

The majority of young cohort sole mothers had an education level of Year 10 or less, with the percentage of sole mothers decreasing as education level increased (Figures 1 & 2). By the time of the second survey, a higher percentage of sole mothers indicated that they had a tertiary qualification. Since this was a cross sectional analysis, this type of change reflects movements into and out of both relationship status and educational categories. Women with children were noticeably less likely to have a university or higher degree than childless women, while similar percentages of all relationship categories had a non-university degree tertiary qualification.

Table 14: Chi square results for relationship status by education

Survey							
Young 1 (N=12873)		Young 2 (N=9125)		Mid-aged 1 (N=12444)		Mid-aged 2 (N=10506)	
df	χ^2	df	χ^2	df	χ^2	df	χ^2
9	1556.88	9	1187.76	9	341.31	9	281.41

Note. All Chi squares were significant, $p < 0.001$.

The picture for mid-aged cohort women was quite different.⁴ While the majority of sole mothers had an education level of Year 10 or less, the next most likely qualification was having a university degree or higher (see Figures 3 & 4). Whereas sole mothers were the *most* likely of the young cohort to have achieved Year 10 or less as their highest qualification; sole mothers were the *least* likely of the mid-aged cohort to have achieved Year 10 or less as their highest qualification.

Multivariate analyses

The majority of sole mothers in each survey indicated that they had an education level of Year 10 or less. Since this level of education will equate to a lower level of potential income, and by extrapolation to lower economic wellbeing, the education item was dichotomised for multivariate analyses to reflect the status of having Year 10 or less as a highest education level (scored 1), with other education categories as the alternative (scored 0). Education status was entered as the outcome variable, with relationship status entered as the predictor variable in the first logistic regression (Model 1); the regressions were then recomputed including the demographic variables (age, area, Aboriginal/Torres Strait Islander origin; Model 2). The purpose of including demographic measures was to adjust the model for potential confounding variables.

⁴ Education was not measured during the second mid-aged survey, so findings represent relationship status of mid-aged women at Survey 2 by their education level at Survey 1, two years earlier.

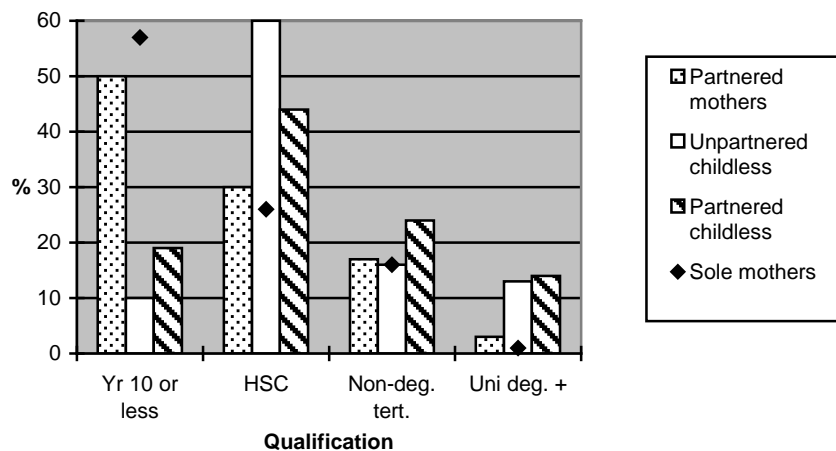


Figure 1: Young Survey 1 cross tabulation results for relationship status by education

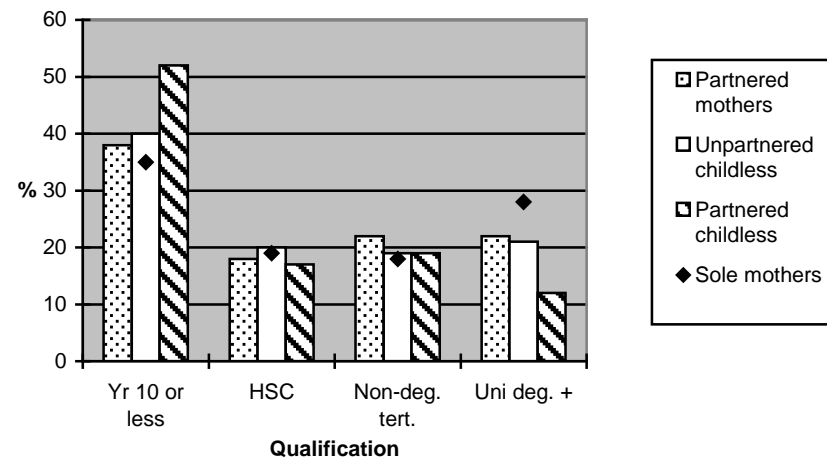


Figure 3: Mid-aged Survey 1 cross tabulation results for relationship status by education

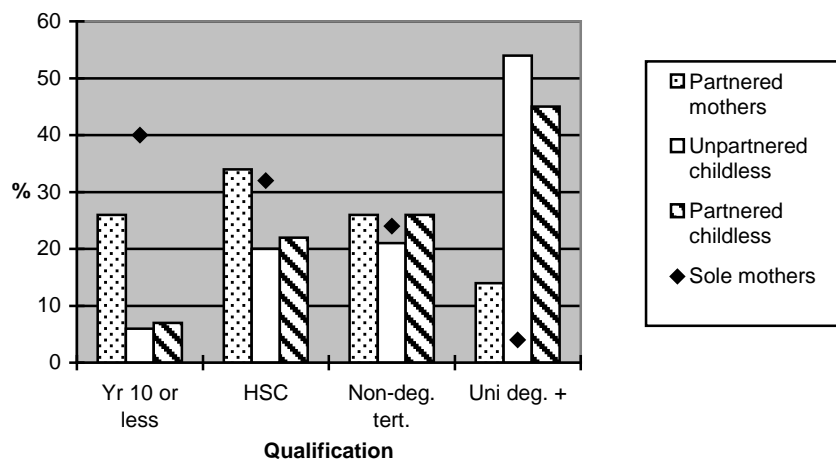


Figure 2: Young Survey 2 cross tabulation results for relationship status by education

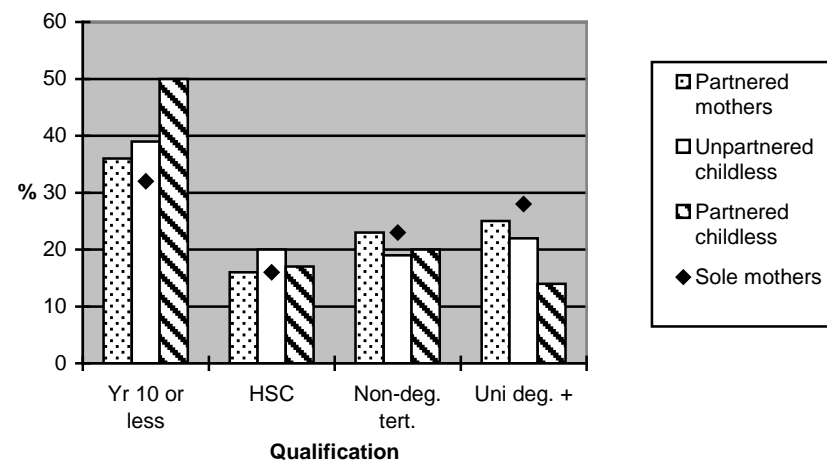


Figure 4: Mid-aged Survey 2 cross tabulation results for relationship status by education (measured at the time of the Mid-aged Survey 1)

Multivariate results

All of the logistic regression analyses revealed significant associations between relationship status and education level. The first young cohort survey results indicated that sole mothers had over five times the odds of having achieved Year 10 or less as their highest qualification, relative to partnered childless women (see Table 15). Partnered mothers had similar results in the first survey, with over four times the odds of an education level of Year 10 or less, relative to partnered childless women. At the time of the second survey, sole mothers had over seven times the odds of having an education level of Year 10 or less, relative to partnered childless women. Results for partnered mothers were no longer similar to sole mothers. There were small reductions in the odds ratios from Model 1 to Model 2, indicating that demographics had a small impact on the education level of sole mothers, but not for women in other relationship categories.

Table 15: Young Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for the odds of having Year 10 or less as highest education level by relationship status (Model 1); and by relationship status and demographics (Model 2).

Relationship status	Survey			
	Young 1		Young 2	
	Model 1	Model 2 ^a	Model 1	Model 2 ^a
	OR	OR	OR	OR
	(CI)	(CI)	(CI)	(CI)
Sole mothers	5.67 (4.44, 7.24)	5.46 (4.25, 7.02)	8.93 (6.74, 11.83)	7.68 (5.72, 10.29)
Partnered mothers	4.31 (4.44, 7.24)	4.30 (3.56, 5.20)	4.71 (3.89, 5.71)	4.05 (3.32, 4.94)
Unpartnered childless	0.46 (0.40, 0.52)	0.43 (0.38, 0.49)	0.80 (0.67, 0.97)	0.81 (0.67, 0.99)
Partnered childless (ref)	1.00	1.00	1.00	1.00

a. Model 2 adjusted for age, area of residence, and Aboriginal or Torres Strait Islander origins.

Table 16: Mid-aged Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for the odds of having Year 10 or less as highest education level by relationship status (Model 1); and by relationship status and demographics (Model 2).

Relationship status	Survey			
	Mid-aged 1		Mid-aged 2	
	Model 1	Model 2 ^a	Model 1	Model 2 ^a
	OR	OR	OR	OR
	(CI)	(CI)	(CI)	(CI)
Sole mothers	0.49 (0.40, 0.61)	0.52 (0.41, 0.65)	0.47 (0.36, 0.60)	0.48 (0.37, 0.62)
Partnered mothers	0.56 (0.52, 0.61)	0.61 (0.56, 0.66)	0.56 (0.51, 0.62)	0.60 (0.54, 0.67)
Unpartnered childless	0.62 (0.55, 0.69)	0.65 (0.58, 0.73)	0.63 (0.56, 0.71)	0.63 (0.56, 0.71)
Partnered childless (ref)	1.00	1.00	1.00	1.00

a. Model 2 adjusted for age, area of residence, and Aboriginal or Torres Strait Islander origins.

Across both mid-aged cohort surveys, sole mothers had decreased odds of having an education level of Year 10 or less, relative to partnered childless women. Table 16 shows a very small change in the odds ratios between Model 1 and Model 2, indicating that demographic variables had very little impact on the association between relationship status and education level for the mid-aged cohort. Sole mothers had the lowest odds of an education level of Year 10 or less of the relationship status categories, a finding which was illustrated in Figures 3 and 4.

Longitudinal analyses: Changes in education status upon separation

Data analysis

Education level among the young cohort was examined by developing a categorical measure derived from the dichotomous variable that measured education in previous analyses of Surveys 1 and 2 (Year 10 or less/more than Year 10). The measure used three categories to assess change in education level from Survey 1 to Survey 2:

- level remained at Year 10 or less
- level increased from Year 10 or less to greater than Year 10
- level remained at greater than Year 10

Student status among the young and mid-aged cohorts was examined by using responses to a question on the first survey that asked if women were currently attending an educational institution, and a question on the second survey that asked how many hours women spent studying in a week (dichotomously scored as: not studying/studying). The measure developed for this analysis used four categories:

- non-student in both surveys
- started studying
- stopped studying
- student in both surveys.

Due to the low number of mid-aged mothers who had separated since Survey 1 ($n = 38$), and the comparatively high number of mothers who remained partnered ($n = 1693$), it was considered appropriate to present descriptive data only for the mid-aged cohort.

Results

There was a significant association between separation and changes in education level among the young cohort, $\chi^2(2, 300) = 7.08, p < 0.029$. Of the mothers who had separated, 16 percent ($n = 9$) had increased their level of education since the time of the first survey, compared to 7 percent ($n = 16$) of mothers who had remained partnered. However, 46 percent ($n = 26$) of mothers who had separated compared to 40 percent ($n = 97$) of mothers who had remained partnered had an education level of Year 10 or less at the time of the second survey.

Separation was also associated with change in student status among the young cohort, $\chi^2(3, 311) = 23.58, p < 0.001$. As will be noted from Table 17, mothers who had separated were more likely to have started studying since the first survey compared to mothers who had remained partnered. Compared to mothers who remained partnered, mothers who had separated were less likely to have been a non-student at both surveys and to have stopped studying, and were about as likely to have been a student at both surveys.

Table 17: Results of cross tabulation analysis for separation by change in student status among the young cohort

Student status	Remained partnered		Separated	
	N	%	N	%
Non-student both surveys	207	80	31	57
Started studying by Survey 2	26	10	19	35
Stopped studying by Survey 2	18	7	2	4
Student both surveys	6	2	2	4
Total	257		54	

Of the mid-aged mothers who separated, 26 percent (n = 9) had started studying since the first survey, compared to 5 percent (n = 81) of mothers who remained partnered. Nearly 30 percent of mothers who separated (n = 10) had stopped studying since the time of the first survey, compared to 6 percent of mothers who remained partnered. Interestingly, comparisons revealed that a higher percentage of mothers who separated were students at Survey 1 and Survey 2, compared to mothers who did not separate. At Survey 1, 29 percent of mothers who later went on to separate were students, compared to 10 percent of mothers who remained partnered. At Survey 2, 27 percent of the mothers who had separated were students, compared to 8 percent of mothers who had remained partnered.

Overall, the results indicated a strong tendency for mothers who separated to be actively pursuing further education when compared to mothers who stayed partnered. However, among the young cohort, more than half of the mothers who separated did not start further education. Furthermore, although 16 percent of young cohort mothers who separated increased their level of education over the study period, separated mothers were still less likely than partnered mothers to have more than a Year 10 level of education by the time of the second survey. The qualitative data were examined to explore the issue of education among sole mothers in more detail, and in particular to identify potential factors that might act to facilitate and those that might act as barriers to further education among sole mothers.

Qualitative results

Education was an important issue for the sole mothers who attended focus groups. Themes for education were both positive and negative in nature. Broadly speaking, the main themes that emerged from the data were concerned with planning further education, factors that motivated sole mothers to consider study as an option, the impeding and facilitating factors they perceived in undertaking further education, the difficulties experienced in maintaining study, experiences of not completing courses, the outcomes of completing education, and women's feelings about their experiences as mature age sole mother students.

I actually have a dream...

Among the sole mothers who had not completed post-school courses, many spoke of a desire to undertake further training or education. Women had both investigated courses by themselves and with assistance from the Jobs Education and Training (JET) scheme:

...this Jobs Education Training program which they set up, and I thought oh, okay so they're trying to help me here, and I umm, I, I said I wanted to speak to someone and make a plan. [FG6]

...if I can get my course one day...I'll be on a decent income

Planning to undertake further study and actually enrolling in courses involved one main motivation: to obtain future paid employment. Underlying this motivation, were two main factors. Firstly, sole mothers were aware that the Parenting Payment Single (PPS) would cease when their youngest child turned 16. While this impending loss of income support caused women stress, it was also the most frequently mentioned reason that women gave for considering further study.

Secondly, sole mothers were motivated by a desire to 'get qualified' in order to obtain paid employment and improve their financial circumstances. A further motivation was mentioned by one woman, who in addition to enhancing her employment prospects spoke about the impact of her life choices on her child:

There's two reasons that I'm going to get qualified. One, basically so that I'll be able to earn enough money to keep us at some point... But the other one is that I really want, more importantly than the financial thing, I want my son to see me having a fulfilling life. You know, and that means a, having a job that I like... because I think that the role model that you are, that you can be happy, you know, mum's happy. Because the thing about the normality that you create, that helps them to understand what's possible... [FG6]

...it's all very well to say go out and get the, do some study, but...

In order to study, sole mothers needed to have a number of elements in place, many of which involved the simultaneous removal of obstacles. For example, sole mothers had to find a course held during suitable hours where they were eligible for enrolment, obtain appropriate childcare, have funds available to support their households and studies, childcare and transport costs, and organise transport. Once these were in place, periods of time in which to complete course work needed to be organised. One sole mother who was in the process of organising housing, childcare, transport and her own course enrolment said, '...if one of those things doesn't happen, then the whole thing falls kaput.' Simultaneous barrier removal formed an obstacle to further education, in addition to the individual barriers, which are described below.

Sole mothers who had experienced difficulty in accessing education spoke about courses being held at night as a major obstacle to their participation. For example,

I found that too, is that a lot of the courses they have that you may want to do, they're in the evening, which is hard because you, your kids need to get to bed, it's tryin' to find a babysitter... [FG10.2]

Difficulty in obtaining childcare was most commonly talked about in the context of courses being held in the evening, as was shown by the above quote. A further point was raised by a sole mother who lived in a remote area that was a considerable distance from the nearest university. This woman had wanted to participate in external university classes but pointed out that accessing childcare while she attended compulsory residential schools was not possible.

The cost of study was also raised, and included the cost of childcare, books, and the cost of living while studying:

...everyone keeps telling me I should go back to study, that's all very well, but I'm paying over \$300 a week rent, where is it going to come from? [FG6]

Where sole mothers had young children, particularly of preschool age, further study was viewed as impossible due to mothering responsibilities. Other obstacles to education that were raised by women included the lack of available information, lack of education facilities in remote areas, availability of transport, and psychological health. Low self esteem and depression were both mentioned as barriers to committing to further education.

...that was how I was able to get my degree...

Many sole mothers had managed to overcome barriers to education, and had found a number of factors that facilitated their entrance into courses and their ability to maintain study until the course was completed.

Most commonly, sole mothers talked about government assistance as being a major contributor to their ability to obtain and maintain education. Government assistance with course information (via JET), childcare placement and fees, course fees, and the PPS were all identified as helpful factors. For instance:

I do say thank god for (Centrelink payments), which on my perspective that's (how) I scraped through to get, you know, with that and part time work, to get through uni, and, you know, the, the benefits I was able to get, childcare and stuff like that with the kids, thank god because, and I just hope that never is relinquished. [FG3]

Another factor that helped sole mothers in pursuing education included social support from friends and family. One woman noted that her course had been delivered through 'flexible delivery', whereby courses were held during weekend workshops that were more accessible for her than daily or nightly classes.

I couldn't get the assignment done...

Non-completion of courses was not a common outcome among sole mothers who took part in focus groups, however, it does warrant some investigation. Dropping out of education was precipitated by many of the same factors that had prevented other women from starting courses, such as loss of childcare, and the need to be with younger children. In addition, the pressures of balancing motherhood with study and other life stresses contributed to their decision to withdraw or drop out. For example,

I got hit with too many things, externals in my life, circumstances, I don't have a computer, so just trying to get out and juggle it all, I couldn't do it. And I pulled out and I felt so stupid, I felt so ashamed that I had, and say, I didn't even tell the TAFE teacher, I just stopped going, and I was so embarrassed that I had to tell Centrelink that I couldn't cope... [FG10.2]

Other sole mothers who were currently studying also talked about experiencing difficulty in managing multiple roles, as a mother, householder, student, and some women were also

undertaking paid work. A further concern of some student sole mothers was the economic stress of being a student while raising children. Although women had expressed gratitude for PPS that had helped them to undertake further study, their economic circumstances were described as having ‘nothing in terms of economic security’, as ‘scraping by’, and as ‘slogging away’. While these descriptions were not dissimilar to those expressed by sole mothers who were not students, it should be noted that being a student does involve additional expenditure that may not be met by available government benefits (eg. Pensioner Education Supplement, Education Entry Payment).

Non-completion of courses led to feelings of failure, loss of hope, and shame, as was illustrated by the previous quote. Some sole mothers had returned to study once the obstacles they faced were overcome, or had passed with time (eg. children getting older). However, it was noted that women chose courses that met two main criteria, that the courses would lead to improved paid employment prospects and that would fit in with their roles as mothers. For example,

You only take courses that are around those time slots that you can get a babysitter. [FG1]

...because of the studies I'd done...

Outcomes of undertaking further education were both positive and negative. Among the positive outcomes were improved feelings of confidence and self esteem, obtaining paid employment, and contact with other adults:

I learnt how to do computers and all those sorts of things, office work, and then they did... work experience, and I had this lovely work experience at this umm, advertising agency, and after, they offered me a job, which was really, really wonderful. [FG6]

Negative outcomes included concerns over Higher Education Contribution Scheme (HECS) debts, and disappointment and depression when paid work was not obtained. For example:

I do have skills and I do have qualifications, and I have updated some of my qualifications but still, I get the interviews but I don't get the job. [FG5]

Discussion

Cross sectional results revealed that the majority of sole mothers had an education level of Year 10 or less. These results concur with past research where the majority of sole parents in receipt of PPS were found to have an education level of Year 10 or less (Carlile et al., 2002). However, differences emerged between the young and mid-aged cohorts, when comparisons were made to other women. Where young cohort sole mothers were the *most* likely to have achieved Year 10 or less among their cohort; mid-aged cohort sole mothers were the *least* likely to have to have achieved Year 10 or less among their cohort. Similarly, young sole mothers were the *least* likely of their cohort to have achieved a university or higher degree; whereas mid-aged sole mothers were the *most* likely of their cohort to have achieved a university or higher degree. A study conducted in Sweden has found similar results, whereby older sole mothers had higher education levels than younger sole mothers (Andren, 2003).

The ages at which sole mothers had their children offer one explanation for the differing results between cohorts. Comparing sole mothers only at the time of the second surveys: 21 percent of the young cohort was aged 18 years or younger at the birth of their first baby, while only 6 percent of

the mid-aged cohort had their first baby at 18 years of age or younger. Having a baby when 18 or less will necessarily interrupt secondary education, which will have a flow-on impact on tertiary education opportunities. Women in the mid-aged cohort were older when they had their children, and therefore had an opportunity to complete education prior to having children.

In addition, the ages of children may also impact on education. For example, within the category of sole mothers (second surveys), 13 percent of young cohort women had children under 12 months of age, and 64 percent of young cohort women had children aged 12 months to 5 years; while only 10 percent of the mid-aged cohort had children aged less than six years. Past research has indicated a positive association between children's ages and education level among sole mothers (Gray et al., 2002). The qualitative study gave further support to this contention, whereby women felt that undertaking education was not possible while their children were of preschool age.

The qualitative study provided information about other potential barriers to participation in further education among sole mothers, including psychological health, financial difficulty, course timetabling, difficulties obtaining childcare, transport and a lack of information about education opportunities. In the remote area, distance formed a further barrier. While many of these barriers might also exist for partnered mothers, sole mothers do not have access to another live-in adult with which to share parenting and household responsibilities. Therefore, overcoming each of the potential barriers to education simultaneously is a challenge that sole mothers must meet alone. Furthermore, some barriers were found to have an association with sole motherhood in later quantitative analyses. For example, sole motherhood was associated with money stress (Section 6) and with poorer psychological health (Section 7). Therefore, it would seem that sole mothers are more likely to face some barriers to further education than partnered mothers. However, further quantitative research is required to determine the extent and impact of these barriers on sole mothers in the population.

Despite these potential barriers, many sole mothers who attended focus groups had undertaken further education. Among those who were not studying or participating in paid work, planning for further education was common, as has been indicated in other research (Carlile et al., 2002). Furthermore, longitudinal analyses demonstrated that mothers who separated were more likely than mothers who remained partnered to begin further education. This finding extends upon earlier research that found sole parents were the most likely of government benefit recipients to be undertaking education (Landt & Pech, 2000).

Among the focus group participants, motivations for undertaking further study were predominantly focussed on improving paid employment prospects, in accord with past research among PPS recipients (Carlile et al, 2002). Sole mothers who attended focus groups undertook further study with a view to preparing for the cessation of PPS and improving their economic status. Factors that had helped sole mothers to successfully undertake education included:

- Government assistance
 - Course information (JET)
 - Assistance with obtaining and paying for childcare
 - Assistance with course fees
 - Income support (PPS)
- Social support
- Flexible course delivery

It was noted that the latter two factors were similar to those found by Morehead (2002) as factors that facilitate paid employment participation among sole mothers. However, the paucity of research in this area, and in the area of barriers to education among sole mothers, indicated the need for further research.

Past research had yielded conflicting results with regard to the impact of further education on paid work outcomes. While some research suggested education made little difference to paid work participation rates of sole mothers compared to partnered mothers (Gray et al., 2002) other research has indicated that further education is necessary in order for sole mothers to successfully obtain paid work (Dickenson et al., 1999). Paid work participation among sole mothers is discussed in more detail in the following section.

The completion of courses had positive outcomes for women in the focus groups, including finding paid employment, and increased self esteem and confidence. However, not completing courses was also mentioned by women as contributing to feelings of failure, loss of hope and shame. Non-completion of courses was most commonly caused by loss of childcare, the need to be available for children's needs, and difficulty with balancing multiple roles. One further difficulty mentioned by women was the economic stress associated with being a sole mother student.

Very little research has been conducted with sole mothers as to the outcomes of the further education that they undertake. The findings of the current study indicated that sole mothers may face serious difficulties with further education, and may be at risk of not completing courses due to the complex nature of their lives. Further research is required in this area to determine the extent of these difficulties amongst sole mother students.

Conclusions

This investigation has contributed to the small body of Australian information that has been concerned with sole motherhood and education. Findings demonstrated low levels of education among young sole mothers, but also revealed a strong tendency among sole mothers to increase their level of education. Focus group findings indicated that pursuing further education involved overcoming many obstacles, including issues to do with childcare, transport, cost, accessibility, and health. More research is required to determine the extent of these difficulties amongst sole mothers who wish to undertake further education, especially since each of these potential barriers is amenable to effective interventions at both policy and service provider levels. The primary aim of sole mothers in seeking further education was to obtain paid employment. In the following section (4), statistical associations between education and paid employment are explored in more detail.

Section 4: Paid employment participation

Increasingly the focus of Australian government policy has been on encouraging sole parents to undertake paid employment, which, theoretically, will place sole parents in a position where they are less reliant on government benefits. This shifting focus mirrors an international trend in reducing welfare expenditure by moving welfare recipients into the paid workforce (Baker, 2000). In the Australian context, sole parents are entitled to income support (PPS) until their youngest child reaches 16 years of age. After this sole parents must find paid employment, or apply for alternative income support (eg. unemployment benefits, disabled/carer pension). In the previous section, qualitative findings suggested that the cessation of PPS was a motivating force for sole mothers to undertake further education as a way of preparing for paid workforce participation.

An analysis of ABS data from 2002 found that 21 percent of sole mothers were employed full time, and 27 percent part time (Gray, et al., 2003). Compared to partnered mothers, sole mothers have been found to have lower rates of paid workforce participation (Gray et al., 2003). By contrast, sole parents in receipt of PPS had the highest paid work participation rates compared to other government benefit recipients (Gregory, 2003).

An interview survey of parents in receipt of PPS revealed that 63 percent of sole parents would have preferred to have been in paid employment, but only 40 percent were actively seeking paid employment, and just 8 percent had undertaken paid work in the two months prior to the survey (Carlile et al., 2002). In another study, 83 percent of PPS recipients were planning to seek paid work, but only 43 percent were preparing to do so within 12 months (Gregory, 2003). Discrepancies between the expressed desire for paid work, seeking paid work, and undertaking paid work might be partially explained by the obstacles to paid employment experienced by sole mothers.

Job availability appears to be a major obstacle for sole mothers. A lack of jobs was named by sole parents as a barrier to paid employment in two separate surveys (Carlile et al., 2002; Dickenson, et al., 1999). Furthermore, Gray et al. (2003) found that sole mothers were more susceptible to changes in national employment rates than partnered mothers.

The suitability of available jobs has also been indicated by PPS recipients as a reason for having poor expectations for obtaining paid employment (Carlile et al., 2002). While the meaning of 'suitability' is unknown, other past research has suggested that flexibility with work hours (Morehead, 2002) was an important consideration for sole mothers undertaking paid work. It is possible that work hours might be involved in assessing the suitability of available paid employment. An investigation of ABS data revealed that part time paid employment participation had increased among sole mothers, from 12 percent in 1983 to 27 percent in 2002 (Gray et al., 2003). However, other data indicated that 20 percent of part time employed sole mothers would have preferred full time paid work (Gray et al., 2003).

Family responsibilities have also been indicated as a barrier to paid employment (Carlile et al., 2002; Dickenson et al., 1999). Balancing the competing needs of family and paid work has been raised by sole parents as a significant issue that affects their ability to seek paid work, and the number of hours they are able to spend in paid employment (Dickenson et al., 1999; Gregory, 2003). It is currently unclear, however, how 'family responsibilities' are defined by sole parents, and what it is about these responsibilities that precludes paid work participation. Childcare is related to this issue. A lack of affordable, accessible childcare has been identified as a barrier to paid

employment (Carlile et al., 2002; Dickenson et al., 1999) and the presence of affordable, accessible childcare was a facilitative factor among sole mothers who were undertaking paid work (Morehead, 2002). Research has also indicated that some separated parents believed that formal childcare was unsuitable for their children (Dickenson et al., 1999), a finding that warrants further exploration.

Poor health has been associated with sole motherhood (eg. Jayakody et al., 2000), which may affect women's ability to participate in paid work. A current debate in the literature concerns the 'role overload' and 'multiple attachment' hypotheses. The former theory proposes that women will become less healthy by taking on more roles, such as motherhood and paid employment; while the latter proposes that multiple roles offer the opportunity for increased contact with the community, which will be beneficial to health (Lahelma, et al., 2002). Investigations with sole mothers have revealed conflicting results, with some reporting a positive association (eg. Fokkema, 2002; Lahelma et al., 2002), and others a negative association between health and paid work (eg. Macran, Clarke, & Johsi, 1996; Baker & North, 1999). However, the contribution of paid work to health (the health effect) is unclear in cross sectional studies, since healthier people are more likely to undertake paid work (the selection effect; Fokkema, 2002). In one qualitative study, mothers reported the onset of psychological health problems when they started work as a part of a welfare program in the US (Hildebrandt, 2002). On the other hand, a longitudinal examination, that controlled for the effects of earlier psychological distress (selection effect), found employment to have a positive impact on psychological distress among sole mothers (Hope et al., 1999). Another longitudinal study found that entering paid work did not have any impact on levels of psychological distress among sole mothers (Ali & Avison, 1997).

The suitability of available paid work might also indicate a lack of qualifications among sole mothers. In a survey of PPS recipients, lack of skills was noted as the most common reason that sole parents gave for their low expectation of future paid employment (Carlile et al., 2002). Past research had suggested that further education was necessary to enable sole mothers to find paid work (Kalb, 2003; Morehead, 2002). Findings reported in the previous section indicated that sole mothers in their twenties had lower education levels than other women in their twenties, and that sole motherhood was not associated with lower education levels among mid-aged sole mothers. Furthermore, the qualitative findings suggested that further education did not necessarily lead to paid employment. Past research had also suggested that the lower education levels associated with sole motherhood may not adequately account for the lower paid work participation rates of sole mothers compared to partnered mothers (Gray et al., 2002).

Lack of access to transport, age (too old to find paid work), and no recent work experience have also been implicated as barriers to paid work participation among sole parents (Carlile et al., 2002; Dickenson et al., 1999; Rodgers & Wilson, 1998).

Just as some factors act to prevent women from obtaining paid work, other factors may act to facilitate paid work participation among sole mothers. One Australian study that has qualitatively examined the experiences of sole mothers who were undertaking paid employment found that seeking and maintaining paid employment were facilitated by social support, flexible working conditions, supportive employers, the ability to earn an adequate income, and the presence of a supportive ex-partner (Morehead, 2002). Each of these factors would appear to assist sole mothers with balancing their paid work and family duties.

Research has found that sole mothers undertake paid work to improve their financial positions (Gregory, 2003). The focus group results reported in the previous section were in accord with this suggestion, whereby women were undertaking further study to assist with gaining paid work, which

they felt would help them economically. However, some research has suggested that the economic outcomes of paid work may fall short of these expectations. For example, paid employment participation in lower paying jobs resulted in sole mothers having lower material wellbeing than if they had been in receipt of PPS (Walter, 2002). Other expected outcomes of paid work participation noted by sole parents have included contact with other adults and increased self confidence (Gregory, 2003).

The results of past research have indicated that the experiences of sole mothers with seeking and maintaining paid employment are complex. To investigate the occupations, work hours and preferences, and paid work participation rates of sole mothers compared to other women, quantitative analyses were conducted. Analyses were also conducted to examine the contribution of education to paid employment status. Qualitative analysis of focus group data was undertaken to elaborate on the experiences of sole mothers with paid employment, particularly with regard to job 'suitability' and 'family responsibilities'.

Quantitative results

Cross sectional associations between relationship status and paid employment

Occupation

Results for the first and second young cohort surveys revealed that relationship status was significantly associated with occupation.⁵ Among women in their twenties, sole mothers tended to be in occupations that offer lower wages (eg. sales, service, manual work), and had similar results to those found for partnered mothers. However, sole mothers who completed the second survey were more likely than other women to have an intermediate clerical/sales position, or to have a trade. Overall, these results suggest that it is young motherhood, rather than sole motherhood, that plays a role in determining the types of occupations that young women undertake.

Results of the mid-aged cohort first survey analysis showed a significant association between relationship status and occupation.⁶ Some slight differences between the responses of relationship categories were evident. However, results were similar for the four relationship status categories. It was worth noting that the majority of sole mothers in the mid-aged cohort were in professional occupations. Although not directly comparable, this contrasts with the young cohort results, where sole mothers were the least likely of their cohort to indicate they had a professional occupation. It is possible that mid-aged sole mothers completed education prior to having children (as discussed in Section 3), which may have assisted mid-aged sole mothers to attain professional positions, while sole mothers in their twenties might not have had these opportunities. In addition, results for professional occupations among mid-aged sole mothers may reflect a wider range of choices available to mothers in this position. That is, mid-aged mothers without a professional occupation may be more likely to stay with a partner, than mid-aged mothers who have a professional occupation. Detailed results for occupation can be found in Appendix D.

⁵ Survey 1: $\chi^2(24, 12,721) = 2023.23, p < 0.001$; Survey 2: $\chi^2(24, 8901) = 2092.69, p < 0.001$.

⁶ $\chi^2(27, 12,104) = 374.78, p < 0.001$.

Hours spent undertaking paid employment

Chi square analyses revealed that there was a significant association between relationship status and the hours women spent in paid work, the results are reported in Table 18. Results for the first young cohort survey revealed that sole mothers were about as likely as other women to undertake 24 hours or less of paid employment per week, were the least likely to undertake 25-40 hours per week of paid employment, and were as likely as partnered mothers to undertake 41 or more hours of paid employment per week. Among the second young cohort survey, sole mothers were slightly more likely to be undertaking part time work than full time work, and were undertaking hours in both types of employment that were similar to those undertaken by partnered mothers. Between 80 and 90 percent of women with children were not undertaking paid employment in both young cohort surveys.

In both mid-aged cohort surveys, sole mothers most commonly indicated that they were not undertaking paid work. However, the percentage of sole mothers not undertaking paid work was much lower than in the young cohort, at around 30 percent. Of those sole mothers who were undertaking paid work, the categories of 1-15 hours, and 35-40 hours in paid work per week were the most common responses. In both mid-aged cohort surveys, around 20 percent of sole mothers were spending 35-40 hours per week in paid work, with 10 percent undertaking 41-48 hours of paid work per week. Detailed results for the number of hours women were spending in paid work can be found in Appendix E.

Table 18: Chi square results for relationship status by hours spent in paid work

	Survey				
	Young 1	Young 2 (full time)	Young 2 (part time)	Mid-aged 1	Mid-aged 2
df	18	18	18	18	18
N	12780	9209	9209	12334	10309
χ^2	861.96	1497.52	64.99	348.37	445.10

Note. All Chi squares were significant, $p < 0.001$.

Preference for paid work hours

Relationship status was significantly associated with preference for paid work hours in all four surveys, as reported in Table 19. Figures 5 to 8 illustrate the cross tabulation results, showing the percentage of women per relationship status category who indicated the relevant response.⁷

⁷ The measure for satisfaction/preference for paid work hours included a 'not applicable' category in the first surveys. These results were omitted from Figures 5 and 7, therefore the percentages shown in these figures do not sum to 100%.

Table 19: Chi square results for relationship status by satisfaction with hours spent in paid work

	Survey			
	Young 1	Young 2	Mid-aged 1	Mid-aged 2
df	9	6	9	6
N	12831	9074	12369	10010
χ^2	1270.09	251.32	114.70	159.25

Note. All Chi squares were significant, $p < 0.001$.

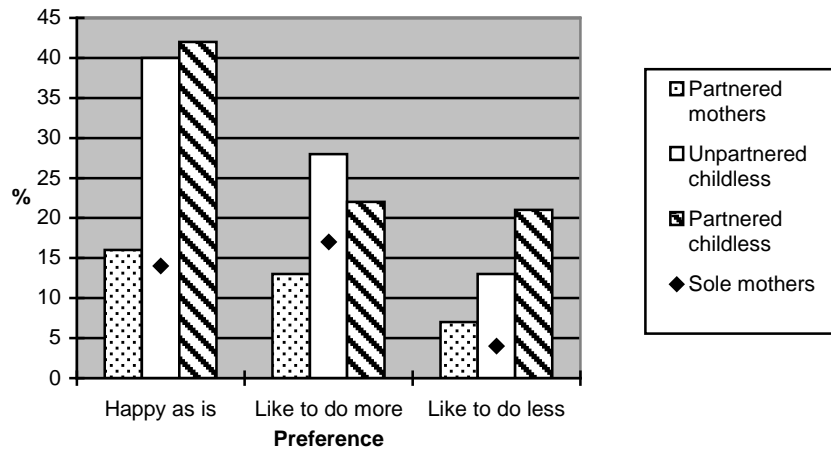


Figure 5: Young Survey 1 cross tabulation results for relationship status by preference for number of paid work hours (N/A category not shown)

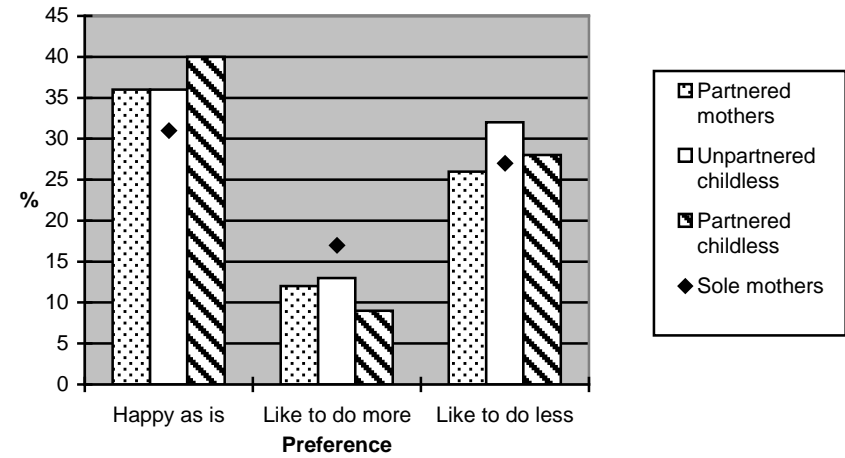


Figure 7: Mid-aged Survey 1 cross tabulation results for relationship status by preference for number of paid work hours (N/A category not shown)

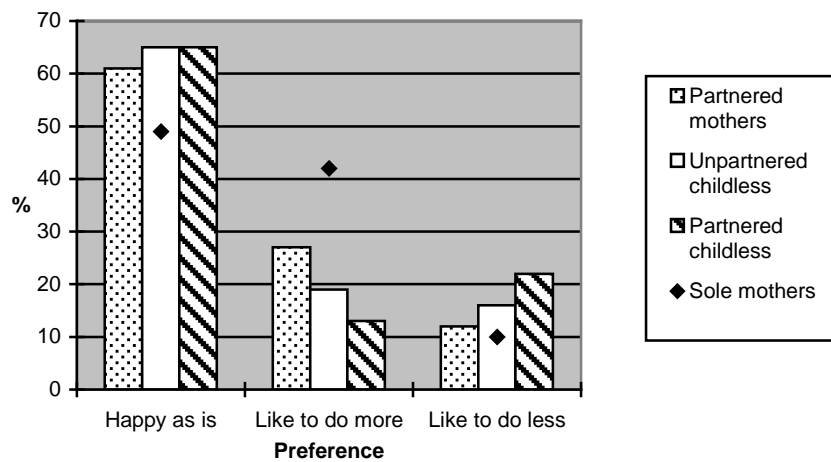


Figure 6: Young Survey 2 cross tabulation results for relationship status by preference for number of paid work hours

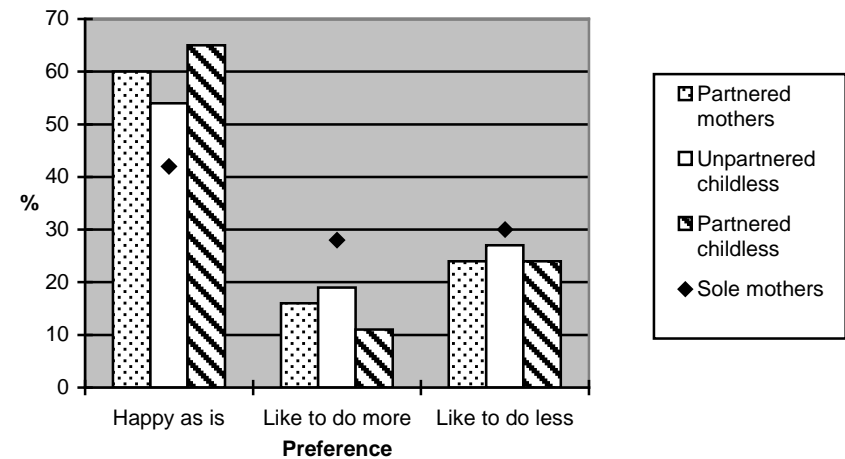


Figure 8: Mid-aged Survey 2 cross tabulation results for relationship status by preference for number of paid work hours

The majority of sole mothers in the young cohort first survey who were in paid work indicated that they would prefer to be spending more time in paid work; they were the least likely of all women to indicate that they were happy with the number of hours they spent in paid work, and the least likely to indicate they would like to do fewer hours of paid work. The mid-aged cohort first survey also indicated that sole mothers were the least likely to be happy with the number of hours they spent in paid employment. By contrast, however, in the first mid-aged cohort survey, sole mothers were more likely to indicate they would like to spend fewer hours in paid work than to spend more hours in paid work. It is noteworthy that a higher proportion of mid-aged sole mothers were in paid work and working longer hours, than young cohort sole mothers.

The second survey measure of preference for paid work hours assessed women who were and who were not in the paid workforce. In both the young and mid-aged cohort second surveys, sole mothers were the least likely group to be satisfied with the number of hours spent in paid employment, and more likely than other women to say they would have preferred to spend more hours in paid work. The mid-aged cohort sole mothers, however, were slightly more likely to say they would like to do fewer hours than they were to say they would like to do more hours of paid work.

Among sole mothers in the second young cohort survey who said they would like to do fewer paid work hours, 52 percent said they would like to do fewer hours because of childcare, 32 percent would have liked fewer hours so they had more time, and 12 percent would have liked fewer hours for other family reasons. Among sole mothers in the second young cohort survey who said they would like to do more hours of paid work, 50 percent said they had been unable to find a suitable job, 39 percent indicated childcare and 10 percent said other family reasons prevented them from doing more hours of paid work. These results suggest that childcare is a more pressing issue for sole mothers in their twenties than for sole mothers in mid-age, which may be reflecting the ages of their children. For example, mid-aged sole mothers are more likely than sole mothers in their twenties to have had children who were no longer in need of childcare.

Among sole mothers in the second mid-aged cohort survey who said they would like to do fewer hours of paid work, 64 percent said they would like more time, and 34 percent said they would like to work fewer hours for family reasons. Among mid-aged sole mothers who said they would like to do more hours of paid work, 48 percent indicated that they were unable to do more hours of paid work because they had been unable to find a suitable job, 34 percent indicated family reasons and 18 percent said health reasons prevented them from doing more hours of paid work.

Paid employment status

Univariate results

The first young cohort survey revealed a significant association between relationship status and paid employment $\chi^2(6, 12,722) = 810.80, p < 0.001$. As will be noted from Figure 9, women with children were more likely than other women to indicate that they were not undertaking paid work. Results for the second young cohort survey were also significant, $\chi^2(6, 9019) = 2215.64, p < 0.001$. The results, as shown in Figure 10, indicate that the majority of women with children, partnered or unpartnered, were less likely than other women to have been undertaking paid work. It is noteworthy that sole mothers in the second young cohort were slightly more likely than partnered mothers to be undertaking paid employment.

In the mid-aged cohort first survey, relationship status was significantly associated with paid employment, $\chi^2(6, 12,447) = 348.63, p < 0.001$. Cross tabulation results indicated that sole mothers were about as likely as partnered mothers to not be undertaking paid employment, and were slightly more likely than partnered mothers to be undertaking full time paid work (see Figure 11).

Relationship status was significantly related to paid employment in the second mid-aged survey, $\chi^2(6, 8897) = 232.91, p < 0.001$. The questions used to obtain the results differed between surveys, so the results are not directly comparable. However, a similar shape in distributions was apparent, sole mothers were about as likely as partnered mothers to not be in paid work (Figure 12).

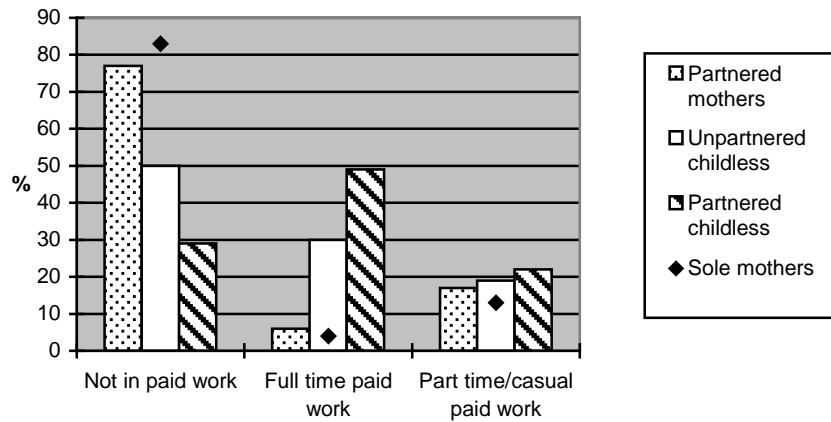


Figure 9: Young Survey 1 cross tabulation results for relationship status by paid employment

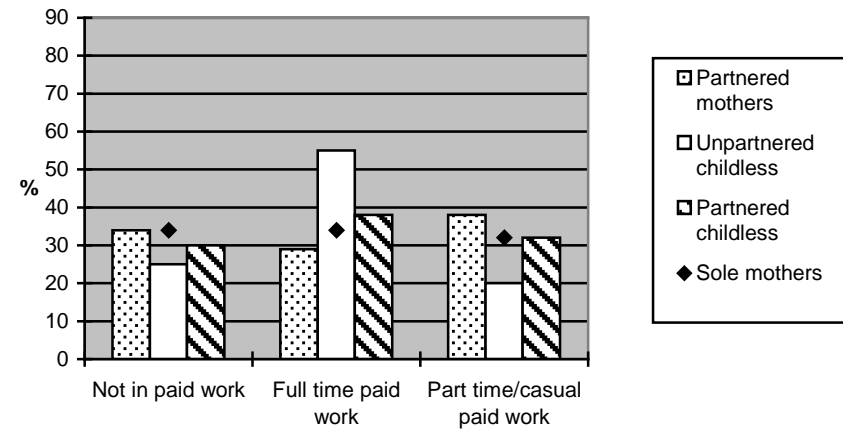


Figure 11: Mid-aged Survey 1 cross tabulation results for relationship status by paid employment

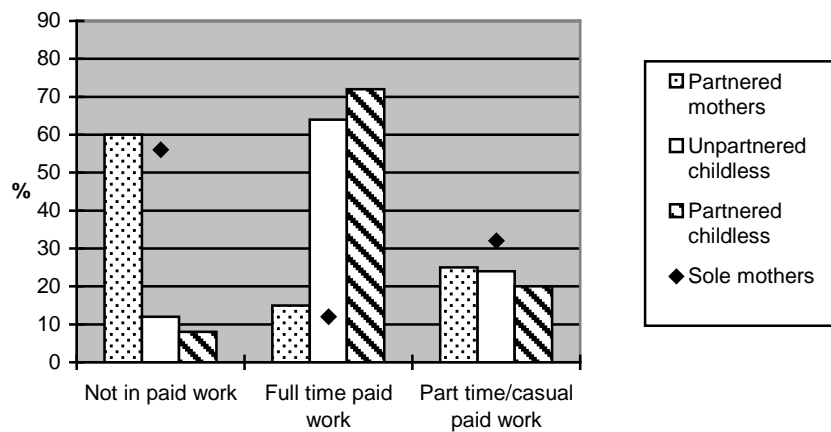


Figure 10: Young Survey 2 cross tabulation results for relationship status by paid employment

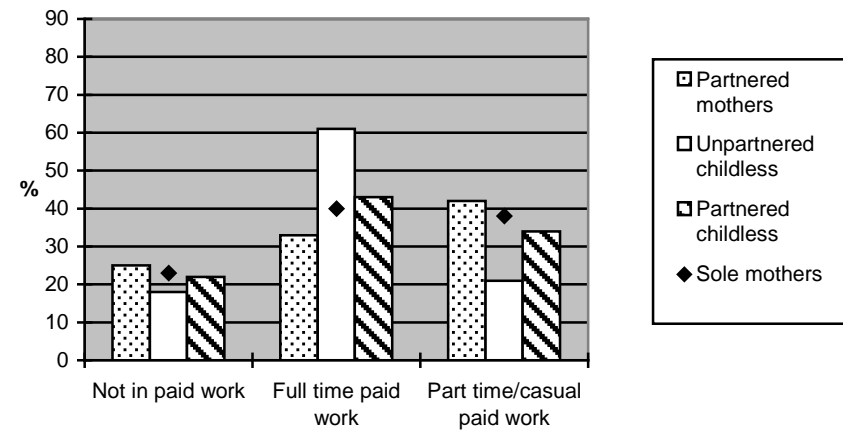


Figure 12: Mid-aged Survey 2 cross tabulation results for relationship status by paid employment

Multivariate analyses

In order to determine the odds of being in paid employment and to adjust for the impact of demographic variables and education, a series of logistic regressions were conducted. The outcome variable was not being in paid employment (scored 1), while the alternative was being in either full time or part time/casual paid employment (scored 0). In the first model, relationship status was entered as the predictor. In the second model, demographic variables were added as predictors (i.e. age, area of residence, & Aboriginal, Torres Strait Islander status) and in the third model demographic variables and the four level measure of education (Year 10 or less; HSC; Non-degree tertiary qualification; University degree or higher) were added as predictors.

Multivariate results

Multivariate results for all four surveys are reported in Table 20. Sole mothers in the young cohort survey had 11 times the odds of not being in paid employment, relative to partnered childless women. After adjusting for demographics, the odds ratio was slightly increased to 12.50. However, after adjusting for demographics and education level, the odds ratio was reduced to 10.68. This finding indicated that part of the association between sole motherhood and paid employment was accounted for by education level. Of all the relationship status categories, sole mothers had the highest odds of not being in paid employment.

These results were different at the time of the second young cohort survey, conducted four years later. Partnered mothers had the highest odds of not being in paid work compared to other relationship status categories. However, sole mothers had nearly 14 times the odds (unadjusted) of not being in paid work, relative to partnered childless women. As before, adjusting for demographics resulted in slightly increased odds of not being in paid employment, and adjusting for demographics and education resulted in a reduction of the odds ratio for both partnered and sole mothers. This indicated that among young cohort women with children, part of the association between relationship status and not being in paid employment was accounted for by education level.

In both of the mid-aged cohort surveys, sole motherhood was not significantly associated with employment status in the unadjusted models, nor in the models that were adjusted for demographics. After adjusting for demographics and education level, sole motherhood was associated with increased odds of not being in paid employment, relative to partnered childless women. Both mid-aged cohort results show that with education level held constant, sole mothers have higher odds of not being in paid employment. These results show that women who had more education were less likely to be unemployed.

A word of caution is required concerning the interpretation of these analyses. It is possible that measuring education also captured other, unmeasured, aspects of women's lives that affected paid employment status. For example, it is possible that women with higher social support had been able to obtain further education, and that social support might also have enabled them to undertake paid work.

Table 20: Odds ratios (OR) and 95% confidence intervals (CI) for the odds of not being in paid employment for relationship status: unadjusted (Model 1); adjusted for demographics (Model 2); and adjusted for demographics and education (Model 3).

Survey Relationship status	Model 1 ^a		Model 2 ^b		Model 3 ^c	
	OR	CI	OR	CI	OR	CI
Young Survey 1						
Sole mothers	11.87	8.75, 16.10	12.50	9.14, 17.11	10.68	7.80, 14.64
Partnered mothers	8.19	6.69, 10.02	10.34	8.39, 12.73	8.94	7.24, 11.05
Unpartnered childless	2.48	2.24, 2.74	1.89	1.70, 2.11	1.99	1.78, 2.21
Partnered childless	1.00		1.00		1.00	
Young Survey 2						
Sole mothers	13.98	10.67, 18.33	14.15	10.69, 18.74	10.98	8.15, 14.79
Partnered mothers	16.41	13.81, 19.49	16.64	13.90, 19.90	14.39	11.92, 17.36
Unpartnered childless	1.44	1.24, 1.68	1.37	1.17, 1.60	1.45	1.23, 1.71
Partnered childless	1.00		1.00		1.00	
Mid-aged Survey 1						
Sole mothers	1.14	0.92, 1.43	1.24	0.99, 1.56	1.51	1.20, 1.91
Partnered mothers	1.45	1.05, 1.26	1.25	1.14, 1.37	1.43	1.30, 1.57
Unpartnered childless	0.76	0.67, 0.85	0.78	0.69, 0.88	0.84	0.74, 0.95
Partnered childless	1.00		1.00		1.00	
Mid-aged Survey 2						
Sole mothers	1.03	0.76, 1.40	1.18	0.86, 1.61	1.42	1.03, 1.96
Partnered mothers	1.16	1.02, 1.31	1.28	1.12, 1.46	1.46	1.28, 1.67
Unpartnered childless	0.77	0.65, 0.90	0.80	0.68, 0.94	0.84	0.71, 0.99
Partnered childless	1.00		1.00		1.00	

a. Unadjusted

b. Adjusted for demographic variables: age, area of residence, and Aboriginal and Torres Strait Islander origin

c. Adjusted for demographic variables and education

Longitudinal analyses: Changes in employment status upon separation

Data analysis

Employment was examined by creating a categorical variable that used the dichotomous paid employment measure (undertaking/not undertaking paid work). The measure used four categories to assess change in paid employment participation from Survey 1 to Survey 2:

- undertaking paid employment at the time of both surveys
- stopped paid employment
- started paid employment
- not undertaking paid employment at the time of either survey.

Results

Separation was not significantly associated with change in paid employment status among the young cohort, $\chi^2(3, 298) = 0.96, p = .810$, and few differences were apparent among the mid-aged

cohort. Of mid-aged women who separated, 69 percent (n=22) were undertaking paid work at both Surveys 1 and 2, 3 percent (n = 1) stopped paid work, 16 percent (n = 5) started paid work, and 12 percent (n = 4) were not undertaking paid work at the time of either survey. Of the mid-aged women who remained partnered, 64 percent (n = 956) were undertaking paid work at both surveys, 4 percent (n = 60) stopped paid work, 12 percent (n = 173) started paid work, and 20 percent (n = 295) were not undertaking paid work at the time of either survey.

Qualitative results

Focus group results revealed the motivations of sole mothers who had sought paid employment, the reasons why other women had chosen not to undertake paid work, the barriers sole mothers experienced in seeking paid employment, and the determinants of the types of work that were undertaken. In addition, facilitative and outcome factors were identified.

There might be a light at the end of this financial disaster. I might be able to go to work again...

As mentioned in the previous section, women who took part in focus groups were motivated to undertake paid work by the desire to improve their financial circumstances and to be able to live independently of government benefits. Less commonly, sole mothers talked of having no choice in undertaking paid work, due to their particular circumstances. For example, one woman who had invested in property in order to prepare for retirement said,

I work sixty hours a week to survive financially. 'Cause I'm not entitled to any pension because my assets take me over the asset limit. [FG9]

Sole mothers were also motivated to undertake paid work to provide a particular role model to their children, and to improve their own self confidence. For example,

Like, if the marriage breaks down, work is one of those places where you get a lot of self-confidence because you're appreciated for what you do... [FG4]

...why choose not to work?

Many sole mothers had plans to undertake paid work, as was indicated by the above quotes and by findings from the previous section, where women had started or completed further education with a view to finding paid work. However, some women felt that their ability to parent their children would be compromised by undertaking paid work. For example,

...whether I'm ever gonna be able to do the full time job bit and feel that I'm still parenting my child in the way that I want to parent. I don't believe that I can. [FG4]

...why choose not to work? Because I want to be there for my son, I want be free to (be) involved in his things at school, I want to be free to be home if he's sick, and I think he's disadvantaged enough... [FG10.2]

For these sole mothers, paid work was not viewed as an option. A common belief among women who felt they should stay home with their children was that childcare was detrimental to their children's wellbeing. For example,

...you're doing the most important job in the world, raising the kids, instead of sticking them in childcare where they learn how to be violent and abusive. [FG1]

...go out to work? It's just not that simple.

Other factors, apart from beliefs about child rearing, impeded the ability to seek paid work. While a lack of training, general feelings of fatigue, and a perception that participating in the paid workforce would result in net financial losses were mentioned by a few sole mothers, more commonly, sole mothers talked about childcare, job availability, and their own health issues as being barriers to paid work participation.

Issues to do with childcare and paid work participation included availability of places, cost, and concerns over the quality of care and suitability of childcare for their children. Sole mothers mentioned a lack of both formal childcare places and informal childcare (eg. relatives) as preventing them from undertaking paid work:

I can't work of a day except for weekends because I don't have anyone to look after my child. [FG5]

The availability of childcare for night and weekend work, and during the Christmas school holidays was also a problem, for example,

And not just 'cause it, especially in a town like this, which a lot of it is tourist time trade, and a lot of it happens at night, evening. Restaurants business, I mean casual work, that sort of stuff, there are no facilities to put your children into safely, in the weekends or the, umm, evenings. [FG7]

The costs of childcare had also prevented women from both seeking paid work, and from accepting positions that were offered:

I applied for a job when I got over here and I was successful in getting it, but childcare was going to cost me \$270 a week, umm, then the only option was (private childcare centre), Family Daycare had a long waiting list, so I think childcare is a real issue for people who want to work. [FG10.2]

The availability of paid employment emerged as a major theme in the qualitative data. As one sole mother said, 'I can't do the work that's not there.' [FG4]. Women also felt that they had been denied positions due to their status as sole mothers:

You tell them, you know, that you want to learn and it's like 'Well, you're a mother so you're not very... You're not gonna be reliable. You're kids are gonna get sick, or...' You're not given a chance. [FG8]

A related point concerned women's ages, whereby women felt that they would be, or had been, denied paid employment because they were older:

...there's a problem then with older, the older workers as well, so you're a single parent, you're this age, what are you going to do? The jobs aren't there. [FG6]

Several sole mothers who attended focus groups had been experiencing significant health problems that had prevented them from seeking paid employment. While some women had experienced physical health problems (eg. Chronic Fatigue Syndrome, Multiple Sclerosis), psychological health problems were mentioned more frequently, particularly depression:

I'm currently in, on Centrelink, in a Centrelink system that is telling me I must be active. Actively looking for a job. Actively getting myself, if I'm not looking for a job, means studying. And, I can't do that right now, because I'm not well enough... [FG4]

As with further education, sole mothers needed to overcome multiple barriers simultaneously in order to obtain paid work. For example, women needed to be healthy, to find a job for which they were qualified, with hours that were suitable and that would fit in with affordable, available childcare, and that would pay them adequately so that they were able to make a net financial gain.

I'd like to work full time or thereabouts, but...

The barriers that sole mothers experienced to paid work participation also acted as determinants of the types of paid work that were undertaken. For example, the availability of childcare determined both the ability of women to undertake paid work and the types of paid work women felt able to accept:

I can't work of a day except for weekends because I don't have anyone to look after my child... and my mother works full time, so I'm sort of, basically (working) of a night, and I get roughly about 20 hours a week, and that's all I want at the moment... [FG5]

To obtain some flexibility, which assisted sole mothers with meeting their parenting goals, casual and part-time, rather than permanent, jobs were undertaken. For example,

I didn't want to work full time, because I knew that physically and emotionally I couldn't do that and, um, parent, so um, I've chosen to only work um, three and a half days a week at a lower rate of pay... [FG11]

I can't, can't work out the balance...

Finding different types of paid work in an attempt to balance children's needs with financial objectives formed one part of a larger theme, that of balancing multiple roles. Sole mothers talked about feeling responsible for 'absolutely everything'. In the context of paid employment, being a paid worker involved managing the logistics of running a household, taking care of children and their needs, and fulfilling obligations as a paid employee. Many sole mothers talked about feeling 'pressured' and 'stressed', which resulted in fatigue and, in some cases, the onset of physical illness and inability to continue in the paid workforce. For example,

I was taking ten buses a day to get my daughter to and from where we lived, to, you know, long day care, to work, to all this sort of thing, and I just, and I'd start at seven in the morning and I'd get home at 7.30 at night. Feed my baby and just crawl into bed... I went on automatic, you know, for years. And it was really quite scary. It caught up with me though. In my mid-thirties I just came crashing down with chronic fatigue. [FG6]

While most sole mothers did not experience such extreme outcomes, feelings of fatigue, 'tiredness' and 'exhaustion' were common:

Tiredness, I also have to deal with my children's problems as well as try and work. And I find that quite a strain at times. [FG9]

Many issues that arose when discussing barriers to paid employment also arose in the context of difficulties experienced by sole mothers as paid workers. For example, childcare arrangements were often complex, and available work was not always suitable, particularly with regard to work hours.

A lack of time for self-care was another issue that arose with regard to sole mothers and paid work. Self-care was defined as taking care of personal physical needs, such as health care, emotional and psychological needs, such as recreation and pursuit of personal interests, and social needs. A lack of time meant that self-care was sacrificed. For example,

...when it comes to health issues, trying to fit time in, I mean you take your children to doctors and dentists because they are your prime responsibility, but your own health, your own dental care... (it is) not even the financial thing, it is trying to find the time [FG7]

In addition to the difficulty of dealing with the day to day issues of running a household while undertaking paid work, the impact of unexpected events also affected sole mother's ability to fulfil paid work obligations. For example, women needed to spend time away from paid work to attend to children who became ill, were hurt, or who were suspended from school.

...luckily because of my friends it was managed.

Despite difficulties with obtaining and maintaining paid employment, 44 percent of the women who took part in focus groups were currently taking part in the paid workforce. Many sole mothers mentioned the support of friends and family as being a crucial element in their ability to undertake paid work. Support networks assisted with childcare and housecleaning, in addition to providing much needed emotional support.

Flexible work practices were also mentioned as facilitating paid work. For example, providing time-off for family emergencies, and flexibility with start and finish times to accommodate childcare arrangements. However, a lack of flexibility in work practices was also noted.

I think the job helps you...

The positive outcomes of undertaking paid work were both personal and economic. Personal outcomes included improved feelings of self-esteem, confidence, and independence, and what was described as feeling 'normal'. For example,

I lost that sense of myself as a person who was very poverty stricken in that instant (of getting a permanent job), and I dunno, that was probably the best, the most happiest feeling I've ever felt in my life... [FG3]

Other women felt that paid work helped them to cope with sole motherhood, by giving them an identity that was separate to that of 'mother':

If I didn't have my uni course, and my job now, I'd be a mess. I wouldn't be able to cope, I see this as, umm, getting outside, doing the mother thing, being there for them when they need me, yeah like, you know, but being able to have a life for myself as well... [FG10.2]

Some sole mothers felt that they were better off financially as a result of the paid work they carried out:

I worked for twelve months, I went up to a normal male's wage umm, and I was a lot better off then... Last year I earned \$35,000, um, my kids did whatever they wanted to do because I could afford to do it. [FG10.1]

It's the working poor is what it is.

While some sole mothers felt better off, others felt that financial gains from paid work participation were minimal. For example,

My wages ended up getting swallowed up in marginal tax rates and child care costs... [FG4]

The net financial gain after losses such as PPS, Family Tax Benefit (A), health care assistance, travel, electricity and telephone concessions were taken into account, were a concern. In fact, for some sole mothers, maintaining a level of income at a rate that entitled them to retain a Health Care Card outweighed the potential financial benefits of earning a higher income:

I cling on, I cling on to the little bit of pension I've got because I know if I give that up, if I do earn just above that, I will lose all the health care.[FG6]

The health costs of paid work participation were discussed previously, and many sole mothers included the personal costs of stress, time management, health problems and concerns over their children's wellbeing when assessing the value of paid work participation. For instance,

When I choose and think about work, I think about it in terms of, 'Okay, how much time away from the kids is that going to mean? How much of that am I going to have to then hassle them about their homework? How much of that is going to be, um, sorting out a whole lot of other household-related things? Time to fit in tasks and stuff?' ...you do get down to the bottom line of it, economically, how much better off am I going to be, on top of the added stress? [FG4]

Summary of qualitative findings

Sole mothers had undertaken paid employment in order to improve financial circumstances, live independently of government benefits, provide a role model for children and to improve self confidence. Various barriers to paid work were identified, including beliefs about motherhood, job availability, age, family responsibilities, childcare, lack of current qualifications, health and issues to do with balancing family and paid work responsibilities. These barriers also acted as determinants of the types of paid work (eg. casual, part time) that sole mothers had undertaken. Factors that assisted sole mothers in overcoming obstacles and maintaining their employment included social support and flexible work practices.

The outcomes of paid employment participation were both positive and negative, and in the case of economic outcomes results were mixed, with some sole mothers feeling that their economic situations were improved and others feeling that they were financially worse off. The positive outcomes of paid work included personal gains such as improved self esteem and improved

economic circumstances. Negative outcomes included increased stress and poor health, and time management issues.

Discussion

Among the ALSWH young cohort, sole motherhood was related to high odds of not being in paid employment, while among the mid-aged cohort, sole motherhood was not associated with paid work participation. Few differences were found between the paid workforce participation rates of sole compared to partnered mothers. Young cohort sole mothers undertook fewer hours of paid work than women without children, and were more likely to have undertaken part time or casual paid work, rather than full time paid work. By contrast, mid-aged sole mothers were about as likely to be undertaking part time or casual paid work as they were to be undertaking full time paid work.

Results of the current study suggest that the higher paid employment participation rates of partnered compared to sole mothers, and the higher proportion of sole mothers undertaking part time compared to full time paid work found among the population (Gray et al., 2003) might have obscured differences in workforce participation that occur at different ages. In addition, past research indicated that paid workforce participation among sole mothers increased as children become older (Gray et al., 2003), which further suggests that workforce participation rates among sole mothers may vary over the life span.

Across all of the quantitative surveys, sole mothers were the least likely to be happy with the number of hours spent in paid employment. Not being able to find a 'suitable job' was the most common reason women gave for not being able to spend more hours in paid work. Lack of suitable job availability also arose in focus groups as a barrier to paid work participation, and has been indicated as a problem for sole parents in past research (Carlile et al., 2002; Dickenson et al., 1999). These findings have two main components, job availability and job suitability.

Job availability refers to the number of jobs that are available in a given area. Several focus group areas had relatively high local unemployment rates (eg. 13%) compared to national figures. Past research had indicated that sole mothers were more susceptible to changes in employment rates than partnered mothers (Gray et al., 2003). The current qualitative study suggested that the many factors that affect sole mother's ability to undertake paid work, discussed further below, mean that their choices of paid employment are already limited. Higher local unemployment levels mean that there is a decreased likelihood of finding and obtaining a position that will accommodate other responsibilities. For example, in some areas local employment was dependant on tourism, jobs that were available involved night and week-end work, when childcare was unavailable. A further problem with regard to a restriction in available employment involved employer discrimination. Some women felt that their age and status as a sole mother contributed to unsuccessful job applications and interviews. This finding warrants further investigation to determine the extent and nature of possible discrimination experienced by sole mothers who are seeking employment.

The second component, job suitability, is more complex and involved assessing available jobs in the context of family responsibilities, childcare options, health status, qualifications (education), available assistance (facilitative factors), and the potential for the job to meet set goals (eg. improve economic wellbeing).

Family responsibilities have been found to prevent sole parents from seeking paid work (Carlile et al., 2002; Dickenson et al., 1999). The current quantitative study found similar results. Around half

of the young cohort sole mothers, and a third of the mid-aged sole mothers indicated that they were unable to work longer hours for family or childcare reasons. Findings from the qualitative study indicated that women had different opinions about the extent to which family responsibilities precluded paid work. For some women, undertaking any amount of paid work was thought to jeopardise children's wellbeing. Many women who held this belief also felt that childcare would be detrimental to their children. This extends on past research, which had found that a minority of sole parents felt that formal childcare was 'unsuitable' (Dickenson et al., 1999).

Other women who took part in the focus group study felt that family responsibilities could be adequately met by taking positions that offered flexibility, such as part time or casual paid work. Flexibility in paid work hours has been identified in other qualitative research as an important facilitative factor for paid work participation among sole mothers (Morehead, 2002). Another important determinant of paid work participation was the availability and affordability of childcare. Childcare options, or the lack of them, had caused women in focus groups not to seek paid work, to refuse job offers, and to accept part time and casual paid work rather than seek a preferred full time position. Lack of childcare has previously been identified as a barrier to paid work (Carlile et al., 2002; Dickenson et al., 1999). Notably, among the women in focus groups who were undertaking full time paid work, only two women had children of preschool age. Thus, a desire for flexible work hours to accommodate family responsibilities and available childcare, in conjunction with the ages of children (Gray et al., 2003), could be seen to underlie the higher rate of part time and casual paid work compared to full time paid work found among the young cohort sole mothers who participated in ALSWH.

Among the women who participated in focus groups, physical and psychological health problems had prevented some women from seeking paid work. Around 10 percent of the mid-aged sole mothers in the quantitative study said they were unable to do more hours of paid work because of health reasons, while this response was not common among young cohort sole mothers. Past research has indicated an association between sole motherhood and poor health (eg. Jayokody et al., 2000). Health and sole motherhood is investigated further in Section 7 of this report.

Findings from past research and the previous section suggested that education might facilitate paid work participation (Kalb, 2003; Morehead, 2002). However, qualitative findings also led to the conclusion that further education did not necessarily lead to paid work participation. In the current quantitative investigation, education accounted for some of the association between sole motherhood and paid work participation among the young cohort. Results for the mid-aged cohort suggested that their higher education levels compared to other women accounted for paid work participation levels that did not differ significantly from those of women who were partnered without children. The quantitative results suggest that a lack of education may act as a barrier to paid employment, while the presence of education may increase the chances of paid employment. However, this analysis was cross sectional in nature, so causal inferences cannot be made. It is also possible that paid employment increases the chances of education, while a lack of paid employment decreases the chances of education. Further longitudinal research is required in this area to determine the temporal sequence of events with regard to sole motherhood, education, and paid employment status.

In addition to education, flexible work practices and supportive employers assisted sole mothers with obtaining and maintaining paid work, in accord with past research (Morehead, 2002). Social support from friends and family, in the form of childcare and assistance with housework and other obligations also enabled sole mothers who participated in focus groups to undertake paid work.

A major concern for women when considering paid employment participation was whether they would be able to manage all of the obligations that being a paid worker, mother, and family manager entailed. Past research has found similar results (Dickenson et al., 1999; Gregory, 2003). Among sole mothers in the quantitative study who wished to do fewer hours of paid work, around a third from the young cohort, and two thirds from the mid-aged cohort indicated that they would like to do so in order to have ‘more time’. This finding was echoed by women in the focus groups, who sacrificed their own interests and self-care in order to fulfil family and paid work responsibilities.

The focus group results did not clearly support either the role overload hypothesis or the multiple attachment hypothesis. Some women who undertook paid work became unhealthy as a result of increased burdens, which supported the role overload hypothesis and some past research (Macran et al., 1996; Baker & North, 1999). Other women felt substantial improvements in psychological health as a result of undertaking paid work, which supported the multiple attachment hypothesis and other past research (Fokkema, 2002; Lahelma et al., 2002). In addition, some women talked about experiencing both positive and negative health outcomes of paid work participation, a finding that suggests paid work participation among sole mothers, and probably among other parents as well, is far more complex than that suggested by either of the proposed hypotheses. This finding warrants further research to determine the facets of paid work participation that are of benefit and those that are detrimental to the health of sole mothers.

Focus group outcomes indicated that some women experienced net financial gains as a result of paid work, while others felt that paid work resulted in net financial losses. Past research found that sole mothers in lower paying occupations were financially worse off when undertaking paid work, than when they were not undertaking paid work (Walter, 2002). In the current quantitative analysis, sole mothers from the young cohort tended to have occupations that were not highly paid. The most common response of mid-aged employed sole mothers was that they were undertaking professional occupations. However, a wide range of occupation types was apparent among sole mothers in both cohorts, while focus group findings indicated that many factors contributed to the economic wellbeing of sole mothers (see Section 6).

Conclusions

Quantitative results suggested that education was an important factor, although not the only factor, that contributed to the paid work participation rates of sole mothers. The ages of the mothers, and by extrapolation the ages of their children, were also important aspects of paid work participation. In addition, a high proportion of both young and mid-aged sole mothers were found to be dissatisfied with the number of hours they spent undertaking paid work. Underlying that dissatisfaction were issues such as childcare, family responsibilities and the desire for ‘more time’. To gain a more complete understanding of the factors that contribute to paid work participation among sole mothers, more population-based research is required. The qualitative results offered some insight into areas where further quantitative investigations might provide useful results.

The results of the qualitative investigation revealed that the factors that underlie the dichotomy of participation/non-participation in the paid workforce among sole mothers are complex, inter-related and often contradictory. Sole mothers were primarily motivated to undertake paid work to obtain independence and financial security. However, barriers to paid workforce participation acted to narrow the field of suitable paid work opportunities. These determinants prevented some women from seeking paid work, and led other women to accept casual and part time positions, which, contrary to their original goal, did not lead to financial security. The current findings warrant further investigation to determine appropriate strategies that will mitigate or remove any barriers to, or

adverse results of, paid work participation among sole mothers. Paid employment also led to positive outcomes of improved economic wellbeing, and improved psychological health among the sole mothers who took part in focus groups. However, positive outcomes may be largely dependent on other factors, such as social support. Factors that act to facilitate paid employment among sole mothers also warrant further quantitative investigation.

Section 5: Income

Sole parenthood has been associated with income levels in past research. For example, sole parents have been found to experience lower incomes than partnered parents in Canada (Lipman, Mac Millan, & Boyle, 2001; Lipman et al., 1997), Germany (Franz et al., 2003), and Australia (eg. Saunders, 2004). The Australian 2000-2001 Survey of Income and Housing Costs (SIHC; ABS, 2003) found that sole parent families had the lowest income of all groups aged under 65 years. The mean equivalised household disposable income of sole parent families was considerably less than that found for couple families with children (ABS, 2003).

In a comprehensive review of poverty measurement, Saunders (2004) pointed to three main indicators of poverty: those based on income, discussed further below; those based on expenditure, such as the Household Expenditure Survey conducted by ABS (2000); and those based on hardship, such as the Bray (2001) study. However, Saunders found that regardless of how poverty was measured, whether by income, expenditure or hardship, sole parents were the most likely group of all Australian families to experience poverty.

Christopher et al. (2002) assessed poverty as being after tax income that was less than half the median of national households.⁸ Among the eight OECD countries examined in this study, sole mothers were found to have the highest odds of living in poverty compared to all other family types (Christopher et al., 2002). Australian sole mothers were found to have the highest odds of living in poverty compared to sole mothers in the seven other OECD countries, and higher odds of experiencing poverty than Australian sole fathers, partnered parents, and unpartnered childless adults, after controlling for age and education (Christopher et al., 2002).

Harding, Lloyd and Greenwell (2001) assessed poverty as less than half of the average Australian income.⁹ Using ABS data, Harding et al. found that sole parent families were at a higher risk of poverty than single people, and couples with or without children for the ten years from 1990 to 2000. Around 22 percent of sole parent families were living in poverty in 2000, compared to 28 percent of sole parent families who were living in poverty in 1990. Harding et al. suggest that this fall is due in part to the introduction of the Child Support Scheme and to increased government benefits.

The SIHC found that just over half of the sole parent families surveyed received government benefits as their main source of income (ABS, 2003). The PPS is a means and asset tested benefit payable to sole parents. In addition, sole parents can apply for FTB (A)¹⁰, and may also qualify for Rent Assistance and childcare subsidies.

In the absence of intimate partner abuse or other exempting factors, sole parents who apply for FTB (A) must lodge a claim through the CSA for child support. As of 2002, the CSA had 657,332 cases, representing 606,941 payees and just over a million children (CSA, 2002). The CSA reported that from 1988-2002, in dollar terms, 88 percent of child support liabilities had been collected.

⁸ Equivalised for household size: $\text{income}/\text{size}^e$ where $e=0.5$. Income included cash and non-cash payments such as food stamps and housing support.

⁹ Equivalised for household size, ages of dependant children, and paid workforce participation.

¹⁰ All sole parents are entitled to FTB Part B as a fortnightly payment through Centrelink, or as a lump sum payment at the end of the tax year.

However, only sixty one percent of child support payers had no child support debt as of 2002, while the total of outstanding child support debt was \$758.1 million owed by 268,490 payers (CSA, 2002).

Overall, CSA (2002) figures suggested that many residential (custodial) parents, 91 percent of whom were female, had not received their full child support entitlements. ABS figures have supported this contention. In 1997, 41 percent of parents who were living apart from their children's other parent (including those who had entered into a subsequent relationship) had not received any child support (ABS, 1998). Of the 42 percent of parents who did receive child support, about one third received \$100 or less per child per month (ABS, 1998).

In a survey of both child support payers and payees who had been assessed for child support at the minimum rate, 21 percent of payers said they had never paid child support (Wolffs & Shallcross, 2000). The qualitative component of this survey revealed a number of problems with the collection of child support, including financial hardship experienced by the payer due to illness, imprisonment, high visitation costs, young age, or a lack of income. Problems were also indicated by payees, including abuse, harassment and unwanted contact with ex-partners (Wolffs & Shallcross, 2000).

In terms of income, sole parents in receipt of child support in 1997 earned more than those not in receipt of child support (ABS, 1998). Furthermore, because government benefits (FTB [A]) are proportionately reduced upon the receipt of child support, child support payments saved \$423 million dollars in government expenditure in 2001-2002 (CSA, 2002). Therefore, child support has the capacity to both increase sole parent's income and to reduce government expenditure. In terms of sole mother's income, a study of divorced families found that sole mothers in receipt of child support were less likely to be living in poverty (using the Henderson poverty line¹¹) than those sole mothers not in receipt of child support (Smyth & Weston, 2000).

The current section quantitatively examined the income of young and mid-aged sole mothers, and sources of income among mid-aged sole mothers. These analyses were descriptive in nature, and were presented to provide an income comparison between sole mothers and other women within their age cohorts. In addition, the current section qualitatively examined sole mothers experiences in obtaining income from Centrelink and the CSA.

Quantitative results

Income

Income was significantly associated with relationship status in the second young cohort survey, $\chi^2(18, 8676) = 2023.80, p < 0.001$. As can be seen in Figure 13, the majority of sole mothers had an income of between \$120 and \$499 per week. Sole mothers tended to have a higher personal income than partnered mothers. However, this measure did not include partner income. Four sole mothers indicated that they had no income, while a further 12 indicated that they received \$119 or less in income. It is unclear how these women were supporting themselves and this facet of the results was investigated further in the focus group study.

¹¹ The Henderson poverty line has been the subject of much criticism, and is based on estimated needs of families based on the size of the household examined. However, for the purpose of the current enquiry, the results of this study demonstrated that the economic status of sole mothers in receipt of child support was relatively better than the economic status of sole mothers not in receipt of child support.

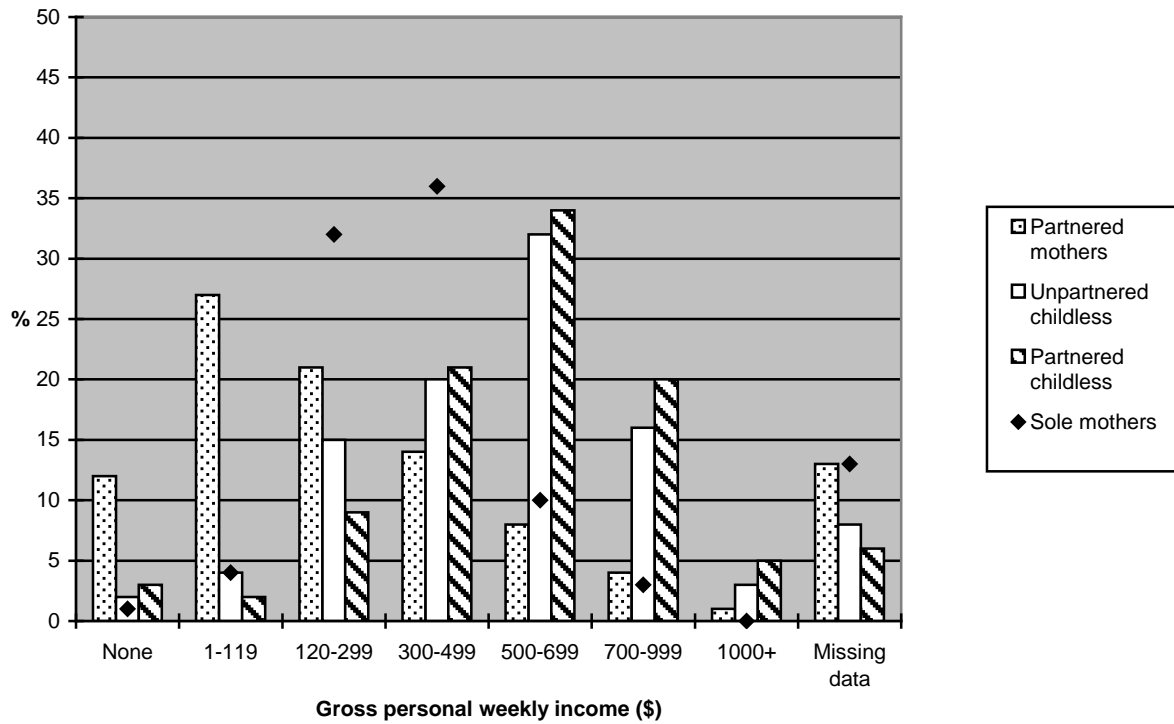


Figure 13: Young Survey 2 cross tabulation results for relationship status by income, showing the percentage of women per relationship category who indicated the relevant income category.

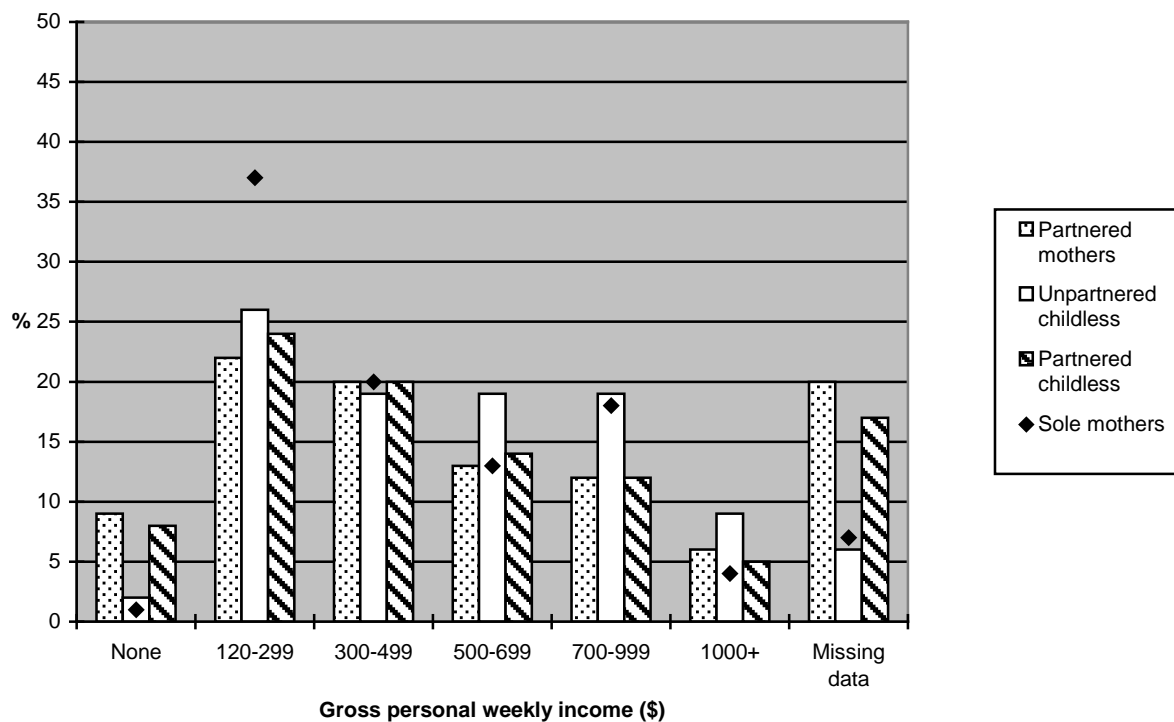


Figure 14: Mid-aged Survey 2 cross tabulation results for relationship status by income, showing the percentage of women per relationship status category who indicated the relevant income category.

Among the second young survey cohort, 91 percent of sole mothers had a Health Care Card, compared to 33 percent of partnered mothers, 21 percent of unpartnered childless women, and 10 percent of partnered childless women. The association between relationship status and the presence of a Health Care Card was significant, $\chi^2(3, 8999) = 1123.28, p < 0.001$.

Relationship status was significantly associated with income in the second mid-aged survey, $\chi^2(15, 8946) = 182.68, p < 0.001$. As can be seen in Figure 14, the main income category that distinguished sole mothers from other women was that of \$120-\$299 gross per week. Thirty seven percent of sole mothers had an income in this category, compared to less than 30 percent of women in other relationship status categories. It is also noteworthy that sole mothers were the least likely to have indicated that their income was \$1000 or more per week. As with the young cohort results, measures of income did not include partner income, therefore the income that partnered women have access to is likely be higher than that indicated in these results.

Sources of income among mid-aged women

Sources of income were measured among women who completed the Mid-aged Survey 2. Four logistic regressions were conducted, one for each potential source of income, with relationship status entered as the predictor variable. Results indicated that relationship status was significantly associated with each source of income.

Sole mothers had decreased odds of receiving income as a wage/salary, from their own business or farm, or from superannuation or a private source, relative to partnered childless women (see Tables 21 & 22). By contrast, sole mothers had around 10 times the odds of receiving income in the form of a government pension or allowance, relative to partnered childless women (see Table 22). Government allowances include allowances for children, which may account for part of this result. However, being partnered with children was not significantly associated with receiving income from a government payment.

Table 21: Mid-aged Survey 2 odds ratios (OR) and 95% confidence intervals (CI) for wage/salary as an income source; and for own business/farm as an income source.

Relationship status	Income source							
	Wage/salary				Own business/farm			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	291	56	0.39	0.31, 0.50	290	10	0.24	0.16, 0.63
Partnered mothers	2036	76	0.97	0.87, 1.09	2036	35	1.23	1.11, 1.37
Unpartnered childless	1493	71	0.76	0.68, 0.87	1494	10	0.26	0.22, 0.31
Partnered childless	6785	76	1.00		6786	30	1.00	

Note. Percentages refer to the percentage of women per category who indicated the relevant source of income (eg. 56% of the 291 women who were unpartnered with children indicated that they were in receipt of a wage or salary).

Table 22: Mid-aged Survey 2 odds ratios (OR) and 95% confidence intervals (CI) for private/superannuation as an income source; and for government allowance/pension as an income source.

Relationship status	Income source							
	Private/Superannuation				Government allowance/pension			
	N	%	OR	95% CI	N	%	OR	95% CI
Sole mothers	290	3	0.38	0.20, 0.74	290	53	10.40	8.15, 13.28
Partnered mothers	2037	7	0.86	0.71, 1.04	2036	11	1.14	0.97, 1.34
Unpartnered childless	1494	7	0.90	0.72, 1.11	1494	22	2.56	2.22, 2.97
Partnered childless	6785	8	1.00		6786	10	1.00	

Note. Percentages refer to the percentage of women per category who indicated the relevant source of income.

Qualitative results

In addition to paid employment, which was covered in the previous section (4), the sources of income that were focussed on by the participants who attended focus groups included Centrelink and child support payments. The following analysis focussed on sole mother's experiences with Centrelink and with collecting child support payments.

Centrelink payments

All of the sole mothers who attended focus groups had had dealings with Centrelink (or its predecessor, The Department of Social Security). Feelings about being dependant on Centrelink benefits included 'shame' and 'sadness', which largely arose from personal value systems:

I think the only problem with Centrelink has been my own shame about having to go there and having to be dependant on government or Centrelink support and not being able to do it for myself... [FG4]

However, interactions with Centrelink staff also contributed to feelings of anger and low self worth. For example, some sole mothers talked about feeling 'degraded' as a result of adverse interactions with Centrelink staff:

The (Centrelink worker) that serves you, treats you like they're taking the money out of their own pocket, out of their own family living, and giving it to you. You haven't done anything to earn it. [FG1]

The most common problem that sole mothers in focus groups had experienced with Centrelink staff concerned difficulty with obtaining accurate information about benefits and services. These difficulties appeared to arise due to a lack of knowledge on the part of the staff concerned, and a lack of staff availability. These types of difficulties led several women to 'give up' calling Centrelink, even when they were required to do so. For example,

I do (casual work), so I haven't got a consistent income, which is very stressful dealing with Centrelink, because you're supposed to ring fortnightly, um, letting them know. I give up, now. I don't even ring them when I'm not working because half the time you're speaking to people who haven't got a clue what to tell you. [FG4]

Where interactions with staff were positive, outcomes of those interactions were also positive. For example, two women had experienced a high level of support and information from JET caseworkers, which led to further training and full time paid employment for both women. Other women had found interactions with Centrelink staff to be very supportive, particularly when they had been feeling distressed. For example,

I feel the social welfare system has helped me, there was a social worker to help me talk through problems, umm, I, and I feel gratitude for this Centrelink, what other country gives you this support? I feel we do get a lot of financial support, and [pause] it just seemed to, umm, well I put out there, I need some help, and the social worker rang me back the next day, and was able to see me frequently whilst I was pregnant. And [pause] everything was put into place for me, so I feel (the) social system has been a great help. And by learning to accept it, that help, I, they accepted me in my position, so I was able to accept myself. [FG9]

Even where sole mothers had not received this level of personal assistance, it was apparent that the existence of Centrelink as a service was appreciated by the sole mothers who attended groups:

I do say thank god for it (Centrelink payments), which on my perspective, that's how I scraped through to get, you know, with that and part time work, to get through uni and, you know, the, the benefits I was able to get, childcare and stuff like that with the kids, thank god, because, and I just hope that never is relinquished... [FG4]

Despite gratitude for the benefits they received, many sole mothers were also critical of the Centrelink system. Women talked about feeling 'stressed', 'anxious' and 'fearful' about some Centrelink procedures, which were seen as being 'invasive', 'degrading', 'demeaning', 'humiliating', 'undermining', 'unfair', and 'punitive'. Fear and anxiety were provoked by Centrelink procedures that involved minimum activity requirements in order to qualify for PPS. The lead up period to the cessation of PPS, once the youngest child turned 16, also caused anxiety. These relatively recent changes in procedure were poorly understood by many sole mothers, who were unclear about their rights and obligations under the new system. Feeling degraded and humiliated were associated with the need to complete large amounts of paperwork in order to obtain benefits, and the need to report earnings when undertaking casual paid work. Sole mothers talked about Centrelink procedures as being inequitable across several issues. In comparison to requirements for other payments, women felt that sole parents were unfairly targeted:

... when you're in a couple you pay the mother to stay home and look after the child, but as soon as you become a sole parent you're meant to go out to work. So the contradiction in those two policies is enormous. [FG9]

Other sole mothers had experienced a reduction in FTB payments because their ex-partners had also claimed FTB. For example, one woman who did not undertake paid work due to a chronic illness, felt that her ex-partner, who earned around \$60,000 per year, should not be entitled to a share of the FTB, even though they shared the care of their four children, due to their unequal financial circumstances:

... I just don't think that somebody that earns that much money should be able to take any money off me and the children. It's just unfair, that's the government, the government says that they can take out of \$200 in one week he can take \$80, I have to pay \$125 rent, so I actually get nothing... [FG10.2]

The shared care arrangements in place for this participant had also resulted in a reduction in child support payments. The participant noted that while she had used the money for rent and other bills, her ex-partner had claimed the FTB and child support reduction to take the children on a holiday.

Another aspect of Centrelink procedures that was seen as unfair involved the reduction in FTB that occurred as children became older:

I mean Family Tax Benefit is, is, just minimal and you hit, kid's hit teenager age and it halves. Like, my care for them hasn't dropped off, so, but the tax that I get back for raising them has halved and gone to almost nothing for my son who's now 16. [FG3]

Sole mothers also talked about feeling punished when they underestimated their income, which resulted in a debt to Centrelink, which then had to be repaid. Fear of losing benefits through not meeting requirements was also common. Minimum activity requirements, impending loss of PPS, reporting procedures, paperwork requirements, and perceived systemic inequity all contributed to feelings of stress, pressure and frustration.

A lack of knowledge about Centrelink entitlements had led two sole mothers to live on very low incomes for some time. One of these women had lived for several years on money that her ex-partner had sent her and Family Payment (predecessor of Family Tax Benefit), and the other had lived on wages from a part time job. Two other sole mothers had experienced periods of time when they were ineligible for any benefits, one had resigned from paid work and was waiting for an appointment with Centrelink, and the other had received a redundancy payment and was told she was ineligible until that money was 'gone'.

One further point concerning eligibility was raised by a sole mother who was not eligible for PPS because she had invested in a property to prepare for her retirement:

With all the property increases lately, I went over the asset limit so of course I was no longer eligible for any help from the government apart from Family Allowance, but that meant my cash still stayed the same, so I had to find more work... [FG9]

Child support payments

Child support also arose as an issue in every group. As with Centrelink benefits, sole mothers had experienced a range of situations with regard to child support. Most commonly women talked about not receiving their full child support entitlements. Many sole mothers (58% of the sample) had not received any child support, while others had received less than they were entitled to, and/or had received payments at irregular intervals. For example,

So I got \$1.44 two months ago. So that was really helpful. And in that same month he asked me could he borrow a carton of milk. [FG10.1]

Sole mothers felt resentment and anger toward their ex-partners over child support issues, which contributed to increased stress levels. The stress of expecting payments that did not arrive, and of dealing with the process of child support collection, led many women to say that they preferred not to receive child support. For example,

I'm more stressed, and feel more insecure when (I'm) waiting to see if he'll pay it or not. [FG10.2]

Other women preferred not to receive child support due to past and/or current experiences of intimate partner abuse.

...because there was so much harassment unbelievable amounts of harassment. Like, my solicitor said to me, 'This guy's like one in ten thousand.' He's never seen anything like it. Really, really, unbelievably skilful and manipulative, with the, all the time. I just thought I'd rather, I'd rather not have the maintenance and just not have to deal with him. [FG7]

Generally, sole parents are required to claim child support by Centrelink as a condition of claiming other benefits. However, some sole mothers who attended focus groups had been exempted from claiming child support due to their ex-partner's history of perpetrating domestic abuse. This was not always seen as a satisfactory situation:

I felt somewhat irritated by the fact that he was exempted (from paying child support), you know, which was to protect me, and I understood that, but once again he's winning, you know, not accepting his responsibilities. [FG11]

Of those sole mothers who experienced difficulties with obtaining child support, many expressed dissatisfaction with the ability of the CSA to collect payments:

Um, and I was constantly ringing the CSA telling them he is working. Why can't they locate him? Why can't they find him? [FG3]

However, some sole mothers were satisfied with the CSA:

I found the Child Support Agency, without them, I would not have got a cent. [FG4]

For the most part sole mothers were satisfied with the interactions they had with CSA staff, who were described as 'delightful' and 'helpful', but were very dissatisfied with the efficacy of the procedures that were used to collect child support. Women felt that the child support system was open to 'rotting' and 'manipulation' by their ex-partners. The most common ways in which ex-partners avoided child support payments were by reporting very low or zero income by 'fiddling' the books of private companies or taking cash paid work, by not submitting tax returns, and by frequently moving jobs. For example,

But according to the CSA my, umm, ex-husband only earns \$812 a year. But he's a, umm, very prominent citizen in the community that loves boasting about his very successful business. But all the money, it all goes through the business, so the business runs at a loss... then his income is only \$812 a year, you know, and mine's sitting up around \$33,000 because I declare everything. So I'm being punished and penalised for being honest. [7]

For some sole mothers, obtaining child support was impossible, for example, where ex-partners had moved overseas or where an ex-partner had died. Overall, the experiences of the women in the focus groups with trying to obtain child support involved a high degree of stress with results that were frequently unsuccessful.

Summary of qualitative findings

Sole mothers were found to derive income from paid employment (Section 4) and Centrelink and child support payments. The amount of income sole mothers received was dependent on their ability to obtain paid work, the type of paid work that was obtained, their eligibility for Centrelink payments, and their degree of success in obtaining child support. Therefore, all of the factors that affected paid employment participation (Section 4), and those factors discussed in this section with regard to Centrelink and child support payments, also affected the amount of income sole mothers received.

Discussion

ALSWH analyses revealed that, among the young cohort, a higher percentage of sole mothers than childless women had incomes in the lower income categories, and sole mothers were the least likely of all women to have an income of over \$700 per week. The majority of sole mothers in the young cohort held a Health Care Card, which indicated lower financial means compared to other women in their cohort. Sole mothers in the mid-aged cohort had a similar level of income to other women, although they were more likely than other women to earn \$299 per week or less, and the least likely of all women to earn \$1000 or more per week. These results are in accord with past research that has demonstrated lower incomes among sole parents compared to other family groups (ABS, 2003; Saunders, 2004).

Over half of the mid-aged cohort sole mothers were in receipt of government pensions or allowances, in accord with past research (ABS, 2003). Mid-aged sole mothers were the most likely of all women in their cohort to indicate that they received income from a government allowance or benefit. The qualitative study indicated that women appreciated the existence of government benefits, although their experiences with Centrelink were often stressful. Findings suggested that staffing levels (relating to lack of availability of staff) and staff training (related to lack of knowledge among staff) might be two areas of Centrelink that could be reviewed.

Centrelink requirements for casual paid workers were found to be particularly stressful for women who attended focus groups. In view of the number of sole parents who undertake casual paid work (as reported in Section 4), this finding warrants further attention. Perceived systemic inequities are also in need of further investigation. For example, taken at face value, providing a shared care parent with access to a proportion of FTB appears to be an equitable arrangement. However, where one parent is totally reliant on Centrelink benefits, the reduction of FTB could be causing undue economic hardship. More research is needed to determine the economic outcomes of these arrangements.

The quantitative study found that a minority of young sole mothers reported receiving zero or very low incomes. The qualitative study found that two women who did not know they were eligible for government benefits had survived on very low incomes until they were told (by family and friends) to go to the Centrelink office. In addition, one woman had received a redundancy payment, which left her ineligible for benefits for a period of time, and another woman had recently resigned, which meant she was ineligible for benefits at the time of the focus group. It is possible that the women in the quantitative survey who reported a zero or low income were experiencing similar transitional circumstances, or may not have realised that they were eligible for benefits. While a lack of knowledge about Centrelink benefits was not common among the focus group participants, the women and their children who lived on a very low income without government benefits experienced extreme hardship and deprivation. Therefore, this finding warrants further investigation

in order to determine the prevalence of a lack of knowledge about entitlements among members of the community.

Qualitative findings for child support payments concurred with and extended upon those of past research. Past intimate partner abuse and current harassment from ex-partners deterred women from claiming child support, as has been previously reported (Wolffs & Shallcross, 2000). Women who attended focus groups felt that the CSA was, in many cases, powerless to collect child support payments. Ongoing stress with unsuccessful child support collection caused many women to give up their pursuit of payments.

A number of methods that ex-partners had used to avoid paying child support were reported by women who attended focus groups. Since sole parents face a high risk of poverty as measured by income indices (ABS, 2000; Christopher et al., 2002; Harding et al., 2001), and since sole parents in receipt of child support have higher incomes (ABS, 1998) and by extrapolation a lower risk of poverty, this finding warrants urgent attention. Methods need to be developed whereby child support payments can be safely collected from ex-partners who have perpetrated abuse; and provision should be made so that ex-partners who report zero or low incomes can be fully investigated. It seems particularly inequitable that ex-partners are able to avoid child support payments when sole parents are subjected a wide range of reporting and investigatory procedures in order to receive Centrelink payments.

Child support payments also have the capacity to reduce government expenditure (CSA, 2002). Since sole parents are being required to prepare for paid work participation as a method of reducing government expenditure (Baker, 2000), it would seem equitable to expect ex-partners to fulfil their child support obligations and thus also make a contribution towards reducing welfare expenditure.

Conclusions

Quantitative analyses found that mid-aged and young cohort sole mothers tended to have lower incomes than other women, that young sole mothers were the most likely of their cohort to have a Health Care Card, and that mid-aged sole mothers were the most likely of their cohort to be in receipt of government benefits or allowances. Taken together, the results showed that sole mothers were likely to have less access to money than other women.

Child support can help to increase sole mother's income, and reduce government expenditure. The high level of outstanding debt reported by CSA (2002), and the methods used by ex-partners to avoid child support payments reported by women in focus groups indicated that CSA collection methods may need to be reviewed, and strategies developed to improve the success rate of child support collection. To assist in this endeavour, it would be useful to conduct more research into child support issues with a representative sample of sole parents.

Income is one measurement of economic wellbeing that can be used to assess poverty, other measures of poverty include household expenditure and hardship (Saunders, 2004). Economic wellbeing is addressed in the following section.

Section 6: Economic wellbeing

Previous sections of this report have described aspects of sole motherhood that contribute to economic status. Among women in their twenties, sole mothers were found to have lower education levels than childless women, to be likely to pursue further education (Section 3), and were unlikely to be participating in the paid workforce (Section 4). Mid-aged sole mothers were found to be the most likely to have a university level of education among their cohort (Section 3), while paid employment participation was not strongly associated with mid-aged sole motherhood relative to other women (Section 4). Nevertheless, around a third of mid-aged sole mothers were found to have a low level of education (Year 10 or less), and only 34 to 40 percent of mid-aged sole mothers were undertaking full time paid employment.

Results of the previous section (5) demonstrated that, compared to childless women, a higher proportion of sole mothers in both the young and mid-aged cohorts tended to indicate income in the lower income brackets. Furthermore, among women in their twenties, sole mothers were more likely to have a Health Care Card than all other women, which further demonstrated their comparatively low income level. Compared to other mid-aged women, mid-aged sole mothers were more likely to be in receipt of government benefits.

In addition to education, paid employment status and income, past research has assessed economic wellbeing in terms of poverty by using measures of household income and housing costs, household expenditure, a combination of income and expenditure, and by assessing financial stress (ABS, 2000; Bray, 2001; McColl, Pietsch, & Gatenby, 2002; Saunders, 2004).

Past research has demonstrated that sole mothers have a higher risk of poverty than other family groups based on measures of income, as discussed in the previous section (Christopher et al., 2002; Harding et al., 2001; Saunders, 2004). Harding et al. (2001) point out that measuring income without taking into account the cost of housing may lead to misleading indicators of poverty because home owners and public housing tenants tend to have lower housing costs than home purchasers and tenants in the private rental sector. In the 1997-1998 SIHC (ABS, 1999) 15 percent of one parent families were home owners, 24 percent were home purchasers, 60 percent were renting in the private rental market, and 22 percent were public housing tenants. Sole parents who were renters in the private rental market were found to be paying the highest proportion of their income in housing costs (32% of gross income) compared to other sole parent families (ABS, 1999). Of all families with dependant children, sole parent families were found, on average, to spend the highest proportion of their gross income on housing (ABS, 1999).

Household expenditure was measured by the ABS (2000) as the amount of money that a household spent on goods and services over a set period of time. Using data from the 1998-1999 Household Expenditure Survey (HES; ABS, 2000), Saunders (2004) found that 43 percent of sole parent families experienced poverty based on expenditure measures.¹² Compared to other households (under 65 years of age), sole parent families were the most likely to have experienced poverty within the timeframe of the study. Saunders (2004) argued that using both income and expenditure may give a more accurate picture of poverty. Using this combined measure and the same HES data, Saunders found that a lower percentage of sole parents had experienced poverty (34%). However,

¹² These calculations used a modified version of the Henderson poverty line and total expenditure on goods and services (Saunders, 2004).

because the proportion of other family groups who had lived in poverty also fell when the combined measure was used, the relative risk of poverty for sole parent families was higher than it had been when measured by either income or expenditure alone.

Financial stress was assessed as a part of the 1998-1999 HES (ABS, 2000). Financial stress was defined as the incidence of deprivation, cash-flow problems and hardship that occurred for households during the study period. Deprivation was measured by a household's inability to afford certain non-essential expenses (eg. yearly holiday, new clothes, leisure activities, providing a meal for friends/family once a month [Bray, 2001; McColl et al., 2002]). Cash-flow difficulties were measured by assessing different events that represented a lack of available money (eg. inability to pay bills on time or to raise emergency funds, borrowing money from friends/family [Bray, 2001]). While hardship included those events that indicated an inability to afford essential expenses (eg. inability to afford heating or food, need to sell belongings, seeking financial aid from charities [Bray, 2001]). A higher proportion of sole parent families reported single and multiple occurrences of deprivation, cash-flow difficulties, and hardship than all other family groups (Bray, 2001). A separate analysis of the same data showed that 41 percent of sole parent families experienced higher overall financial stress, and a further 32 percent of sole parent families experienced moderate overall financial stress (McColl et al., 2002). Not surprisingly, sole parent families were the least likely of all groups to have indicated that they experienced no financial stress (McColl et al., 2002).

Saunders (2004) found that when income, expenditure and financial stress were used in combination to assess the presence of poverty, 40 percent of sole parent families had lived in poverty during the study period of the 1998-1999 HES. This figure was four times that obtained for the national average.

In summary, whether measured by income, expenditure, financial stress, or a combination of these factors, Australian sole parents had an increased risk of poverty compared to other family groups aged less than 65 years. In real terms, these results indicated that on average, Australian sole parent families had less income, were able to spend less money on goods and services, and experienced more deprivation, cash flow difficulties and financial hardship than other Australian families. It should be noted that despite the different analytic techniques used, all of these findings were based on the results of one survey: the 1998-1999 HES (ABS, 2000). Other Australian surveys have found similar results. Smyth and Weston (2000) conducted a survey of divorced adults and found that sole mothers were the most likely family group to experience economic hardship after divorce. While Harding et al. (2002) analysed the SIHC (ABS, 2003) and found that sole parent families were the most likely family type to have lived in poverty.

Current policy, through the JET scheme and activity requirements for those in receipt of PPS, encourages sole parents to undertake further study and training in order to prepare for entry into the paid workforce. Based on past research, discussed in Sections 3 and 4 of this report, further education is thought to increase the chances of obtaining paid employment, and to increase wages or salaries. However, previous findings of the current report have suggested that education did not necessarily lead to paid employment participation (Sections 3 & 4), and that paid employment participation did not necessarily entail a net financial gain compared to non-participation in the paid workforce (Section 5).

The current section investigates the relative contributions of education and paid employment status to overall economic wellbeing, which was measured as difficulty with income management and degree of stress experienced with money matters. The income management measure was most similar in nature to a definition of poverty tested by Saunders (2004, p. 8), who found that just

under a third of adult Australians felt that ‘Having to struggle to survive each and every day’ was an appropriate definition of poverty. In addition to the quantitative examinations reported below, the focus group data were analysed to determine women’s economic experiences as sole mothers.

Quantitative results

Cross sectional analyses

In order to examine economic wellbeing, the measures of income management and money stress were used. In order to determine the odds of experiencing income management difficulty, the response options of the income management item were dichotomised, so that zero equated to finding income management ‘difficult some of the time’, ‘not too bad’ or ‘easy’; and a score of one indicated that income management was ‘impossible’ or ‘difficult all of the time’. In order to determine the odds of experiencing money stress, the response options of the money stress item were dichotomised, so that zero equated to feeling ‘not at all’, ‘somewhat’ or ‘moderately’ stressed about money; and feeling ‘very’ or ‘extremely’ stressed about money were coded one¹³.

Seven series of analyses were conducted. Income management was tested for the first young cohort survey and the first and second mid-aged cohort surveys. Money stress was tested for the first and second surveys of both the young and mid-aged cohorts. In each analysis, four logistic regressions were conducted with the relevant economic wellbeing measure entered as the outcome variable. The first logistic regression was unadjusted, the second adjusted for demographics, the third adjusted for demographics and education level (four category measure), and the fourth adjusted for demographics, education level, and paid employment status (undertaking/not undertaking paid employment).

Cross sectional results

Income management

As shown in Table 23, 36 percent of sole mothers who participated in the first young cohort survey found income management impossible or difficult all of the time. This result was significant in the unadjusted model, with sole mothers having nearly two and a half times the odds of experiencing income management difficulty, relative to partnered childless women. When education and paid employment were added to the model, the odds of experiencing income management difficulty were reduced for sole mothers. With education and paid employment status held constant, sole mothers were no longer distinguishable from partnered childless women; while partnered mothers and unpartnered childless women had decreased odds of experiencing income management difficulty. Among young women, earlier analyses found that sole mothers had the highest odds of having Year 10 or less as their highest qualification, and had higher odds of not being in paid employment, relative to women without children. Taken together, the results imply that the lower education level and the higher odds of not being in paid employment associated with young sole motherhood account for the higher odds of sole parents experiencing income management difficulty, relative to partnered childless women. Sole mothers remained distinct from partnered mothers and unpartnered childless women after adjusting for education and paid employment because these two groups of women had decreased odds of experiencing income management difficulty relative to partnered childless women.

¹³ Univariate relationships between relationship status and the five category response measures of income management and money stress are available in Appendix E.

Among all of the young cohort, having a Year 10 education or less was associated with increased odds of experiencing income management difficulty, relative to having a university degree or higher. Among all of the young cohort, not being in paid work was associated with nearly three times the odds of experiencing income management difficulty, relative to being in paid work.

Thirty five percent of sole mothers who took part in the first mid-aged cohort survey indicated that they experienced income management difficulty (see Table 24). This result was significant in the unadjusted model, with sole mothers having over four and a half times the odds of experiencing income management difficulty, relative to partnered childless women. Partnered mothers and unpartnered childless women also had increased odds of income management difficulty; however, at 1.5 and 2.9, the odds ratios were somewhat lower than that obtained for sole mothers.

As shown in Table 24, 41 percent of mid-aged sole mothers were experiencing income management difficulty at the time of the second survey. The association between sole motherhood and income management difficulty was significant in the unadjusted model, with sole mothers having over six times the odds of experiencing income management difficulty relative to partnered childless women. Partnered mothers and unpartnered childless women also had increased odds of experiencing income management difficulty relative to partnered childless women, but with much lower odds than that obtained for sole mothers.

In both analyses of mid-aged data, adjusting for education resulted in an increase in the odds of experiencing income management difficulty for sole mothers. Earlier analyses showed that mid-aged sole mothers had the lowest odds of having Year 10 or less as their highest qualification. In the current analysis, any variance in income management difficulty that was shared between relationship status and education was removed when education was added to the model. This resulted in an increase in the odds of sole mothers experiencing income management difficulty. The results imply that among mid-aged sole mothers, higher education may help to decrease the odds of experiencing income management difficulty. Among both mid-aged cohorts, women who indicated that they had a Year 10 education or less had over twice the odds of experiencing income management difficulty, relative to women who had a university degree or higher.

Both analyses of mid-aged cohort data revealed that adjusting for paid employment status did not affect the odds of sole mothers experiencing income management difficulty to any appreciable degree. These results do not imply that paid employment status did not have an impact on income management difficulty. As can be seen in Table 24, mid-aged women who were not in paid employment had over twice the odds, in both surveys, of experiencing income management difficulty. Adjusting for paid employment did not affect the odds of sole mothers experiencing income management difficulty, because sole mothers did not differ from other women with regard to paid employment status, as was reported in Section 4.

Table 23: Young Survey 1 odds ratios (OR) and 95% confidence intervals (CI) for odds of finding income management impossible or difficult: Unadjusted; adjusted for demographics; adjusted for demographics and education; and adjusted for demographics, education, and employment status.

Survey	N	%	Model							
			Unadjusted		Adjusted for demographics ^a		Adjusted for demographics and education		Adjusted for demographics, education and employment	
			OR	CI	OR	CI	OR	CI	OR	CI
Young 1										
Relationship status										
Sole mothers	330	36	2.41	1.88, 3.10	2.18	1.71, 2.78	1.94	1.51, 2.48	1.07	0.82, 1.39
Partnered mothers	693	21	1.15	0.93, 1.43	1.32	1.09, 1.60	1.16	0.96, 1.42	0.68	0.55, 0.84
Unpartnered childless	9697	17	0.88	0.78, 1.00	0.85	0.75, 0.96	0.88	0.78, 1.00	0.77	0.68, 0.87
Partnered childless	2198	19	1.00		1.00		1.00	1.00	1.00	
Education										
Year 10 or less							1.90	1.54, 2.34	1.91	1.54, 2.37
HSC							1.52	1.26, 1.83	1.34	1.11, 1.63
Non-degree tertiary							1.43	1.16, 1.75	1.62	1.32, 1.99
University degree or higher							1.00		1.00	
Not in paid employment ^b									2.90	2.61, 3.22

Note. Percentages refer to the percentage of women per relationship category who were finding income management impossible or difficult all of the time (eg. 36% of the sole mothers were finding income management impossible or difficult all of the time).

a. Adjusted for age, area of residence and Aboriginal or Torres Strait Islander status.

b. Dichotomous variable where being in full time or part time/casual paid work was used as the reference category.

Table 24: Mid-aged Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of finding income management impossible or difficult: Unadjusted; adjusted for demographics; adjusted for demographics and education; and adjusted for demographics, education, and employment status.

Survey Variable	N	%	Unadjusted		Adjusted for demographics		Adjusted for demographics & education		Adjusted for demographics, education & employment	
			OR	CI	OR	CI	OR	CI	OR	CI
Mid-aged 1										
Relationship status										
Sole mothers	376	35	4.78	3.82, 5.99	4.79	3.78, 6.07	5.18	4.06, 6.60	5.01	3.92, 6.41
Partnered mothers	3180	14	1.43	1.26, 1.62	1.52	1.34, 1.72	1.63	1.43, 1.85	1.56	1.37, 1.77
Unpartnered childless	1690	25	2.92	2.56, 3.34	3.03	2.64, 3.48	3.19	2.77, 3.66	3.36	2.91, 3.87
Partnered childless	7310	10	1.00		1.00		1.00		1.00	
Education										
Year 10 or less							2.06	1.73, 2.46	1.72	1.43, 2.05
HSC							1.60	1.31, 1.97	1.38	1.12, 1.70
Non-degree tertiary							1.48	1.22, 1.82	1.34	1.09, 1.64
University degree or higher							1.00		1.00	
Paid employment status									2.03	1.82, 2.26
Mid-aged 2										
Relationship status										
Sole mothers	288	41	6.36	4.96, 8.14	6.68	5.17, 8.62	7.71	5.93, 10.00	7.62	5.72, 10.16
Partnered mothers	2006	16	1.73	1.50, 2.00	1.75	1.52, 2.02	1.90	1.64, 2.19	1.76	1.50, 2.06
Unpartnered childless	1479	22	2.55	2.20, 2.96	2.63	2.27, 3.05	2.83	2.43, 3.28	2.98	2.52, 3.52
Partnered childless	6717	10	1.00		1.00		1.00		1.00	
Education										
Year 10 or less							2.32	1.91, 2.81	1.88	1.52, 2.31
HSC							2.00	1.60, 2.49	1.64	1.29, 2.08
Non-degree tertiary							1.58	1.27, 1.97	1.41	1.11, 1.78
University degree or higher							1.00		1.00	
Not in paid employment									2.17	1.90, 2.47

Note. Percentages refer to the percentage of women per relationship category who were finding income management impossible or difficult all of the time. Demographics included: age, area of residence and Aboriginal or Torres Strait Islander status. Reference category for not in paid employment was being in full time or part time/casual paid employment.

Stress with money

In all four surveys, sole motherhood was significantly associated with increased odds of experiencing stress with money. In the first young cohort survey, 44 percent of sole mothers were very or extremely stressed about money, and in the unadjusted model had twice the odds of experiencing money stress relative to partnered childless women (Table 25). Being partnered with children or unpartnered without children were not significantly associated with experiencing money stress. After adjusting for demographics, education and paid employment status, sole mothers had one and a half times the odds of experiencing money stress, relative to partnered childless women.

In the second young cohort survey (Table 25), 53 percent of sole mothers were very or extremely stressed about money. Sole mothers had over three times the odds of experiencing money stress, relative to partnered childless women. After adjusting for demographics, education and paid employment status, sole mothers had two and a half times the odds of experiencing money stress, relative to partnered childless women. In the final adjusted model, partnered mothers had 1.3 times the odds of experiencing money stress relative to partnered childless women, while being unpartnered without children was barely associated with money stress.

In the first mid-aged cohort survey, 34 percent of sole mothers were very or extremely stressed about money (Table 26). Sole motherhood was significantly associated with around four times the odds of experiencing money stress in unadjusted and adjusted models, relative to partnered childless women. Being partnered with children and unpartnered without children were also associated with increased odds of experiencing money stress relative to being partnered without children; however, these odds were much lower than those found for sole mothers.

In the second mid-aged cohort survey, 33 percent of sole mothers were very or extremely stressed about money (Table 26). Sole motherhood was significantly associated with around five times the odds of experiencing money stress in adjusted and unadjusted models, relative to partnered childless women. Being partnered with children and unpartnered without children were also associated with increased odds of experiencing money stress relative to being partnered without children; however, as in the first survey, these odds were much lower than those found for sole mothers.

Table 25: Young Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of experiencing stress with money: Unadjusted; adjusted for demographics; adjusted for demographics and education; and adjusted for demographics, education, and employment status.

Survey Variable	N	%	Unadjusted		Adjusted for demographics		Adjusted for demographics & education		Adjusted for demographics, education & employment	
			OR	CI	OR	CI	OR	CI	OR	CI
Young 1										
Relationship status										
Sole mothers	318	44	2.06	1.62, 2.62	2.03	1.61, 2.56	1.92	1.52, 2.43	1.50	1.78, 1.92
Partnered mothers	681	31	1.16	0.96, 1.40	2.19	1.00, 1.42	1.12	0.94, 1.35	0.91	0.76, 1.10
Unpartnered childless	9548	24	0.82	0.74, 0.91	0.81	0.73, 0.91	0.84	0.75, 0.93	0.80	0.71, 0.89
Partnered childless	2172	28	1.00		1.00		1.00	1.00	1.00	
Education										
Year 10 or less							1.45	1.22, 1.73	1.44	1.20, 1.72
HSC							1.31	1.13, 1.53	1.25	1.07, 1.46
Non-degree tertiary							1.31	1.11, 1.54	1.34	1.14, 1.59
University degree or higher							1.00		1.00	1.00
Paid employment status										
									1.48	1.36, 1.62
Young 2										
Relationship status										
Sole mothers	277	53	3.87	3.01, 4.96	3.91	3.08, 4.98	3.17	2.46, 4.08	2.61	2.00, 3.40
Partnered mothers	1157	32	1.63	1.40, 1.88	1.74	1.50, 2.01	1.52	1.30, 1.77	1.27	1.07, 1.51
Unpartnered childless	4522	23	1.04	0.93, 1.51	1.03	0.92, 1.15	1.10	0.98, 1.23	1.08	1.00, 1.21
Partnered childless	3306	23	1.00		1.00		1.00		1.00	
Education										
Year 10 or less							1.89	1.58, 2.25	1.82	1.52, 2.18
HSC							1.74	1.52, 1.98	1.70	1.48, 1.95
Non-degree tertiary							1.67	1.46, 1.90	1.65	1.44, 1.89
University degree or higher							1.00		1.00	
Not in paid employment										
									1.39	1.21, 1.60

Note. Percentages refer to the percentage of women per relationship category who were experiencing stress with money. Demographics included: age, area of residence and Aboriginal or Torres Strait Islander status. Reference category for not in paid employment was being in full time or part time/casual paid employment.

Table 26: Mid-aged Surveys 1 and 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of experiencing stress with money: Unadjusted; adjusted for demographics; adjusted for demographics and education; and adjusted for demographics, education, and employment status.

Survey Variable	N	%	Unadjusted		Adjusted for demographics		Adjusted for demographics & education		Adjusted for demographics, education & employment	
			OR	CI	OR	CI	OR	CI	OR	CI
Mid-aged 1										
Relationship status										
Sole mothers	366	34	4.16	3.31, 5.23	4.28	3.36, 5.44	4.47	3.50, 5.70	4.36	3.41, 5.58
Partnered mothers	3046	15	1.42	1.25, 1.60	1.45	1.28, 1.65	1.52	1.34, 1.73	1.49	1.30, 1.69
Unpartnered childless	1626	23	2.37	2.06, 2.72	2.42	2.10, 2.80	2.50	2.16, 2.90	2.60	2.25, 3.02
Partnered childless	6877	11	1.00		1.00		1.00		1.00	
Education										
Year 10 or less							1.48	1.25, 1.75	1.29	1.09, 1.53
HSC							1.34	1.10, 1.63	1.19	0.98, 1.45
Non-degree tertiary							1.24	1.03, 1.50	1.15	0.95, 1.40
University degree or higher							1.00		1.00	
Paid employment status									1.65	1.48, 1.84
Mid-aged 2										
Relationship status										
Sole mothers	284	33	4.83	3.72, 6.28	4.99	3.81, 6.54	5.21	3.96, 6.84	4.85	3.59, 6.55
Partnered mothers	1915	12	1.33	1.13, 1.56	1.41	1.20, 1.67	1.45	1.23, 1.71	1.38	1.15, 1.65
Unpartnered childless	1441	18	2.16	1.84, 2.53	2.33	1.98, 2.74	2.40	2.04, 2.83	2.46	2.06, 2.94
Partnered childless	6279	9	1.00		1.00		1.00		1.00	
Education										
Year 10 or less							1.47	1.21, 1.79	1.28	1.03, 1.58
HSC							1.28	1.02, 1.61	1.15	0.90, 1.47
Non-degree tertiary							1.30	1.05, 1.62	1.21	0.96, 1.54
University degree or higher							1.00		1.00	
Not in paid employment									1.60	1.38, 1.85

Note. Percentages refer to the percentage of women per relationship category who were experiencing stress with money. Demographics included: age, area of residence and Aboriginal or Torres Strait Islander status. Reference category for not in paid employment was being in full time or part time/casual paid employment.

Longitudinal analyses

Experience of money stress for both the young and mid-aged cohorts was assessed by creating a categorical variable that used the dichotomous stress with money variable (stressed/not stressed about money) previously described. The measure used four categories to examine change in money stress from Survey 1 to Survey 2: remained unstressed; became stressed; became unstressed; and remained stressed.

Longitudinal results

Results for the young cohort revealed that separation was significantly associated with change in money stress, $\chi^2(3, 313) = 9.71, p = .021$. As can be seen in Table 27, compared to mothers who remained partnered, separated mothers were less likely to remain stress free. Separated mothers were more likely than mothers who remained partnered to become stressed or to become unstressed about money. In addition, separated mothers were also more likely to remain stressed about money, compared to mothers who remained partnered. The finding that stress with money was more likely to increase *or decrease* for mothers who separated (relative to mothers who remained partnered) was unexpected, and will be examined further in the qualitative study.

Table 27: Results of cross tabulation analysis for separation by change in degree of money stress for the young cohort

Stress with money	Remained partnered		Separated	
	N	%	N	%
Remained unstressed	159	62	22	39
Became stressed	31	12	11	20
Became unstressed	37	14	12	21
Remained stressed	30	12	11	20
Total	257		56	

Results for the mid-aged cohort revealed that of the mothers who remained partnered, 81 percent ($n = 1264$) were not stressed about money at the time of both surveys, compared to 43 percent ($n = 15$) of mothers who separated. Fourteen percent ($n = 5$) of mothers who separated were stressed about money at both surveys, and 26 percent ($n = 9$) became stressed about money by the time of the second survey. Seventeen percent ($n = 6$) of mothers who separated were stressed about money at Survey 1, and not at Survey 2.

Qualitative results

All of the sole mothers who attended focus groups felt that their economic wellbeing had been adversely effected by separation. Further analysis indicated that economic circumstances tended to decline for a period of time after the relationship had ended. Marked improvements did not appear to occur until full time paid employment was obtained. Sole mothers who attended groups were in various stages of economic decline and economic recovery. However, the experiences of sole mothers did not follow a trajectory that simply declined and then improved. Several sole mothers reported economic circumstances that improved and then worsened in cycles that were directly related to their paid employment status. It was apparent that sole mothers remained economically

vulnerable, even after a period of time in the paid workforce. Furthermore, very few sole mothers seemed to have attained the same level of economic security and wellbeing that they had experienced prior to separation. Sole mothers mentioned a number of aspects of economic wellbeing that were of particular concern to them, including the costs of housing, transport, and healthcare.

The impact of separation on economic wellbeing

Upon separation, women experienced a reduction in income and a reduction in assets as joint property was divided. Sole mothers also faced increased expenses by taking on family debt, by incurring legal costs associated with separation, and through setting up a new household.

...the income difference has been huge...

Most sole mothers who attended focus groups experienced the impact of the loss of their partner's income. Even where child support was paid regularly, women felt that family income was less after separation than it had been beforehand. In addition, sole mothers who were undertaking paid work at the time of separation tended to reduce their employment hours, or leave paid work altogether, in order to cope with increased family responsibilities. This resulted in a further reduction in income. For example,

I left him and moved back to my parents in [town] and I left my um, I had a gallery that I was running and I closed it, left everything and moved back, back home. [FG11]

Despite the reduction in income, some sole mothers felt an improvement in economic wellbeing because they had more control over the family money:

But in, in terms of how I am financially now in comparison with how I was when I was with my child's father, I'm actually, probably, slightly better off now, because I have control of the money that I have. [FG4]

...you have just, literally, destroyed years and years worth of assets that you've built up.

Overall, sole mothers generally felt that they had not received a fair share of the joint assets after property settlements were finalised. While it was impossible to determine the equity of property divisions in the current study, it was possible to conclude that sole mothers had experienced a reduction in assets as a result of separation. The degree of reduction experienced by women ranged from 'ending up with nothing' to being 'pretty okay'.

Several sole mothers had left relationships with none of the joint assets and had made no subsequent claims for proportions of joint property:

...all I left with was the clothes, our clothes, and the baby stuff. I, I left him all the furniture, the house, the car, everything. I walked away going, um, mostly because it was so bad at that point, that I just didn't want to get into a long, entangled, you know, drawn out property stuff. So, yeah, um, I know that partly that was my choice but it was also because things were so... At that point, emotionally, I was trying to save my own life. [FG4]

As was suggested by the above quote, women who were leaving abusive situations tended not to pursue claims on joint property, or had 'given in' to ex-partner requests in order to maintain a peaceful relationship. Other women, who did not mention past abuse, also felt that they had 'given

in' to ex-partner requests and demands for joint property in order to 'keep the peace'. It was also apparent that many women felt that the quick sale of family homes, which resulted from 'giving in', had resulted in a loss of potential profit:

I was forced to sell mine (house), but that was emotional blackmail and, you know, he wasn't going to be nice to the kids if... He was gonna be an aggressive, basically, if I didn't agree to sell it and, and, ah, it was horrible. I was, it was forced to go at auction. We lost a bit of money on it, but I paid him out everything he'd put into it, and ended up with about half of what I'd put into it, basically. [FG3]

Women who had been running businesses with their ex-partners, or whose ex-partners owned a business tended not to retain an interest in these businesses after separation. However, in most cases the businesses had failed, or were in the process of failing, at the time the relationship ended.

All of the sole mothers who talked about attending Family Court to determine property settlements were dissatisfied with the outcome. One sole mother talked about a prolonged custody and property settlement dispute that ended when she felt unable to continue with the dispute due to 'emotional exhaustion' and financial cost (\$20,000 in legal fees). She felt the result was unfair:

In my situation I owned the home, I built the home. The guy I met, I married him, we were together for five years, he took half. Nice. So I'm left with a really big mortgage, he took all the equity in the house. [FG7]

Most of the sole mothers who attended groups displayed feelings of powerlessness over the distribution of joint assets. For the most part, this appeared to arise from emotional distress, as described above, fear of the consequences of 'upsetting' their ex-partners, and from court decisions that women felt were unfair. The extent to which the emotional upheaval of separation and past abuse affected women's decisions with regard to joint property was unclear. However, the current findings suggest such stresses might involve an adverse financial outcome for some sole mothers.

In contrast to the above findings, several sole mothers were satisfied with the distribution of joint property. For instance,

I think being the strong one in the marriage, I did everything, and that's why really at the end of it, I was the one laughing, not him, 'cause, you know, I thought I know how to do this, I know, knew how to do everything except start the lawnmower, that was the only thing he ever did, so umm, you know, money wise I've always been pretty okay there. [FG3]

Other sole mothers pointed out that the joint property was only sufficient to meet joint liabilities, so neither party left the relationship with assets of any value. One further outcome of the distribution of assets and dissolution of the relationship involved debt. In most cases the debt involved a mortgage on the family home, which women took over in order to keep the home. But for two sole mothers, partner-incurred debts became their responsibility once the relationship ended:

I did end up taking on the house, but I had to also take on some debt that my husband had incurred (in order to run a business) and, at the time, the lawyer said to me, 'Oh, you know, that doesn't seem very fair.' What could I do? I mean, if I wanted the house it had this loan attached to it and, which he'd done without my consent, anyway, and without my knowledge, really. [FG3]

...you literally have to start again

Where the distribution of joint assets resulted in a sale of the family home, sole mothers had to find accommodation, usually in the private rental sector. For some sole mothers, separation resulted in a period of homelessness because they were unable to afford suitable accommodation. While no participants had ‘lived on the streets’ as such, many had spent time boarding with family or friends in accommodation that was less than optimal. For example,

So I was homeless when my marriage broke up, I was living in a little bed-sitter underneath a girlfriend’s house, umm, with two kids. Umm, it was one room basically. A little kitchenette thing, yeah, and umm, I had nowhere to live and I had very little money... [FG5]

Some sole mothers had spent time in refuges due to having limited financial means. As a result of separation, many sole mothers faced the costs of moving and setting up a new home. The difference in economic situations pre- and post-separation were summed up by one sole mother in this way,

So my financial situation went from being sports car and trips overseas and nice jewellery and stuff like that to, ‘Oh, will we have bread or milk today kids?’ [FG11]

Economic decline and financial stress

Economic decline occurred when expenses exceeded income. This was a common theme to emerge from the data for sole mothers who were living on government benefits in the absence of paid work and child support payments. Several of these women had sought financial counselling, however, this had not helped:

When you sit down with a Family Support wor, worker, and you’re trying to pay a house, a mortgage and everything else, yeah, and black and white, in black and white, there is more expenses to go out than money that’s coming in, that’s before you’ve looked at food or clothing... [FG10.2]

Sole mothers who were in receipt of regular child support payments generally considered themselves to be ‘better off’ than the sole mothers who were not in receipt of child support. For example, after hearing several women talk about their financial circumstances, one woman said,

I think my experience has been a lot more positive, you know, compared to other people’s here, like financially and in every other way... I live reasonably well... and he does pay child support, so that’s different again... [FG10.2]

However, despite feeling better off, sole mothers in receipt of government benefits and child support as their only sources of income still talked about experiencing financial stress (Bray, 2001; McColl et al., 2002). For example, the woman quoted above mentioned that she had often eaten rice and beans because of limited funds. In addition, sole mothers in this situation also found that their expenses exceeded their income.

Sole mothers who were undertaking part time paid work also felt better off than those who were surviving on government benefits alone, however they also experienced financial stress:

I guess mine’s a bit positive. I mean, I was, I was working full time, and I’m studying full time, and when me and my partner separated, well then I, umm, gave up the full time job, to go part time to (work), so financially I’ve sort of been able to, to get along, [FG10.2]

According to Bray (2001) and McColl et al. (2002), financial stress was defined as deprivation, cash-flow problems and hardship. Sole mothers who attended focus groups had experienced all of these aspects of financial stress. Furthermore, interactions between the elements of financial stress contributed to economic decline, and to financial stress in the longer term. For example, many sole mothers had borrowed money from family and friends, and had used credit cards to help with short term financial difficulties, but then had to pay that money back at a later date.

Another method used to cope with immediate financial problems was to sell the family home. This decision was not easily reached, and sole mothers who had sold the family home had spent some time trying to maintain a mortgage. One of the prime motivators for selling the family home was to obtain increased government benefits in the form of Rent Assistance. For example,

I hung on to my house for four years, trying to pay rates, insurance and, you know, you don't get rent assistance when you're left with a mortgage, even though you've gone on to a pension... And in the end I just let go of the house after struggling for four years 'cause we had no quality of life. It was a burden, anything broke down, \$800 hot water system, I had to pay for it. Now, I get rent assistance, and the landlord picks (up the bill for) everything. I've got no rates or insurance, and to me I'm happier. [FG10.2]

Underlying decisions to take out loans and sell assets, such as the family home, was the need to meet current bills, which were often paid late. The long term impact of taking these steps to meet short term needs was that sole mothers eventually reached a point where they could no longer put off paying bills, no longer had assets that were saleable, and not only did they become ineligible to borrow more funds, but were also in a situation where they had added to their financial load because existing debts had to be repaid. One sole mother described this situation in the following way:

I've got something to say, and that is that when you're on a pension for a long time, and, and umm, you know, you go without, and you go without, and you go without, and you, and then eventually, you run out of going without. Eventually, there is, you come to a place where the whole thing just, you know, falls apart around you. And there's no way out. You know, like you're in the middle of it all and umm, and it's just, umm, horrible. [FG5]

For many sole mothers this was the point at which they had asked for help from charity organisations. However, deciding to do this was very difficult and involved a lot of negative emotions. For example,

This is probably pride again, that I find it very hard to ask for help, 'cause you feel like it's your responsibility, or you've asked for help in the past and people judged you, brushed you off or whatever. So you think, 'Okay, I've gotta do this meself.' And you know, to have to (go) and ask someone to use their phone, you feel like you're a burden and you're a nuisance and you're a hypocrite, you know? [FG10.2]

Other steps that sole mothers took to meet bills included pawning belongings, and eating at a soup kitchen. One sole mother asked her ex-partner for help, however, he would only help her if she had sex with him:

I've often had to do that, where I've been so broke with money, that I've had to have sex with him, (ex-partner), in order to have, you know, \$50 to keep me going until the next week. [FG8]

Expenses were also cut-back or not incurred. For example, very few sole mothers had taken holidays, leisure activities were not pursued, and clothing was purchased from second hand shops. Even then, some sole mothers mentioned that second hand clothing was not affordable. Tutoring and extra-curricular activities for children, such as sport, music and swimming lessons, were also viewed as too expensive.

Not all sole mothers who attended focus groups were currently experiencing financial stress but the majority had experienced deprivation, cash-flow problems and hardship for periods of time since becoming sole mothers. The impact of financial stress was such that sole mothers stopped planning for future eventualities, found it very difficult to manage unforeseen and special events such as birthdays and Christmas, and generally lived from 'pay to pay' or from 'week to week'. For example,

Their birthdays this year was really hard. I didn't buy them anything. I took them for a picnic barbecue, like, in the park, but, I felt like the worst mother out... [FG8]

I think Christmas is really, really for the rich people. [FG8]

Financial stress was buffered by support provided by family and friends. Many sole mothers said that 'if it wasn't for my mother' they would not have been able to manage. Having a family that was supportive helped women to feel a sense of security. The opposite was also true, sole mothers without extended family support tended to feel insecure around money issues, and to talk about being 'all alone'. Other forms of support included free babysitting, help with transport, help when sick or indisposed, bartering with other sole mothers, and help with giving children access to extracurricular activities.

The period of economic decline continued for many sole mothers until they reached the point described above as 'running out of going without', or until they started full time paid work. The degree of financial stress experienced depended upon the economic situation at the time of separation, the economic resources at the time (eg. income, saleable assets), the ability to ask for help, and the level of available social support. Aspects of financial stress were found to occur for all of the participants, although those with full time paid work experienced these stressors less often, and to a lesser degree.

Economic recovery

Economic recovery was defined as those periods of time where income was sufficient to meet expenses, and occurred after periods of economic decline and financial stress. Economic recovery mainly occurred in the context of obtaining full time paid work. Nevertheless, as was mentioned in Sections 4 and 5, full time paid work did not guarantee a net financial gain once paid work expenses and government benefit losses were taken into account.

When full time paid work was first obtained, sole mothers experienced a period of time where they felt as if they were 'catching up'. Experiencing improved financial circumstances also resulted in sole mothers taking a longer term view of their financial situations. One woman who had recently started full time paid work talked about her feelings in the following way:

I think that that will change, like, I hope that it's not gonna be like that the rest of my life that I'll always be scraping, and I certainly hope as [participant] mentioned, to get a bit more

nousier about financial, you know, projecting myself into the future financially. Just trying to get, go from strength to strength, basically... [FG3]

Assistance from family was seen as pivotal in helping some sole mothers to regain economic security. For example, one woman's mother had provided her with a house. Another woman had been able to save some money because of childcare and housing assistance provided by her parents:

While I didn't have to pay rent I managed to save up a bit of money, I was, I worked. I was at the stage where I was working at [local] high school, umm, and I have two kids and my mother would mind them while I was at work and because I was working in a school, umm, the hours weren't very long, umm, it was helpful... [FG5]

Continuing economic vulnerability

Being economically vulnerable was defined as being in an economic situation where there was little or no security, and where meeting expenses was attainable only while income and expenses remained relatively stable. Among the sole mothers in focus groups, even those women who owned their houses felt that they were economically vulnerable:

My financial situation is fine at the moment, but if I get sick and cannot work that'll all fall down on top of me. So I don't get sick. [FG9]

The factors that contributed to continuing economic vulnerability, even after a period of time in the paid workforce, included accumulated debt from a period of non-participation in paid work, expenses related to undertaking paid work, a lack of assets (many of which were liquidated in order to survive during a period of non-participation in paid work), HECS debt repayments, and either a net financial loss or a low net financial profit as a result of undertaking paid work. These factors prevented many sole mothers from accumulating savings, or from investing in other assets, such as property.

Sole mothers described feeling as though they were making no progress towards economic security, despite having undertaken further education and obtaining paid work. For example,

But I, it's like, I have no bridge, now, to get from where I am, to move towards where I would, where I would like it to be. [FG4]

I've got a little bit more money in my pocket and I'm just saving a little bit but it seems like everything I save at the moment just goes out back into the kids... [FG3]

Sole mothers who had experienced job losses due to redundancy, the end of contract work, or for health reasons described a period of economic decline as a result of finishing paid work. These women's experiences exemplified the economic decline part of the cycle (of economic decline and recovery) that continued for sole mothers who were unable to move out of economic vulnerability:

I had to cash my superannuation in this year, because I chose to actually resign from my job after I became very ill... I'd been through an immense amount of trauma because of the abuse umm and it was time to look after me, the only way I could actually feasibly do that with the mortgage that I had to have [laughs] because I chose to leave my relationship and he got half the equity of the house that he didn't really own originally, I cash, cashed my superannuation in. And I had to pay double tax on that and return, and because, because my

income for the year, even though I hadn't hardly worked, was just over the threshold I had to pay all my HECS fees. And I had been counting on getting a tax return to assist me with some renovations that needed to occur on the house. So I feel like I've been in this double or triple actually, a triple financial inequity. By cashing in my superannuation early and doing away with all my benefits that were attached to my employer who would have paid half, putting it in on my mortgage so I could afford the mortgage repayments, yeah. [FG7]

When asked about their futures, many sole mothers were unsure of how they would attain financial security. Some sole mothers thought they might move from one government benefit to another until they were on the aged pension, and, as mentioned in Section 4, many had plans to undertake paid work. However, few were confident that they would ever reach a stage where they would feel secure:

Well, I, I, I'm not, I'm not saying I've accepted this, but there's a big part of me that seriously doubts whether I'll ever, um, get into home ownership. That I'll ever have security. [FG4]

Affording essentials

Sole mothers talked at length about their difficulties with affording essential goods and services. Women's experiences with purchasing housing, transport and healthcare are described below, in order to further elaborate on the economic circumstances and lives of sole mothers. Sole mothers who attended focus groups also experienced difficulty with buying food and clothing, as was indicated by the previous findings.

Housing

Sole mothers who attended groups had experienced homelessness, had rented homes from the private and public housing market, and had purchased homes. Each of these types of housing had particular benefits and costs, which are described below.

As was previously mentioned, periods of homelessness were often spent living with family and friends. This afforded sole mothers the opportunity to save some money but rarely provided optimal accommodation:

I'm in the situation at the moment, I'm staying with my sister, I cannot stay there long term. She, she has a family, she has a husband who we don't get on that well with, he doesn't really want us there... [FG6]

As suggested by the above quote, sole mothers found paying rent in the private rental sector very difficult:

I paid nearly half my sole parent and family payment in rent... [FG7]

Other problems sole mothers experienced with the private rental sector included being refused accommodation on the basis that they were sole mothers, and having to move house frequently:

I want a private rental, I want this house. And I go and put my application in and as soon as I write single parent down on that form, I'm the worst in the world. [FG1]

I lived in the same house for 21 years until I got married the first time, since then I've moved 30 times. [FG11]

Sole mothers who obtained public housing usually expressed gratitude for the economic and housing security that this offered. However, problems arose from taking this type of housing, including the local environment and the need to move away from family and friends:

Well it's housing that's really important. It's Community Housing that's helped me umm, because it's fixed, the percentage of rent, the percentage of my income that goes in rent and yeah I just, I'd be on the street if it wasn't for them. [FG8]

Well, I'm in the situation now where I'm in department of housing and I hate it with a, a, a vengeance... Some of them (other people who live on the same Department of Housing estate) are quite disadvantaged, and there's a lot of social problems. And for me, my biggest challenge is keeping my kids away from some of the social problems that are there. [FG4]

Some sole mothers had also experienced social isolation as a result of moving house to gain access to cheaper housing in the private rental sector:

I came out this way because I thought well, the places to rent, it's a lot cheaper and a lot more spacious, the kids have somewhere to run around in. And so I moved here and became isolated. [FG8]

Other sole mothers had refused public housing, and had opted not to move to cheaper private rental areas because they felt the need to remain near their social networks outweighed the need for cheaper housing:

But with the housing department, that was the thing, 'Well, you'll have to move out of your area.' Umm, well, hold on a minute, all my support systems are here, this is where I grew up, I don't want to leave this area. [FG6]

Despite the cost, purchasing a home was generally felt to be preferable to renting a home by most sole mothers who were paying mortgages:

I wanted the house and I'm pleased, you know, that in the end I did take it on, but, you've no idea all those dreadful, you know, 'You'll be paying off this mortgage till you're 103.' type words. And I just had to think, oh well, that's it, I'll just always be putting that money in and paying the house off. [FG3]

Sole mothers who were currently not purchasing their own homes did not feel that buying a home would be possible, although many would have liked to have done so:

When you've been married and you've bought your house together and then you separate and divorce and then you're not entitled to the first home owner's grant. Because you've already borrowed. There should be a scheme that if you do end up in that situation... Now if I could get that \$14,000, first home owner's grant, plus the money that I've got in my super, I've got a deposit for a house. And I've got a future then for me and my daughter. [FG8]

The three sole mothers who owned their own homes felt more financially secure than other women, even though they had experienced times of financial stress:

My mother helped me financially. She said, when I left my partner for the first time, she said, 'The best thing I can do for you would be provide you with your own housing.' And that's been a godsend. [FG9]

Transport

An interaction between place of residence and transport arose from the focus group data. Sole mothers who lived in inner and middle city areas that were serviced by reliable public transport did not feel that they needed to have a car. Furthermore, sole mothers who lived in city areas had access to discounted bus travel, which was not available in outer metropolitan or rural/remote areas.

(It's) hard with two young ones getting on the bus, it's not cheaper out this way, the bus drivers don't consider the pension card, in the city it's a \$1.10 to travel on ferries, buses, trains. Your pension card means zip out here. [FG8]

In addition, although sole mothers in outer metropolitan areas did have access to discounted train travel, many did not use trains because they felt that public transport was unsafe.

You don't feel safe. I actually got off the train this was a few years ago, that was, that was, the last time that I caught the train on our own... [FG8]

Most of the sole mothers who lived in outer metropolitan and rural/remote areas had their own cars. Women felt that running a car was essential because of the above issues, and because of the distances they needed to travel in order to obtain goods and services. However, cars were often old and unreliable, and women found it difficult to afford maintenance and running costs:

(One thing) the government could do, is assist sole parents, widows and you know, and people raising children alone, by subsidizing the leaded fuel. The excess of four cents a litre fuel, which can, which really hurts me. I feel punished because I can't afford a nice modern car that I'd love, that didn't ruin the environment with its lead, but it's impossible. I'm lucky to hang on to the old '83 model that I've got. So that would be, a, a wonderful area that would make it equal, at least. I'm not asking for more, except to be the same fuel costs as others. That's a huge, err, injury to me constantly. And the review of regional and small town high costs to fuel, for example, we're less than two hours away from (regional centre) and it's ten cents a litre cheaper... [FG7]

Healthcare

Gaining access to healthcare was a major issue to arise in focus groups. As might be expected, the lack of bulk billing general practitioner services was raised in all but one of the groups that were held outside the city area. A lack of financial resources affected sole mother's ability to pay for consultations, prescriptions, allied and ancillary health goods and services, and preventive activities:

I've two scripts at home waiting there for, and I actually do need them scripts, but I can't do a thing until payday. [FG10.2]

The kind of things that my body is impacted by, doctors can't help me. Allergies and, you know, kidney weaknesses, and all of those things. The doctors can't do anything with that. And I can't afford naturopaths. [FG7]

Can we buy fresh water to drink? No. That's a luxury. [FG10.2]

The last point raised in the above quote is deserving of further explanation. In one of the rural areas visited, the local water was called 'unpalatable' by one of the participants, although the general consensus of focus group attendants and the local community was that the water was undrinkable. Therefore, local people tended to buy bottled water. However, among women in focus groups, the purchase of bottled water was difficult to manage.

Findings for health are covered in more detail in Section 7, while findings that were specific to area of residence are covered in more detail in Section 8.

Summary of qualitative findings

Sole mothers were found to experience a reduction in income and assets, and an increase in expenses upon separation that included the loss of partner income, a reduction in sole mother's income, loss of joint property, legal costs and the costs of setting up a new home.

Economic decline occurred where expenses exceeded income. Coping techniques adopted by sole mothers contributed to further economic decline, for example, taking out loans and selling assets. Economic recovery usually occurred when sole mothers obtained full time paid work, however, due to the long term impact of taking out loans and selling assets, many found it hard to 'get ahead'. Despite experiencing a decrease in financial stress once full time paid work was obtained, sole mothers were found to experience prolonged economic vulnerability. This was exemplified by cases where women became unemployed and quickly experienced the onset of financial stress and returned to a period of economic decline. Sole mothers experienced all of the aspects of financial stress described by Bray (2001) and McColl et al. (2002), in addition to other stressors, including:

- Difficulty affording 'non-essential' goods and services:¹⁴
 - Extra-curricular activities for children
 - Birthdays
 - Christmas
 - Holidays
 - Unexpected events
- Difficulty affording essential goods and services:
 - Food
 - Clothing (new and used)
 - Housing
 - Transport
 - Healthcare
 - Unexpected emergencies
- Borrowing money to pay bills
- Disposing of assets including:
 - Family home
 - Superannuation
- Pawning belongings to pay bills

¹⁴ For the purposes of this report, items were termed 'non-essential' if they were not necessary for basic wellbeing (eg. food, shelter). However, it is acknowledged that being unable to afford swimming lessons and tutoring for children, and having difficulty with celebrating birthdays and Christmas, might have serious practical and emotional consequences for those involved.

- Inability to pay bills on time
- Seeking help from charities for:
 - Food
 - Utility bills
 - Clothing

Discussion

Between 35 and 41 percent of sole mothers who took part in the young and mid-aged cohort surveys of the ALSWH experienced difficulty with managing on their available income. These figures were comparable to those obtained by studies that have examined the proportion of sole mothers who were living in poverty (Bray, 2001; McColl et al., 2002; Saunders, 2004). Between 33 and 34 percent of mid-aged sole mothers were very or extremely stressed about money and between 44 and 53 percent of sole mothers in their twenties were very or extremely stressed about money. The proportions of young cohort sole mothers who experienced money stress were slightly higher than those who reported income management difficulty, and were also higher than the proportions of mid-aged sole mothers who had experienced money stress. Furthermore, although income management and money stress were significantly associated with each other, the correlations between the two variables were not overly strong.¹⁵ Therefore, while these two constructs are related, they appear to be tapping different aspects of economic wellbeing.

The measure of income management used in the ALSWH resembles a measure of poverty developed by Saunders (2004). Furthermore, the income management question was also asked of participants in the qualitative study and several women commented on this item during one of the focus groups. Women felt that the measure was inaccurate, because the response of ‘impossible’ would indicate that they were not able to manage on their available money, and since they were able to obtain food and meet most basic needs, then income management was ‘...not impossible, but it’s bloody hard.’ As such, the income management question was seen to be a measure that captured the degree to which income could meet expenses. Furthermore, the focus group discussion explained why so few women selected the response of ‘impossible’, while selection of ‘difficult all of the time’ was much more common (Reported in Appendix F).

The measure of money stress, on the other hand, was a more global measure. This accounts for the higher proportion of women in the young cohort survey who indicated that they experienced stress with money compared to the results for income management. For example, it is possible to feel stress around money issues, even when there is sufficient income to meet expenses. This was demonstrated in the qualitative study as women continued to feel economically vulnerable even when the family budget was balanced.

Across all measures, cohorts, and surveys of the ALSWH, sole motherhood was associated with lower economic wellbeing compared to partnered mothers, and unpartnered and partnered childless women. Even after adjusting for education and paid employment status, sole mothers could be distinguished from other groups of women on measures of economic wellbeing by their higher odds of experiencing income management difficulty and money stress.

Among women in their twenties, adjusting for education and paid employment status resulted in a reduction in the size of the association between sole motherhood and economic difficulty. Because

¹⁵ Around $r = 0.5$ for each survey.

sole motherhood was associated with lower education and not being in paid employment in earlier analyses, the results suggested that education and paid employment status might partially mediate the relationship between sole motherhood and economic difficulty.

While education and paid employment status may explain some of the association between sole motherhood and economic stress, these variables did not account for the entire association. This point was especially pertinent among mid-aged sole mothers. Although adjusting for education had an effect on the association between sole motherhood and economic difficulty, it was not as pronounced as that found for young sole mothers. Furthermore, paid employment status did not have a substantial impact on the association between mid-aged sole motherhood and economic difficulty.

For both young and mid-aged women, sole motherhood was associated with income management difficulty and money stress beyond that which was explained by educational attainment and paid employment participation. Therefore, interventions designed to assist sole mothers in furthering their education and improving their employability may have a positive impact on the economic status of sole mothers, but may not have an impact that is sufficient to bring sole mothers to an economic level that is comparable to that of other women.

The focus group results supported this contention. Although sole mothers were seen to experience improved economic wellbeing as the level of income increased, experiences of financial stress were apparent among sole mothers who were undertaking full time, part time or casual paid work, and among those who had a tertiary education.

Women who attended focus groups had experienced all of the aspects of financial stress used in the ABS (2000) measure of economic wellbeing, that is, deprivation, cash-flow problems, and hardship (Bray, 2001; McColl et al., 2002). Furthermore, all of the women who attended focus groups mentioned that they had experienced more than one aspect of financial stress during periods of economic difficulty. The non-representative nature of the qualitative study precludes extrapolation to the general population. However, this finding warrants further research to establish the lifetime incidence of poverty and financial stress among sole parent families.

The quantitative study indicated that separation was associated with both increased and decreased money stress. Focus group findings indicated that increased financial stress occurred as a result of decreased income, disposal of assets and increased expenses. Decreased stress with financial management was seen to occur in the context of regaining control of the family budget. As such, the association between separation and decreased money stress found in the quantitative study might be a reflection of increased control over money, after a period of time living with a partner who was financially inept or economically abusive.

Aspects of economic wellbeing that were not tested in the quantitative models involved the sale of assets and the incurring of debts. By incurring debt and selling assets, sole mothers who attended focus groups sacrificed long term financial security in order to alleviate short term financial stress. It is possible that the high odds of income management difficulty and money stress that were found after controlling for paid employment status in the ALWSH analyses were, in part, reflecting the long term economic outcomes of decisions that were made during periods of financial crisis.

To date, examinations into the economic wellbeing of sole mothers have focussed on income, expenditure and financial stress (ABS, 2000; Bray, 2001; Harding et al., 2001; McColl, Pietsch, & Gatenby, 2002; Saunders, 2004; Smyth & Weston, 2000). These studies have had similar findings,

which have indicated that sole mother families face the highest risk of financial stress and poverty of all Australian families aged under 65 years. The current qualitative study has indicated that measurement of assets and liabilities among sole mother families may reveal further information about the continuing economic vulnerability that sole mother families experience. Future studies should be undertaken that incorporate assessment of the assets and liabilities of sole parents.

A further point to arise in focus groups concerned the distribution of joint assets that occurred after separation. Women who had experienced intimate partner abuse, and women who were threatened by their partners were found to 'give in' to partner demands concerning joint property. Among the ALSWH young cohort second survey, 42 percent of sole mothers had lived with a violent partner. Among the mid-aged cohort first survey, 37 percent of sole mothers had lived with a violent partner. Since an even higher proportion of women are likely to have experienced other forms of intimate partner abuse, the impact of intimate partner abuse on the distribution of joint assets warrants further investigation. Furthermore, legal practitioners who represent women in matters of Family Law should be aware of the possibility that their clients might not feel as though they are in a position to sufficiently pursue property settlements and custody disputes. The provision of advocacy services for women in this position should be investigated as a matter of urgency.

Much of the financial stress of sole mothers might be alleviated by the addition of child support, as was mentioned in Section 5. Women who were in receipt of child support generally felt that they were better off than the women who attended focus groups who did not receive child support. However, an investigation of income management and child support among sole mothers who attended groups revealed no significant differences between those who were receiving child support and those who were not. In part, this is probably due to the low amount and lack of reliability of child support that was reported by the participants (Section 5). This finding warrants further research. In particular, there is a paucity of information concerning the regularity, reliability and amount of child support that sole parents receive, and how this affects their economic wellbeing.

Among the sole mothers who attended focus groups, social support was found to offer the most effective means by which women avoided some of the more extreme aspects of financial stress, such as homelessness. Family and friends provided housing, money, free babysitting and transport, assistance when sole mothers were ill, and helped to provide children with extracurricular activities. Many women also received assistance from charities, and some women routinely relied upon charities to help with utility bills and the provision of food. That all of the women who attended focus groups had felt the need to obtain social or charity support points to a high degree of economic distress among sole mothers.

Conclusions

Previous qualitative results had indicated that sole mothers experienced a number of barriers to education and paid employment, and demonstrated the difficulties sole mothers experienced in obtaining income. The current section of the report has been concerned with the outcome of those experiences in terms of economic wellbeing. Quantitative results confirmed what the qualitative findings reported in Sections 3-5 had suggested: further education and paid employment status accounted for only part of the economic wellbeing of sole mothers. Therefore, interventions that address only these issues may assist with the economic wellbeing of sole mothers, but are unlikely to be effective in raising the economic wellbeing of sole mothers to a level comparable to that of other women.

Qualitative results indicated a number of areas that require further investigation in order to determine:

- The lifetime incidence of poverty among sole mothers
- The economic wellbeing of sole mothers as measured by assets and liabilities
- The impact of intimate partner abuse on the distribution of joint property
- The impact of child support amount and regularity on economic wellbeing

The qualitative results also indicated that sole mothers experienced a decline in economic wellbeing upon separation, that economic recovery usually occurred within the context of paid employment, that improved economic wellbeing did not necessarily lead to economic security, and that sole mothers experienced prolonged periods of economic vulnerability even after the family budget was balanced. Economic vulnerability meant that women who experienced a decrease in income quickly returned to a state of economic decline. Overall, the women who attended focus groups did not expect to achieve economic security in the near future, and many did not expect to achieve economic security in the long term.

Section 7: Health

The qualitative findings described in previous sections of this report have indicated that sole mothers experienced stress when trying to complete further education (Section 3), when undertaking paid work (Section 4), and in their dealings with Centrelink and around child support issues (Section 5). The previous section indicated that women experienced many financial stressors. There is ample evidence that stress impacts on health. For example, stress has been linked to gastrointestinal disorders (Righter & Sansone, 1999), and decreased immune system functioning (McEwen, 1998). Mayer (2000) proposed that prolonged stress leads to maladaptive stress responses and notes two neurotransmitters that have been implicated in the stress reaction, and that are relevant to health. Cortisol secretion may be elevated for a long time under chronic stress, and can result in permanent changes to areas of the brain concerned with memory and conditioned fear, and may be responsible for increased symptoms in patients with bowel disorders, and possibly to an increased risk of inflammatory disorders such as asthma and arthritis. The release of serotonin may also be increased during a long period of stress, resulting in both a depletion of serotonin, and the decreased ability of postsynaptic receptors to absorb serotonin (Mayer, 2000). Disruption of serotonin levels has been implicated in both depression and anxiety (Carson et al., 1996).

The qualitative findings indicated that poor health had prevented sole mothers from undertaking further education (Section 3) and paid work (Section 4). Among the sole mothers who attended focus groups, paid work participation was found to lead to poorer health outcomes for some sole mothers, while other sole mothers reported improved psychological health as a result of paid work participation (Section 4). Qualitative results of the previous section indicated that decreased economic wellbeing resulted in difficulties with accessing healthcare and with undertaking preventive measures that might have a positive impact on health. The purpose of the current section was to investigate the associations between sole motherhood and health.

A search of academic databases (Medline, Proquest, Ovid, Psychinfo) restricted to peer reviewed publications from 1995-2004 revealed that there were no recent articles that had been concerned with Australian sole motherhood and health. Some evidence for health problems among Australian sole mothers was reported in a study conducted by the Department of Family and Community Services, which found that among Parenting Payment recipients, sole parents were more likely than partnered parents to have experienced emotional problems (Gregory, 2003).

Research conducted overseas has indicated an association between sole motherhood and poorer health. For example, sole motherhood has been associated with poorer psychological and physical health in studies conducted in Germany (Franz et al., 2003), the US (Jayakody et al., 2000), Britain (Baker & North, 1999; Hope et al., 1999), Canada (Davies, Avison, & McAlpine, 1997), Sweden (Whitehead et al., 2000) and Finland (Lahelma et al., 2002). Of some concern were findings from a national sample study in Sweden, where sole mothers were found to have a higher mortality rate than partnered mothers, with the likelihood of suicide being around twice as high for sole mothers compared to partnered mothers (Weitoft et al., 2000). Another study indicated that sole mothers used mental health services more often than partnered mothers (Cairney & Wade, 2002).

In general, lower socioeconomic status was found to have an influence on the health of sole mothers. For example, sole mothers with lower socioeconomic status have been found to have worse general health and poorer psychological health than sole mothers with higher socioeconomic status (Bernstein, 2001; Franz et al., 2003; Lipman et al., 1997). Furthermore, when socioeconomic

status was controlled for, the association between sole motherhood and poorer health was found to decrease (Hope et al, 1999; Whitehead et al., 2000). These results imply that socioeconomic status might have acted as a partial mediator in the relationship between sole motherhood and poorer health. However, economic status did not account for all of the association between sole motherhood and poorer health, which implied that there were other factors involved in the health of sole mothers.

The quantitative investigation included in this section examines the association between sole motherhood and health among the young and mid-aged cohorts of the ALSWH. Based on past research, it was expected that sole motherhood would be associated with poorer psychological and physical health, and that these associations would be partially mediated by other factors. The qualitative results included in this section examined sole mother's experiences of psychological and physical health.

Quantitative results

Cross sectional analyses

Recent depression, anxiety and psychoactive medication use were examined by conducting univariate cross tabulations and Chi square analyses. Suicidal thoughts and self harm among the young cohort were examined using two univariate logistic regressions, with the presence of either suicidal thoughts or self harm entered as the outcome variable, and relationship status entered as the predictor variable.

Current depression (CES-D), measured at Survey 2, was examined by using two logistic regressions, one for each of the cohorts. In both analyses, the cut-off score for depression (greater than or equal to 10) was used to develop the outcome variable: the presence of depression. In the first model, relationship status was entered alone, demographic variables were adjusted in the second model, and the third model adjusted for demographic variables and economic status indicators: education (Year 10 or less); paid employment participation; and stress with money (very or extremely stressed).

To test for the significance of the relationship between sole motherhood and poorer psychological health (SF-36 MCS) and to examine the impact of economic status on psychological health, a series of multiple regressions were conducted. Three models were run for each of the four surveys. For each model tested, the SF-36 MCS was entered as the outcome variable. The relationship status variable was dummy coded, so that sole mothers were distinguished from all other women. In the first model, sole motherhood was the only predictor entered. In a regression such as this, the coefficient (B) represents the difference between the mean of the target group (sole mothers) and the mean of the comparison group (other women). In the second model, demographics (age, area of residence, Aboriginal/Torres Strait Islander status) were added as predictor variables. In the third model, economic indicators (education [Year 10 or less/more than Year 10], employment status [not in paid employment/in paid employment], and stress with money [very or extremely stressed/not at all, somewhat or moderately stressed]) were added as predictor variables.

The number of medical conditions women had experienced in their lifetimes was examined by using univariate cross tabulations and Chi square analyses. Recent physical symptoms were analysed by conducting univariate linear regression analyses, where relationship status was entered as the predictor variable and number of physical symptoms was entered as the outcome variable.

The relationship between sole motherhood and overall physical health (SF-36 PCS) was analysed using the same techniques that were used to test the relationship between sole motherhood and overall psychological health (SF-36 MCS, described above).

Cross sectional results

Recent depression and anxiety

Among the young cohort at the time of the second survey, sole mothers were more likely than other women to have experienced symptoms of depression in the previous 12 months, $\chi^2 (9, 9419) = 73.86, p < 0.001$ (see Figure 15). Although relationship status was significantly associated with symptoms of anxiety in the previous 12 months among the young cohort, $\chi^2 (9, 9419) = 21.49, p = .01$, differences between groups were small, as can be seen in Figure 16. Among the mid-aged cohort at the time of the second survey, sole mothers were more likely than other women to have experienced symptoms of depression ($\chi^2 [9, 10,474] = 134.40, p < 0.001$.) and anxiety ($\chi^2 [9, 10,462] = 56.82, p < 0.001$) in the previous 12 months. These results are depicted in Figures 17 and 18.

A higher percentage of mid-aged sole mothers compared to sole mothers in their twenties appeared to have experienced depression in the previous 12 months. The question that asked about anxiety differed between surveys, so results for anxiety were not comparable.

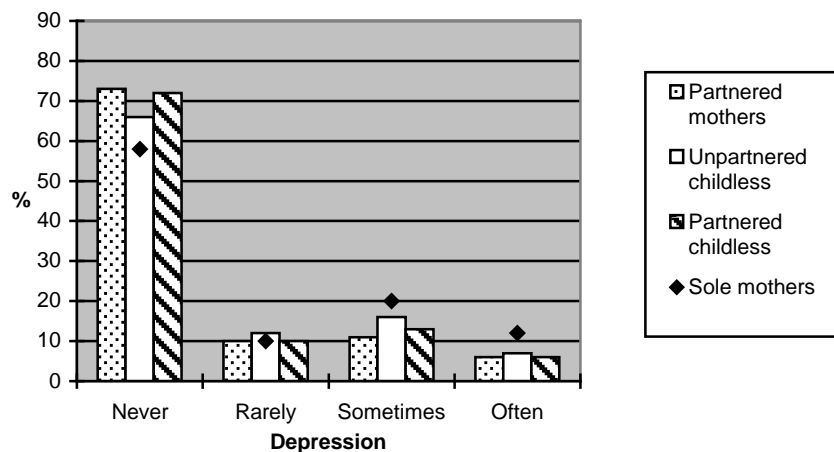


Figure 15: Young Survey 2 cross tabulation results for relationship status by experiences of depression in previous 12 months

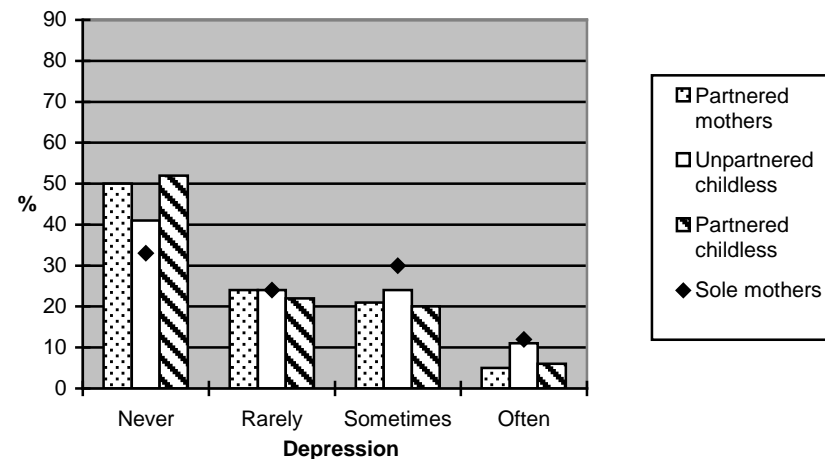


Figure 17: Mid-aged Survey 2 cross tabulation results for relationship status by experiences of depression in previous 12 months

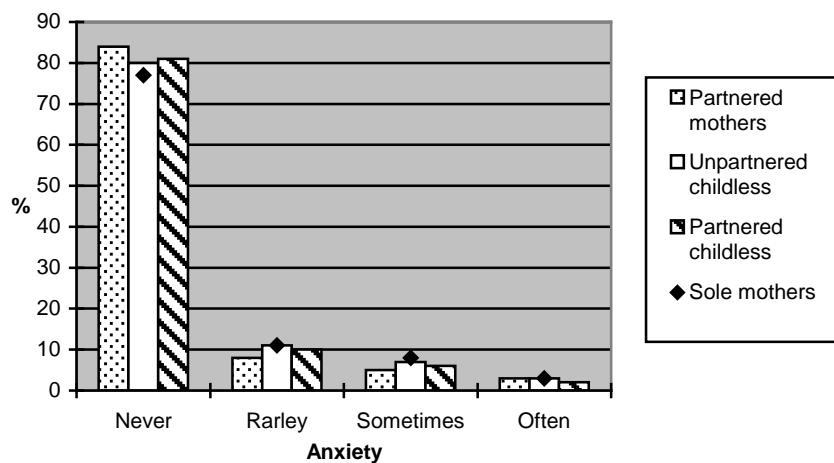


Figure 16: Young Survey 2 cross tabulation results for relationship status by experiences of anxiety in previous 12 months

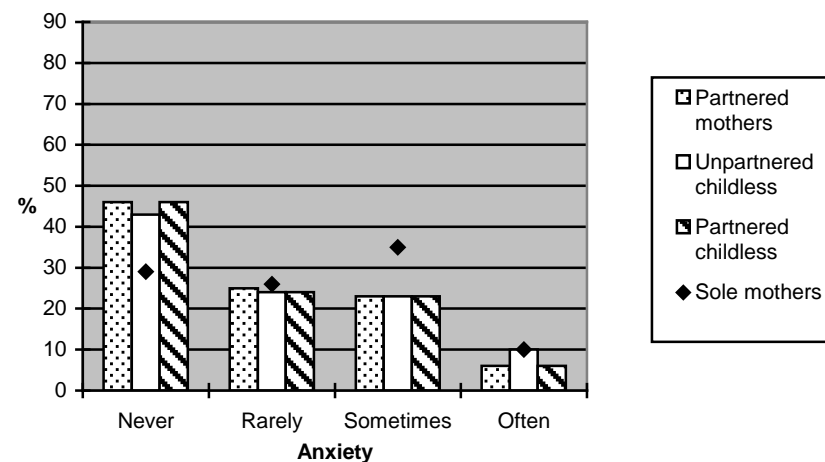


Figure 18: Mid-aged Survey 2 cross tabulation results for relationship status by experiences of anxiety in previous 12 months

Current psychoactive medication use

Results for the young cohort, shown in Table 28, indicated that the association between relationship status and use of depression medication was significant, $\chi^2(3, 9169) = 31.65, p < 0.001$. Sole mothers were the most likely to have indicated that they had taken medication for depression in the previous four weeks. Relationship status was not significantly associated with use of anxiety medication among the young cohort, $\chi^2(3, 9168) = 4.23, p = .238$. The association between relationship status and sleep medication use was barely significant, $\chi^2(3, 9170) = 10.49, p = .015$, and there was little difference between groups.

Among the mid-aged cohort at the time of the second survey, associations between relationship status and psychoactive medication use were significant at $p < 0.001$ for depression $\chi^2(3, 10,208) = 47.17$, anxiety $\chi^2(3, 10,237) = 19.56$, and sleeping medication $\chi^2(3, 10,240) = 32.02$. Table 28 shows the percentage of women per relationship status category who were taking the relevant psychoactive medications. Of all relationship categories, sole mothers were the most likely to be taking medication for depression, were more likely than partnered mothers to be taking medication for anxiety, and were more likely that partnered women to be taking sleep medication. The similar results that were found for sole mothers and unpartnered childless women might be explained by the number unpartnered childless women who had children aged over 16 years.

Table 28: Young and Mid-aged Survey 2 cross tabulation results for relationship status by recent psychoactive medication use for the second ALSWH surveys

Survey Relationship status	Medication used in previous 4 weeks for:					
	Depression		Anxiety		Sleep	
	N	%	N	%	N	%
Young 2						
Sole mothers	272	9.2	272	2.6	273	2.9
Partnered mothers	1142	3.2	1142	1.7	1142	1.6
Unpartnered childless	4481	5.3	4480	2.0	4481	3.2
Partnered childless	3274	3.6	3274	1.5	3274	2.5
Mid-aged 2						
Sole mothers	281	11.4	282	4.3	281	11.4
Partnered mothers	1961	5.2	1964	2.7	1965	6.2
Unpartnered childless	1448	9.1	1449	5.8	1452	11.1
Partnered childless	6518	5.3	6542	4.3	6542	7.9

Suicidal thoughts and self harm

Relationship status was significantly associated with feeling as though life was not worth living during the week prior to the time of the second young survey, $\chi^2(3, 9313) = 41.36, p < 0.001$. Of sole mothers, 11 percent had felt that life wasn't worth living in the week prior to the survey, while 6 percent of partnered mothers, 9 percent of unpartnered childless women, and 5 percent of partnered childless women had felt this way. In a univariate logistic regression, sole mothers had 2.2 times the odds of feeling as though life was not worth living (95% CI: 1.4, 3.3) relative to partnered childless women.

Relationship status was also significantly associated with deliberate self harm within six months of the time the second young survey, $\chi^2(3, 9319) = 50.75, p < 0.001$. Seven percent of sole mothers reported that they had deliberately tried to harm themselves in the previous six months, compared to 2 percent of partnered mothers, 5 percent of unpartnered childless women, and 2 percent of partnered childless women. In a univariate logistic regression, sole mothers had 3.2 times the odds of deliberate self harm (95% CI: 2.0, 5.4), while unpartnered childless women had 2.1 times the odds of deliberate self harm (95% CI: 1.6, 2.8), relative to partnered childless women. The higher odds of experiencing these life threatening conditions among sole mothers warrants urgent attention.

Current depression (CES-D 10)

Means and standard deviations for scores on the CES-D 10 are available in Table 29. There was a noticeable difference between groups, whereby sole mothers in both cohorts had the highest depression scores.

Table 29: Young and Mid-aged Survey 2 means and standard deviations for CES-D 10 (depression) scores for relationship status categories

Relationship status	Young cohort Survey 2			Mid-aged cohort survey 2		
	N	M	SD	N	M	SD
Sole mothers	270	9.85	6.00	286	9.23	6.18
Partnered mothers	1130	7.80	5.40	1995	6.07	5.27
Unpartnered childless	4434	7.96	5.72	1468	7.81	6.47
Partnered childless	3246	6.83	5.03	6665	6.19	5.46

As can be seen in Table 30, among the young cohort, sole mothers had nearly three times the odds of experiencing current depression, relative to partnered childless women (unadjusted model). In fact, nearly half of the young cohort sole mothers had a level of depression that was commensurate with diagnosable depression. Similar results were apparent for the mid-aged cohort: sole mothers had over twice the odds of experiencing depression relative to partnered childless women. Forty two percent of sole mothers were experiencing depression at the time of the second mid-aged cohort survey. In both the young and mid-aged cohort surveys, adjusting for economic indicators resulted in a reduction in the association between sole motherhood and depression, implying that economic status accounted for some of this relationship.

Table 30: Young and Mid-aged Survey 2 odds ratios (OR) and 95% confidence intervals (CI) for odds of experiencing depression: Unadjusted; adjusted for demographics (age, area of residence, ATSI status); and adjusted for demographics and economic indicators (education, employment, stress with money).

Survey Variable	N	%	Unadjusted		Adjusted for demographics		Adjusted for demographics & economic indicators		
			OR	CI	OR	CI	OR	CI	
Young 2									
Relationship status									
Sole mothers	271	48	2.91	2.26, 3.74	2.78	2.18, 3.54	1.55	1.16, 2.06	
Partnered mothers	1130	31	1.39	1.20, 1.62	1.48	1.28, 1.71	1.07	0.90, 1.28	
Unpartnered childless	4434	33	1.51	1.37, 1.68	1.54	1.38, 1.71	1.56	1.39, 1.76	
Partnered childless	3246	24	1.00		1.00		1.00		
Mid-aged 2									
Relationship status									
Sole mothers	286	42	2.45	1.92, 3.12	2.22	1.72, 2.86	1.50	1.10, 2.04	
Partnered mothers	1995	21	0.88	0.78, 1.00	0.98	0.86, 1.10	0.92	0.79, 1.06	
Unpartnered childless	1468	32	1.55	1.37, 1.76	1.72	1.52, 1.96	1.54	1.32, 1.80	
Partnered childless	6666	23	1.00		1.00		1.00		

Note. Percentages refer to the percentage of women per relationship status category who had CES-D 10 scores of 10 or more, which indicated the presence of depression (eg. 42% of the 286 mid-aged women who were sole mothers had depression).

General psychological health (SF-36 MCS)

Across all four surveys, sole mothers had worse psychological health than other women. The means and standard deviations of the SF-36 MCS for all four surveys are reported in Table 31.

Table 31: Means (M) and standard deviations (SD) of SF-36 MCS for relationship status categories

Relationship status	Young cohort						Mid-aged cohort					
	Survey 1			Survey 2			Survey 1			Survey 2		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Sole mothers	321	46.9	11.0	273	47.1	10.7	357	45.3	10.8	281	45.9	10.9
Partnered mothers	670	49.8	10.4	1141	51.2	9.5	3016	50.1	9.7	1994	50.4	9.6
Unpartnered childless	9520	50.2	9.8	4488	49.6	9.9	1578	48.2	10.8	1478	49.4	10.7
Partnered childless	2165	50.3	10.0	3278	51.1	9.4	6882	51.0	9.5	6669	51.4	9.8

The results of the multivariate analyses for the young and mid-aged cohorts are presented in Table 32. Among the first young cohort survey, sole mothers were significantly less psychologically healthy than other women. The relationship between sole motherhood and psychological health was not strong ($r = 0.05$); however, it was noted that the inclusion of economic variables in the model (Model 3) resulted in a reduction in the size of the coefficient (B). This indicated that part of the variance between sole motherhood and psychological health could be accounted for by economic status. Since previous analyses (Sections 3, 4 & 6) had already determined a relationship between sole motherhood and education, paid employment, and stress with money, this result suggested that economic status acted as a mediator in the relationship between sole motherhood and psychological health among young women aged 18-22 years.

Among the second young cohort survey, sole mothers were significantly less psychologically healthy than other women. The relationship between sole motherhood and psychological health ($r = 0.06$) was similar to that obtained for the first survey. The inclusion of economic variables in the model again resulted in a reduction in the relationship between sole motherhood and psychological health. Education, paid employment, and stress with money were significantly associated with sole motherhood in previous analyses. Taken together, these results indicated that economic status may partially mediate the relationship between sole motherhood and psychological health among young women aged 22-27 years.

Table 32: Multiple regression results for SF-36 MCS with predictors: relationship status (Model 1); relationship status and demographics (age, area of residence, ATSI status; Model 2); and relationship status, demographics and economic indicators (education, employment, stress with money; Model 3).

Survey Predictor	Model 1					Model 2					Model 3				
	N	B	SEB	t	p	N	B	SEB	t	p	N	B	SEB	t	p
Young 1	12675					12543					12133				
Sole mother		-3.30	0.56	-5.87	.000		-3.44	0.54	-0.06	.000		-2.04	0.54	-3.78	.000
Age							0.26	0.06	4.34	.000		0.19	0.06	3.25	.001
Rural/remote							0.89	0.18	4.98	.000		0.90	0.17	5.19	.000
Yr 10 or less education												-0.75	0.23	-3.16	.002
Not in paid work												0.06	0.18	0.33	.738
Stress with money												-6.89	0.20	-34.90	.000
Young 2	9180					8776					7985				
Sole mother		-3.26	0.60	-5.45	.000		-3.47	0.57	-6.10	.000		-1.37	0.59	-2.33	.020
Age							0.04	0.70	0.62	.535		0.01	0.70	0.18	.860
Rural/remote							1.61	0.21	7.59	.000		1.52	0.21	7.11	.000
Yr 10 or less education												0.03	0.34	0.08	.936
Not in paid work												0.05	0.27	0.17	.862
Stress with money												-6.69	.24	-28.16	.000
Mid-aged 1	11834					11789					11032				
Sole mother		-5.07	0.53	-9.61	.000		-4.80	0.55	-8.69	.000		-3.01	0.54	-5.60	.000
Age							0.24	0.60	3.98	.000		0.21	0.06	3.61	.000
Rural/remote							0.70	0.19	3.77	.000		0.87	0.18	4.72	.000
Yr 10 or less education												-0.60	0.18	-3.39	.001
Not in paid work												-0.64	0.19	-3.36	.001
Stress with money												-8.66	0.25	-34.07	.000
Mid-aged 2	10423					10463					8335				
Sole mother		-5.02	0.60	-8.35	.000		-3.89	0.62	-6.25	.000		-1.81	0.65	-2.78	.005
Age							0.29	0.64	4.55	.000		0.29	0.69	4.15	.000
Rural/remote							0.54	0.20	2.68	.007		0.56	0.22	2.59	.010
Yr 10 or less education												0.06	0.21	0.31	.759
Not in paid work												-0.28	0.24	-1.16	.246
Stress with money												-8.83	0.32	-27.27	.000

Among the first mid-aged cohort survey, sole mothers were significantly less psychologically healthy than other women. The relationship between mid-aged sole motherhood and psychological health ($r = 0.09$) was stronger than that found in the young cohort survey analyses. The inclusion of economic variables in the model resulted in a reduction in the strength of the relationship between sole motherhood and psychological health. In earlier analyses, mid-aged sole motherhood was associated with a higher level of education and was not associated with paid employment status (Sections 3 & 4). When education was added to a multiple regression with sole motherhood and demographics, the coefficient describing the relationship between sole motherhood and psychological health barely changed (from $B = -4.80$ to $B = -4.75$, $SE = 0.56$). A similar small change in the coefficient was noted when employment status was added to a multiple regression with sole motherhood and demographics (from $B = -4.80$ to $B = -4.76$, $SE = 0.55$). Taken together, these results indicated that the relationship between sole motherhood and psychological health may be partially mediated by the stress mid-aged sole mothers experienced with money.

Among the second mid-aged cohort survey, sole mothers were significantly less psychologically healthy than other women. The relationship between sole motherhood and psychological health was a little smaller than that found in the first mid-aged survey ($r = 0.08$). The inclusion of economic variables in the model resulted in a reduction in the size of the relationship between sole motherhood and psychological health. As with the first mid-aged cohort survey, adding education and paid employment status to the model resulted in very small changes to the coefficient that described the relationship between sole motherhood and psychological health (from $B = -3.89$ to: $B = -3.96$, $SE = 0.62$ for education & $B = -3.87$, $SE = 0.67$ for education & paid employment). Therefore, the results indicated that the relationship between sole motherhood and psychological health may be partially mediated by money stress.

Diagnosed medical conditions

Relationship status was significantly associated with the number of medical conditions experienced by respondents to the first ($\chi^2 [9, 11,585] = 368.02, p < 0.001$) and second ($\chi^2 [9, 9332] = 311.28, p < 0.001$) young cohort surveys. Sole mothers were the least likely to indicate that they had experienced no medical conditions, and were more likely than other women to indicate that they had experienced two or more medical conditions. Results of the cross tabulations are provided in Figures 19 and 20.

Relationship status was significantly associated with the number of medical conditions ever experienced by mid-aged women in the first ($\chi^2 [9, 11,963] = 55.25, p < 0.001$) and second surveys ($\chi^2 [9, 10,606] = 85.75, p < 0.001$). As can be seen in Figures 21 and 22, differences between the groups of women were small, with mid-aged sole mothers showing similar profiles to those of unpartnered childless women, in both surveys. Sole mothers were less likely than partnered women to have never experienced a medical condition.

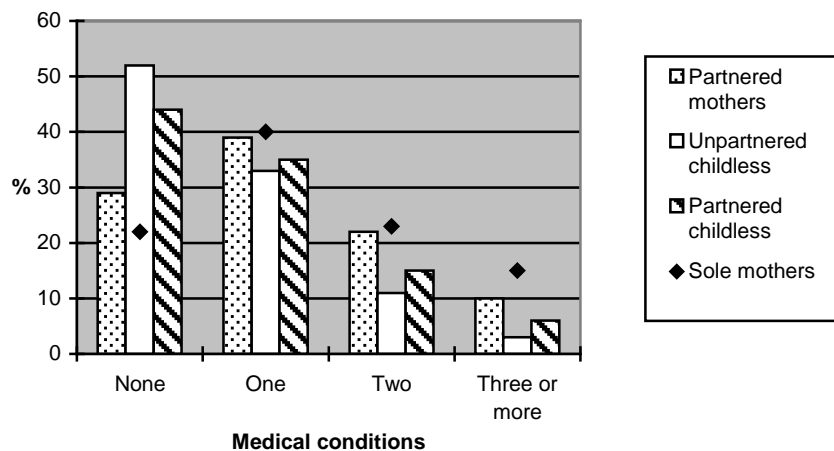


Figure 19: Young Survey 1 cross tabulation results for relationship status by number of medical conditions ever experienced

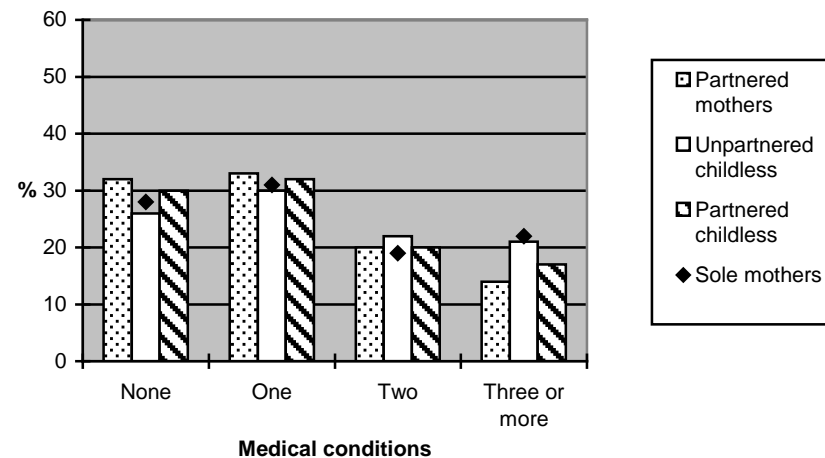


Figure 21: Mid-aged Survey 1 cross tabulation results for relationship status by number of medical conditions ever experienced

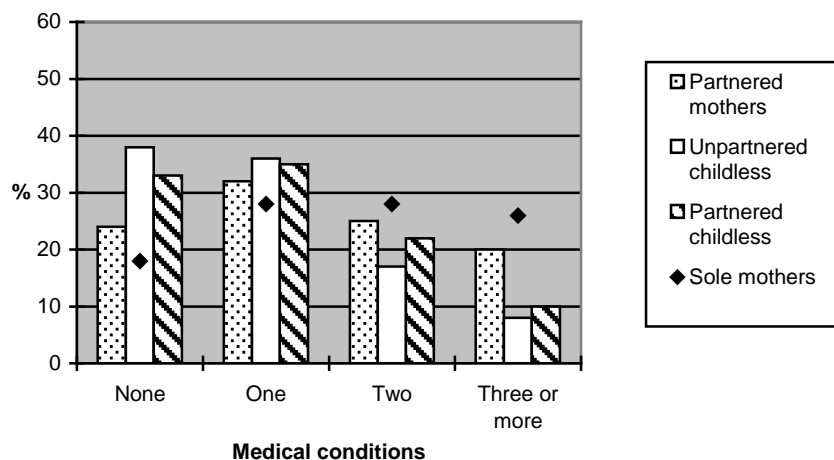


Figure 20: Young Survey 2 cross tabulation results for relationship status by number of medical conditions ever experienced

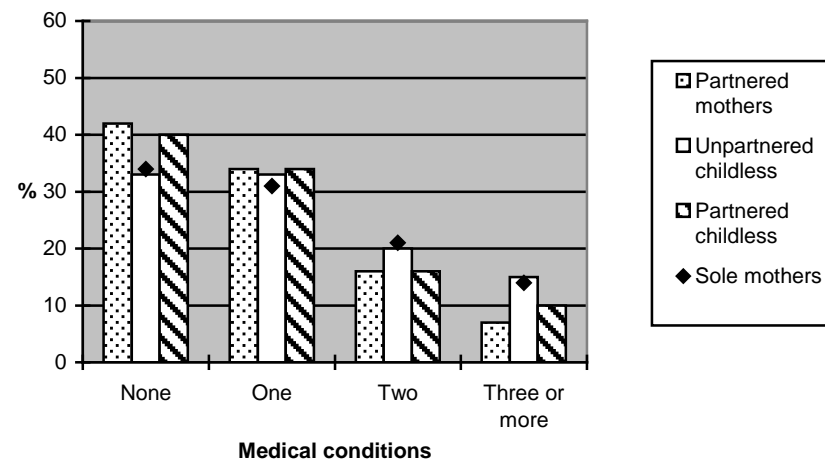


Figure 22: Mid-aged Survey 2 cross tabulation results for relationship status by number of medical conditions ever experienced

Physical symptoms

Among the first young cohort survey, sole mothers had the highest mean score for degree of physical symptoms experienced in the previous year, as shown in Table 33. In a regression analysis, sole motherhood was significantly related to the degree of physical symptoms, $B = 2.51$, $SEB = 0.38$, $t = 6.61$, $p < 0.001$ ($N = 12,547$). In the second young cohort survey, sole mothers had the highest mean score for the degree of symptoms experienced in the previous year. However, in a regression analysis sole motherhood was just barely related to physical symptoms, and was very low in strength, $B = 1.11$, $SEB = 0.46$, $t = 2.40$, $p = .016$ ($N = 9419$).

Table 33: Means (M) and standard deviations (SD) of symptoms scale for relationship status categories

Relationship status	Young cohort						Mid-aged cohort					
	Survey 1			Survey 2			Survey 1			Survey 2		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Sole mothers	323	16.2	7.4	283	12.6	8.8	349	46.1	10.0	257	46.2	9.9
Partnered mothers	659	14.0	7.3	1180	11.0	7.7	2996	45.2	10.1	1764	44.4	9.6
Unpartnered childless	9422	13.6	6.6	4604	11.6	7.6	1550	46.1	10.9	1279	45.1	10.1
Partnered childless	2124	14.4	6.9	3352	11.4	7.5	6804	46.4	10.0	5779	45.4	9.8

Among the mid-aged cohort, the degree of physical symptoms was similar among women in both surveys, as reported in Table 33. In regression analyses, sole motherhood was not significantly related to degree of physical symptomatology in the first or second survey ($p = .891$ & $.094$, respectively).

General physical health (SF-36 PCS)

Means and standard deviations of physical health as measured by the SF-36 PCS are reported in Table 34. Among the first young survey sample, sole mothers appeared to have the worst physical health; while among the first mid-aged cohort survey, sole mothers appeared to have the best physical health. Distinctions were less clear in the second surveys, among both cohorts.

Table 34: Means (M) and standard deviations (SD) of SF-36 PCS for relationship status categories

Relationship status	Young cohort						Mid-aged cohort					
	Survey 1			Survey 2			Survey 1			Survey 2		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Sole mothers	321	45.2	12.3	273	47.7	10.7	357	52.0	9.6	281	49.8	10.9
Partnered mothers	670	47.7	11.2	1141	47.3	11.0	3016	50.9	9.2	1994	50.4	9.5
Unpartnered childless	9520	50.8	9.5	4488	51.0	9.60	1578	48.8	11.5	1478	48.4	11.6
Partnered childless	2165	48.5	10.4	3278	49.8	10.2	6882	50.0	9.8	6669	49.6	10.0

Table 35: Multiple regression results for SF-36 PCS with predictors: relationship status (Model 1); relationship status and demographics (age, area of residence, ATSI status; Model 2); and relationship status, demographics and economic indicators (education, employment, stress with money; Model 3).

Survey Predictor	Model 1					Model 2					Model 3				
	N	B	SEB	t	p	N	B	SEB	t	p	N	B	SEB	t	p
Young 1	12675					12543					12133				
Sole mother		-5.04	0.56	-9.04	.000		-3.87	0.54	-7.20	.000		-1.76	0.56	-3.16	.002
Age							-0.04	0.06	-0.73	.466		-0.10	0.06	-1.69	.091
Rural/remote							-0.46	0.18	-2.57	.010		-0.16	0.81	-0.89	.377
Yr 10 or less education												-3.14	0.25	-12.74	.000
Not in paid work												-0.25	0.18	-1.34	.179
Stress with money												-3.03	0.20	-14.83	.000
Young 2	9180					8776					7985				
Sole mother		-2.38	0.62	-3.84	.000		-2.22	0.60	-3.73	.000		0.61	0.64	0.96	.338
Age							-0.20	0.07	-2.74	.006		-0.14	0.08	-1.95	.052
Rural/remote							-0.77	0.22	-3.37	.001		-0.28	0.23	-1.21	.226
Yr 10 or less education												-2.06	0.37	-5.54	.000
Not in paid work												-3.40	0.29	-11.67	.000
Stress with money												-3.25	0.26	-12.65	.000
Mid-aged 1	11834					11789					11032				
Sole mother		1.90	0.53	3.57	.000		1.28	0.56	2.29	.022		2.19	0.56	3.95	.000
Age							-0.22	0.06	-3.64	.000		-0.19	0.06	-3.10	.002
Rural/remote							0.06	0.19	0.31	.756		0.44	0.19	2.34	.019
Yr 10 or less education												-0.90	0.18	-4.92	.000
Not in paid work												-3.08	0.20	-15.77	.000
Stress with money												-3.68	0.26	-14.02	.000
Mid-aged 2	10423					10463					8335				
Sole mother		0.24	0.62	0.40	.688		-0.56	0.64	-0.87	.382		0.57	0.67	0.85	.396
Age							-0.26	0.07	-3.93	.000		-0.18	0.07	-2.59	.010
Rural/remote							-0.28	0.21	-1.37	.171		0.14	0.22	0.62	.535
Yr 10 or less education												-1.05	0.22	-4.83	.000
Not in paid work												-3.60	0.25	-14.38	.000
Stress with money												-4.59	0.34	-13.71	.000

The multiple regression results for all four surveys are reported in Table 35. Young cohort sole mothers had worse physical health than other women in both surveys, as indicated by the significant, negative coefficient (B). In the first young cohort survey, when economic status variables were added to the model, the size of the coefficient that described the relationship between sole motherhood and physical health was reduced. In earlier analyses of the first young cohort survey data, sole motherhood was associated with increased odds of having a Year 10 or less level of education (Section 3), not being in paid work (Section 4), and experiencing stress with money (Section 6). In the current analysis, the three economic indicators were associated with poorer physical health. Taken together, these results indicated that the lower physical health associated with sole motherhood can be partially accounted for, or mediated by, indicators of economic status.

In the second young cohort survey, after adding the economic indicators to the model, the relationship between sole motherhood and physical health was no longer significant. This indicated that the relationship between sole motherhood and poorer physical health was fully mediated by the economic status indicators.

Results for the mid-aged cohort first survey indicated a significant association between sole motherhood and better physical health. After controlling for economic indicators, sole motherhood and better physical health remained significantly associated, with a small increase in the size of the coefficient, which indicated that economic status had a small negative impact on the association between sole motherhood and physical health. Sole motherhood was not significantly associated with physical health in the second mid-aged cohort survey in any of the models that were tested.

Longitudinal analyses

To examine the impact of separation on psychological health (SF-36 MCS), a univariate ANOVA was conducted with change in psychological health entered as the dependent variable, and separation entered as the independent variable. Psychological health at Survey 1 was entered as a covariate.

To examine the impact of separation on physical health (SF-36 PCS), a univariate ANOVA was conducted with change in physical health entered as the dependent variable and separation entered as the independent variable. Physical health at Survey 1 was entered as a covariate.

Longitudinal results

Results for the young cohort indicated that there was no significant difference between mothers who separated and mothers who stayed partnered with regard to changes in psychological health, $F(1, 384) = 0.58, p = .447$. Separated mothers had a mean difference of -0.18 ($SD = 11.64$), while mothers who remained partnered had a mean difference of -0.75 ($SD = 10.94$), which indicated that both groups had experienced a slight decrease in psychological health since the time of the first survey. Within subjects t-tests revealed that the decrease in psychological health was not significant for either group.

Results for the mid-aged cohort revealed that mothers who separated experienced a mean decrease in psychological health of 0.20 ($SD = 12.69$), compared to a mean decrease experienced by mothers who remained partnered of 0.01 ($SD = 8.75$).

Results for the young cohort indicated that there was a significant difference in physical health between mothers who had separated and mothers who had remained partnered, $F(1, 384) = 4.03, p$

= .045. Mothers who had separated experienced an increase in physical health from the time of Survey 1 (Mean difference = 2.34, SD = 10.10), while mothers who remained partnered experienced a slight decrease in physical health (Mean difference = -0.56, SD = 13.12). It should be noted that scores on the SF-36 PCS that are low are likely to increase, while scores that are high are likely to decrease over time. Within subjects t-tests revealed no significant differences between physical health at Survey 1 and physical health at Survey 2, for either of the two groups. Between subjects ANOVAs revealed that there were no significant differences in physical health between the two groups at Survey 1 or Survey 2. Taken together, these results indicate that changes that occurred for mothers' physical health were significantly different, with separated mothers physical health showing an improvement relative to mothers who remained partnered.

Results for the mid-aged cohort revealed that on the SF-36 measure of physical health, mothers who separated experienced a mean decrease in health of 2.30 (SD = 8.52), while mothers who remained partnered experienced a mean decrease in health of 0.91 (SD = 8.35).

Qualitative findings

Many of the qualitative findings for health have been reported in the context of further education, paid employment participation, interactions with Centrelink, and economic wellbeing. However, there were a number of findings that concerned women's health that warranted further elaboration. Following separation, many women felt an improvement in their general health and wellbeing, despite increased levels of stress. Nevertheless, several women experienced a dramatic decrease in their psychological health upon separation, including suicidal thoughts. The ongoing stress of sole parenting was mentioned by women as contributing to a deterioration in health, that in some cases led to the sudden onset of a debilitating illness. Overall, it was noted that a large number of women who attended groups had experienced diagnosed depression, which was in keeping with the quantitative findings. One important theme to emerge from the data concerned difficulty with accessing satisfactory health services.

The health impact of separation

Sole mothers who attended focus groups experienced both positive and adverse health consequences when separation first occurred. Positive health effects were attributed to the removal of stress, which had been a consequence of living in a discordant relationship. For example,

(When we first separated) I was under a lot of pressure because it was very, very nasty all the time, he had a new girlfriend, which was terrible. And all this sort of stuff, which didn't bother me but it was causing problems between the kids, the kids and me and that. But I still wasn't under quite as much pressure as what I was when I was actually there. I wasn't as unwell as what I was when I was actually living there. [FG10.2]

The adverse health effects of separation that sole mothers talked about were largely psychological in nature. For some women, psychological health had deteriorated over the course of violent relationships. For example, one woman who had been severely beaten by her partner during the separation period of her relationship, talked about how she felt once the relationship had ended:

So I had to start from absolute zero. Which, I was, why I was at that, suicidal, 'I can't do this' state. Because I felt, before I (went into business with ex-partner) I had lots of skills. (After the relationship), I felt totally incompetent, totally without any sort of skill. [FG11]

Other sole mothers experienced the onset of poor psychological health as a result of feelings of failure, and a lack of understanding as to why the relationship had ended:

The shock of coming to terms with leaving for no reason, and bolting and wanting to leave quick and telling me to sell the marital home and quick, and losing the profit that we might have gained if we'd have at least waited six months. All that does terrible things, did terrible things to my esteem. I became suicidal for the first time in my life. [FG7]

However, the majority of sole mothers, even those who had experienced a difficult separation, felt that they were 'better off' as sole mothers than they would have been had the relationship continued. For example,

I mean it was me that ended the relationship, and, um, you know, it's been a really fabulous thing for me in the long term... [FG3]

However, one woman who had lived with an abusive partner and who had recently been experiencing difficulties with her adult children experienced some doubts:

I always used to say that when fear of the unknown is less than the fear of staying with your partner then leave. But in retrospect, sometimes I think it would've been better to stay. Because at least there's financial security, or there (would) be some form of financial security, maybe the kids would not be suffering so much... [FG7]

Ongoing stress

Nearly all of the sole mothers who attended groups talked about feeling stressed or pressured. Stresses that were mentioned included economic stress, stress from interactions with ex-partners, stress from coping with children, the stress of looking for paid work or of dealing with paid work obligations, the stress of fulfilling both parenting roles, and the stress of dealing with Family Court matters. But more than anything else, women mentioned that stress came from being alone and from not having someone to share the burden of their responsibilities with:

It's just the weight of carrying that on your own which I find really demanding. Quite exhausting. [FG10.2]

You've got to maintain the whole home, everything, you know clean the gutters, mow the lawns... So your health and your dental just goes totally out the window. [FG7]

Health problems

Several women mentioned that dealing with the stress of being a sole mother over a long period of time suddenly 'caught up with' them in terms of poor health. For example,

...after 12 years of financial hardship, juggling a budget that seemed impossible to stretch to just prevent, uh, ill health and maintain good health, and I'm talking about fundamentals only, then that, that, the consequence of that, were panic attacks for myself, or an anxiety (disorder). [FG7A]

...we deal with all the stresses, we deal with our children, we try to keep them as healthy as we can and then finally everything's probably pretty much on an even keel and we crumble.

And if it's not an anxiety attack, the other thing I've observed, both personally and amongst friends, because at the second time I didn't get the anxiety attack but I had a total, umm, diagnosed adrenalin overload that actually broke down my immune system and I had to have seven weeks off work to recuperate. Because my immune system had just utterly collapsed. That's also relevant to other friends of mine. So that, that, that pattern, is really a very recognisable pattern... [FG7B]

The impacts of experiencing sudden psychological decompensation, that some women referred to as a 'nervous breakdown', or of experiencing a sudden serious physical illness, were serious. Some women had to leave paid work, as was mentioned in Section 4, others found it hard to cope with day to day living. Not all women had experienced such dramatic decreases in health as those described above, some women experienced cycles of good and poor health, while others had experienced a gradual onset of health problems.

Experiences of depression were common among women who attended focus groups. In fact during one group, when the subject of depression arose, six of the eight women present said they were currently taking medication for depression. Depression is a debilitating illness that had a profound impact on the lives of sole mothers. For instance,

And for me, um, the depression, you know, like, it, it's been overwhelming. And debilitating. And I've never experienced this level of debilitation before. And so it's frustrating for me, because I know what I'm capable of. And, breaking it down to what I can achieve in a, on a, on a daily basis is really tough to come up with... I think I'm in a situation at the moment where, because of my experiences, and I've been on my own for so long, um, I can't see really positive things. [FG4]

The sole mothers who attended focus groups also talked about experiencing differing levels of anxiety, that ranged from anxiety disorders to living with continual anxiety:

I'm h, I'm h, always highly strung. It's, um, it's, it's difficult, I think, because for literally two years, two and a half years that we were married and, um, you know, all the changes with that, it was quite stressful. Anyway, on top of that I was walking on egg shells when I was married to him. So now, I actually feel a lot more in control but I'm still highly strung. [FG4]

Physical health problems were not mentioned during focus groups as often as psychological health problems. Nevertheless, when women did talk about their physical health they felt that the stress of their lives was an underlying cause of the health problems they had experienced. For example,

And a consequence of our sole parenting is ill health because of the stresses that you contend with, that create that. [FG7]

Health services

Bulk billing general practitioners and ancillary and allied health services, such as physiotherapists, dentists and chiropractors were identified by sole mothers as being difficult to access. Psychological and counselling services were the most frequently mentioned as being inaccessible or unsatisfactory, and were most frequently mentioned by sole mothers who lived in non-urban areas.

Problems with accessing counselling services commonly involved long waiting periods and many sole mothers felt as though they had had to ‘fight’ or ‘push’ in order to obtain counselling services. However, women in this position may not always have the emotional strength or confidence to verbalise their degree of need. Several sole mothers felt that the screening procedures used by services to determine their degree of need were inappropriate at best and dangerous at worst. For example,

I needed help, (I tried to) make an appointment at the hospital, and umm, they asked me a few questions over the phone, like, was I suicidal? I said no, and so immediately you say you’re not suicidal then you kind of go on the waiting list... You may not be the best person to assess whether or not you’re suicidal. So if I had’ve been (suicidal) and hadn’t made it through, it could’ve been a pretty bad result. [FG10.2]

A further problem with accessing counselling concerned the consistency of service in the remote area:

- P1: You might build a good rapport with a counsellor, that’s great, and then they’ll leave town!
- P4: Exactly! And then you’ve gotta go through telling your whole life story to another, I’ve done that four times!
- P6: And it’s hard enough for some people to actually speak to somebody...
- P1: To be able to open up to be able to trust them.
- P4: And then they up and leave, well, I can’t, I’ve had four counsellors since I was 15, and I’ve only just turned 20, in five years, four counsellors, is just, yeah. Every 12-18 months, ‘Oh, sorry, gotta leave town, I gotta go somewhere else.’ [FG10.2]

The value of psychological and counselling interventions was exemplified by sole mothers who had managed to find and use appropriate services:

I’ve been working a lot with a psychiatrist, psychotherapist and really looking after my emotional health. And, it, it’s taken a while and I’ve been through two years of depression and something shifted this year and I’ve come through something and I’m starting to feel better. [FG4]

And because that, that fellow, that psychologist was personally generous, and uhh, he gave his time free one day a fortnight to people like myself. And within that group there were 12 people and we were like new people after two years. And you’re armed with life skills thereafter that benefit you for the rest of your life and that then also prevent anxiety. [FG7]

Discussion

The contention of the current investigation, that the health of sole mothers would be poorer than the health of other women, was broadly supported, with the exception of physical health results for mid-aged women. With this exception, the results were in accord with past overseas research (Baker & North, 1999; Davies et al., 1997; Franz et al., 2003; Hope et al., 1999; Jayakody et al., 2000; Lahelma et al., 2002; Whitehead et al., 2000).

Depression and poorer psychological health were more likely for sole mothers than other women among both the young and mid-aged ALSWH cohorts. Results for anxiety were less consistent, sole

motherhood was associated with anxiety problems among the mid-aged cohort, but sole mothers in their twenties were only slightly more likely to have experienced recent anxiety relative to other women in the young cohort.

Physical health results revealed that among women in their twenties, sole mothers were more likely than other women to have experienced more medical conditions, a higher number of physical symptoms and poorer overall physical health. The results found for the analyses of mid-aged cohort data were less straightforward. Among mid-aged women, sole mothers were slightly less likely than other women to indicate they had never experienced a medical condition and had a similar number of physical symptoms as other women in the cohort. Results for general physical health among the mid-aged cohort first survey were unexpected, and revealed that mid-aged sole mothers had *better* physical health than other women in their cohort, while second mid-aged survey results revealed no association between sole motherhood and general physical health.

The quantitative results also indicated that the relationship between sole motherhood and poorer psychological health was higher for sole mothers in mid-age, compared to the results for sole mothers in their twenties. Together with the findings for physical health, this suggests that the associations between sole motherhood and different aspects of poorer health might vary with age. This finding warrants further research to enable a better understanding of the health status of sole mothers, which in turn will enable the development of appropriate intervention strategies.

The second main contention of the current investigation, that the relatively poorer health of sole mothers would be partially accounted for by economic status, was also supported, in agreement with past overseas research (Hope et al., 1999; Whitehead et al., 2000). Economic status partially mediated the relationship between sole motherhood and depression, psychological and physical health¹⁶ among both the young and mid-aged cohorts. These results imply that the associations between economic status and sole motherhood reported in previous sections account for part of the association between sole motherhood and poorer health. Because these analyses were cross sectional in nature, causality cannot be inferred and no direction in the relationships between sole motherhood, economic status and health can be determined. However, focus groups findings indicated that poor health prevented women from obtaining paid work and affected their ability to maintain paid work (Section 4). Furthermore, the costs associated with ill health also had an impact on economic wellbeing, by increasing expenses. Focus groups also determined that economic wellbeing had an impact on health. Financial stress was prevalent among women who attended focus groups, and stress was found to have an adverse impact on health. In addition, financial stress was seen to limit sole mother's access to health services and preventive health measures, such as dietary supplements. Sole mothers also found it difficult to afford prescription medication, which meant that they often put off or did not purchase medicines that had been prescribed. Overall, the focus group findings suggest that the relationship between economic wellbeing and health is bidirectional, so that health affects economic wellbeing, and economic wellbeing affects health.

Focus group findings demonstrated that sole mothers felt many of the health problems they experienced were caused or exacerbated by the stress of being a sole mother. In particular women mentioned that the lack of someone with whom to share the 'burdens' of parenthood and financial insecurity was very stressful. It is possible that these facets of sole parenthood account for the associations between sole motherhood and poorer health that remained significant after controlling for economic factors in the quantitative analyses. This finding deserves further investigation, to

¹⁶ Except for the second mid-aged cohort survey, where physical health was not associated with sole motherhood.

provide more detailed information about the stresses of sole motherhood that might be open to the development of supportive interventions.

Because the cross sectional quantitative results revealed a consistent relationship between sole parenthood and poorer psychological health, it was expected that separation would be associated with a decrease in psychological health. However, the longitudinal analysis of the young cohort data revealed no relationship between separation and psychological health. Longitudinal results for physical health among the young cohort were also unexpected, and revealed that an increase in physical health was associated with separation.

The focus groups provided possible explanations for these results. The qualitative study found that some women experienced an increase in health and other women experienced a decrease in health after separating from their partners. It is possible that the longitudinal results for psychological health reflected a range of both positive and negative health effects of separation, which in effect cancelled each other out in the longitudinal analyses. Results that indicated a significant relationship between separation and improved physical health among young cohort sole mothers might reflect a decrease in stress related illnesses associated with the end of acrimonious relationships. However, these explanations are tentative, and are in need of further long term longitudinal examination in order to determine the patterns and correlates of health among sole mothers.

Qualitative findings for health services raised some serious issues that merit attention from both service providers and policy makers. The positive impact of counselling and psychological services was clearly demonstrated by the qualitative data. Furthermore, the poorer psychological health of sole mothers relative to other women was shown by the quantitative examinations. However, the qualitative study found that sole mothers were often unable to obtain appropriate and prompt help for psychological problems.

One of the most disturbing results obtained in the current investigation concerned suicidal ideation and self harm. Sole motherhood among 22-27 year olds was associated with increased odds of both suicidal thoughts and actual self harm. Eleven percent of sole mothers in this age bracket had felt suicidal, and seven percent had actually harmed themselves in the six months prior to the survey. One previous study had indicated that, in Sweden, the suicide rate among sole mothers was twice as high as that found for partnered mothers (Weitoft et al., 2000). Focus group analyses revealed that sole mothers had felt suicidal in the context of economic emergencies and during the post-separation period. The seriousness of these quantitative and qualitative findings cannot be disregarded, and warrant urgent further investigation.

Conclusions

Analyses of the ALSWH data revealed that among women in their twenties, sole mothers experienced poorer psychological health and poorer physical health than other women. In particular, sole mothers in their twenties were more likely than other women their age to have experienced depression, had suicidal thoughts, deliberately tried to harm themselves, and to have experienced more medical conditions and physical symptoms. Similar results were found for mid-aged sole mothers, who were more likely than other women their age to have experienced depression and anxiety, and to have experienced more medical conditions.

In some cases the size of the relationships between sole motherhood and health were small, and it is noteworthy that among mid-aged women aged 45-50 years, sole motherhood was actually

associated with better physical health, relative to other women. Associations between sole motherhood and poorer health were partially mediated by economic status.

Focus group results indicated that some sole mothers had experienced an increase in health upon separation, while others had experienced a decrease in health at this time. Sole mothers felt that the ongoing stress of sole motherhood contributed to poorer health. Some women felt that ongoing stress caused them to experience the sudden onset of a serious illness. In addition, sole mothers who attended groups talked about difficulties they had experienced with accessing health services, particularly psychological health services.

The quantitative and qualitative research findings point to a number of areas that require attention, including:

- Long term longitudinal investigations in order to determine the patterns and correlates of health among sole mothers over time and at different life stages
- Further research into the nature of stressors experienced by sole mothers
- Development of support and intervention strategies to mitigate the health impact of stressors experienced by sole mothers, including economic stressors
- Investigation into the availability of ancillary and allied health services including:
 - Psychological and counselling services
 - Dental services
 - Physiotherapy services
- Improvement in the availability of bulk billing general practitioner services

In light of the results for self harm and suicidal thoughts among young sole mothers, and in conjunction with findings for depression among sole mothers in their twenties and among mid-aged sole mothers, the importance of reviewing the availability of psychological health services to sole mothers cannot be underestimated. Each of these conditions should be considered life threatening.

Section 8: Area of residence

One purpose of the current project was to determine the nature of any geographic differences in the economic wellbeing and health of sole mothers. Quantitative analyses indicated that there were no differences in area of residence between sole mothers and other women aged 18-22 years, that sole mothers aged 22-27 years were more likely than childless women to live in a non-urban area, and that mid-aged sole mothers were less likely than mid-aged partnered childless women to live in a non-urban area (Section 2).

Area of residence was included as a demographic variable in all of the multivariate analyses conducted in Sections 3, 4, 6 and 7. Adjusting for the demographic variable set, which also included age and Aboriginal or Torres Strait Islander status, resulted in very little change in associations between sole motherhood and education level, paid employment participation, income management difficulty, money stress and health. There were two notable exceptions that concerned findings for health. Addition of demographic indicators did have an impact on the relationship between mid-aged sole motherhood and general psychological health at the time of Survey 2 (Table 32), and also had an impact on the relationship between young sole motherhood and general physical health at the time of Survey 1 (Table 35). Demographic factors accounted for some of the variance in these two cases. This implied that the demographic factors associated with sole motherhood contributed to the relatively poor health experienced by sole mothers (Section 7). However, in these analyses, the proportion of the association between sole motherhood and demographics that impacted on the health association and was attributable to area of residence was unknown.

A study conducted with women of all ages found no differences on measures of emotional distress (depression, anxiety, stress) between those living in urban, rural and remote Australian areas (Bramston, Rogers-Clark, Hegney, & Bishop, 2000). Previous research that used the mid-aged cohort ALSWH survey data revealed little difference in psychological and physical health (SF-36 MCS & PCS) between women living in urban, large, small, and other rural, and remote areas (Brown, Young, & Byles, 1999).

Previous qualitative analyses included in this report have indicated a number of geographic differences in the experiences of sole mothers. In Section 3, the difficulty of accessing external university courses among sole mothers in a remote area was noted. It had been impossible for a participant to attend compulsory residential schools due to childcare availability and transport and accommodation costs. It is possible that other sole mothers who live some distance from universities face similar barriers to university education.

Qualitative results reported in Section 6 revealed that women in non-city areas were paying more for transport and had less access to discounted transport services compared to women from city areas. Most women who lived in non-city areas felt they needed to run a car, which involved additional expenses. However, these additional transport costs might be balanced by the relatively higher housing costs that women who lived in city areas were paying.

Findings from Sections 6 and 7 showed that sole mothers who lived in non-urban areas had difficulty accessing bulk billing general practitioners. Past quantitative research has indicated that women from non-urban Australian areas were less likely than urban women to have used bulk billing services, and furthermore, experienced higher medical expenses than urban women (Young

& Dobson, 2003). Findings from Sections 6 and 7 also indicated that the availability of ancillary and allied health services were found to be a concern for sole mothers living in non-urban areas.

Although the quantitative analyses suggested minimal geographic differences in the economic status and health of sole mothers, the unique impact of area of residence remained unknown. Therefore, the current investigation examines economic and health differences between sole mothers who lived in urban areas and sole mothers who lived in non-urban regions. Qualitative data were analysed to determine geographic differences among women who attended focus groups, in order to supplement those findings described above.

Quantitative investigation

Method

Analyses were conducted within subjects. That is, sole mothers from urban areas were compared with sole mothers from non-urban areas on the measures of interest.

Participants

Using the urban and rural/remote dichotomous measure that has been previously described (Section 2), 155 sole mothers from the young cohort first survey lived in an urban area while 215 sole mothers lived in a non-urban location (missing data = 1¹⁷). At young cohort Survey 2, 123 sole mothers lived in an urban area, and 199 women lived in a non-urban location (missing data = 15). Of the first survey mid-aged cohort, 147 sole mothers lived in an urban area while 191 sole mothers lived in a non-urban location (missing data = 1). At mid-aged Survey 2, 116 sole mothers lived in an urban area, and 157 women lived in a non-urban location (missing data = 2).

Measures

Demographics were measured using items originally described in Section 2. Education was measured with the dichotomous variable previously described (having more than a Year 10 level of education v. having Year 10 or less level of education). Employment was measured using the dichotomous paid employment measure (undertaking/not undertaking paid work). Stress with money was measured using the dichotomous variable used in previous analyses (very or extremely stressed/not at all, somewhat or moderately stressed). Psychological health was measured by the SF-36 MCS and physical health was measured by the SF-36 PCS.

Analyses

Dichotomous variables were analysed by using chi-square analyses, while continuous variables (age, SF-36 MCS & PCS) were analysed by entering area of residence (urban/non-urban) as the factor variable in a series of one way ANOVAs, where the relevant continuous variables were entered as the dependent variables. Education was not measured in the second mid-aged cohort survey, therefore this analysis was omitted for the mid-aged sample.¹⁸

¹⁷ Missing data for the area of residence variable was generated by women who were travelling at the time the survey was completed.

¹⁸ Education was not measured due to the expectation of small changes within this group.

Results

Demographics

Young cohort

There was no significant age difference among the young cohort at Survey 1 between urban ($M = 21.18$, $SD = 1.29$) and non-urban sole mothers ($M = 21.03$, $SD = 1.33$), $F(1, 369) = 1.05$, $p = .305$. At young cohort Survey 2, there was no significant difference in age between urban ($M = 24.98$, $SD = 1.47$) and non-urban sole mothers ($M = 25.02$, $SD = 1.48$), $F(1, 320) = 0.05$, $p = .829$.

Mid-aged cohort

Among mid-aged sole mothers, there was no significant age difference at Survey 1 between urban ($M = 47.35$, $SD = 1.36$) and non-urban sole mothers ($M = 47.24$, $SD = 1.47$), $F(1, 338) = 0.52$, $p = .470$. At Survey 2, there was no significant difference in age between urban ($M = 49.35$, $SD = 1.44$) and non-urban sole mothers ($M = 49.04$, $SD = 1.47$), $F(1, 272) = 2.98$, $p = .08$.

Education

Among the young cohort Survey 1, area of residence was not significantly associated with the education level of sole mothers, $\chi^2(1, 366) = 0.92$, $p = .338$. A similar percentage of urban sole mothers (56%) and non-urban sole mothers (61%) had Year 10 or less as their highest qualification. Among the young cohort Survey 2, area of residence was not associated with the education level of sole mothers, $\chi^2(1, 315) = 0.22$, $p = .639$.

Among the mid-aged Survey 1 cohort, area of residence was significantly associated with education level among sole mothers, $\chi^2(1, 330) = 10.70$, $p < 0.001$. Sole mothers from non-urban areas were more likely to indicate they had Year 10 or less as their highest level of education than sole mothers from urban areas, 48 percent of non-urban women compared to 31 percent of urban women indicated a Year 10 or less level of education.

Paid employment participation

Area of residence was not significantly associated with paid employment status among sole mothers who took part in the young cohort first ($\chi^2[1, 358] = 0.96$, $p = .957$) or second surveys ($\chi^2[1, 320] = 0.76$, $p = .384$). Area of residence was not significantly associated with paid employment status among mid-aged cohort sole mothers at Survey 1, $\chi^2(1, 337) = 3.05$, $p = .081$, or Survey 2, $\chi^2(1, 230) = 1.52$, $p = .218$.

Money stress

At the time of young cohort Survey 1, area of residence was not significantly associated with stress with money among sole mothers, $\chi^2(1, 356) = 0.23$, $p = .229$. Nor was area of residence associated with stress with money among sole mothers at young cohort Survey 2, $\chi^2(1, 327) = 2.38$, $p = .123$. Results for the mid-aged cohort were similar. At the time of Survey 1, area of residence was not significantly associated with stress with money among sole mothers, $\chi^2(1, 330) = 0.18$, $p = .669$. and nor was area of residence associated with stress with money among sole mothers at Survey 2, $\chi^2(1, 269) = 0.70$, $p = .403$.

Health

There was no significant difference, at young cohort Survey 1, in psychological health between urban ($M = 46.48$, $SD = 11.05$) and non-urban sole mothers ($M = 47.56$, $SD = 10.83$), $F(1, 360) = 0.85$, $p = .356$. At the time of young cohort Survey 2, urban sole mothers ($M = 46.11$, $SD = 10.88$) did not differ significantly from non-urban sole mothers ($M = 48.26$, $SD = 10.92$) on the measure of psychological health, $F(1, 308) = 2.86$, $p = .092$.

There was no significant difference, at mid-aged Survey 1, in psychological health between urban ($M = 45.02$, $SD = 10.61$) and non-urban sole mothers ($M = 46.32$, $SD = 11.41$), $F(1, 321) = 1.09$, $p = .298$. At the time of Survey 2, urban sole mothers ($M = 45.04$, $SD = 10.96$) were significantly less psychologically healthy than non-urban sole mothers ($M = 48.49$, $SD = 11.18$), $F(1, 262) = 6.20$, $p = .013$.

Results for young cohort Survey 1 revealed that there was no significant difference in physical health between urban ($M = 44.75$, $SD = 12.80$) and non-urban sole mothers ($M = 46.21$, $SD = 11.19$), $F(1, 360) = 1.32$, $p = .251$. Nor did urban sole mothers ($M = 47.58$, $SD = 10.59$) differ significantly from non-urban sole mothers ($M = 47.17$, $SD = 10.88$) on the measure of physical health at the time of Survey 2, $F(1, 308) = 0.10$, $p = .747$.

There was no significant difference in physical health at mid-aged cohort Survey 1 between urban ($M = 52.33$, $SD = 9.51$) and non-urban sole mothers ($M = 50.76$, $SD = 9.93$), $F(1, 321) = 2.04$, $p = .154$. Nor was there a significant difference between urban sole mothers ($M = 50.07$, $SD = 10.41$) and non-urban sole mothers ($M = 48.28$, $SD = 12.25$) on the measure of physical health at the time of mid-aged Survey 2, $F(1, 262) = 1.55$, $p = .215$.

Summary

There were few differences between urban and non-urban sole mothers. Across all surveys, age, paid employment participation, stress with money, and physical health did not differ by area of residence.

Significant results indicated that:

- Among women aged 45-50 years, non-urban sole mothers were more likely than urban sole mothers to have Year 10 or less as their highest level of education
- Among women aged 47-52 years, non-urban sole mothers had better psychological health than urban sole mothers

Qualitative findings

Focus groups were held in inner and outer metropolitan areas, a regional centre, and five were held in non-urban areas, one of which was considered a remote location. In all of the rural focus groups and one of the outer metropolitan groups, issues to do with small town living arose, including the friendliness or unfriendliness of the local area and local gossip. Two focus groups were held at the remote location. Issues to do with accessing legal services and services for children arose in both of these groups. Issues to do with crime and safety arose as a topic of interest in four groups. However, only two groups felt that local crime was a problem that impinged on their lives and both of these were in outer metropolitan suburbs.

Small town living

Some sole mothers who attended focus groups felt that the towns they were living in were very supportive, and that this helped them to cope with some of the stresses associated with raising children alone. For example,

I see that my mind goes immediately to the positives and I'm here because it's a small community for the sense of belonging, for the connectedness at a local level umm, the, the bonds that come together that aren't possible in a city, where I did live. The anonymity of the city prevents that con, connectedness, so the human relationship support network for me as a woman here are profoundly beneficial. For physical, mental, and social wellbeing of myself and my child, so I rely on that... [FG7]

...from that, the smallness of the community, comes the strength of the community [FG9]

Interestingly, one group generated both positive and negative comments about the hospitality level of the town. One sole mother found the local area to be 'very friendly' while the remaining group members disagreed, and felt the town was 'cliquey' and a difficult place in which to make friends. Another uncomfortable aspect of small town living concerned gossip. This was particularly pertinent at the time of separation:

As soon as someone's relationship is over everybody, everybody's ear about it, make up other stories and make things worse for the parties that are involved, it just makes things... Yeah, people thrive on that in (this town), they really do, they thrive on the gossip... it (gossip) can cause more grief, um, it can cause bigger problems... [FG10.1]

Remote issues

The medical and health needs of children appeared to be particularly difficult to obtain for sole mothers who lived in the remote area. One sole mother, who regularly travelled 500 kilometres each way to obtain specialist treatment for her son, talked about the costs involved:

(A support scheme) paid for his ticket, but they would not pay for our accommodation. I actually had to, umm, front up at a friend's home and asked them to help me out. [FG10.2]

Furthermore, the support scheme accessed by this woman required that she first take her son for the treatment and then present receipts for reimbursement. This meant that before she could take her son for treatment, she needed to have her own funds available in order to pay for the travel.

Sole mothers also talked about a lack of local psychological services for their children.

...you're hitting your head against a brick wall in (town) to get your children help with counselling. Like the paediatrician's counselling. Paediatricians you can get into but with, uh, counselling and things like that you've got what, at least four to six months wait to get them in. Like, my eldest lad's father died um, the only reason that they seen him was because he was depressed um, or if he was suicidal. [FG10.1]

Another problem in the remote area concerned legal services. Sole mothers in both of the groups that were held in the remote area had experienced difficulty in obtaining legal representation because their ex-partners had spoken with every solicitor in the area, and thus created a conflict of

interest. These women had had to seek legal services from solicitors based in the nearest city, around 500 kilometres away:

- P1: I, I didn't have a lawyer for the first two court cases I went through because I couldn't get one here in town, because he went to every other lawyer and made appointments and it gave me a conflict of interest.
- P2: So she had to, and to get any contact with that lawyer, how's a single mother with two kids going to, with a car that won't get there, drive 500 k's to see a lawyer... [FG10.1]

One sole mother had experienced even greater difficulty obtaining legal representation:

My daughter's dad and his mother had got on the phone to nine out of the ten lawyers that I wanted to ring in (nearest capital city). I couldn't even ask a question! I got stuck with (solicitor) or someone like, you know, and I lost everything mate. [FG10.2]

Crime and personal safety

The sole mothers who lived in outer metropolitan areas said they had personally experienced a range of criminal activities. For example, one woman had been 'mugged', several had been burgled and had property stolen, and three had experienced 'home invasions'. Sole mothers from one of the outer metropolitan areas said that, despite an increasing level of homelessness, public drinking and drug use in their area, that they generally felt safe.

However, sole mothers from the other outer metropolitan area did not appear to feel safe. They talked about being unable to use public parks due to discarded syringes and because they found the youth presence in parks to be intimidating or threatening. Because parks were viewed as unsafe, women felt unable to use them. One sole mother said that there was 'nowhere to take your children for free', which other women in the group agreed with. The following discussion arose when one woman talked about taking her children to a local private park:

- P1: It costs like \$12 to go in, or take your kids in, and I thought well, this is a garden, this is fresh air, this...
- P2: It's a fantastic park.
- P3: It's beautiful. But I can't afford to take them.
- P2: But you've got to pay. [FG8]

In addition, sole mothers talked about events that indicated to them that there was a lack of trust in the community, which meant that getting help when lost and needing directions, or getting help during an emergency was difficult or impossible. For example,

I got out, and flashed my hazards, and got out of the car so they could see that I was needing help, no one stopped. [FG8]

He (ex-husband) was bashing my head, and I'm screaming, 'cause I saw the security car there, screaming for them to give me a lift home, 'cause I didn't want to get in the car with him, 'cause he drove up to me. Security car drove straight past me. [FG8]

- P2: And people just don't want to get involved...
- P3: Because they're risking their own safety. [FG8]

Another woman described the area as one with ‘a lot of problems’ where the police presence was inadequate to meet the needs of the community. However, several women in this group felt that their local area was no different from other areas, that these types of events occurred ‘everywhere’.

Relative wellbeing

The concept of relative wellbeing arose from the data. Sole mothers were found to compare themselves to others in their area, and to the general economic wellbeing of their communities.

Several sole mothers felt that how they thought about themselves was dependent on the people around them and the areas that they lived in. For example, one woman who had recently moved to a suburban area from an inner city area, said that she had felt ‘bohemian’ in the city, but in the suburbs she was afraid she might be ‘white trash’, although her basic lifestyle had not changed. One sole mother who was boarding with relatives talked about the changes in her feelings, depending on where she lived:

I’ve never had very much money, and I’m kind of okay with that. Most of my friends have never had very much money... You know, living in (affluent Sydney suburb) I feel really, really poor but if I was to jump on a plane to India I’d be incredibly wealthy... [FG6]

Another sole mother felt that she could only live where she ‘fitted in’ economically:

If you try to live somewhere, if you try to be economically that you don’t fit, you’re in trouble ’cause you can’t keep up that standard. [FG6]

Although other women who attended the group disagreed with the above comment, it was apparent that living in an affluent area involved a certain level of stress:

...here is just this perfect little world of, it’s all just, you know, ticking along and then, and sometimes I, I think I struggle to keep up with it because I look at other people and they do have their kids at dances, at band, and we can’t afford that, it just doesn’t happen... [FG6]

Outcomes

Small town living had the capacity to both mitigate and exacerbate stress levels among sole mothers. Where towns were perceived as friendly and supportive, sole mothers felt comfortable and able to ‘connect’ with others. Where towns were perceived as unfriendly or difficult, sole mothers found it more difficult to form social networks, and were concerned about gossip.

Sole mothers in the remote area were faced with travelling long distances, and the associated expenses, as a result of the lack of services in their local area. In addition, the inability to access local legal representation put women at a distinct disadvantage during custody and property disputes.

Crime and personal safety issues arose in outer metropolitan suburbs, and were a cause of stress and concern. In addition, not using public transport and parks due to safety fears caused further financial stress.

Sole mother's perceptions of their local area affected their self-perceptions. Women who lived in more affluent areas tended to feel as though they 'could not keep up', which contributed to stress. Other sole mothers talked about feeling stigmatised (eg. like 'white trash') by living a different lifestyle to those around them.

Discussion

The quantitative analyses revealed few differences between urban and non-urban sole mothers. Level of education was higher among urban mid-aged sole mothers compared to non-urban mid-aged sole mothers, but did not differ between urban and non-urban sole mothers in their twenties. Paid employment status and money stress were similar among urban and non-urban sole mothers. The only health difference to emerge between urban and non-urban sole mothers indicated that mid-aged sole mothers (47-52 years) from non-urban areas had better psychological health than mid-aged urban sole mothers.

Qualitative findings reported in Section 3, had suggested that women in remote areas might find it impossible to undertake university education due to barriers of distance and childcare needs. It is possible that the quantitative result reflected these barriers, and that non-urban women found it more difficult to complete further education than urban women. However, there may also be an age specific barrier to further education among non-urban sole mothers, because there was no significant relationship between education level and area of residence among sole mothers in their twenties. Findings for education and area of residence warrant further research to determine the barriers that may act to prevent further education among women who live in non-urban areas.

Qualitative findings indicated that many sole mothers who lived in non-urban areas found living in small towns to be a positive experience. However, other sole mothers had experienced difficulties in small towns, including problems with developing social networks. Therefore, the psychological health outcomes in terms of stress were both positive and negative. It is unclear why non-urban sole mothers in the quantitative analyses who were aged 47-52 years had experienced better psychological health than urban sole mothers, while non-urban women in other age groups were not different from urban sole mothers on measures of psychological health. This finding warrants further investigation.

With the above exception, findings for health were in accord with past research, whereby no differences emerged between sole mothers in urban and non-urban areas on measures of psychological and physical health (Bramston, et al., 2000; Brown, et al., 1999). The qualitative study demonstrated that stress among women in small towns varied, depending on the perceived level of community friendliness or unfriendliness, the degree of local crime, and how well women felt they 'fitted in' within their local communities. Therefore, local community interactions had the potential to contribute to increasing or decreasing the stress, and by extrapolation the psychological wellbeing, that was experienced by sole mothers. Factors that emerged from the data that were closely related to local community interactions involved discrimination, stigma and social support. Each of these factors is discussed in more detail in the following section (9).

Previous qualitative findings for health services indicated that non-urban sole mothers had found it difficult or impossible to access bulk billing services (Sections 6 & 7). In addition, access to ancillary and allied services was a problem for sole mothers from non-urban areas who attended focus groups. The current findings suggested that sole mothers from remote areas also face barriers to health services for their children, which might be further complicated by the need to travel long

distances in order to obtain some specialist services. More research is needed among sole mothers in remote areas in order to determine the extent and impact of local health services.

Access to local legal services was a major problem for sole mothers who attended the remote area focus groups. Once ex-partners had contacted all of the local solicitors, and created a potential conflict of interest, women were precluded from retaining the services of local solicitors. This type of problem is particular to remote areas, because in an urban area, or a less isolated rural area, there is a larger pool of legal resources that women can access. The situation for women in remote areas warrants a review of the procedures involved in obtaining legal services.

Area of residence had the potential to impact on the economic wellbeing of sole mothers. The majority of sole mothers who attended focus groups felt that public transport was inadequate or unsafe outside of city areas, which meant that women who lived in these areas felt the need to own a car. By contrast, sole mothers in city areas felt that their housing costs were higher than those of women living in outer metropolitan and non-urban areas. In the outer metropolitan areas, crime had the potential to impinge on economic wellbeing through the need to replace stolen property. In addition, where women felt unsafe using public facilities, expenses were increased by the need to use private facilities. Sole mothers from the remote area faced increased expenses to meet the costs of travelling long distances in order to obtain specialist health services for children, and to maintain contact with solicitors.

Although the quantitative results indicated no differences between urban and non-urban sole mothers on measures of economic wellbeing and most health measures, the qualitative data indicated that the factors that underlie economic and psychological wellbeing do tend to differ by area of residence.

Conclusions

Based on the quantitative findings, the economic wellbeing and health of non-urban sole mothers was very similar to that of urban sole mothers. However, the factors that underlie economic wellbeing and psychological health were found to differ by area in the qualitative study. In comparison to sole mothers in other areas, sole mothers from inner metropolitan areas experienced higher housing costs, access to affordable, adequate transport and access to bulk billing general practitioners and limited access to ancillary and allied health services. In comparison to sole mothers from other areas, sole mothers from outer metropolitan areas experienced more criminal activity, which involved property loss, increased stress and a loss of a sense of community and security. This, in turn, discouraged sole mothers from activities such as using public transport and public spaces.

In comparison to sole mothers from metropolitan areas, sole mothers from rural and remote areas experienced the personal benefits and costs of small town living. Sole mothers experienced decreased stress where they perceived a strong sense of community with high levels of social support. However, increased stress resulted where sole mothers found their local communities to be non-supportive and where they had experienced detrimental town gossip. Other issues to arise for rural and remote sole mothers included poor access to bulk billing general practitioners and allied and ancillary health services, and a lack of public transport.

Sole mothers from the remote area experienced all of those factors experienced by women in rural areas, in addition to experiencing difficulties that occurred due to distance, such as accessing further education and the need to travel in order to obtain some health services. In addition, inconsistency

in local psychological health services and accessing legal representation were found to present problems for sole mothers who lived in the remote area.

A number of factors were identified as being in need of further attention, including:

- Investigation into the barriers to further education faced by sole mothers in non-urban areas
- Improvement in the availability of bulk billing general practitioner services in non-urban areas
- Investigation into the availability of ancillary and allied health services to sole mothers in all areas, but with special attention paid to non-urban areas in the provision of psychology and counselling services
- Investigation into the prevalence of ex-partners blocking access to legal services in remote areas
- Review of the adequacy of children's services in remote areas

The qualitative study also indicated that the psychological health of sole mothers could be affected by interactions with the local community, in particular by how well they felt they 'fitted in' with those around them. This finding was closely related to issues of discrimination, stigma and social support, which are covered in the following section (9).

Section 9: Supplementary factors

Over the course of the focus groups, and during analysis of the focus group data, several factors emerged that were relevant to the economic situations and/or health and wellbeing of sole mothers. Discrimination and stigma arose in every group as issues that were important to sole mothers and had the potential to adversely affect psychological and social wellbeing. Feeling stigmatised was closely associated with women's ability to develop social support networks, the presence of which assisted sole mothers with their economic wellbeing and psychological health. One issue that arose in nearly every group was intimate partner abuse. Intimate partner abuse affected women's economic wellbeing and health in the long and short term. When asked about their future economic wellbeing, women raised a number of issues that have not been covered in detail in the previous sections. Therefore, in addition to discrimination and stigma, social support, and intimate partner abuse, the current section also describes women's future economic plans, and the factors that have affected their ability to prepare for an independent retirement. Each of these areas is dealt with separately within the current section.

Discrimination and stigma

For the purposes of this analysis, discrimination was defined as those events where women felt they had been unfairly treated as a result of their sole parent status. Feeling stigmatised occurred where women felt as though they were being identified as the stereotype of a sole mother, or, as one woman said, 'one of those single parent people'. In cases where women felt stigmatised, the stereotype of a sole mother that they felt they were being identified as was negative in nature (eg. 'lazy', 'a tart').

Experiences of discrimination and stigma may have the potential to effect sole mother's economic wellbeing and her psychological health. Kissane (2003) found that the stigma of asking for help from charities had deterred 'poor' women from seeking help. In the current qualitative study, women talked about feelings of 'pride' that deterred them from asking charities for help (Section 6). Benzeval (1998) has suggested that part of the health difference found between sole and partnered mothers might be attributed to the stress associated with the stigma of sole motherhood. A survey study among sole mothers in Hong Kong found that feeling stigmatised was associated with poorer psychological wellbeing (Rudowicz, 2001). A qualitative study among US sole mothers found that some sole mothers felt stigmatized during interactions with health services (Knott & Latter, 1999).

The current investigation was conducted to shed light on the experiences of Australian sole mothers' experiences of discrimination and stigma. Because the roles of discrimination and stigma were not the focus of the enquiry, the results should be viewed as a preliminary investigation.

Qualitative findings

I have been discriminated against where it's been blatant

Focus group participants felt they had been discriminated against by real estate agents, financial institutions, places of employment, and in their social lives. Although not experienced by the majority of participants, some women had experienced discrimination from real estate agents when

attempting to rent accommodation and from financial institutions when attempting to obtain loans. For example,

(The real estate agent has) gone, 'Yes, it was down to you and someone else, and the owners have said it's because you're a single parent.' Now they're not allowed to do that. But they do do it. And that's the thing that really, that, that's probably the most, umm, disempowering thing, is that you know they're not allowed to do this and yet they do it. [FG3]

One sole mother had recently resigned as a result of discrimination she felt she had received from her work colleagues:

Oh, these people (work colleagues) are yeah, absolutely, they hated me. I'm a single parent. I couldn't be there (at work) and do sport on weekends, and, click their fingers and have me, you know, front up to meet and greet some official, you know, it just became a joke... [FG3]

The most common type of discrimination that sole mothers had encountered involved interactions with social groups. For some, this occurred just after separation from their ex-partners. However, sole mothers also felt that this was an ongoing problem, and that they were discriminated against by new people that they met. For example,

- P3: It's uncomfortable. If you go to school it's like, you know, and you're talking to the mothers and they sort of go, 'What does your husband...'. 'Oh no, we're divorced.' It's like...
- P1: Also, they take two steps away from you as if to say 'You just keep away from my husband, okay?'
- P3: They perceive you as a threat. [FG4]

Sole mothers felt that the impact of discrimination also reached their children:

Some people keep a distance. Oh, no, we won't let our kids go and play with your kids 'cause they might catch something. They might catch single parent family kind of values or something. [FG4]

Incidents of discrimination led to feelings of powerlessness and also led to a lack of social contact and feelings of trepidation when meeting new people. However, several sole mothers felt that discrimination was not an issue that concerned them:

Discrimination, ohh, I just, I don't, I couldn't care less because people who discriminate just obviously are idiots and don't have a clue, and aren't worth the time of day, and nothing can hold me back really. You know, if, if someone discriminates against me I, I'll go to, to a different angle and stuff. I don't, I don't feel hopeless as a single mum. I, I am amazed at how much of a good mum I am and how, umm, you know, against the odds everything's going quite well. Yeah so, yeah, I don't, don't waste energy, on err, any form of discrimination. [FG3]

It's an awful stigma being a sole, single parent. Shocking.

One of the results of discrimination was that sole mothers felt stigmatised. Other sole mothers felt stigmatised when interacting with children's schools and health services. Many sole mothers felt

stigmatised by society in a general way, through messages communicated by the media, by aspects of government policy and as a result of their own internal value systems.

Some incidents where sole mothers had felt stigmatised included interactions with health services and children's schools. For example,

I've noticed, and also, like, because I've had, I've got quite a few problems with my son so we've been referred to, like, community health centre and it's like, one of the first things they say is, you know, 'Family type. Oh, single mother. Yes, we get a lot of single mother families in here.' [FG4]

Sole mothers who attended focus groups felt that they were perceived as 'lazy', 'unintelligent', and one woman felt she was seen as a 'tart' because her children had two different fathers. Other sole mothers spoke more generally about how they felt society perceived them. One woman said that she felt sole parent families were seen as 'an inferior type of family', and several women said they felt that society did not 'value' sole mothers for the work that they did. For example,

And you are not identified as an individual, as a human being, umm, you, and it's very much, you are not the person you are, you are the single mother, and they are the children of a single mother and it just carries on, the stigmatisation just carries right through. [FG7]

A lot of women felt frustrated that they experienced the stigma of sole motherhood, and a stereotype that was negative, while their children's other parents appeared to be able to go on with their lives without societal reproach. For example,

There's the three of us sitting here, who are all in the situation where we didn't get child support, umm, we were, our relationships ended and our partners didn't continue on with that parenting responsibility, yet there's nothing, there's nothing against umm, fathers that abandon their children. In the states they have umm, this term that they use, called 'deadbeat dads', and you hear it quite a bit, but you never hear it here... here's that perception that, we're the ones that cop all the flack, because we're the single parents. But the others that have gone off, and are maybe even happily remarried and have a new, nice new life, and don't have that responsibility anymore. [FG1]

Many sole mothers felt that the media were responsible for the 'poor image' of sole mothers. Other women thought that public opinion was driven by aspects of government policy. For example, when asked about the origins of the negative stereotype of sole motherhood, one group talked about feeling as though only those people who 'pulled their weight', who were 'economically viable' or who did not 'ask the government for any support' were acceptable as members of society, whereas the 'punitive stuff around welfare' led society to treat sole mothers as though they were 'less valid' as members of the community.

For some sole mothers, feeling stigmatised came from value systems that had been instilled in them when they were younger. Women in this situation tended to feel ashamed and embarrassed about their situations. Other women felt that being stigmatised as a sole parent had its origins in the lack of value that society generally places on the role of 'mother'. For example,

There's, there's all, there's the whole men thing, too, about, there, there's, uh, social validity in men working and bringing in the money and that's acceptable and valued. Whereas women staying at home and working 12, 24 hours with a child, to entertain them, feed them,

clothe them, make sure they have a social life, take them to the park, give them phys... All of that stuff is not valued. [FG4]

Discussion

Sole mothers who attended focus groups had experienced discrimination, and many had felt stigmatised by their status as sole parents. Sole mothers who had experienced discrimination or who felt stigmatised tended to have difficulty asking for help, felt 'burdened' by stigma, 'hurt' by society, and thought that being treated as though they had less value than others, or no value, had adversely affected their self esteem.

The outcomes of discrimination included difficulty in obtaining rental accommodation, an inability to obtain loans, job loss, a decrease in social contact, and social difficulties for children. Discrimination also led to some sole mothers feeling powerless. Issues to do with discrimination warrant further investigation, particularly since it was noted that none of the women who had experienced discrimination had pursued the matters by using anti-discrimination legislation.

Feeling stigmatised led sole mothers to experience difficulty with developing a social network, the benefits of which are discussed in the following subsection. Women who attended focus groups felt that the image of sole motherhood was generated by the media and aspects of government policy that portrayed sole mothers in a poor light.

The current investigation was somewhat limited by the scope of the inquiry, which was focussed on health and economic wellbeing rather than experiences of discrimination and stigma. However, the results have indicated that the outcomes of discrimination and stigma among sole mothers might be serious, and furthermore, were found to affect both the economic wellbeing and psychological health of sole mothers. Therefore, discrimination and stigma among sole mothers are worthy of further research.

Social support

Social support was found, in the previous sections of this report, to have assisted sole mothers who attended focus groups with undertaking further education (Section 3), with maintaining paid work (Section 4), and with economic wellbeing by offering support that mitigated the impact of financial stress (Section 6). The types of support that sole mothers had experienced included free childcare, housing, money, housework, food, transport, assistance when ill, and the provision of extracurricular activities for children. Other forms of social support included emotional support and having someone to talk to.

Empirical evidence for the positive impact of social support has also been found in past research. For example, sole mothers without social support were found to experience higher levels of psychological distress than sole mothers with support (Franz et al., 2003). However, the findings have not been consistent. Hope et al. (1999) found that lower social support was not associated with increased psychological distress among sole mothers when economic wellbeing was controlled for. In other research, social support has been found to mitigate the impact of stressful life events, such as relationship breakdown, on health (Paykel, 1994). Furthermore, the effects of stress on health have been found to be reduced when social support is increased (Crystal & Kersting, 1998; Newbyfraser & Schlebusch, 1997). In addition, social support has also been found to have a direct impact on health, whereby higher levels of social support have been related to increased levels of

health (Grassi, Rasconi, Pedriali, Corridoni, & Bevilacqua, 2000; Orth-Gomer, Wamala, Horsten, & Schenck-Gustafsson, 2000).

The qualitative findings of the current report have suggested that sole mothers might experience difficulty in forming social networks, due to discrimination and stigma. Past empirical research has found that sole mothers had lower levels of social support compared to partnered mothers (Hope et al., 1999). Therefore, while social support may have a positive impact on economic wellbeing and health among sole mothers, social support may be less available to sole mothers.

The current investigation will examine the relationship between sole motherhood and social support, and the differences in economic wellbeing and health between sole mothers with low and those with high levels of social support, by analysing the second surveys of the ALSWH. Based on past research, and findings from the qualitative study, it is expected that sole mothers will experience less social support than other women, and that social support will have a positive relationship with economic wellbeing and health among sole mothers.

Analyses

This investigation used the second surveys of the young and mid-aged cohorts of the ALSWH (described in Section 2). Relationship status used the same measure that has been used throughout this report (sole mothers, partnered mothers, unpartnered childless women, partnered childless women). Economic wellbeing was measured using the dichotomous measure of stress with money (very or extremely stressed/not at all, somewhat or moderately stressed). Psychological health was measured using the SF-36 MCS, and physical health was measured using the SF-36 PCS. Each of these measures has been previously described in Section 2.

Social support was measured using the MOS Social Support Survey (Sherbourne & Stewart, 1991). The survey asked respondents to indicate, from a list of different types of support, how often that each was available to them when they needed it, with response options of ‘none of the time’, ‘a little of the time’, ‘some of the time’, ‘most of the time’, or ‘all of the time’. The list of possible supports contained six items in the young cohort survey and 19 items in the mid-aged survey. Items asked respondents about areas of support that included practical assistance (eg. someone to help when they were ill), informational support (eg. someone to ask advice from), confidante support (someone to confide in), and company or friendship (eg. someone to do something enjoyable with). Higher scores on the MOS Social Support Survey indicate a higher level of social support. Among the second young cohort the scale had good internal reliability (Cronbach’s alpha = 0.88), and scores ranged from 6-30. Among the mid-aged cohort the scale had very good internal reliability (Cronbach’s alpha = 0.97), and scores ranged from 19-95.

Differences in level of social support between relationship status categories were analysed using the Kruskal-Wallis test, where scores are ranked regardless of group membership, and the mean rank for each group is calculated. Significant differences between groups were indicated by a Chi Square calculation. The Kruskal-Wallis test is the non-parametric equivalent of a one-way ANOVA, and was appropriate in this instance because screening analyses revealed that the data for social support by relationship status did not meet the homogeneity of variance assumption required for ANOVA.

In order to examine the relationships between social support and economic wellbeing, and between social support and health among sole mothers, within subjects analyses were conducted using the responses of women who were sole mothers. Using the median score for social support among the young cohort sole mothers (Mdn = 20), and mid-aged sole mothers (Mdn = 55), sole mother’s

scores were split into two groups, representing high social support (above median), and low social support (below median). Differences in economic status between sole mothers with high social support and sole mothers with low social support were examined using chi square analyses. Differences in health between the high and low social support groups were examined using one way ANOVAs.

Results

There was a significant association between relationship status and social support among the young cohort. Inspection of the mean ranks and social support mean scores, reported in Table 36, revealed that sole mothers had less available social support than women in all the other relationship status categories. Results for the mid-aged cohort also revealed a significant association between relationship status and social support, whereby sole mothers had less available social support than women in all other relationship status categories (Table 36).

Table 36: Young and Mid-aged Survey 2 mean scores for social support with standard deviations and mean ranks for relationship status

Relationship status	Cohort (Survey 2)					
	Young			Mid-aged		
	M	SD	M rank ^a	M	SD	M rank ^b
Sole mothers	20.13	6.50	2722	55.45	17.79	1610
Partnered mothers	23.53	5.55	4130	74.04	17.14	3598
Unpartnered childless	23.48	5.34	4042	62.81	19.45	2415
Partnered childless	26.25	4.30	5521	76.17	16.82	3799

a. $\chi^2(3, 9080) = 801.36, p < 0.001$

b. $\chi^2(3, 9399) = 528.94, p < 0.001$.

Chi square analyses revealed that social support was significantly associated with money stress among sole mothers in the young cohort, $\chi^2(1, 251) = 6.88, p = 0.009$. Of sole mothers with low social support, 63 percent reported being very or extremely stressed about money, compared to 46 percent of sole mothers with high social support. Social support was also significantly associated with money stress among sole mothers in the mid-aged cohort, $\chi^2(1, 243) = 6.18, p = 0.013$. Of sole mothers with low social support, 42 percent were very or extremely stressed about money, compared to 27 percent of sole mothers with high social support.

Descriptive statistics for health are reported in Table 37. Among the young sample, sole mothers with low social support were significantly less psychologically healthy than sole mothers with high social support, $F(1) = 21.12, p < 0.001$. In addition, young cohort sole mothers with low social support were significantly less physically healthy than young cohort sole mothers with high social support, $F(1) = 12.86, p < 0.001$. The results for the mid-aged cohort analyses were also significant: sole mothers with low social support were significantly less psychologically healthy than sole mothers with high social support, $F(1) = 6.88, p = 0.009$; and sole mothers with low social support were significantly less physically healthy than sole mothers with high social support $F(1) = 11.14, p = 0.001$.

Table 37: Means and standard deviations for psychological and physical health by social support among young and mid-aged sole mothers

Health	Young cohort			Mid-aged cohort		
	N	M	SD	N	M	SD
Psychological health						
Low social support	122	44.07	10.50	123	43.56	10.79
High social support	124	50.06	9.87	116	47.33	11.47
Physical health						
Low social support	122	45.12	11.47	123	47.52	11.77
High social support	124	49.99	9.73	116	52.15	9.53

Discussion

The expectations of this investigation were confirmed by the quantitative analyses. Sole mothers experienced significantly less social support among both the young and mid-aged cohorts. In addition, sole mothers with low social support were more likely to experience money stress, and were less psychologically and physically healthy than sole mothers with high social support. These results were in accord with past research where sole mothers were found to experience lower levels of social support than partnered mothers (Hope et al., 1999), and where a lack of social support was found to be related to higher psychological distress among sole mothers (Franz et al., 2003).

The current quantitative analysis was cross sectional in nature, so no causal or temporal inferences can be made. Furthermore, economic status has been found to reduce the relationship between social support and psychological distress among sole mothers in past research (Hope et al., 1999). The current analyses were univariate in nature and did not control for economic variables in the health analyses. However, the qualitative study found that social support had the capacity to directly affect economic wellbeing, by the provision of housing or money. Social support also affected economic wellbeing indirectly, through the provision of free childcare and household assistance, which enabled sole mothers to undertake paid work. In addition, the current quantitative analyses found that social support and money stress were strongly associated with each other among sole mothers. Therefore, controlling for economic wellbeing may remove some of the positive effect that social support has on health, by the removal of variance shared between economic wellbeing and social support. In essence, social support and economic wellbeing appear to be closely linked.

Social support also has the capacity to reduce the effects of stress on health (Crystal & Kersting, 1998; Newbyfraser & Schlebusch, 1997) and may have a direct positive impact on health (Grassi et al., 2000; Orth-Gomer et al., 2000). In the current quantitative study, sole mothers with high social support had significantly better health than sole mothers with low social support, however, direction could not be inferred from these results. The qualitative study has suggested that practical and emotional support helped women to cope with the stresses of sole motherhood, which may have had a positive impact on their overall feelings of wellbeing.

The quantitative results for health are also open to an alternative interpretation, that poorer health may lead to decreased social support. The qualitative study supported this contention, sole mothers who were experiencing psychological distress, especially depression, found it very difficult to meet with people socially, and talked about ‘shutting off’ the outside world (reported in Section 7). It is

likely that the relationship between social support and psychological health is bidirectional. Poorer health can be seen as reducing the chances of social contact with others, while increased social support can be seen as mitigating the stress that sole mothers experience. It is not clear how a reduction in social contact might impact on health, although women in the qualitative study did talk about feeling ‘isolated’ when they moved to new neighbourhoods, away from family and friends.

It is also possible that the poorer psychological health experienced by sole mothers relative to other women (reported in Section 7) may underlie some of the association between sole motherhood and poorer social support. Qualitative findings suggested that discrimination and feeling stigmatised further acted to isolate sole mothers from other people. In addition, economic wellbeing was mentioned by women as limiting their options for socialising with people, financial stress meant that outings with friends that cost money were unreachable, while undertaking paid work limited women’s social activity due to time constraints (reported in Section 4).

The above findings and past research have indicated that social support can be beneficial to sole mothers’ health and wellbeing, but is likely to be lower than that experienced by other women. In addition, the relationships between sole motherhood, social support, economic wellbeing and health are complex, and warrant further, more detailed examinations.

Conclusions

Sole mothers experienced lower levels of social support than other women among both the young and mid-aged ALSWH cohorts. Sole mothers with low social support were more likely to experience money stress, and had poorer psychological and physical health than sole mothers with high social support.

Qualitative findings indicated that social support among sole mothers might be reduced by discrimination, stigma, poor health, financial stress and time constraints. The positive impacts of social support noted by sole mothers who attended focus groups included direct improvements to economic wellbeing through the provision of money, housing, food and transport, and indirect financial benefits through free childcare, housework and the provision of extracurricular activities for children. Emotional support led to improved feelings of wellbeing among the sole mothers who attended focus groups.

Social support has the potential to improve the lives of sole mothers, yet relatively little information is available concerning those factors that assist sole mothers in creating a social network, and those factors that act to prevent sole mothers from maintaining a supportive social network. Therefore, more research is required in this area.

Intimate partner abuse

Intimate partner abuse was defined as acts committed by one intimate partner or ex-partner against the other that involved physical violence or the threat of physical violence, emotional abuse (eg. shaming, constant blaming), verbal abuse (eg. shouting), financial abuse (eg. restricting access to family income), or sexual abuse (adapted from Hegarty, Hindmarsh & Gelles, 2000, from the Australian Public Health Association definition of ‘domestic violence’). The prevalence of intimate partner physical violence among the population was last measured in a national sample study in 1996 by the ABS. Findings indicated a lifetime prevalence of 23 percent among Australian women, and a lifetime prevalence of 39 percent among women who had separated from an ex-partner (ABS,

1996). The ALSWH data have also revealed a much higher lifetime prevalence of relationship violence among women who are separated or divorced. For example, among mid-aged women at the time of Survey 1, 10 percent of married women compared to 39 percent of women who were separated or divorced had ever lived in a violent relationship.

Although intimate partner abuse crosses all socioeconomic boundaries, the experience of intimate partner abuse has been associated with lower economic status in some studies (eg. McCauley et al., 1995), although not in others (eg. Hedin & Janson, 2000). Intimate partner abuse has been consistently associated with poorer psychological and physical health (Campbell & Soeken, 1999; Coker, Smith, Bethea, King, & McKeown, 2000; Kyriacou et al., 1999). In addition, intimate partner abuse has been associated with social support, whereby women who have experienced intimate partner abuse tend to have less social support available than women who have not experienced intimate partner abuse (Grisso et al., 1999).

In a series of analyses conducted with the first and second ALSWH mid-aged cohort surveys, ever having lived in a violent relationship was associated with experiencing difficulty with income management, and poorer physical and psychological health (Loxton, 2003). Furthermore, among the ALSWH first survey mid-aged cohort, women who had lived in a violent relationship had less available social support than women who had never lived in a violent relationship.

During the focus group study conducted for the current report, intimate partner abuse was not specifically targeted as an area for investigation. In fact, in order to preclude ethical complications, no questions about intimate partner abuse were asked of participants. However, in nearly every group the topic of partner abuse arose. Not surprisingly, given the abovementioned statistics, many of the women who attended focus groups had experienced various forms of intimate partner abuse.

The qualitative findings reported in Section 5 indicated that women often opted not to pursue child support payments when they had experienced intimate partner abuse. Findings reported in Section 6 indicated that the threat of future partner abuse, and the stress of past abuse, had prevented sole mothers who attended focus groups from pursuing claims on joint assets during property settlements.

The purpose of the current investigation was to determine the prevalence of lifetime intimate partner physical violence among sole mothers who participated in the ALSWH mid-aged and young cohort second surveys. Focus group data were analysed to determine the impact of past partner abuse, in order to supplement those qualitative findings described above.

Quantitative analyses

The presence of lifetime intimate partner physical violence was ascertained by using responses to the question that asked, ‘Have you ever been in a violent relationship with a partner/spouse?’ on the first mid-aged cohort survey, and the first and second young cohort surveys. Chi square analyses were conducted for both the young and mid-aged cohort first and second surveys to examine the associations between sole motherhood and intimate partner physical violence.

Quantitative results

Across all surveys, sole mothers were the most likely of all women to have ever lived in a violent relationship with a partner or spouse. Percentages of women who had ever lived in a violent relationship are reported in Table 38.

Among the first survey of the young cohort, ever having lived in a violent relationship was associated with relationship status, $\chi^2(3, 12,882) = 546.97, p < 0.001$. Among the second survey of the young cohort, ever having lived in a violent relationship was associated with relationship status, $\chi^2(3, 9185) = 383.73, p < 0.001$. Among the first survey of the mid-aged cohort, ever having lived in a violent relationship was associated with relationship status, $\chi^2(3, 12,494) = 581.72, p < 0.001$. Among the second survey of the mid-aged cohort, ever having lived in a violent relationship was associated with relationship status, $\chi^2(3, 10,532) = 460.95, p < 0.001$.

Table 38: Number and percentage of women per relationship category who had ever lived in a violent relationship with a partner/spouse for Surveys 1 and 2 of the ALWSH young and mid-aged cohorts

Relationship status	Young cohort				Mid-aged cohort			
	Survey 1		Survey 2		Survey 1		Survey 2	
	N	%	N	%	N	%	N	%
Sole mothers	141	43	117	42	138	37	119	41
Partnered mothers	147	21	166	18	308	10	199	10
Unpartnered childless	783	8	337	8	514	31	392	26
Partnered childless	339	16	300	9	896	12	732	11

Qualitative results

During relationships sole mothers who attended focus groups had experienced varying degrees of intimate partner abuse, including physical violence, emotional abuse, verbal abuse and financial abuse. The impact of intimate partner abuse was long lasting, and involved losses of self esteem and self confidence. Some sole mothers were still experiencing the emotional impact of abuse, even though relationships had ended many years beforehand. For example,

I knew that he was full of it, but when you're there for so long, you believe things, and people don't understand that when you're mentally abused you're not being hit um, you're not having any, anything to show, just get over it and move on. But it's really hard. It's really, really hard. [FG10.1]

And you go home and you get abused. Yeah, no, it's horrific. I mean, you were talking before about self-esteem and I mean absolutely that's where I lost mine, is in that relationship, my last relationship. I lost my independence. I mean, I was a fully independent woman! [FG7]

I still feel the consequences of his abusive bullshit that goes on every time (the children and I) have contact with him. [FG11]

Some sole mothers had fled the family home and gone into hiding upon separating from an abusive partner. This entailed leaving the majority of possessions behind, and starting a new home with limited resources, and little, if any, social support. Several sole mothers had spent time in refuges as a result of leaving abusive relationships.

For some sole mothers the end of the relationship brought an end to intimate partner abuse. But others experienced a continuation of abuse and harassment. For example, one sole mother talked

about the period of time after she had separated from her ex-husband when she was recovering from a severe beating that he had perpetrated:

I was living separately from him... with the kids and um, I was on crutches with plaster from my head to my toes, and in a wheel chair, you know, I couldn't manage the crutches basically because of the damage to the rest of me. And, um, he took to ringing up at one or two o'clock in the morning and... over the phone and saying, 'I haven't finished with you yet, if I go to gaol, I'll kill you.' And the police said, 'Look, we don't have a 24 hour service, we can't protect you, best to get away.' So I left (town)... this took five years, before he stopped threatening to kill me. [FG11]

Another sole mother talked about the impact of experiencing months of harassment and stalking following her separation, which made it hard for her to 'move on' with her life or to live a 'proper' life. For some sole mothers, continued abuse also had an impact on their families:

Mum and dad were told by (ex-partner's) solicitor not to go out the front pruning roses. I mean they're in their own home and this is the crap that we had to put up with. They were coming to the home, intimidating us all the time. (Ex-husband and his family) approached my father in the car and threatened him, so therefore we had to get an AVO against them, and I mean my son was in the car at the time. And this is all going on and no one stops and thinks of the child. [FG5]

Several sole mothers had taken out Apprehended Violence Orders (AVOs), as the woman quoted above mentioned. For one woman, however, the process of taking out an AVO had met with limited success:

...and then the court system, I realised, doesn't support you, there's AVOs, yep, you can go and get an AVO but it doesn't necessarily stop it. You can report it eventually, because you might not realise the extent of what you can report upon, but they can't back date it to look at the other breaches. They can then be taken in for a breach, the magistrate locally can say, 'Yes, he's breached it.' If that person appeals, it's him against the queen. It goes into the public prosecution, police prosecutors thing (gets) sent to a totally different court room, where you don't even go, get called, as a police witness. And they go off the transcripts, and if the guy, the police prosecutor lawyer hasn't had time to read the stuff and this, the person has all the, all the charm in the world, they get off their breach. And that's exactly what happened in my situation. This guy was known in the community, had, had, he had a pattern of doing this, but he got off the breach, I didn't want him to go to court but I thought what they were gonna give him was anger management and counselling sessions. That's what they were gonna give him, for a year. That was his bond. Don't go near her, and have anger management and, and counselling. He didn't have to do any of it. And now he's going to perpetrate again, I know, I can see it happening right in front of my eyes. [FG7]

As was suggested by some the above quotes, continuing abuse after separation caused stress and fear, and also prevented sole mothers from making a 'fresh start'. Another area of great concern for sole mothers was the impact of their ex-partner's behaviour on their children, particularly when children were having access visits with the other parent. For example,

...particularly where there's been a history of domestic violence it needs to be addressed because obviously, if there's a history of domestic violence then how is good parenting going to work? [FG7]

The ability of sole mothers to pursue Family Court proceedings due to fear and stress was mentioned in Section 6 in the context of property disputes. Some women who had experienced intimidation, threats and prolonged Family Court disputes also talked about feeling unable to pursue custody proceedings due to stress and financial cost. For example,

I was working at the time, he represented himself and I had to go, I couldn't get Legal Aid so I had to go through (a) lawyer. I spent \$20,000. And it was either the point of, I either pay now or I take another risk and go back to court, fight him to get, you know, full custody of the child, because I was very concerned about the boy being with him. But I couldn't. I had no more strength left. Couldn't. So I gave in and said, 'Okay, have him five days a fortnight. Have this much money.' [FG7]

Discussion

Between 37 and 43 percent of sole mothers who participated in the ALSWH young and mid-aged cohort surveys had ever lived in a violent relationship. These figures are similar to those obtained in the national sample survey, where 39 percent of women had experienced physical violence in the context of a previous relationship (ABS, 1996).

The qualitative data revealed that sole mothers who had experienced intimate partner abuse continued to feel the impact of that abuse many years after the relationship had ended. Findings from ALSWH investigations have also suggested that the health and social effects of intimate partner physical violence might be long lasting (Loxton, 2003). However, more longitudinal research is required in this area. The impacts of abuse among sole mothers who attended focus groups included the need to move away from the family home and assets, the need to move away from family and friends, losses of self esteem, confidence and feelings of independence, and physical injuries. Thus, these women had experienced financial losses, and a reduction in social support, psychological and physical health. These findings are in accord with past empirical research, that has indicated lower social support and health among women who have experienced partner abuse compared to other women (Campbell & Soeken, 1999; Coker, et al., 2000; Grisso et al., 1999; Kyriacou et al., 1999; McCauley et al., 1995).

In addition, the qualitative data indicated that intimate partner abuse did not necessarily cease once the relationship ended. Sole mothers who attended focus groups had experienced a range of abusive behaviour after the relationship ended, including physical, emotional and verbal abuse, and stalking. The full extent of post-relationship abuse and harassment experienced by sole mothers is currently unknown, and warrants further research. A further concern for women who attended focus groups was the impact of continued abuse on their children, particularly where ex-partners were having access visits with the children.

It was apparent from the qualitative study that past and current experiences of abuse impacted on women's economic and social wellbeing, and took a toll on their psychological and physical health. The high percentage of sole mothers who experienced intimate partner physical violence suggested that many sole mothers will, in addition to the stresses of sole motherhood, also be recovering from the impact of intimate partner abuse.

Conclusions

Between 37 and 43 percent of sole mothers who took part in the young and mid-aged cohort ALSWH surveys had lived in a violent relationship. Qualitative findings indicated that the impacts of intimate partner abuse included decreased economic wellbeing through not pursuing child support payments and joint assets at property settlement, and asset losses when fleeing abuse. In addition, sole mothers who attended focus groups and who had experienced intimate partner abuse experienced decreased psychological and physical health through the direct and indirect effects of abuse.

Intervention strategies that support women through the legal processes of separation, and measures, such as AVOs, that were designed to protect women and their children from abusive ex-partners, require further evaluation.

Qualitative findings indicated that sole mothers who had experienced intimate partner abuse might feel unable to pursue Family Court disputes due to feelings of emotional exhaustion and financial cost. Detailed empirical and qualitative research is required into the nature and impact of custody arrangements put in place for children where there have been incidents of partner and/or ex-partner abuse.

Future economic plans

In Section 6 of this report, the concept of continuing economic vulnerability arose. Women who attended focus groups indicated that even when they had obtained paid work, they continued to experience some aspects of financial stress, and, furthermore, had been largely unable to save or invest money due to ongoing expenses. In addition, a lack of investments or savings meant that if women experienced a period of unemployment they quickly returned to a state of economic decline, whereby their expenses exceeded their income. Periods of economic decline, which were experienced by most women after separation, had led many women to dispose of assets, including the family home. Therefore, the implications for the long term economic future of these sole mothers included a lack of material assets and a lack of savings with which to ensure an independent retirement.

In addition, most of the women who attended focus groups had experienced periods of unemployment, so that during these periods of time no superannuation was being deposited on their behalf. Quantitative analyses of ALSWH data revealed that between 56 and 83 percent of sole mothers in the young cohort and between 23 and 34 percent of sole mothers in mid-age were not undertaking paid work (Section 4). Overall the quantitative results indicated that many sole mothers had experienced periods of time out of the paid workforce. Furthermore, ALSWH analyses showed that between 13 and 32 percent of sole mothers in their twenties and between 32 and 38 percent of sole mothers in mid-age were undertaking part time or casual paid work (Section 4). Casual and part time positions generally offer lower superannuation contributions from employers than that offered for full time paid work.

It was noted that, among the ALSWH cohorts, many partnered mothers were not undertaking paid work. However, mothers who remain partnered until retirement will have access to the superannuation and joint assets accumulated by two adults over the course of the relationship. On the other hand, sole mothers will have experienced the distribution of joint assets, are likely to have spent time out of the paid workforce, either when they were partnered or once they had separated.

Therefore, sole mothers face multiple deficiencies compared to partnered mothers when considering the prospect of retirement.

The purpose of the current section was to examine the responses of women who attended focus groups to the question that asked, 'What are your plans for the future? Particularly in terms of things like superannuation and retirement.'

Results

You're trying to make us laugh aren't you? or outright laughter, were the immediate responses women gave to the question about their future economic plans. In the context of the focus groups, where the majority of the time had been spent talking about the financial stress of sole motherhood, the response of laughter was hardly surprising. Underlying the laughter were feelings of hopelessness and uncertainty about the future. The inability to see a future beyond the current circumstances probably evolved as an extension of women's financial circumstances, where women experiencing financial stress talked about living from 'week to week'. As was mentioned in Section 6, sole mothers sacrificed long term financial security to meet short term financial crises. Other factors that had impacted on long term financial security included decisions made within relationships. Some women felt that their inability to plan for the future came from a lack of knowledge about financial planning.

Although most women were pessimistic about their financial futures, some women had started planning for retirement. However, only two women had enacted plans that they felt would lead to a secure future, and two other women felt that their futures would be secure once their parents had died. Most women felt that a secure financial future entailed home ownership. Very few women had money invested in superannuation, and those that did were dissatisfied with the process.

There is no future for us...

Many women described their futures as 'bleak', 'scary', 'daunting', and 'not good'. For example,

I think about the future and I, the future to me, financially, is like a big black tunnel and there's no light at the end of it. Okay? And umm, the only hope that I have is to try and do my absolute best for my children. And their education, and so they can umm, be, you know, well educated and have a good start. And that's my only hope, I've lost hope, there's no hope for me personally. [FG5]

Um, in terms of my future, I think I'm actually gonna go and book a place under the bridge at Central station and get my mattress and go and slot it in now. You know, so that, maybe in another 40 years time, oh no, um, redo the sums, 30 years time, I'll have a place. 'Cause I, when it, in my worst days, I'm not convinced I have much of a bright future at all. [FG4]

Other women did not know what the future would hold:

I'm sort of wondering, you know, what's (the future) gonna hold, like where will I be at that time? [FG5]

Feelings of hopelessness and uncertainty about the future arose out of a short term focus, which itself arose from financial stress; and a lack of assets and investments, that arose as a result of joint

property distribution, time out of the paid workforce, and decisions made during the relationship. For example,

I live in the absolute now these days, the moment we stand and breathe in, and umm, and that's a, you know, great coping mechanism... [FG9]

You know I guess at some stage I'll be back again. Old age pension. I don't have that, I just don't have (investments). [FG9]

To get into medicine [ex-partner] had to go back and do the HSC again, so I supported him while he did that, and then when he got in, of course, it was medicine and everything else. So we, and that's when I had out first child, um, I cashed in my long service leave and my superannuation... I always dreaded the prospect of being like mum and dad and not having any money. But um, well, there's been, my choice, I didn't want to work full time, because I knew that physically and emotionally I couldn't do that and um parent, so um, I've chosen to only work um, three and a half days a week at a lower rate of pay... [FG11]

In Section 7, quantitative results indicated that sole mothers were more likely than other women to experience depression. It is possible that depression may have played a role in women's feelings about the future.

Women's plans for the future

While women's feelings about the future tended to be pessimistic, some women still had plans for the future, and ideas about how they might be able to prepare for retirement. For many women, having a brighter outlook was related to current or future paid employment participation. For example,

I'm putting a bit aside out of my work now, not a lot, I mean it's probably not even worth doing, but I've been taking a bit out ever since I've been able to work... [FG5]

I'll be armed and trained to go back into the workforce again, so, but so, no, if that's the case cause then I'll start working and then I'll be able to pay superannuation... [FG7]

Um, yeah, I've got very little super, and er, I can see, and I'll probably be working til I'm 65. [FG11]

Two women, of the 48 who attended groups, had enacted plans to ensure a secure retirement. Both had purchased investment properties by using the equity from the family home. One of these women had been given her family home by her mother, and the other had taken possession of the family home at property settlement. Both of these women were unusual among the women who attended groups, and both felt confident about their financial futures. For instance,

Yes, I've been planning for the future, I have a second property because I have this equity in the house so I bought a second property when prices were cheap. And that's when I was still able to get part pension, working part time because I had younger children at home, but with all the property increases lately, I went over the asset limit so of course I was no longer eligible for any help from the government apart from Family Allowance, but that meant my cash still stayed the same, so I had to find more work. But I am providing for my future at

the same time, so that I will not be dependent on the government at a later stage. And actually property is a lot better than super at the moment anyway. [FG9]

Two other women thought that their future economic security was dependent on their parents' death and their own subsequent inheritance:

I hate to say, I'm an only child and I will inherit my mother's property and that's the only hope that I've got of, of even having a new car or a holiday. And that's a horrible thing to have to think. That you're [laughing] waiting for your mother to die to get a house! [FG6]

And, and the other thing I'm counting on, which my gorgeous 81 year old mother said to me when I first separated was, 'Darling, you won't always have a mortgage you will have an inheritance one day.' And that's so tragic for her to have to say that to me because it's the last thing you wish for, is for your parent to die. But it is a reality, she will die, and I will have an inheritance of some sort which will assist me in owning my home, so I won't always have a mortgage, and eventually I will climb back up that ladder... [FG7]

Other women who had thought about the future could see little hope for change, and expected their future circumstances to remain similar to their present circumstances:

Do you know what? I hope my daughter has a decent job to keep me. Because I think, I, I have no money to put away for superannuation. We live dollar for dollar, just for today and I think if this continues, I pray and pray that my daughter will get a decent job that we can live. So, hopefully we'll still be in a Housing Commission or something and that's just our life. You know? [FG6]

I do feel very pessimistic though, about this whole pension thing. And the, white trash type thing, thinking god, I guess I'm just going to always be on (benefits), always be dependent. [FG11]

What is financial security?

For most women who attended groups, financial security was closely associated with home ownership. However, few of the women who attended felt that they would be able to enter the housing market in the near, or far, future. For example,

Well, I, I, I'm not, I'm not saying I've accepted this, but there's a big part of me that seriously doubts whether I'll ever, um, get into home ownership. That I'll ever have security. [FG4]

I'd really like to buy a place. My, my parents and I talked about buying a place together but I just can't umm, with the way the prices of the houses have gone there's just no way I can afford to buy anything at the moment. So I'm just stuck renting. [FG5]

Among women who had purchased a home, mortgage repayments were a big concern, with women commenting that they would be paying off their homes for many years, which would in turn necessitate paid work participation throughout that time.

Most participants did not have a lot of money invested in superannuation, and some women had no superannuation. The superannuation schemes that women had available to them were not generally

viewed as being adequate provision for a secure future. For example, several women commented that superannuation account keeping fees had reduced the value of their investments. Other women felt that undertaking paid work in part time and casual positions adversely affected their superannuation entitlements:

I'm 50 and I've got \$7000 in super and I'm in four different funds and, they take so much fees out of it, it's goin' backwards faster than it's going forward. Superannuation is a joke for people on low income, and casuals and women, and they wanna get rid of it and give us our 9 percent in our hand now when my children need it. [FG6]

My superannuation is non-existent and not a possible, not even a dream. But it could be if, if the bit of part time work that we've done or casual work that we, that would be just socially just and equitable, if we could have the same benefits as the f, full time workers... [FG7]

One woman felt that the lack of superannuation among people living on social security benefits was an equity issue that was strongly related to the value of 'mother's work':

But I mean, what, if we're at home looking after our children as a single parent, is there not an entitlement to superannuation? For when you get older, if it's meant to be happening for every member of society, I mean, again this marginalised group of the unemployed and the single parent and those with a disability pension, have nothing. So they are going to remain in the system, and I'm one of them, for the rest of their lives, and there's not a nice little investment unit at the end or whatever, a retirement place... [FG7]

Discussion

Based on the results reported in the current study, and those of Sections 4 and 6, women's long term financial futures were affected by continuing economic vulnerability and financial stress that precluded saving. The sale of assets, in particular the family home, occurred at property settlement and as a result of immediate financial need. Women had a low amount of money invested in superannuation due to:

- Cashing in accrued benefits because of:
 - Decisions made during the relationship
 - Financial need
- Casual and part time, rather than full time, paid work participation
- Time spent out of the paid workforce

Further research is required to establish the degree to which sole mothers might be able to plan for their financial futures in a more long term manner. Pivotal to this would be changing the short term approach to financial planning that many women had adopted as a result of financial stress. If problems of financial stress could be effectively remedied, then sole mothers would be in a better position to plan for financial security in later life. The majority of the aspects of economic wellbeing discussed in this report have the capacity to affect the ability of sole mothers to successfully execute plans for future financial security. Therefore, addressing those issues that have arisen in previous sections will have a positive impact on the long term financial wellbeing of sole mothers.

References

- ABS. (2003). Household income and income distribution, Australia. Publication 6523. Canberra: ABS.
- ABS. (2000). Household Expenditure Survey, Australia. Publication 6530. Canberra: ABS.
- ABS. (1998). 1997 Family Characteristics Survey. Publication 4442. Canberra: ABS.
- ABS (1999). Housing occupancy and costs, Australia. Publication 4130. Canberra: ABS.
- ABS. (1996). Women's Safety Australia. Canberra: ABS.
- Ali, J. & Avison, W.R. (1997). Employment transitions and psychological distress: The contrasting experiences of single and married mothers. *Journal of Health and Social Behavior*, 38, 345-358.
- Andren, T. (2003). The choice of paid childcare, welfare, and labor supply of single mothers. *Labour Economics*, 10, 133-147.
- Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults- Evaluation of a short form of the CES-D. *American Journal of Preventive Medicine*, 10, 77-84.
- Australian Bureau of Statistics. (2003). Australian Social Trends. Available online: www.abs.gov.au
- Australian Department of Primary Industries and Energy; Australian Department of Human Services and Health. (1994). Rural, remote and metropolitan areas classification: 1991 Census Edition. Canberra: Australian Government Publishing Service.
- Baker, M. (2000). New employment policies, poverty and mothering. *Family Matters*, 55, 46-51.
- Baker, D. & North, K. (1999). Does employment improve the health of sole mothers? *Social Science and Medicine*, 49, 121-131.
- Beck, A., Schuyler, D., & Herman, I. (1974) Development of the Suicide Intent Scale. In A.T. Beck, H.L.P. Resnick, & D.J. Lettieri (Eds.) *The prediction of suicide*. Bowie, MD: Charles Press Publishers.
- Benzeval, M. (1998). The self-reported health status of lone parents. *Social Science and Medicine*, 46, 1337-1353.
- Bernstein, A.B. (2001). Motherhood, health status, and health care. *Women's Health Issues*, 11, 173-184.
- Bramston, P., Rogers-Clark, C., Hegney, D., & Bishop, J. (2000). Gender roles and geographic location as predictors of emotional distress in Australian women. *Australian Journal of Rural Health*, 8, 154-160.
- Bray, J.R. (2001). Hardship in Australia: An analysis of financial stress indicators in the 1998-99 Australian Bureau of Statistics Household Expenditure Survey. Occasional paper No. 4. Canberra: Department of Family and Community Services.
- Brown, W. J., Bryson, L., Byles, J. E., Dobson, A. J., Lee, C., Mishra, G., & Schofield, M. (1998). Women's Health Australia: Recruitment for a national longitudinal cohort study. *Women's Health*, 28, 23-40.
- Brown, W.J. & Dobson, A.J. (2003). The decline in bulk-billing and increase in out-of-pocket costs for general practice consultations in rural areas of Australia, 1995-2001. *Medical Journal of Australia*, 178, 122-126.
- Brown, W.J., Young, A.F., & Byles, J.E. (1999). Tyranny of distance? The health of mid-age women living in five geographic areas of Australia. *Australian Journal of Rural Health*, 7, 148-154.
- Burke, A.D. (2001). Ending welfare, continuing poverty. *Dissent*, 48, 90-95.
- Burns, A.M. & Scott, C.L. (1997). Two-generation effects of maternal tertiary study. *Journal of Family Studies*, 3, 209-225.
- Cairney, J., Thorpe, C., Rietschlin, J., & Avison, W.R. (1999). 12-month prevalence of depression among single and married mothers in the 1994 National Population Health Survey. *Canadian Journal of Public Health*, 90, 320-324.

- Cairney, J. & Wade, T.J. (2002). Single parent mothers and mental health care service use. *Social Psychiatry and Psychiatric Epidemiology*, 37, 236-242.
- Campbell, J. C., & Soeken, K. L. (1999a). Women's responses to battering: A test of the model. *Research in Nursing and Health*, 22, 49-58.
- Carlile, C., Fuery, M., Heyworth, C., Ivec, M., Marshall, K., & Newey, M. (2002). Welfare reform pilots: characteristics and participation patterns of three disadvantaged groups. Occasional paper no. 5. Canberra: Department of Family and Community Services.
- Carson, R. C., Butcher, J. N., & Mineka, S. (1996). *Abnormal psychology and modern life*. (Tenth ed.). New York: Harper Collins College Publishers.
- Child Support Agency (CSA). (2002). *Child Support Scheme facts and figures 2001-2002*. Canberra: CSA.
- Christopher, K., England, P., Smeeding, T.M., & Phillips, K.R. (2002). The gender gap in poverty in modern nations: Single motherhood, the market, and the state. *Sociological Perspectives*, 45, 219-242.
- Coker, A. L., Smith, P. H., Bethea, L., King, M. R., & McKeown, R. E. (2000). Physical health consequences of physical and psychological intimate partner violence. *Archives of Family Medicine*, 9, 451-457.
- Crystal, S., & Kersting, R. C. (1998). Stress, social support, and distress in a statewide population of persons with AIDS in New Jersey. *Social Work in Health Care*, 28, 41-60.
- Davies, L., Avison, W.R., & McAlpine, D.D. (1997). Significant life experiences and depression among single and married mothers. *Journal of Marriage and the Family*, 59, 294-309.
- De Vaus, D. & Gray, M. (2003). Family transitions among Australia's children: How much time do children spend in specific family types, and to what extent do they experience various family transitions? *Family Matters*, 65, 10-17.
- Dickenson, J., Heyworth, C., Plunkett, D., & Wilson, K. (1999). Sharing the care of children post-separation: family dynamics and labour force capacity. Family Strengths Conference, University of Newcastle.
- Dillman, D. A. (1978). *Mail and telephone surveys: The Total Design Method*. New York: Wiley.
- Fokkema, T. (2002). Combining a job and children: Contrasting the health of married and divorced women in the Netherlands? *Social Science and Medicine*, 54, 741-752.
- Franz, M., Lensche, H., & Schmitz, N. (2003). Psychological distress and socioeconomic status in single mothers and their children in a German city. *Social Psychiatry and Psychiatric Epidemiology*, 38, 59-68.
- Grassi, L., Rasconi, G., Pedriali, A., Corridoni, A., & Bevilacqua, M. (2000). Social support and psychological distress in primary care attenders. *Psychotherapy & Psychosomatics*, 69, 95-100.
- Gray, M., Qu, L., de Vaus, D., & Millward, C. (2002). Determinants of Australian mother's employment: An analysis of lone and couple mothers. Research paper no. 26. Melbourne: Australian Institute of Family Studies.
- Gray, M., Qu, L., Renda, J., & de Vaus, D. (2003). Changes in the labour force status of lone and couple Australian mothers, 1983-2002. Research paper no. 33, Australian Institute of Family Studies.
- Green, V., Zappala, G., & Parker, B. (2000). Factors associated with financial disadvantage: A case study of the Smith Family's Emergency Help Program in NSW. Research and Advocacy Briefing Paper No. 5. Camperdown: The Smith Family.
- Gregory, A. (2003). What are the characteristics and aspirations of parents new to parenting payment? Australian Institute of Family Studies Conference. Melbourne: February.
- Grisso, J. A., Schwarz, D. F., Hirschinger, N., Sammel, M., Brensinger, C., Santanna, J., Lowe, R. A., Anderson, E., Shaw, L. M., Bethel, C. A., & Teeple, L. (1999). Violent injuries among women in an urban area. *The New England Journal of Medicine*, 341, 1899-1905.

- Hall, P. (2000). *Work and family issues: Trends and projections*. Sydney: NSW Department for Women.
- Harding, A., Lloyd, R., & Greenwell, H. (2001). *Financial disadvantage in Australia*. Camperdown: The Smith Family.
- Hedin, L. W., & Janson, P. O. (2000). Domestic violence during pregnancy - The prevalence of physical injuries, substance use, abortions and miscarriages. *Acta Obstetrica et Gynecologica Scandinavica*, 79, 625-630.
- Hegarty, K., Hindmarsh, E.D., & Gilles, M.T. (2000). Domestic violence in Australia: definition, prevalence and nature of presentation in clinical practice. *Medical Journal of Australia*, 173, 363-367.
- Hildebrandt, E. (2002). The health effects of work-based welfare. *Journal of Nursing Scholarship*, 34, 363-368.
- Hope, S., Power, C., & Rodgers, B. (1999). Does financial hardship account for elevated psychological distress in lone mothers? *Social Science and Medicine*, 49, 1637-1649.
- Jackson, A. P., Brooks-Gunn, J., Huang, C-C, & Glassman, M. (2000). Single mothers in low-wage jobs: Financial strain, parenting, and preschoolers' outcomes. *Child Development*, 71, 1409-1423.
- Jackson, A.P., Tienda, M., & Huang, C-C. (2001). Capabilities and employability of unwed mothers. *Children and Youth Services Review*, 23, 327-351.
- Jayakody, R., Danziger, S., & Pollack, H. (2000). Welfare reform, substance use, and mental health. *Journal of Health Politics, Policy and Law*, 25, 623-651.
- Kalb, G. (2003). The impact of social policy initiatives on labour supply incentives: A review of the literature. Policy research paper no. 18. Canberra: Department of Family and Community Services.
- Kissane, R.J. (2003). What's need got to do with it? Barriers to use of non-profit social services. *Journal of Sociology & Social Welfare*, 30, 127-149.
- Knott, M. & Latter, S. (1999). Help or hindrance? Single, unsupported mothers' perceptions of health visiting. *Journal of Advanced Nursing*, 30, 580-588.
- Kyriacou, D. N., Anglin, D., Taliaferro, E., Stone, S., Tubb, T., Linden, J. A., Muelleman, R., Barton, E., & Kraus, J. F. (1999). Risk factors for injury to women from domestic violence. *New England Journal of Medicine*, 341, 1892-1898.
- Lahelma, E., Arber, S., Kivela, K., & Roos, E. S. (2002). Multiple roles and health among British and Finnish women: The influence of socioeconomic circumstances. *Social Science and Medicine*, 54, 727-740.
- Landt, J. & Pech, J. (2000). *Work and welfare in Australia: The changing role of Income Support*. Sydney: 7th Australian Institute of Family Studies Conference.
- Lee, C. (2001). *Women's Health Australia: What do we know? What do we need to know?* Brisbane: Australian Academic Press.
- Lipman, E.L., Mac Millan, H.L., Boyle, M.H. (2001). Childhood abuse and psychiatric disorders among single and married mothers. *The American Journal of Psychiatry*, 158, 73-78.
- Lipman, E.L., Offord, D.R., & Boyle, M.H. (1997). Single mothers in Ontario: Sociodemographic, physical and mental health characteristics. *Canadian Medical Association Journal*, 156, 639-645.
- Loxton, D. (2003). *Domestic abuse and health: Quantitative and qualitative investigations among mid-aged Australian women*. PhD thesis. University of New England.
- Macran, S., Clarke, L., & Joshi, H. (1996). Women's health: dimensions and differentials. *Social Science and Medicine*, 42, 1203-1216.
- Mayer, E. A. (2000). The neurobiology of stress and gastrointestinal disease. *Gut*, 47, 861-869.

- McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., Ryden, J., Bass, E. B., & Derogatis, L. R. (1995). The 'Battering Syndrome': Prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Annals of Internal Medicine*, 123, 737-746.
- McCull, B., Pietsch, L., & Gatenby, J. (2002). Household income, living standards and financial stress. *Year Book Australia 2002. Income and welfare*. Canberra: ABS.
- McEwen, B. S. (1998). Seminars in medicine of the Beth Israel Deaconess Medical Centre: Protective and damaging effects of stress mediators. *New England Journal of Medicine*, 338, 171-179.
- Morehead, A. (2002). Behind the paid working hours of single mothers. *Family Matters*, 61, 56-61.
- Newbyfraser, E., & Schlebusch, L. (1997). Social support, self-efficacy and assertiveness as mediators of student stress. *Psychology*, 34, 61-69.
- Orth-Gomer, K., Wamala, S. P., Horsten, M., & Schenck-Gustafsson, K. (2000). Marital stress worsens prognosis in women with coronary heart disease: The Stockholm Female Coronary Heart Study. *Journal of the American Medical Association*, 284, 3008-3014.
- Paykel, E. S. (1994). Life events, social support and depression. *Acta Psychiatrica Scandinavica*, 89, 50-58.
- Reading, R. & Reynolds, S. (2001). Debt, social disadvantage and maternal depression. *Social Science and Medicine*, 53, 441-453.
- Righter, E. L., & Sansone, R. A. (1999). Managing somatic preoccupation. *American Family Physician*, 59, 3113-3120.
- Rodgers, K. & Wilson, K. (1998). Rights and obligations of families in the Social Security system. *Changing Families, Challenging Futures: 6th Australian Institute of Family Studies Conference*, Melbourne, Australian Institute of Family Studies.
- Rudowicz, E. (2003). Stigmatization as a predictor of psychological well-being of Hong Kong single mothers. *Marriage and Family Review*, 33, 63-83.
- Saunders, P. (2004). Towards a credible poverty framework: From income poverty to deprivation. *SPRC Discussion Paper No. 131*. Sydney: Social Policy Research Centre.
- Saunders, P., Brown, J., & Eardley, T. (2003). Patterns of economic and Social participation among FaCS customers. *Policy research paper no. 19*. Canberra: Department of Family and Community Services.
- Sherbourne, C.D., & Stewart, A.L. (1991). The MOS social support survey. *Social Science and Medicine*, 32, 705-714.
- Smyth, B. & Weston, R. (2000). Financial living standards after divorce. A recent snapshot. *Research Paper No. 23*. Melbourne: Australian Institute of Family Studies.
- Walter, M. (2002). Working their way out of poverty? Sole motherhood, work, welfare and material wellbeing. *Journal of Sociology*, 38, 361-380.
- Walter, M. (2003). Orientation to motherhood. Comparing the attitudes and values of sole and married mothers on the congruence of labour market participation and good motherhood. *8th Australian Institute of Family Studies Conference, Steps forward for families: Research practice and policy*. Melbourne: February.
- Ware, J. E., & Davies, A. R. (1995). *Monitoring health outcomes from the patients point of view: A primer*. New Jersey: Integrated Therapeutics Group Inc.
- Ware, J. E., & Sharebourne, C. D. (1992). The MOS 36-Item Short-Form Health Survey (SF - 36): 1. Conceptual framework and item selection. *Medical Care*, 30, 473-483.
- Whitehead, M., Burstrom, B., & Diderichsen, F. (2000). Social policies and the pathways to inequalities in health: a comparative analysis of lone mothers in Britain and Sweden. *Social Science and Medicine*, 50, 255-270.

- Weitoft, G.R., Hagland, B., & Rosen, M. (2000). Mortality among lone mothers in Sweden: a population study. *The Lancet*, 355, 1215-1219.
- Wolffs, T. & Shallcross, L. (2000). Low income parents paying Child Support: Evaluation of the introduction of a \$260 minimum Child Support assessment. *Family Matters*, 57, 26-33.
- Young, A.F., Powers, J.R., & Bell, S.L. (2004). The magnitude, correlates and implications of attrition in a longitudinal study: A comparison of three age cohorts. (Under review with *Epidemiology* at the time of printing)

Appendices

Appendix A: Supplementary analyses of ALSWH data (Young Survey 3)

Introduction

The purpose of this appendix is to provide descriptive information about changes in economic wellbeing and health that co-occur with changes in relationship status among mothers. This appendix was provided to supplement the analyses and information provided in the preceding sections of this report.

These analyses conducted herein used data from the three surveys of the young cohort of the Australian Longitudinal Study on Women's Health (1996, 2000 & 2003). The third survey of the ALSWH young cohort was conducted in 2003. The Young Survey 3 analyses used the preliminary release data. As such, the results reported here should be considered as preliminary analyses.

Method

Participants

When the Survey 3 preliminary data were released, the Survey 3 sample consisted of 8441 participants, aged 25-30 years. This represents a response rate of 57% of the original Survey 1 participants.

Measures

The analyses included in this report utilised measures from Surveys 1, 2, and 3 of the ALSWH. More details about the survey items are available in Section 2, and copies of the surveys are available on the ALSWH website:

<http://www.newcastle.edu.au/centre/wha>

Relationship status was determined by responses to questions about women's relationships and marital status, and to items that asked about living arrangements and the ages of children.

Stress with money was calculated by using the survey item that asked how stressed respondents were about money. Responses were dichotomously scored, so that being 'very' or 'extremely' stressed about money was taken to indicate the presence of money stress; and responses of 'not at all', 'somewhat' or 'moderately' stressed were taken to indicate the absence of money stress.

General psychological health was examined using the SF-36 MCS, where higher scores indicate better psychological health. Depression was measured using the CES-D 10, where higher scores indicate higher depressive symptomatology. Medication use was examined using responses to the ALSWH survey questions that asked women if they had used medication for depression or anxiety in the previous four weeks. Physical health was examined using the SF-36 PCS, where higher scores indicate better physical health.

Data analyses

SPSS (v.11) was used for all the analyses. The data were weighted to account for the deliberate over-sampling of women from rural and remote locations.

Relationship status

For the purposes of the following analyses, mothers were defined as women who had children living with them, where children were defined as being 16 years of age or younger. Partnered women were defined as being women who indicated that they were living with a partner or spouse, and who had not indicated that they were divorced or separated. Unpartnered women were defined as women who had not indicated that they were living with a partner or spouse, and who had not indicated that they were married or living in a de facto relationship. Women who indicated that they were widows were excluded from the analyses due to low numbers.

In cross sectional analyses conducted with Survey 3 data, sole mothers (unpartnered women with children) were compared to:

- Partnered mothers
- Unpartnered childless women
- Partnered childless women

Longitudinal examinations involved the definition of groups of women based on their relationship status at different surveys. In comparing results from Survey 2 with those of Survey 3, four categories were developed:

- Mothers who were partnered at Survey 2 and Survey 3
- Mothers who were partnered at Survey 2, and who were sole mothers at Survey 3 (separated)
- Mothers who were sole mothers at Survey 2 and Survey 3
- Mothers who were sole mothers at Survey 2, and who were partnered mothers at Survey 3 (repartnered)

To examine changes in relationship status that occurred over time, eight categories of relationship status were developed using data from all three young cohort surveys (described further below).

Relationship status at Survey 3

The frequencies for relationship status among women who participated in Survey 3 are reported in Table 39. At Survey 3, the majority of women were partnered and childless, whereas at Survey 2 the majority of women had been unpartnered and childless. The percentage of women who were sole mothers, 3%, was the same at Survey 3 as it had been at Survey 2.

Table 39: Relationship status among Survey 3 participants

Relationship status	N	%
Sole mothers	243	3.1
Partnered mothers	2038	26.1
Unpartnered childless	2567	32.9
Partnered childless	2950	37.8
Total	7797	

Changes in relationship status among mothers

Survey 2 to Survey 3

Although the percentage of women who were sole mothers remained the same from Survey 2 to Survey 3, some women had experienced changes in relationship status during this time. As can be seen in Table 40, the majority of mothers remained partnered from 2000 (Survey 2) to 2003 (Survey 3). A slightly higher percentage of women who were sole mothers at Survey 2 remained sole mothers at Survey 3 compared to those who had entered into relationships.

Table 40: Changes in relationship status among mothers from Survey 2 to Survey 3

Survey 2 (2000) Relationship status	Survey 3 (2003) Relationship status	N	%
Sole mother	Sole mother	82	8.3
Partnered mother	Sole mother	62	6.3
Sole mother	Partnered mother	59	6.0
Partnered mother	Partnered mother	779	79.4
Total		982	

Surveys 1, 2 and 3

Eight groups of mothers were identified using data from the three young cohort surveys. As will be noted from Table 41, the majority of mothers remained partnered over the seven year study period. However, 32% of mothers indicated that they had moved into and/or out of relationships since they had had children. These results included only those women who indicated that they had been mothers at the time of Survey 1, when the cohort were aged 18-23 years. Therefore, the data include only women who became mothers at a relatively young age.

Table 41: Changes in relationship status over time among women who were mothers at the time of Survey 1

Survey 1 (1996) Relationship status	Survey 2 (2000) Relationship status	Survey 3 (2003) Relationship status	N	%
Sole mother	Sole mother	Sole mother	20	6.3
Sole mother	Sole mother	Partnered mother	21	6.5
Sole mother	Partnered mother	Partnered mother	23	7.2
Sole mother	Partnered mother	Sole mother	13	4.2
Partnered mother	Partnered mother	Partnered mother	197	62.0
Partnered mother	Partnered mother	Sole mother	12	3.7
Partnered mother	Sole mother	Sole mother	18	5.8
Partnered mother	Sole mother	Partnered mother	14	4.4
Total			318	

Results

Economic wellbeing

Results from Surveys 1 (1996) and 2 (2000; Section 6) indicated that sole mothers had lower economic wellbeing than other women. To investigate the economic wellbeing of sole mothers in 2003, several analyses were conducted:

1. Relationship status was examined using Survey 3 data and the variable that measured money stress.
2. Money stress was examined for women who were sole mothers at both Surveys 2 and 3. Longitudinal results from Surveys 1 and 2 suggested that separation was associated with both increased and decreased stress with money.
3. Changes in money stress were examined using Survey 2 and Survey 3 data, in order to examine changes in stress with money that co-occurred with changes in relationship status among mothers.
4. Money stress among women who were sole mothers at all three surveys was investigated.

1. Stress with money at Survey 3

As can be seen in Table 42, compared to women in other relationship status categories, sole mothers were more likely to indicate that they were experiencing stress with money. These results are similar to those obtained for Surveys 1 and 2, where sole mothers were also more likely than other women to be experiencing money stress. Results for Survey 1 had indicated that 44% of sole mothers were stressed about money, while Survey 2 results had indicated that 53% of sole mothers were stressed about money (Section 6).

Table 42: Young Survey 3 number and percentage of women per relationship status category who were very or extremely stressed about money

Relationship status	N	%
Sole mothers	112	46.5
Partnered mothers	568	28.2
Unpartnered childless	605	23.9
Partnered childless	521	17.8

2. Money stress at Surveys 2 and 3 among sole mothers

There were 82 women who were sole mothers at the time of both Surveys 2 and 3. At the time of Survey 2, 58% of these sole mothers were stressed about money. By the time of Survey 3, this figure had fallen to 48%.

3. Changes in money stress from Survey 2 to Survey 3

Four groups of women were compared:

- Women who were sole mothers at both surveys
- Mothers who separated (partnered mothers at Survey 2 and sole mothers at Survey 3)
- Mothers who repartnered (sole mothers at Survey 2 and partnered mothers at Survey 3)
- Mothers who were partnered at both surveys

Results are summarised in Figure 23. Mothers who remained partnered were the most likely of all groups to have remained unstressed about money. Mothers who separated were the most likely to have become stressed about money, and were the least likely to have become unstressed about money. Mothers who repartnered were the most likely to have become unstressed about money, while women who were sole mothers at the time of both surveys were the most likely to indicate that they remained stressed about money.

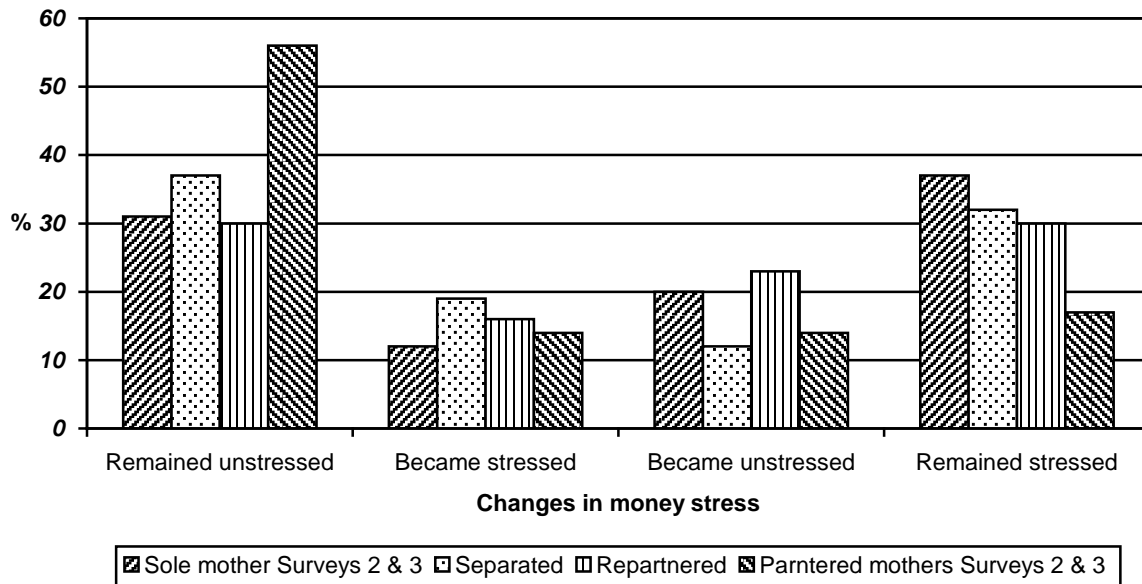


Figure 23: Changes in money stress from Survey 2 to Survey 3 among mothers

4. Money stress at Surveys 1, 2 and 3 among sole mothers

Only 20 women were sole mothers at the time of all three surveys, so the following results should be cautiously viewed. Fifty percent of these sole mothers were very or extremely stressed about money at the time of Survey 1. This percentage had increased by Survey 2 (72%) and remained at about that level at Survey 3 (70%).

Psychological health

Results for Surveys 1 and 2 indicated that sole mothers had worse psychological health than other women in their twenties (Section 7). Women who were sole mothers were more likely to be depressed, and to have used psychoactive medication than other women. To investigate the psychological health of sole mothers in 2003, several analyses were undertaken:

1. Cross sectional analyses comparing sole mothers to other women on measures of general psychological health, depression and psychoactive medication use.
2. Psychological health and depression among women who were mothers at both Surveys 2 and 3
3. General psychological health among women who were mothers at all three surveys.

1. Psychological health at Survey 3

At the time of Survey 3, sole mothers had worse psychological health, and had more depressive symptoms than other women, as can be seen in Table 43. These results are similar to those obtained for Surveys 1 and 2. Results for psychoactive medication were also similar to those of the earlier surveys, with sole mothers being more likely than other women to have used medication for depression and anxiety (See Table 44). However, the percentage of sole mothers who had used medication for depression had increased somewhat. At the time of Survey 2, 9% of sole mothers had used medication for depression, increasing to 14% at Survey 3.

Table 43: Young Survey 3 means (M) and standard deviations (SD) for psychological health and depressive symptomatology

Relationship status	Psychological health (SF-36 MCS)			Depressive symptomatology (CES-D 10)		
	N	M	SD	N	M	SD
Sole mothers	240	47.53	10.62	231	10.00	5.90
Partnered mothers	2003	52.04	9.14	2002	6.93	5.05
Unpartnered childless	2528	50.35	10.06	2528	7.42	5.62
Partnered childless	2913	52.66	8.79	2908	5.92	4.56

Table 44: Young Survey 3 cross tabulation results for relationship status by psychoactive medication use

Relationship status	Medication used in the previous 4 weeks for:			
	Depression		Anxiety	
	N	%	N	%
Sole mothers	210	13.6	236	2.9
Partnered mothers	1931	5.3	2016	1.1
Unpartnered childless	2376	7.4	2512	2.1
Partnered childless	2842	3.7	2911	1.3

Note. Percentages refer to the percentage of women per relationship status category who had used medication (eg. 13.6% of 210 sole mothers had taken medication for depression).

2. Psychological health among mothers at Surveys 2 and 3

The results for general psychological health among mothers at Surveys 2 and 3 are shown in Figure 24. Women who were sole mothers at both surveys experienced a decrease in psychological health

from 2000 to 2003. Mothers who separated from their partners after 2000 experienced a slight decrease in psychological health. Women who were sole mothers at Survey 2 and who had repartnered by Survey 3 experienced an increase in psychological health. Women who were partnered mothers at both surveys had similar psychological health at both surveys.

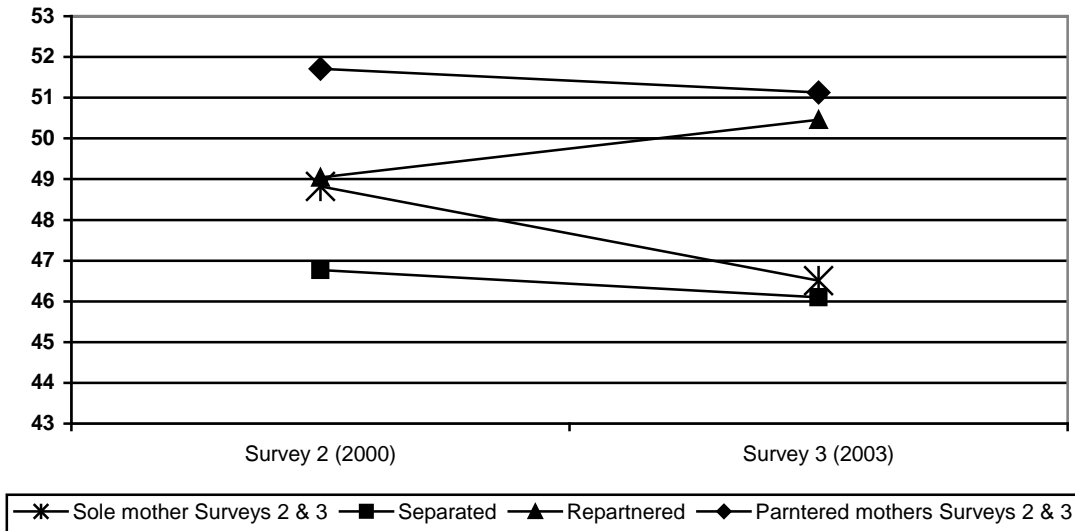


Figure 24: Psychological health at Surveys 2 and 3 among mothers (SF-36 MCS)

Results for depressive symptomatology are shown in Figure 25. Women who were sole mothers at the time of both surveys had a similar level of depressive symptomatology in 2000 as they had in 2003. Mothers who were partnered at the time of Survey 2, and who had separated by Survey 3 experienced the highest depressive symptomatology of all of the women, in both 2000 and 2003. Furthermore, mothers who separated experienced an increase in depressive symptomatology from 2000, when they were partnered, to 2003, when they had separated. Women who were sole mothers at Survey 2 and who had repartnered by Survey 3 experienced a slight decrease in depressive symptomatology, while mothers who were partnered for both surveys experienced little change in levels of depressive symptomatology.

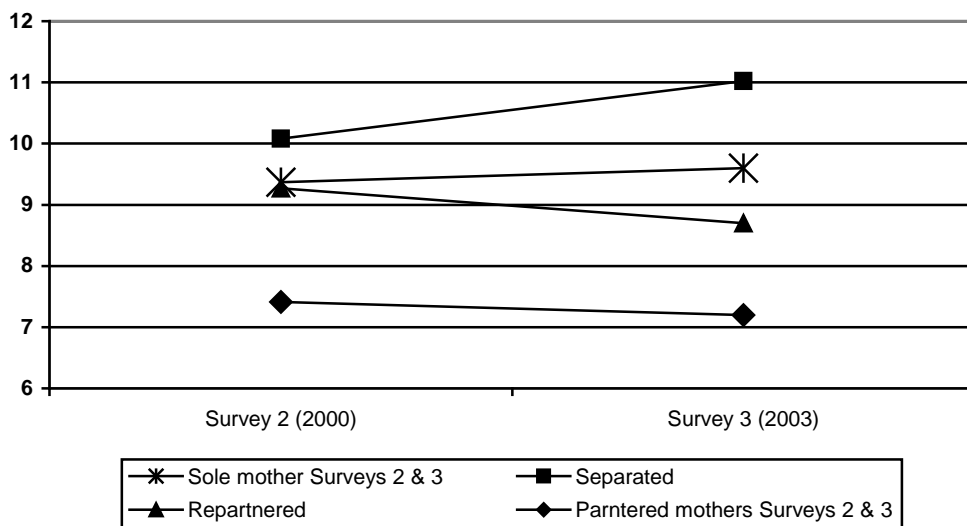


Figure 25: Depressive symptomatology at Surveys 2 and 3 among mothers (CES-D 10)

3. Psychological health among mothers at Surveys 1, 2 and 3

Results included in Table 41 indicated that the number of women who had been mothers since the time of Survey 1 were low, as would be expected since the respondents were aged between 18 and 23 years at this time. Even fewer of these women had experienced periods of sole motherhood. The following analysis included only those relationship status groups where the numbers equalled 20 or more (as per Table 41). Nevertheless, as previously mentioned, the results should be very cautiously viewed, given the small numbers of mothers involved.

Results in Figure 26 show that women who were sole mothers for all three surveys experienced a decrease in their psychological health over the seven year study period. Women who were sole mothers at Surveys 1 and 2, and who repartnered prior to Survey 3 experienced an increase in psychological health over the study period. Interestingly, this group had much worse psychological health at the time of Survey 1 compared to other women. Women who were sole mothers at Survey 1, and who were partnered mothers at Surveys 2 and 3 experienced an increase in psychological health at Survey 2, and a decrease by the time of Survey 3. Mothers who were partnered for all three surveys experienced a slight decrease in psychological health at Survey 2, and a slight increase at Survey 3.

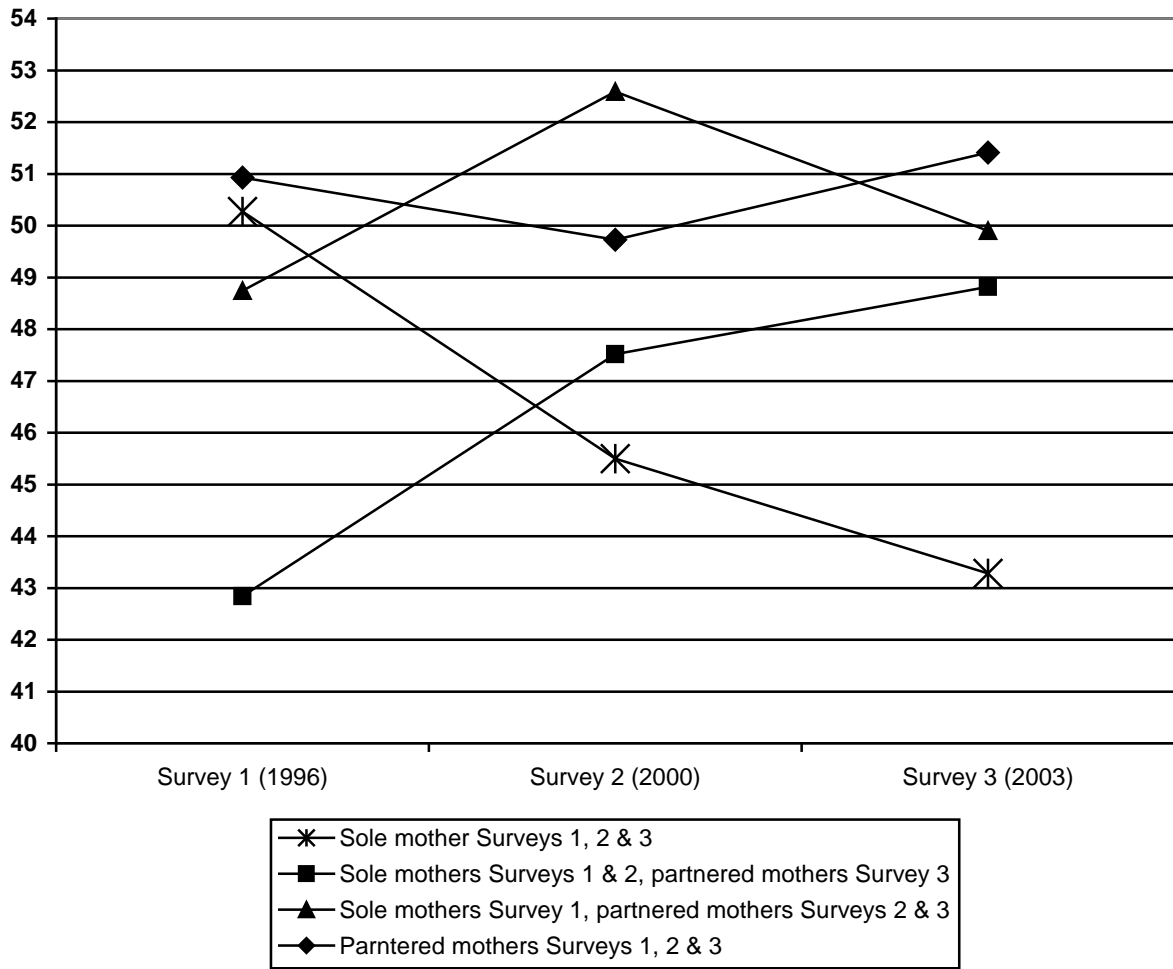


Figure 26: Psychological health among mothers for Surveys 1, 2 and 3 (SF-36 MCS)

Physical health

Sole mothers were found to have worse physical health than other women in their twenties in analyses of data from Surveys 1 and 2, with mean scores of 45 and 48 respectively (Section 7). To investigate the physical health of sole mothers in 2003, the following analyses were undertaken:

1. Cross sectional analyses compared sole mothers to other women at Survey 3
2. Physical health among women who were mothers at both Surveys 2 and 3
3. Physical health among women who were mothers at all three surveys.

1. Physical health at Survey 3

As can be seen in Table 45, both sole and partnered mothers had worse health than childless women at Survey 3, in results that were similar to those obtained in analyses of Surveys 1 and 2. There was very little difference in physical health between sole and partnered mothers.

Table 45: Young Survey 3 means (M) and standard deviations (SD) for physical health (SF-36 PCS)

Relationship status	Physical health (SF-36 PCS)		
	N	M	SD
Sole mothers	240	48.99	10.63
Partnered mothers	2003	48.37	10.91
Unpartnered childless	2528	50.75	10.15
Partnered childless	2913	50.36	9.98

2. Physical health among mothers at Surveys 2 and 3

Women who were sole mothers at both surveys experienced little change in physical health from 2000 to 2003 (Figure 27). Mothers who were partnered in 2000 and who had separated by the time of Survey 3 in 2003 experienced a slight increase in physical health. Women who were sole mothers in 2000 and who had repartnered by 2003 experienced very little change in physical health. Interestingly, this group had worse physical health at both surveys than the other three relationship status groups. Mothers who were partnered at both surveys experienced an increase in physical health from 2000 to 2003.

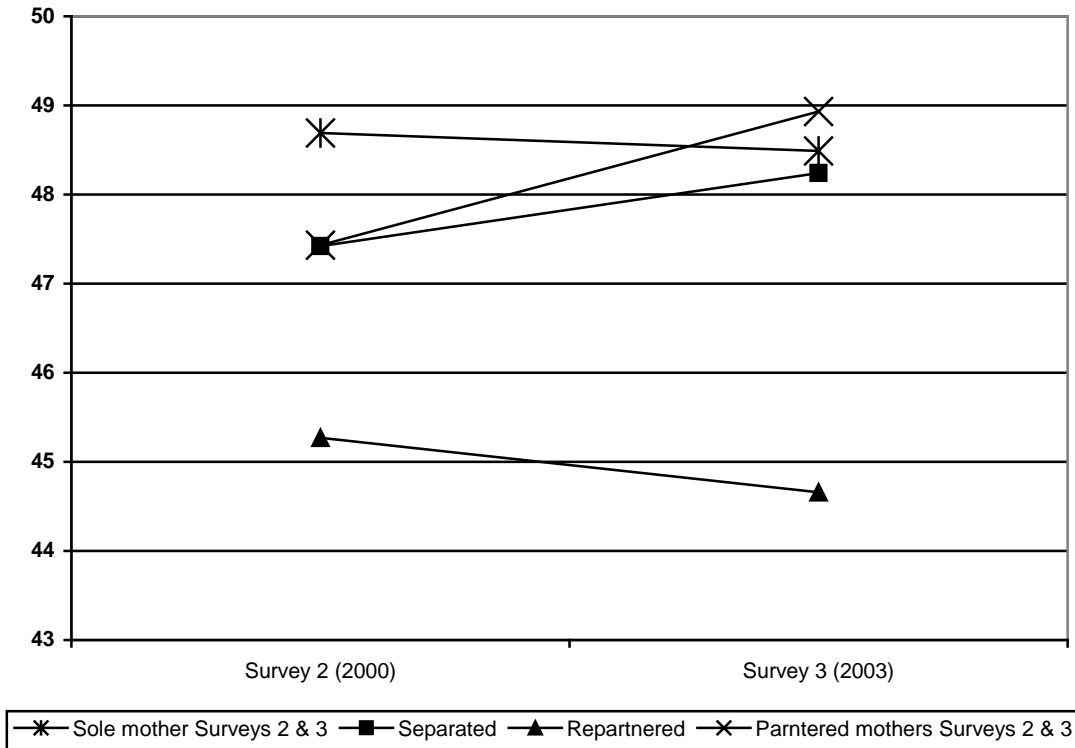


Figure 27: Physical health among mothers at Surveys 2 and 3 (SF-36 PCS)

3. Physical health among mothers at Surveys 1, 2 and 3

As with the psychological health analysis of all three young cohort surveys, the following physical health analysis included only those relationship status groups where the numbers, reported in Table 41, equalled 20 or more. The results should be very cautiously viewed, given the small numbers of mothers involved.

As can be seen in Figure 28, women who were sole mothers at all three surveys experienced an increase in physical health from 1996 to 2000, and little change in physical health from 2000 to 2003. Women who were sole mothers at Surveys 1 and 2, and who had repartnered by the time of Survey 3 experienced a steady decrease in physical health from 1996 to 2003. This group had the poorest physical health of all the relationship status groups at the time of each survey. Women who were sole mothers at Survey 1 and who were partnered for Surveys 2 and 3 experienced a decrease in health from Survey 1 to Survey 2, and an increase from Survey 2 to Survey 3. A similar pattern of responding was apparent amongst mothers who were partnered for all three surveys, although the difference in physical health from one survey to the next was not as large.

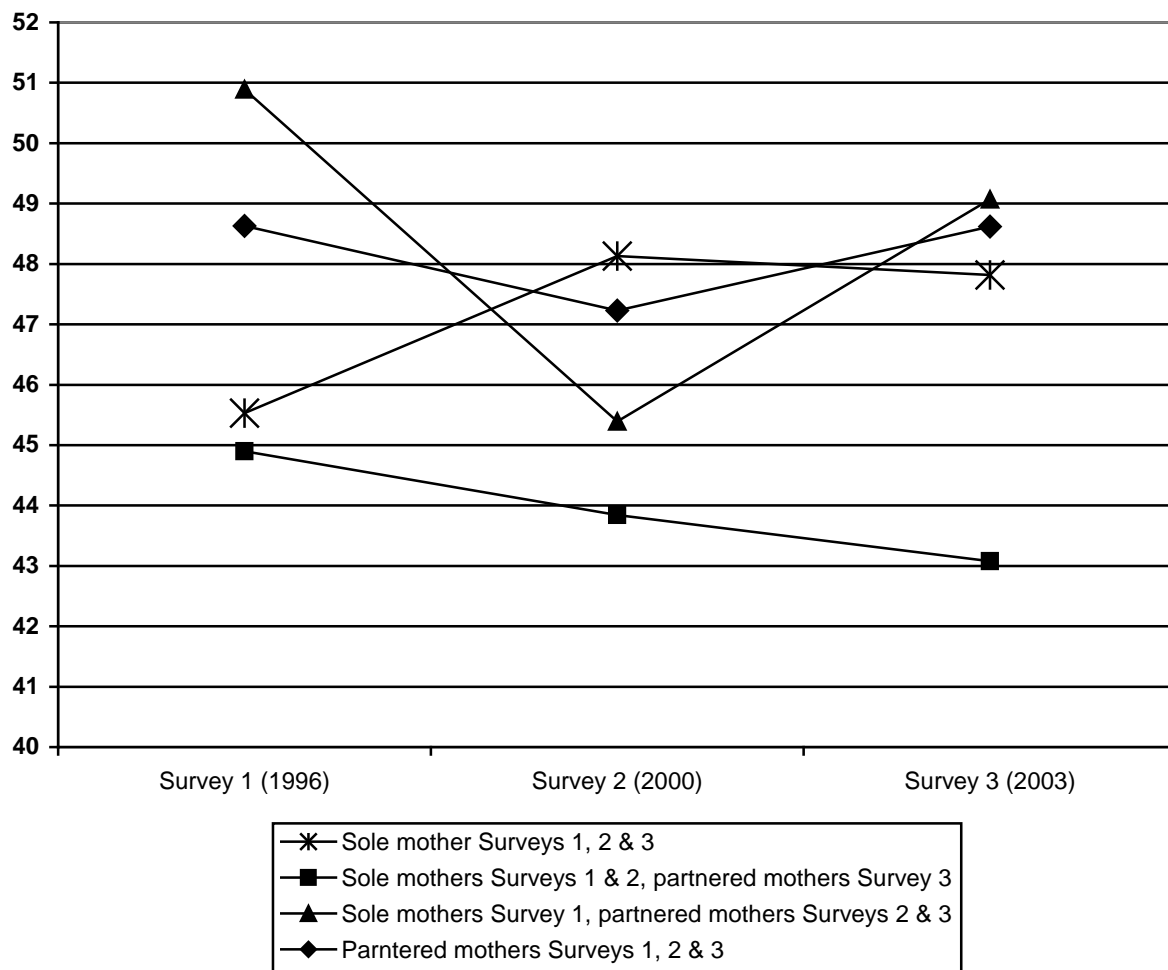


Figure 28: Physical health among mothers at Surveys 1, 2 and 3 (SF-36 PCS)

Discussion

The main Technical Report has indicated that sole mothers experience poorer economic wellbeing and health than other women, and has suggested that separation affects economic wellbeing and health. The further longitudinal analysis reported here, which includes Survey 3 data, offers some insight into the nature of changes in relationships experienced by mothers from the ages of 18 to 30, and the economic and health variations that occur with those changes.

Most women who were mothers in 1996 were partnered, and remained partnered over the seven year study period. Similarly, most mothers who were partnered in 2000 remained partnered in 2003. However, the results also indicated that a substantial proportion of mothers had moved into and out of relationships during the study period.

Economic wellbeing

Sole mothers were more likely than other women to be experiencing financial stress. This is consistent with previous analyses of data from the first two young cohort surveys (Section 6). However, fewer sole mothers were experiencing financial stress in 2003 than in 2000. Twenty percent of women who were sole mothers in both 2000 and 2003 became less stressed about money, while 12% became stressed about finances. However, among women who were sole mothers in all three surveys, a similar percentage had money worries in both 2000 and 2003. It is unclear why women who were sole mothers over the entire study period should be more likely than other sole mothers to experience financial stress. However, it is possible that the ages at which women had their children had an impact on this result. This finding warrants further research, particularly since the number of women in this group was very low.

Sole mothers who repartnered prior to 2003 were more likely than other mothers to have become less stressed about money, while partnered mothers who became separated prior to 2003 were more likely than other women to become more stressed about money. The impact of relationship changes on economic wellbeing, particularly where women have experienced multiple changes (eg. partnered, unpartnered, repartnered), warrants further research.

Psychological health

In line with previous analyses of data from Surveys 1 and 2, sole mothers at Survey 3 had poorer psychological health, and more symptoms of depression than other women. The results also indicate that the proportion of sole mothers who had used medication for depression had increased since 2000. Women who were sole mothers at both Surveys 2 and 3 experienced a decline in psychological health, and mothers who separated prior to Survey 3 experienced both a decrease in psychological health and an increase in depressive symptoms. These findings suggest that more sole mothers were depressed in 2003 at ages 25-30, than had been in 2000 at ages 22-27. However, this finding requires further research.

Differences in psychological health were observed between mothers who remained partnered during the seven year study period, those who were sole parents throughout the study period, and those who had separated or repartnered.

Taken together, the results suggest that the onset of poorer psychological health may be associated with separation, and that in the long term, continuing sole motherhood appears to be related to declining psychological health. Results for repartnered mothers support this contention. Women who were sole mothers in 2000 and who had repartnered by 2003 experienced an increase in

psychological health, and a decrease in depressive symptomatology from 2000 to 2003. By 2003, the psychological health of these repartnered mothers was similar to that of mothers who had been partnered throughout the three year period.

Physical health

Cross sectional results for physical health at Survey 3 were similar to those obtained at Survey 2, where mothers were less physically healthy than other women. However, as with psychological health, differences were observed between mothers who remained partnered, those who were sole parents throughout the study period, and those who had separated or repartnered.

Mothers who had a partner in 2000 and remained partnered in 2003 experienced an improvement in physical health so that by 2003, mothers who had remained partnered had better physical health than other mothers. The small group of women who were partnered mothers for all three surveys experienced a decrease in physical health from 1996 to 2000, and then an increase from 2000 to 2003. It is interesting to note that physical health among women who were sole mothers throughout the study period remained fairly stable from 2000 to 2003, and was only slightly poorer, in 2003, than that of mothers who had remained partnered over the study period. Sole motherhood appears to be far more detrimental to emotional wellbeing than to physical health.

Mothers who had a partner in 2000 but separated prior to 2003 experienced an increase in physical health, so that in 2003 separated mothers had similar physical health to that of mothers who had been partnered and those who had been sole mothers throughout the study period. Sole mothers at 2000 who had repartnered by 2003 experienced little change in their physical health during this period, however, the physical health of these repartnered mothers was poorer than that of other mothers in both 2000 and 2003.

Conclusions

The results of the current study have suggested that investigations into the economic wellbeing and health of sole mothers might be enhanced by also considering the past history of relationship status within the groups of mothers. Separated mothers appeared to have poorer psychological health than other mothers, while repartnered mothers appear to have poorer physical health than other mothers. In addition, although repartnering co-occurred with an improvement in psychological health, the current study suggests that this may not be a long-term gain because psychological health was seen to decrease over time.

The current study underlines the value of examining motherhood over time. Although sole mothers had poorer economic wellbeing than other women, it seems that the situation may have improved from 2000 to 2003. This might have occurred as a result of policy changes and/or as a consequence of children becoming older. Sole mothers experienced a decline in psychological health over time and it is possible that the ongoing stresses of sole motherhood take a cumulative toll. However, more research is needed in this area in order to determine the nature and causes of psychological ill health among sole mothers.

Overall the results suggest that changes in relationship status did co-occur with changes in both financial stress and health. However, these results have some limitations. It is not clear from these descriptive analyses whether there is anything about relationship status per se that directly affects financial or health status. Furthermore, these analyses did not take into account the myriad of other factors that are known to affect financial status and health. For example, paid work participation was not assessed, and was found to account for some of the relationship between sole motherhood and financial status among the young cohort in earlier analyses (Section 6). It is also important to

note the descriptive nature of the results. Inferential statistics were not conducted and significance values were not calculated. Therefore, the observed differences could have been caused by chance. However, the findings offer useful indications of areas that could be productively examined in future research.

Appendix B: Development of the relationship status measure

Young Survey 1

Women were asked, ‘Who lives with you?’ For the purposes of this enquiry, a relationship status variable was constructed that used responses to the ‘partner/spouse’ and ‘own children’ options. This resulted in four categories:

- Sole mothers
- Partnered mothers
- Unpartnered childless women¹⁹
- Partnered childless women

To check the validity of the variable, it was cross referenced with responses women had made to an item that asked about their marital status. Response options to the marital status item included: married (N = 1234), defacto (opposite sex [N = 1819]), defacto (same sex [N = 30]), separated (N = 114), divorced (N = 3), widowed (N = 5), and never married (N = 10,151). Results indicated some anomalies. Of the women who indicated they were married, 18 indicated that they were unpartnered with children, and 228 had indicated that they were unpartnered with no children. Of the women who indicated that they were living in a defacto relationship (same or opposite sex), 11 indicated that they were unpartnered with children, and 132 indicated that they were unpartnered without children. Of the women who indicated that they were separated or divorced, 6 indicated that they were partnered with children, and 7 indicated that they were partnered without children.

The actual relationship status of women who indicated that they were married or in a defacto relationship and yet lived with no partner remains unknown (N = 389). Similarly, the actual relationship status of women who indicated that they were separated or divorced and yet lived with a partner is also unknown (N = 13). Therefore, these 402 women were coded as having missing data on the relationship status variable.

Young Survey 2

Women were 22-27 years of age at the time the second young cohort survey was conducted. The youngest age at the birth of the first child was 14. Therefore, the oldest that a child could possibly be was 13 years of age at the time of the second survey. Thus, it was not necessary to exclude women from categories based on the ages of their children. In fact, only 80 women (0.8%) had children aged between 13 and 16 years.

Women were asked, ‘Who lives with you?’ For the purposes of the current enquiry, responses of ‘partner/spouse’, and ‘own children’ were used to construct the relationship status variable. This resulted in four categories:

- Sole mothers
- Partnered mothers
- Unpartnered childless women
- Partnered childless women

¹⁹ All of the women who indicated that they lived alone were included in the ‘no partner/no children’ category by default (N = 875).

One other question was concerned with women's living arrangements. Respondents were asked about their current living arrangements, with response options of: 'living in a registered marriage', 'living in a defacto relationship', and 'not married'. Responses for this item were cross referenced with the relationship status item.

Of the women who were unpartnered with children, 11 indicated that they were living in a registered marriage and 3 indicated that they were living in a de facto relationship. Of the women who were unpartnered without children, 15 indicated that they were living in a registered marriage, and 18 indicated that they living in a de facto relationship. Since the actual living arrangements of these 47 women remain unknown, they were coded as missing data on the relationship status variable.

Mid-aged Survey 1

Women were asked, 'Who lives with you?' with response options of: no one, partner/spouse, own children, someone else's children, parents, other adult relatives, and other adults. For the purposes of the relationship status variable, the second and third response options were utilised (own children, partner/spouse). Women were classified as being:

- Sole mothers
- Partnered mothers
- Unpartnered childless women
- Partnered childless women

This variable was cross referenced with the marital status item that asked, 'What is your present marital status?' with response options of: married, defacto (opposite sex), defacto (same sex), separated, divorced, widowed, or single. Some responses were ambiguous: 83 sole mothers and 374 unpartnered childless women also indicated that they were either married or living in a defacto relationship (same or opposite sex); 44 partnered mothers and 56 partnered childless women also indicated that they were either separated, divorced, widowed, or single. This total of 557 ambiguous responses equated to 4 percent of the total sample. Since there was no way of knowing these women's actual living arrangements, these responses were coded as missing data on the relationship status variable.

After this step, the relationship status variable was comprised of 927 sole mothers, 1041 unpartnered childless women, 6946 partnered mothers, and 4018 partnered childless women.

For the purposes of developing the relationship status variable, women were identified as having dependent children where they had indicated that they had one or more children living with them who were under 16 years of age. In order to determine which women had children under the age of 16 years, responses to the question that asked, 'How many children live with you?' were utilised. Response categories included: under 5 years; 5-15 years; 16-18 years; over 18 years, with response options of: none, one, two, three, or four or more for each of the categories. On this child status variable, women who had any number of children less than 16 years of age were coded as having dependent children; and all other women were coded as not having dependent children.

The child status variable was then used to modify the relationship status variable so that women who had children under 16 living with them were classified as having dependent children, while

women with children aged over 16 years were classified as not having dependent children living with them.

This resulted in a measure that categorised women as being:

- Sole mothers: defined as unpartnered women living with dependent children
- Partnered mothers with children: defined as partnered women living with dependent children
- Partnered childless women: defined as partnered women who were not living with their own dependent children
- Unpartnered childless women: defined as unpartnered women who were not living with their own dependent children

Of the 402 women who were unpartnered with children, 130 were separated, 209 were divorced, 49 were widowed, and 34 responded that they were single. Being a widowed mother has been found in past research to involve different economic outcomes to those experienced by other sole mothers. Furthermore, an examination of the mid-aged survey 1 data revealed that there were significant differences between being a separated/divorced mother, a widowed mother, and a 'single' mother, on some of the variables of interest (occupation, employment status, stress with money). The small numbers of women who were widowed or single precluded them from inclusion as categories in the relationship status variable. Therefore, women who were widowed or considered themselves 'single', and who had children under 16 living with them, were excluded from the analyses. Because the research is primarily concerned with associations between separated/divorced mothers and partnered mothers, unpartnered and partnered childless women (Research proposal, p.6, Approach 1), the exclusion of widowed and single mothers was not considered problematic.

The relationship status variable, then, represented women who were unpartnered and living with children less than 16 years of age; women who were partnered and living with children less than 16 years of age; partnered women not living with children less than 16 years of age; and unpartnered women not living with children less than 16 years of age. Women who considered themselves single or widowed, and who were also unpartnered and living with children less than 16 years of age were excluded from the analyses (n = 83).

Mid-aged Survey 2

Relationship status was measured by using the question that asked women, 'How many people live with you?' The responses were labelled partner/spouse; children less than 16 years; children 16-18 years; children over 18 years; with response options of none; one; two; three or more. Women were classified as having children where they indicated that they had one or more children aged less than 16 years. Women were classified as being unpartnered with children; partnered with children; unpartnered without children; and partnered with children.

The relationship status item was cross referenced with the item that asked about marital status. Response options included: married; defacto (opposite sex); defacto (same sex); separated; divorced; widowed; and single. Of the 392 women who were unpartnered with children, 51 indicated that they were either married or living in a defacto relationship. Since these women's actual relationship status is unknown, they were excluded from the analysis. Of the remaining women who were unpartnered with children, 38 indicated that they were widowed, and 28 indicated that they were single. Since the analysis is focussed on divorced and separated women, the

responses of these 66 women were excluded from the analysis. Unfortunately, low numbers in these two categories precluded them from inclusion in the analyses as separate categories.

Of the 2006 women who indicated that they were partnered with children, 17 indicated that they were separated, divorced, widowed or single. Of the 1534 women who were unpartnered without children, 157 indicated that they were married, or living in a de facto relationship. Of the 7293 women who were partnered without children, 84 indicated that they were separated, divorced, widowed or single. Since the actual relationship status of these women is unknown, their responses were excluded from the analyses.

Terminology

When discussed in the body of the report, unpartnered women with dependent children were referred to as 'sole mothers'; partnered women with dependent children were referred to as 'partnered mothers'; unpartnered women without dependent children were referred to as 'unpartnered childless women'; and partnered women without dependent children were referred to as 'partnered childless women'.

Appendix C: Areas selected for focus groups

Table 46: Characteristics of areas selected for focus groups

Area type		Inner capital		Outer capital city		Urban n-c		Rural		
Group number		4	6	8	9	1 & 11	3	5	7	10.1 & 10.2
Population (N)	since 1996 to 2001	-2 586	+2 757	+2 087	+1811	+3 028	-1 334	-409	+2 690	-993
	2001	73 431	56 547	145 860	74 317	132 569	20 271	20 884	33 137	20 363
Cultural background (% of population)	ATSI	1.4	0.2	2.5	1.2	1.8	5.3	1.9	4.2	5.1
	English only	54.3	77.9	74.8	91.0	88.0	91.7	89.5	91.6	92.5
	Aust. Born	53.0	58.2	68.5	78.5	83.6	85.5	86.3	81.1	88.8
	Overseas born	39.0	33.9	25.1	17.2	11.3	10.3	6.6	13.2	4.5
Age (mdn years)		34	34	30	37	36	29	35	44	40
Registered marital status (% of population)	Married	37.5	36.8	50.2	52.1	44.8	40.4	46.9	56.2	50.6
	Separated	3.6	3.0	4.5	3.4	3.4	3.3	4.0	4.2	4.5
	Divorced	8.1	9.5	7.1	8.7	9.0	6.8	7.9	9.1	7.9
	Widowed	4.6	4.9	4.4	5.9	8.2	6.3	7.9	8.4	9.8
Non-school education (% of population)	Postgraduate	6.8	10.1	1.6	5.7	2.9	7.0	1.6	2.0	1.2
	Bachelor	16.2	28.5	5.6	12.9	9.0	10.4	5.2	5.7	4.3
	Dip./Cert.	18.0	19.1	21.9	27.4	23.5	19.0	22.7	24.4	18.5
	None	59.1	42.2	71.0	54.1	64.7	63.6	70.5	67.9	76.0
Employment (% of labour force)	Unemployed	7.0	3.5	8.5	5.5	11.1	10.1	7.3	13.0	12.8
	Employed	93.0	96.5	91.5	94.5	88.9	89.9	92.7	87.0	82.7
Families (% of population)	Couple & children	41.0	27.4	54.3	48.7	41.3	42.7	42.2	33.8	38.9
	Couple no children	39.3	58.1	22.9	35.1	37.4	34.9	36.2	50.5	39.7
	Sole parent	16.2	10.9	21.6	15.2	19.1	20.3	20.0	14.8	19.6
Home (% of population)	Own/buying	49.5	41.9	63.5	76.3	63.7	55.9	62.9	69.4	75.5
	Renting	40.5	48.1	30.3	17.7	30.3	39.0	30.0	22.2	16.5
Median \$	Mortgage/month	1 200-1 399	1 800-1 999	800-999	1 000-1 199	800-899	600-799	600-799	600-799	400-599
	Rent/week	200-249	300-349	150-199	150-199	100-149	100-149	100-149	100-149	100-149
Household income \$/week (median)		800-899	1 200-1 499	800-999	800-999	600-699	600-699	600-699	400-499	400-499
Proportion of Statistical Local Area in:	1. Capital Inner	100	100							
	2. Capital Middle									
	3. Capital Outer			98.3	50.1					
	4. Within 75k			1.7	16.9					
	5. 100,000 +					96.1				
	6. 40-100,000					3.5				
	7. 10-40,000				25.1		100	100	30.8	97.4
	8. 2-10,000				5.5				24.4	
	9. Under 2,000				1.8				25.7	
	10. Non Urban				0.5	0.4			19	2.6

Appendix D: Cross tabulation results for relationship status by occupation

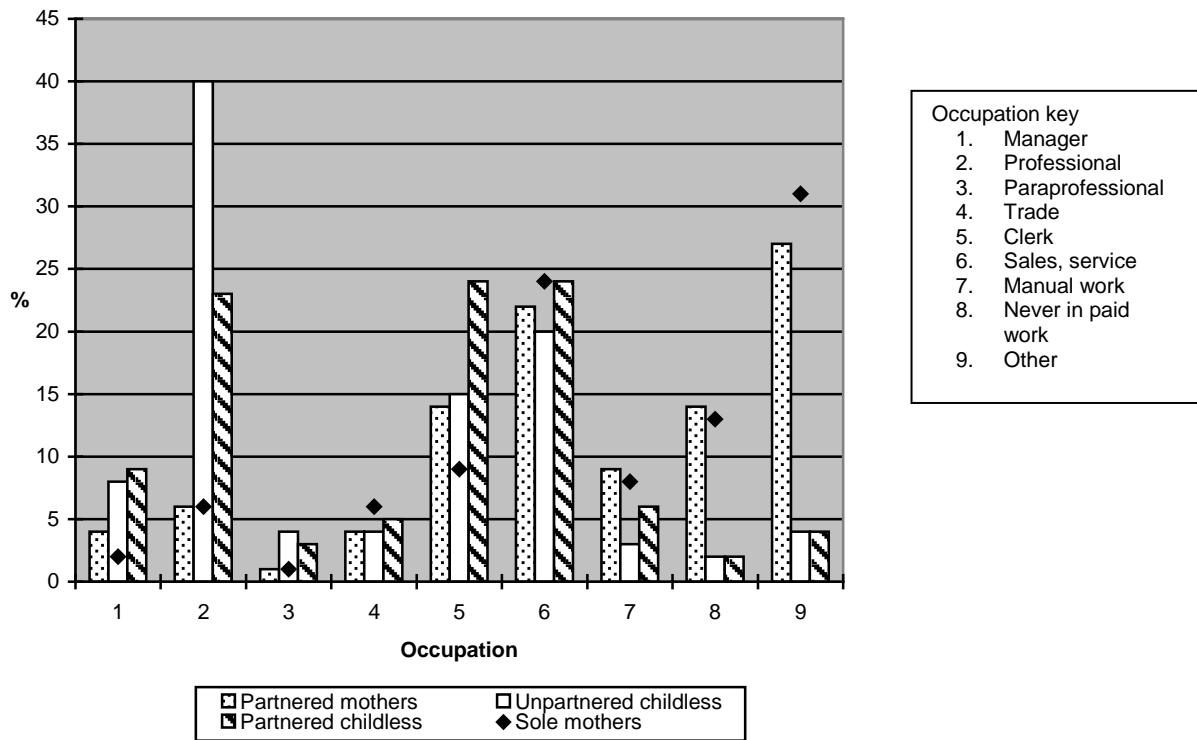


Figure 29: Young Survey 1 cross tabulation results for relationship status by occupation

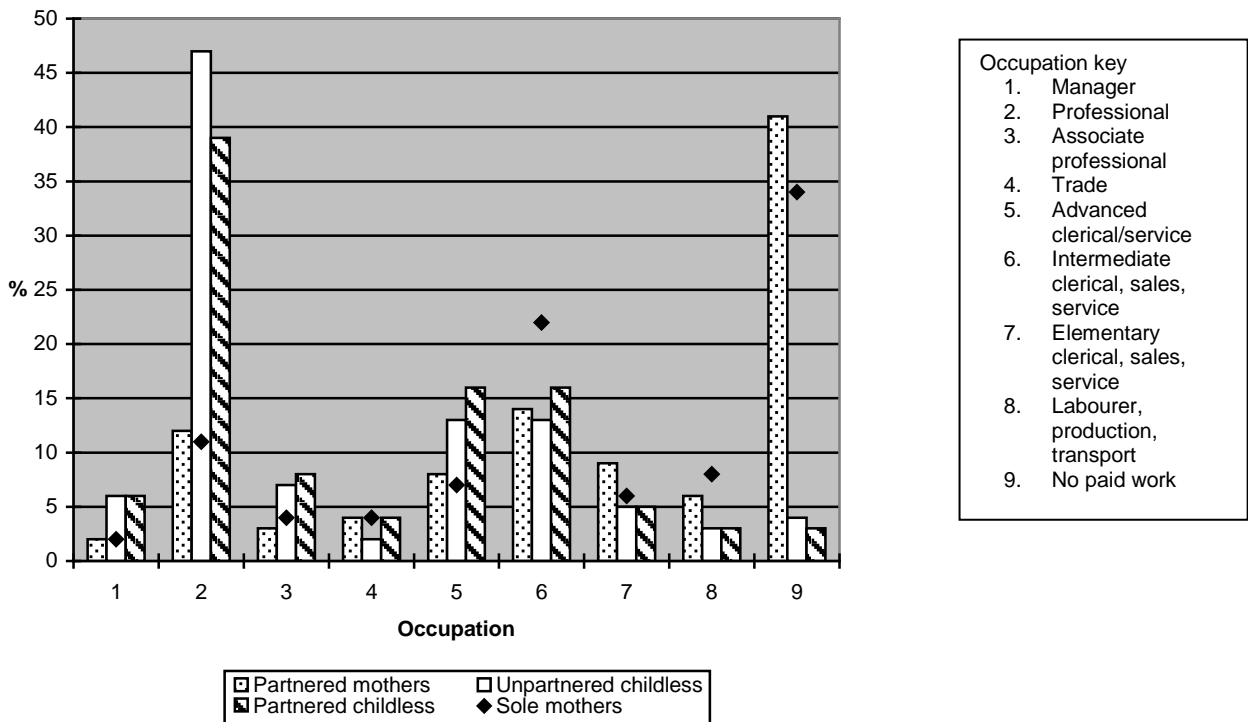


Figure 30: Young Survey 2 cross tabulation results for relationship status by occupation

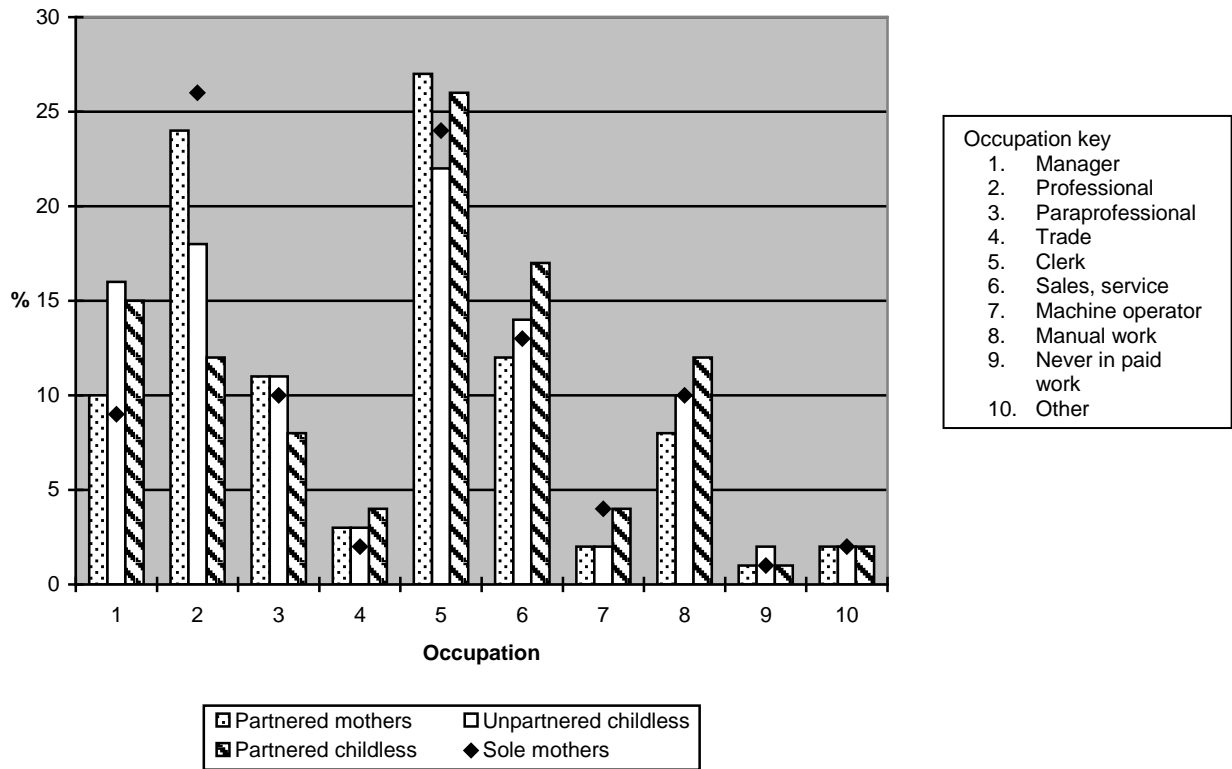


Figure 31: Mid-aged Survey 1 cross tabulation results for relationship status by occupation

Appendix E: Cross tabulation results for relationship status by number of hours spent in paid work per week

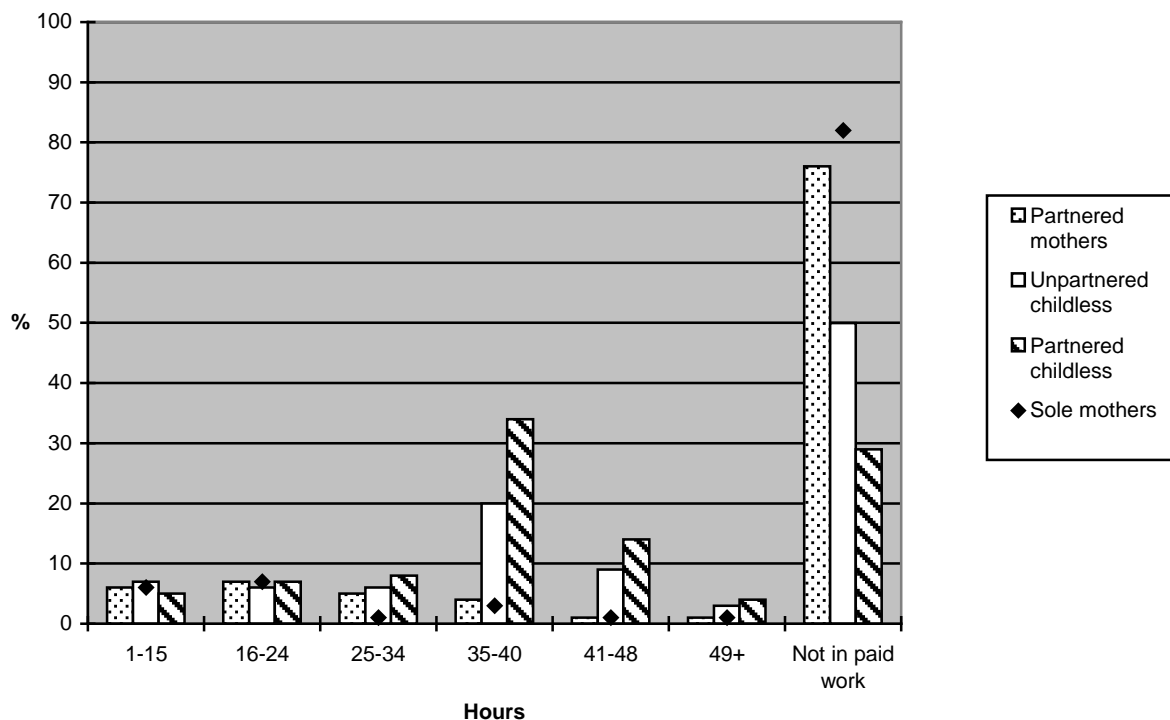


Figure 32: Young Survey 1 cross tabulation results for relationship status by hours spent in paid work, showing the percentage of women per relationship status category who undertook the relevant category of hours in paid work per week.

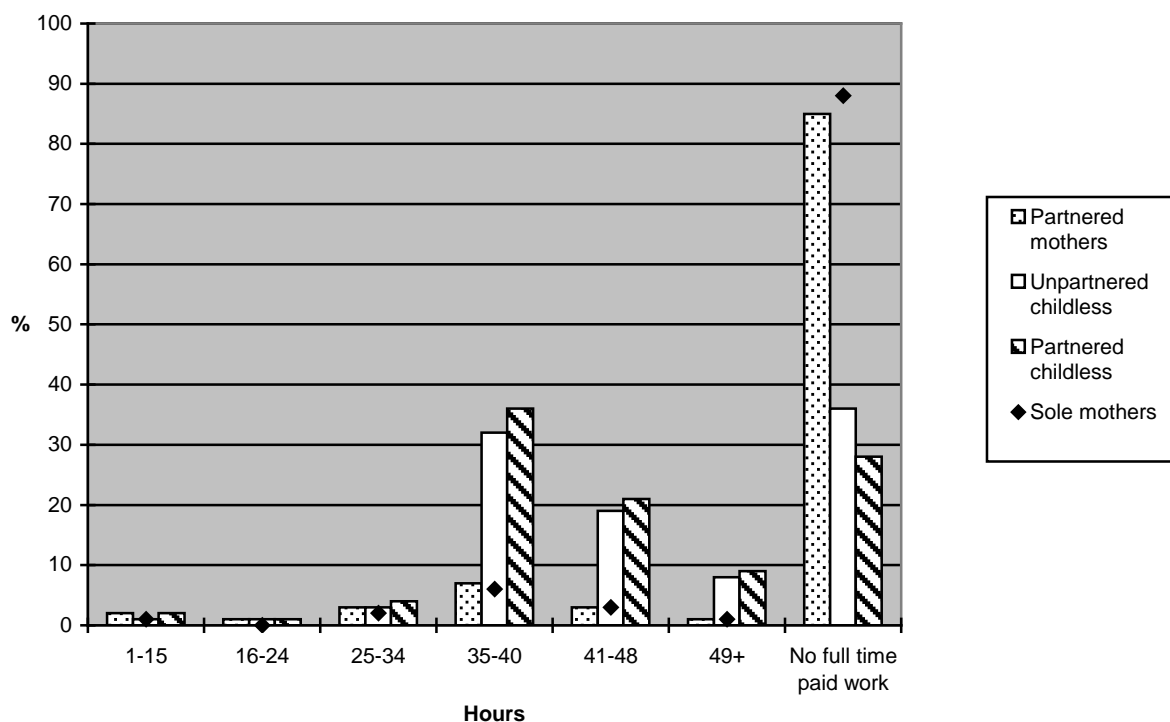


Figure 33: Young Survey 2 cross tabulation results for relationship status by number of hours spent in full time paid work, showing percentages of women per category who had undertaken the relevant category of hours in the previous week.

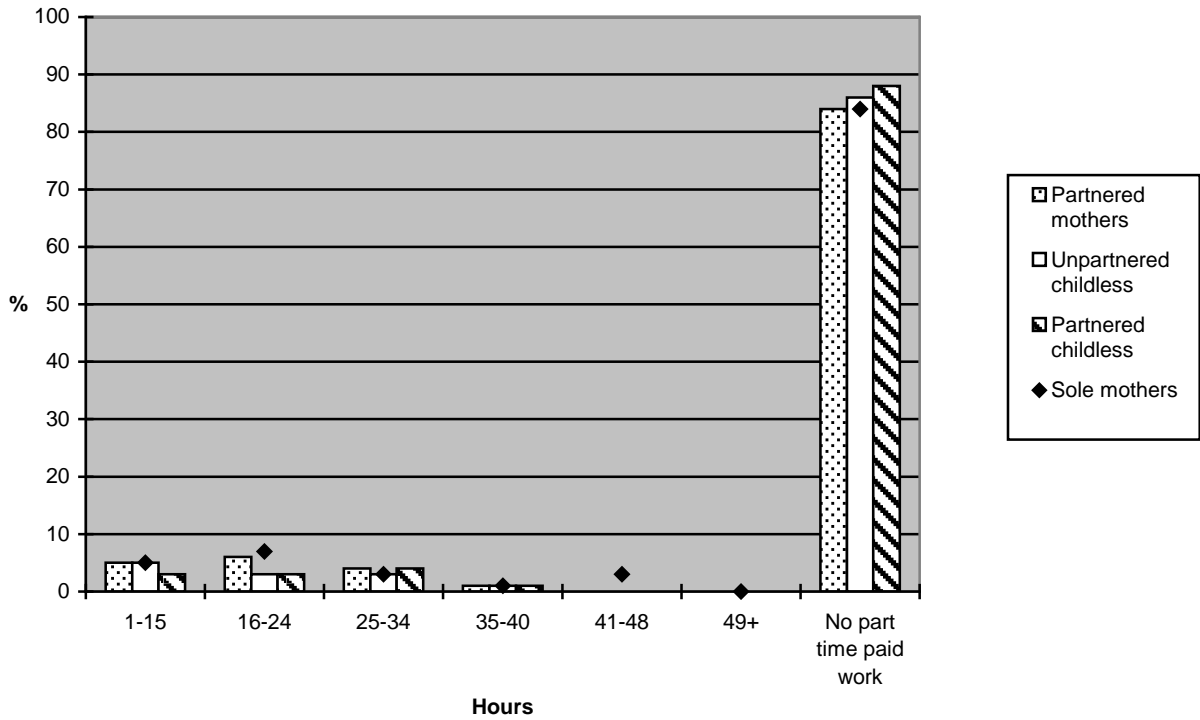


Figure 34: Young Survey 2 cross tabulation results for relationship status by number of hours spent in part time paid work, showing percentages of women per category who had undertaken the relevant category of hours in the previous week.

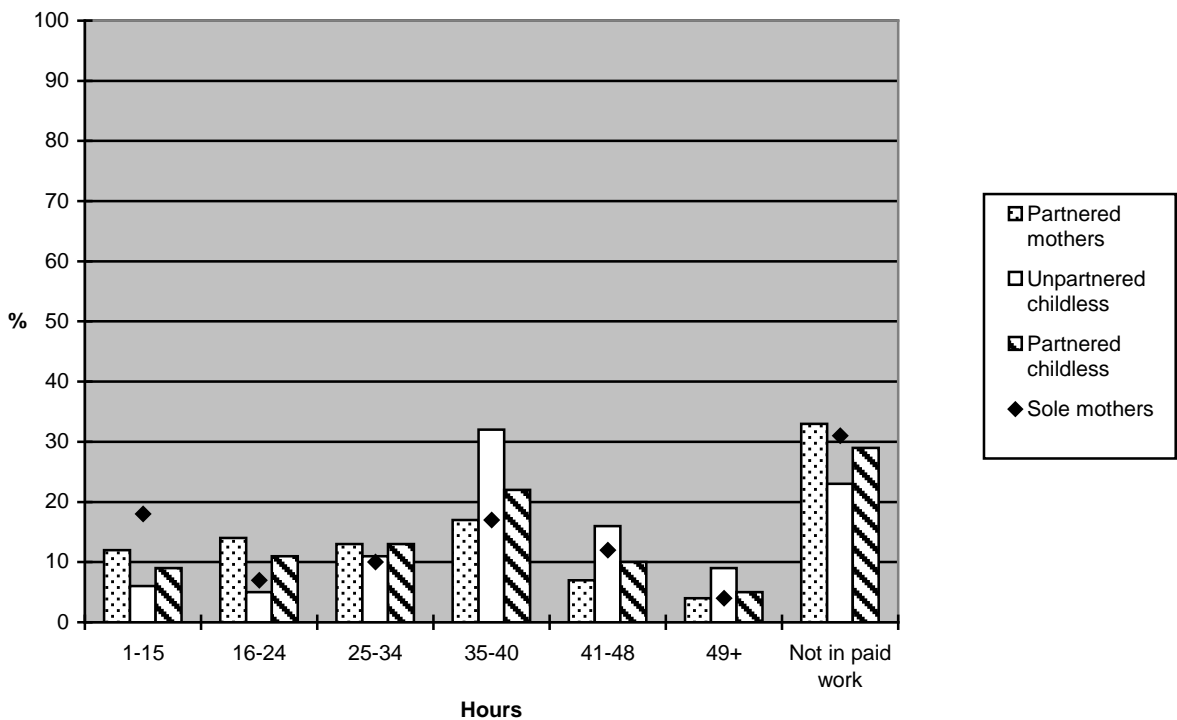


Figure 35: Mid-aged Survey 1 cross tabulation results for relationship status by hours spent in paid work, showing the percentage of women per relationship status category who undertook the relevant category of hours in paid work per week.

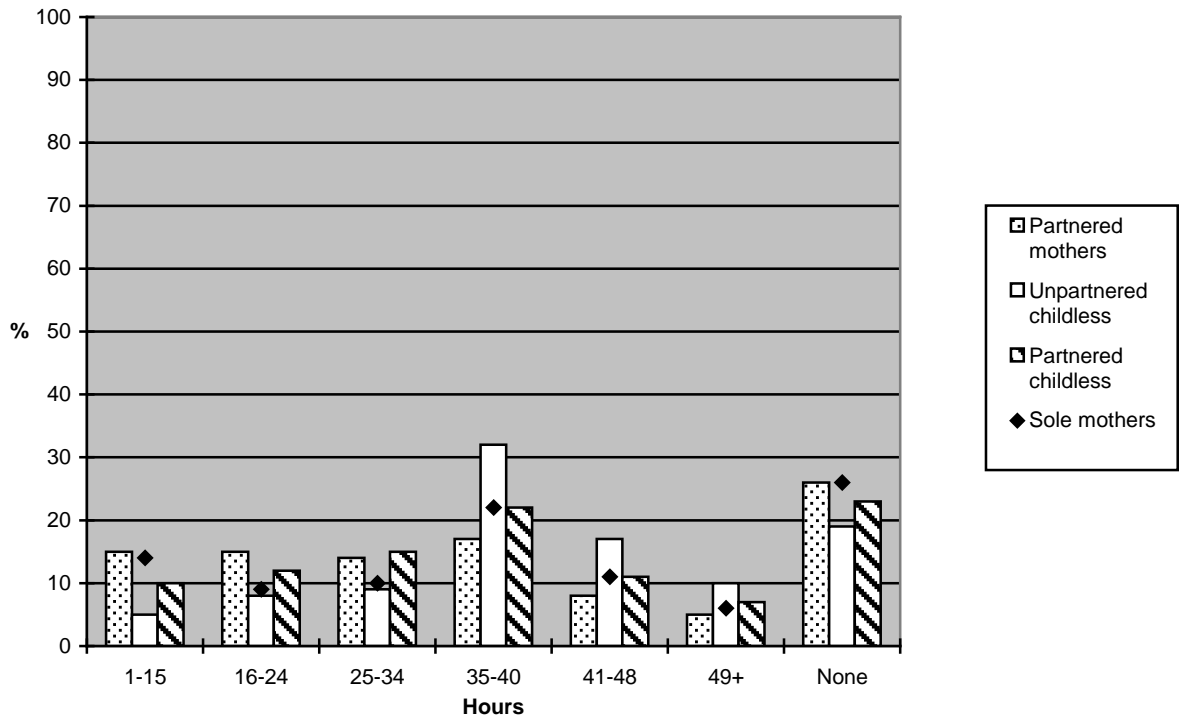


Figure 36: Mid-aged Survey 2 cross tabulation results for relationship status by hours spent in paid work, showing the percentage of women per relationship status category who undertook the relevant category of hours in paid work per week.

Appendix F: Cross tabulations for relationship status by economic wellbeing measures.

Table 47: Young Survey 1 cross tabulation results for relationship status by income management

Income management	Relationship status			
	sole mothers (N=328)	Partnered mothers (N=693)	Unpartnered childless (N=9679)	Partnered childless (N=2199)
	%	%	%	%
Impossible	5	3	3	3
Difficult always	30	18	13	15
Difficult sometimes	41	46	31	34
Not too bad	20	31	37	38
Easy	4	3	15	11

Table 48: Mid-aged Survey 1 cross tabulation results for relationship status by income management

Income management	Relationship status			
	sole mothers (N=377)	Partnered mothers (N=3181)	Unpartnered childless (N=1690)	Partnered childless (N=7311)
	%	%	%	%
Impossible	4	2	4	2
Difficult always	30	12	21	8
Difficult sometimes	43	30	32	24
Not too bad	17	43	33	46
Easy	6	14	10	20

Table 49: Mid-aged Survey 2 cross tabulation results for relationship status by income management

Income management	Relationship status			
	sole mothers (N=289)	Partnered mothers (N=2005)	Unpartnered childless (N=1479)	Partnered childless (N=6717)
	%	%	%	%
Impossible	6	1	5	1
Difficult always	36	15	17	9
Difficult sometimes	40	31	35	24
Not too bad	16	41	32	46
Easy	3	12	12	20

Table 50: Young Survey 1 cross tabulation results for relationship status by stress with money

Stress with money	Relationship status			
	sole mothers (N=318)	Partnered mothers (N=681)	Unpartnered childless (N=9548)	Partnered childless (N=2172)
	%	%	%	%
Not stressed	7	12	20	14
Somewhat stressed	30	33	32	35
Moderately stressed	19	23	24	23
Very stressed	20	17	15	17
Extremely stressed	24	13	9	11

Table 51: Young Survey 2 cross tabulation results for relationship status by stress with money

Stress with money	Relationship status			
	sole mothers (N=276)	Partnered mothers (N=1158)	Unpartnered childless (N=4521)	Partnered childless (N=3307)
	%	%	%	%
Not stressed	5	11	18	16
Somewhat stressed	21	33	35	38
Moderately stressed	20	24	24	23
Very stressed	30	19	15	15
Extremely stressed	23	13	8	8

Table 52: Mid-aged Survey 1 cross tabulation results for relationship status by stress with money

Stress with money	Relationship status			
	sole mothers (N=365)	Partnered mothers (N=3047)	Unpartnered childless (N=1626)	Partnered childless (N=6876)
	%	%	%	%
Not stressed	14	32	26	42
Somewhat stressed	26	38	32	33
Moderately stressed	26	15	20	13
Very stressed	17	9	11	6
Extremely stressed	17	6	11	5

Table 53: Mid-aged Survey 2 cross tabulation results for relationship status by stress with money

Stress with money	Relationship status			
	sole mothers (N=284)	Partnered mothers (N=1915)	Unpartnered childless (N=1440)	Partnered childless (N=6279)
	%	%	%	%
Not stressed	11	35	25	44
Somewhat stressed	32	40	39	37
Moderately stressed	24	13	18	10
Very stressed	19	8	10	6
Extremely stressed	14	4	8	3