Measuring the socio-economic status of women across the life course

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An extensive research literature highlights the significance of socio-economic status in explaining disparities in outcomes among women across the life course, including in areas such as education, employment and health (see McLachlan, Gilfillan, & Gordon, 2014). Developing and implementing appropriate policy responses requires an understanding of why such disparities occur, and which women they affect. This, in turn, requires appreciation of the challenges in the measurement of socio-economic status. In 2013, the Australian Institute of Family Studies was contracted by Women NSW in the NSW Department of Family and Community Services (FACS) to explore issues related to the measurement of socio-economic status (SES) of women in NSW over the life course. This article presents some highlights from this research. The full research paper contains more extensive analyses and discussion of related policy issues and approaches (see Baxter & Taylor, 2013).[1]

The full report to Women NSW was concerned with the socio-economic status of women, rather than men, although some of the measurement issues concerned with variation across the life course could equally apply to men. The focus on women was considered important because the caring role that is often undertaken by women can result in their having a lower personal income than men, and a greater reliance upon other family members (such as a partner) or on income support payments from the government. This places women in a somewhat vulnerable position with regard to their own economic security at the time this takes place, as well as at later ages, if opportunities to save or invest for their retirement have been limited.

Our interest is in the socio-economic status of women; specifically regarding the extent to which groups of women are facing some form of disadvantage with regard to their education, employment, incomes, wealth or housing.[2] As the analyses to be presented here shows, the choice of indicator (or indicators) used makes a difference to which women are counted as low socio-economic status. In the development

and evaluation of policies and programs it is important that these measurement issues be considered. While there are exceptions, it is not always well articulated how the use of different measures might yield different results, how results might differ specifically for women, and how life stage should also be taken into account when evaluating the meaning and use of different indicators of socio-economic status. The research project attempted to address these issues.

Although difficulties in measuring the socio-economic status of women at different ages or life stages have been recognised (e.g., Dutton, Turrell, & Oldenburg, 2005; Galobardes, Shaw, Lawlor, Lynch, & Smith, 2006; House et al., 1994; Mishra, Ball, Dobson, Byles, & Warner-Smith, 2001), this literature has not specifically focused on women across the life course. The existing literature includes discussion of the measurement of socio-economic status at specific life stages, but not necessarily for women. Reviews and related discussions on young men and women, for example, have been published by McMillan and Western (2000), Mayer, Duncan, and Kalil (2004) and Hanson and Chen (2007). In research on the health and mortality of older men and women, difficulties in measuring socio-economic status have also been discussed extensively (e.g., Bowling, 2004; Dutton et al., 2005; Grundy & Holt, 2001; Jaggera & Spiersa, 2005).
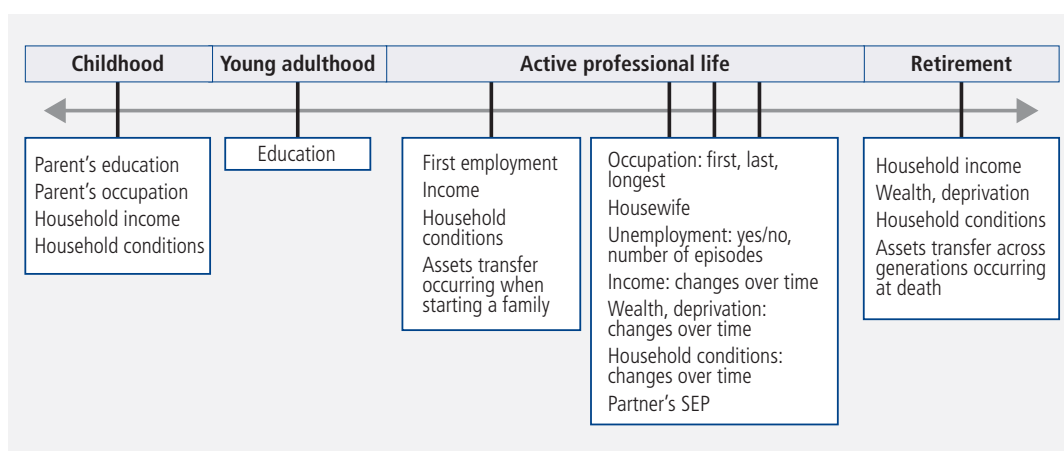
The need to take account of the life course in the measurement of socio-economic status has been most thoroughly discussed in the context of health research (see e.g., Grundy & Holt, 2001). Figure 1 is based on work originally published by Galobardes et al. (2006). It summarises some ways in which socio-economic status has been measured across the life course in this field of research. However, Galobardes et al. (2006) did not consider the specific issues associated with the measurement of the socio-economic status of women, as was the focus of the AIFS research for NSW Women.

Measurement of socio-economic status

To examine how the measurement of socio-economic status is affected by life stage, and to consider the relevance of particular measures for women at each life stage, this report examined several indicators of socio-economic status. The choice of measures was informed by the literature on the measurement of poverty and disadvantage (e.g., for Australia: McLachlan, Gilfillan, & Gordon, 2013; Phillips, Miranti, Vidyattama, & Cassells, 2013; Saunders, 2011), and by the availability of data that could be explored for women in NSW. Analyses were undertaken on measures of educational attainment, labour force participation, main source of personal income, personal and household income, personal and household wealth, and housing tenancy. The distribution of these measures for women in NSW, by age, was explored in order to highlight the difficulties in using specific measures at particular life stages. To simplify the presentation of these issues, from the fuller list of measures, some indicators of low socio-economic status were created and examined for broad life stages of women. The socio-economic status indicators used were:

- low educational attainment;
- low personal income;
- income support payments is main source of income;
- low personal wealth;

Childhood	Young adulthood	Active professional life		Retirement

Parent's education
Parent's occupation
Household income
Household conditions

Education

First employment
Income
Household conditions
Assets transfer occurring when starting a family

Occupation: first, last, longest
Housewife
Unemployment: yes/no, number of episodes
Income: changes over time
Wealth, deprivation: changes over time
Household conditions: changes over time
Partner's SEP

Household income
Wealth, deprivation
Household conditions
Assets transfer across generations occurring at death

Source: Galobardes et al. (2006), Figure 1

Figure 1: Measurement of socio-economic status over the life course

- low equivalised household income;
- low household wealth; and
- housing tenancy of public housing or Commonwealth Rent Assistance (CRA) private rent.

Information about the data sources used for the analyses is provided in Box 1. For information about the derivation of the indicators, refer to the Appendix in the full report.

This list of indicators includes some measures that are based on the women as individuals, and some based on the household within which the women live. Household measures—of household income or wealth, for example—may provide insights into the resources to which women have access. But information about a woman's personal resources within a family or household might provide more depth to this information, especially regarding her possible socio-economic status should there be a change in household living arrangements, such as a relationship separation. One of the important contributions of this research project was the consideration of how individual and household measures provide very different perspectives on women's socio-economic status.

In these analyses we did not include indicators based on area-level measures of socio-economic status. One reason that local area or regional measures of socio-economic status can be important and add value to individual and household measures is that they can provide an indication of someone's likely exposure to disadvantage in their area. This may have implications for the quality of housing, services and educational and employment opportunities for those living in their area (Hand, Gray, Higgins, Lohoar, & Deblaquiere, 2011). However, these measures do not always provide an accurate picture of individuals living within an area (Ben-Shlomo & Smith, 1999; Grundy & Holt, 2001; Hyndman et al., 1995; Krieger, Williams, & Moss, 1997). These indices are based on the *average* level of disadvantage within a defined area, which may not represent the socio-economic status of particular households or those who reside in particular parts of that area. In addition, problems can arise where indices are reported for areas that contain pockets of disadvantage interspersed with areas of relative advantage (Ainley & Long, 1995; Power & Robertson, 1987; Power, Robertson, & Beswick, 1985). Further, the characteristics upon which the area-level measures are based may be less relevant for understanding the socio-economic status of women, or of women at different ages. For example, measures based on the employment and occupational characteristics of people living within an area may not be so relevant for understanding the socio-economic status of older women, who usually no longer have a connection to the labour market. As a result, we decided to focus only on measures of individual and household socio-economic status.

The detailed analyses of each of the indicators of socio-economic status, by age, revealed some key issues that were relevant to the interpretation of any findings based on those indicators. The following sections discuss some of these conceptual and methodological issues.

Box 1: Description of data sources

Census	Survey of Income and Housing
The five-yearly Australian Census provides a range of information on all persons, families and households in Australia. The data presented in this report are for 2011. The analyses are based on the person-level database based on a person's location on Census night, for women in NSW. The Census data are primarily self-reported, with information about incomes collected through individuals' checking boxes on the Census form (or online) that indicate the range within which their incomes fall. Aggregated data have been accessed through the ABS TableBuilder facility.	The Survey of Income and Housing (SIH) is a nationally representative survey of households that collects information on sources of income, amounts received, household and personal wealth, housing characteristics, household characteristics and personal characteristics. It is administered by trained interviewers who interview respondents face-to-face and enter the data into a laptop computer. The survey scope covers residents of private dwellings in urban and rural areas of Australia. We conduct analyses at the person level for women in NSW, also making use of women's household characteristics. Data presented here were derived from the Confidentialised Unit Record File.

Low educational attainment

Education is an often-used measure of socio-economic status, being readily available in many statistical collections. Because higher levels of education tend to be associated with having access to more resources through the opportunity to obtain better jobs and earn higher incomes (see Lynch & Kaplan, 2000), education may capture likely differences in income, wealth or some other aspect of financial wellbeing.

Using education to assess the socio-economic status of women of different ages presents challenges, as recent decades have seen marked changes in the educational attainment of women. This has led to very large cohort differences in educational attainment among Australian women (and among men, albeit to a lesser extent) (Booth & Kee, 2011). Older women, therefore, are much more likely to be classed as having "low educational attainment" compared to young women, if a fixed cut-off (such as incomplete secondary education) is used, while this does not necessarily have the same meaning at each life stage with respect to socio-economic status.

Although there are challenges in using educational attainment as an indicator of socio-economic status for women across the life course, it remains true that higher educational attainment is expected to be related to more positive outcomes among the working age population, especially in terms of employment or income (McLachlan et al., 2013).

Our research used an indicator of low educational attainment that captured those with a highest qualification of Year 10. For the youngest women who have not yet completed their education, this is not the best approach. If young people are the focus, a better option might be to identify those who have dropped out of school early, as they would be an important group to target for supports or programs. For the oldest women, other measures of socio-economic status are likely to be more useful than educational attainment, given that when these women were in school it was not uncommon to leave school prior to completing the equivalent of Year 10.

Low personal or equivalised household income

Income is a fundamental measure of the amount of economic resources someone may have access to that can be used to acquire goods and services to achieve a certain standard of living. It is therefore an often-used measure of socio-economic status and one that also speaks to an individual's risk of experiencing financial disadvantage. It is especially common to use household income as a measure of socio-economic status.

For women, personal income fluctuates over the life course. In particular, it will be lower at times of reduced employment participation; for example, while studying, while not working or working part-time to care for children, and at older ages when few women will receive income from employment. As such, being "low income" will be very much tied to where women are in the life stage, such that a great majority of younger and older women, as well as those caring for children (or others), may be classed as "low income" relative to other women. This may not be indicative of their socio-economic status if they are able to draw upon other incomes at these times.

In the same way, household incomes vary for women (and men) over the life course, with lower incomes expected when young people move out of the family home to form their own households, and lower household incomes at older ages, as people enter retirement and move out of the workforce.

In assessing socio-economic status from household income, it is usual to derive a measure of "equivalised income", which divides the household income by a factor calculated from information on household structure. This is done to take account of the fact that to attain a certain standard of living, different levels of income would be needed in households of different sizes and compositions (Whiteford, 1997). Equivalised income is therefore generally recognised as a better reflection of socio-economic status as experienced by individual family members than when compared to an unadjusted measure of household income. Measures such as equivalised income implicitly assume everyone in the household has the

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same experience of socio-economic status. In reality, there is likely to be some unevenness in the distribution of consumption of that income across household members (see discussion and analyses by Hanson & Chen, 2007). This, in itself, might be important in order to better understand the socio-economic status of women within households, but we have not been able to do this as part of this research.

Despite the common use of income to assess socio-economic status (or financial wellbeing or disadvantage), the key criticism is that individuals may have access to resources that are not captured by income alone (see McLachlan et al., 2013). In particular, this applies to older women (and men), who are likely to have low incomes, but who may have significant savings and investment in housing or other assets that allow them to sustain their standard of living. Headey, Krause, & Wagner (2009), in fact, presented estimates of poverty using an equivalised household income, but also took account of household consumption and the value of their assets. This produced quite different estimates of poverty among those at older ages than estimates based only on income.

We have used two methods to analyse personal and equivalised household income. To identify low-income individuals and households using the SIH, we have compared information about income and wealth for women in NSW to all people in Australia, to identify those with incomes in the lowest 20% of the distribution. In analysing the Census data, we identified those as being low income if they had income up to a certain income range. This captured 33% of women based on personal income and 21% based on equivalised household income. We found that if we limited the classification of low personal income to a lower income range, it did not include many older women as having low personal income, most likely because the value of the age pension was greater than this lower income range. Raising the cut-off brings older women on government pensions into the low income category. These analyses showed clearly the importance of establishing a cut-off point at a value that makes sense to the research or policy question under consideration. In particular, analysis that defines women (or others) as low socio-economic status based on a relative measure of income is likely to be sensitive to the rates of income support payments, as also noted by McLachlan et al. (2013).

Main source of income is income support payments

Income support recipients are often considered to be an at-risk population for financial wellbeing. In particular, those who have income support payments as their main source of income, may have little additional financial resources upon which they can draw if needed. We have therefore used this as an indicator of socio-economic status for this research. However, we note that just as the amount of personal income varies for women over the life course, so too do their sources of income. Government payments may contribute more to women's income, and that of their family, at certain life stages. It is apparent from our analyses that it is very common among older women and also to some extent retirement-aged women. It is possible that having a main source of income as government payments might not mean the same thing in terms of socio-economic status across the life course, and, in fact, it may be important to take account of the type of income support payment received as well as life course stage in order to identify those most at risk of disadvantage.

Low personal and household wealth

Wealth is another indicator of socio-economic status, which is more often used for older adults when other measures of income may be less likely to reflect their standard of living (see Krieger et al., 1997). Wealth provides some indication of the resources available to an individual or a family should there be a change in income or an immediate financial need for other reasons. We explored personal wealth and household wealth using the SIH, identifying low-wealth individuals and households as those with wealth in the bottom quintile of the distribution, compared to all people in Australia. Personal wealth is defined to include only superannuation balances and other personal wealth, such as the value of shares and bank balances (but does not include the value of commercial or residential property). Household wealth comprises the sum of the personal wealth of the individuals in the household as well as household assets, including the place of residence and other property, if applicable.

Housing tenancy of public housing or Commonwealth Rent Assistance (CRA) private rent

Housing tenure is another way of capturing socio-economic status insofar as it provides some indication of individuals' access or lack of access to financial resources. This information

may be particularly valuable in identifying lower socio-economic status women among those whose income does not provide a good representation of their status. In particular, housing tenure can be a useful indicator for older women (and men), among whom lack of home ownership and having precarious housing situations are indicators of poorer financial wellbeing (Bradbury & Gubhaju, 2010; Darab & Hartman, 2012; Grundy & Holt, 2001).

We focus in our analyses on women who are living in rented accommodation, in public housing or as private tenants to indicate lower socio-economic status. Within private rental housing, we further look at a group most likely to be disadvantaged—those living in households in which CRA is provided to the household. The eligibility criteria for both public housing and CRA privately rented housing mean that only the financially disadvantaged have this form of housing tenure and therefore only women living in lower socio-economic status households were included when using these indicators.

A limitation of housing tenure information, as used here, is that tenure is a *household* variable, and living in a home that is owned outright, for example, does not mean that all occupants share equally, if at all, in the ownership of that home. This applies particularly to young people living in their parents' home, or even to older people, who may have moved into the residence of one of their children. Similarly, some people who are renting their home of residence may own a property elsewhere.

Variation by life stage

To explore socio-economic status across the life course for women in NSW, life stages were defined based on four broad categories of women's age:

- young women, aged 15–24 years;
- mid-age women, aged 25–54 years;
- retirement-age women, aged 55–74 years; and
- older women, aged 75 years and over.

Women within each of these stages are, of course, not necessarily homogeneous, and in particular, Table 1 shows the diversity of relationships within the household that women hold within these life stages. This information is relevant to this research, as the measurement of socio-economic status is often closely tied to information about the household within which women live, as noted above, and analysed further below.

Table 2 (on page 68) shows the percentage of women classified as low socio-economic status, as operationalised on each of the indicators described above, using the 2009–10 SIH and the 2011 Census for NSW.

First, it is apparent that each measure captures a different proportion of the population, and there are also some differences across the two data sources.[3] The variation of findings is a reminder of the care needed in basing analyses and subsequent policy recommendations on one source of information about difficult-to-measure items such as these.

Putting aside the issues concerning data sources, an important point is that some indicators of

> Housing information may be particularly valuable in identifying lower socio-economic status women among those whose income does not provide a good representation of their status.

Table 1: Relationships in the households of women in NSW, by life stage, 2011					
Relationship in household	**Young women (%)**	**Mid-age women (%)**	**Retirement-age women (%)**	**Older women (%)**	**All women (%)**
Dependent student	42.4	n.a.	n.a.	n.a.	6.4
Non-dependent child	23.1	5.1	0.9	0.0	6.3
Couple without dependent children	8.6	22.4	60.4	28.5	30.0
Couple with dependent children	3.6	45.8	3.8	0.1	24.9
Lone parent	2.8	12.4	6.9	8.0	9.2
Other family member	6.4	2.6	4.2	7.6	4.0
Group household member	7.1	3.5	2.2	1.1	3.5
Lone person	2.5	6.8	19.3	37.9	12.2
Non-private dwelling	3.4	1.5	2.3	16.8	3.5
Total	100.0	100.0	100.0	100.0	100.0

Note: Includes women living in non-private dwellings.
Source: 2011 Census of Population and Housing (see Box 1)

Table 2: Measures of low socio-economic status by life stage, women in NSW

Measures of low socio-economic status	Young women (%)	Mid-age women (%)	Retirement-age women (%)	Older women (%)	All women (%)
Survey of Income and Housing, 2009–10					
Year 10 or less	27.9	23.9	55.5	79.2	36.3
Bottom quintile of personal income	48.2	19.3	22.8	7.0	23.9
Main source of income is income support payments	18.1	19.7	46.2	86.7	30.9
Bottom quintile of personal wealth	50.3	21.0	19.0	19.6	25.2
Bottom quintile of equivalised household income	9.6	12.1	24.9	42.4	17.1
Bottom quintile of household wealth	32.8	20.2	7.9	8.9	18.4
Public housing	0.7	2.8	2.9	3.7	2.6
Household in receipt of CRA	10.8	8.0	4.4	4.0	7.3
SIH sample size	450	1,608	916	363	3,337
Census of Population and Housing, 2011					
Year 10 or less	26.5	20.7	49.8	69.7	32.7
Low weekly personal income (< $300 per week)	61.9	23.9	36.0	30.7	33.2
Low equivalised weekly household income (< $400 per week)	20.1	14.8	27.3	43.8	21.1
Public housing	4.1	3.3	4.7	4.6	3.9
Private rent	32.2	29.5	11.4	7.0	23.5
Population size ('000)	353.6	1,240.3	585.9	200.5	2,380.3

Notes: Includes women living in occupied private dwellings. The total number of women providing valid responses to specific items is often smaller than the number shown.
Source: 2009–10 Survey of Income and Housing and 2011 Census of Population and Housing (see Box 1)

socio-economic status identify a relatively small proportion of the population, while others are much more inclusive. Indicators of socio-economic status that identify a high proportion of the population as being of low status are likely to be less powerful in their ability to detect those who experience disadvantage. For example, this was especially apparent in the use of educational attainment and main source of income as a measure of socio-economic status for older women.

Relationships and low socio-economic status

The life stages used in these analyses include a diverse range of household situations (see Table 1). For example, among the young women, their relationship within the household includes being a dependent or non-dependent child, or being a member of a couple, or a lone parent. This relationship within the household may make a considerable difference to the meaning of individual versus household measures of socio-economic status. This subsection explores this by examining a range of indicators from the SIH (Table 3 on page 69) and the Census (Table 4 on page 70). Each table shows the relationship in the household of women classified as

low socio-economic status to examine how the make-up of this group of women varies depending on which indicator is used. Educational attainment has not been used in these analyses, as that measure is not expected to be dependent upon a woman's relationship within the household. Findings are described below the tables for each life stage.

One finding that is clear from these analyses is that individual measures yield different results to household measures of socio-economic status. We undertook some additional analyses to see to what extent there was overlap between individual and household measures, using income as an example. The results are available in the full report, and discussed in conjunction with the overall findings below. Specifically, the analyses use the Census data to show the overlap between low personal income (< $300 per week) and low equivalised household income (< $400 per week).

Young women

- A majority of young women classified as low socio-economic status based on their own income were dependent students. Those with low personal wealth were predominantly dependent students and non-dependent children.

■ Other measures of socio-economic status tended to classify a more diverse group of young women as lower socio-economic status. For example, young women who were lone parents were over-represented among those mainly reliant on income support payments and with low equivalised household income. Group household members were over-represented among those living in households privately rented and receiving CRA, among those mainly reliant on income support payments and in households with low household wealth. Of course, group household members are not likely to be sharing resources such as income and wealth.

Table 3: Relationship in household for women classified as low socio-economic status at each life stage, women in NSW, 2009–10

	Low personal income (%)	Mainly income support payments (%)	Low personal wealth (%)	Low equivalised household income (%)	Low household wealth (%)	Household in receipt of CRA (%)	All NSW women (%)
Young women							
Dependent student	77.2	36.2	59.0	45.5	24.0	33.8	46.2
Non-dependent child	14.4	14.8	18.5	21.8	14.8	9.3	23.9
Couple without dependent children	2.9	1.4	4.1	0.0	15.3	5.6	9.5
Couple with dependent children	0.3	14.6	3.2	6.2	8.1	9.6	3.3
Lone parent	0.0	11.1	3.6	14.6	6.4	7.4	3.2
Other family member	2.1	3.4	4.2	0.0	9.9	12.5	4.1
Group household	2.5	14.3	5.9	5.5	14.4	16.8	7.3
Lone person	0.7	4.4	1.4	6.4	7.1	5.0	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mid-age women							
Non-dependent child	3.1	3.8	7.6	3.5	2.5	3.3	6.0
Couple without dependent children	30.2	6.0	18.2	16.3	21.5	9.1	23.6
Couple with dependent children	60.6	53.3	43.3	37.5	27.8	38.7	46.9
Lone parent	2.2	28.3	23.0	28.6	28.6	37.1	11.8
Other family member	0.6	0.2	0.4	0.3	3.4	4.0	1.5
Group household	0.4	1.4	2.6	0.4	5.4	1.9	3.6
Lone person	2.8	7.0	4.9	13.3	10.6	5.8	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Retirement-age women							
Couple without dependent children	74.0	55.4	45.4	51.5	13.0	31.3	62.9
Couple with dependent children	11.4	5.9	6.5	4.0	6.5	11.8	6.2
Lone parent	3.6	7.5	12.5	4.3	28.7	10.2	7.7
Other family member	1.1	4.7	6.9	0.6	0.0	5.4	2.4
Lone person	8.5	25.5	26.7	38.6	49.5	40.5	18.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Older women							
Couple without dependent children	67.2	30.7	16.7	–	5.9	–	30.4
Couple with dependent children	8.6	0.7	0.0	–	0.0	–	0.6
Lone parent	4.7	10.8	5.9	–	7.1	–	11.7
Other family member	18.5	10.1	22.6	–	1.2	–	8.8
Lone person	0.9	46.9	53.3	–	81.2	–	47.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Some categories of relationship in household have not been presented where overall percentages were particularly small. As a result, percentages will not always add to 100% within each life stage. The relationship in household classification has not been shown for those indicators that resulted in few (< 20) NSW women in the SIH being represented in the sample.

Source: 2009–10 Survey of Income and Housing (see Box 1)

The analyses in the full report shows that most young women with low personal incomes *did not* also have low equivalised household income. Overall, 44% of young women had only low personal income, another 36% had neither low personal income or low equivalised household income, 17% had both low personal and low equivalised household income, and 3% had only low equivalised household income.

■ For those who were dependent students, 74% had only low personal income and 19% had both low personal and low household incomes. Young women who were non-dependent children or who were themselves one of a couple household without dependent children were the least likely to be low socio-economic status on either of these income-based indicators.

Table 4: Relationship in household for women classified as low socio-economic status at each life stage, women in NSW, 2011

	Low personal income (< $300 per week) (%)	Low equivalised HH income (< $400 per week) (%)	Public housing (%)	Private rent (%)	All NSW women (%)
Young women					
Dependent student	65.1	41.7	37.5	25.1	43.9
Non-dependent child	14.1	14.6	34.8	14.2	23.9
Couple with dependent children	3.2	5.0	3.8	6.8	3.8
Couple without dependent children	3.9	4.8	2.5	16.5	8.9
Lone parent	0.9	8.2	11.2	4.9	2.9
Other family member	6.1	8.8	5.6	9.5	6.7
Group household	5.3	10.9	1.6	18.2	7.3
Lone person	1.4	6.0	3.1	4.8	2.5
Total	100.0	100.0	100.0	100.0	100.0
Mid-age women					
Non-dependent child	3.8	2.7	6.6	2.2	5.2
Couple with dependent children	61.4	36.9	17.8	34.7	46.5
Couple without dependent children	18.9	9.7	10.7	22.9	22.7
Lone parent	7.4	35.7	43.6	18.3	12.6
Other family member	2.5	2.2	2.9	3.8	2.6
Group household	2.4	2.2	2.5	8.1	3.6
Lone person	3.6	10.6	15.8	9.9	6.9
Total	100.0	100.0	100.0	100.0	100.0
Retirement-age women					
Couple with dependent children	3.7	2.0	2.1	3.5	3.9
Couple without dependent children	76.7	52.8	27.9	41.1	61.8
Lone parent	4.4	4.0	14.8	12.5	7.1
Other family member	4.2	2.8	5.1	7.9	4.3
Group household	1.2	0.9	2.6	5.1	2.2
Lone person	9.4	37.1	46.3	29.2	19.8
Total	100.0	100.0	100.0	100.0	100.0
Older women					
Couple without dependent children	60.6	30.9	17.2	25.4	34.3
Lone parent	6.4	2.6	11.9	10.2	9.6
Other family member	10.0	2.8	4.9	11.0	9.1
Group household	0.7	0.4	1.4	2.6	1.4
Lone person	22.2	63.3	64.5	50.6	45.6
Total	100.0	100.0	100.0	100.0	100.0

Note: Sample is of women living in occupied private dwellings.
Source: Census of Population and Housing (see Box 1)

- Lone parents were most often captured in these analyses as having low equivalised household income only (41%), with another 13% having both low personal income and low equivalised household income.
- The young women who were most likely to have both low personal and equivalised household income were lone women, and women living in a group household or as an "other family member".

Mid-age women

- Except on the measure of personal income, mid-age women who were lone parents were over-represented in each of the low socio-economic status groups, compared to their representation overall at this life stage. This is most apparent for women in households receiving CRA—37% of these were lone parents.
- Mid-age women who were partnered and had dependent children at home were over-represented among those who had low personal income, and somewhat over-represented among those whose main source of income was income support payments. But they were not over-represented on other classifications of low socio-economic status. We would expect that this largely reflects women who have reduced their involvement in paid work to focus on caring for children.
- Lone women are over-represented on some of the indicators of low socio-economic status, particularly those based on equivalised household income and housing tenure.

Overall, the analysis in the full report shows that 69% of mid-age women were not classified as being of low socio-economic status on either of the (census) income-based measures. Some 8% were classified as such based on both their personal income and equivalised household income, while 16% were based on their personal income only and 7% based on their equivalised household income only.

- Almost half of the mid-age women were in a couple relationship with dependent children, and these women were the most likely to be classified as being of low socio-economic status based on their personal income only (24% of these women); however, most of them (64%) were not classified as such. For many women, lower personal income at this life stage reflects having a reduced income as a result of withdrawal from paid work to care for children.
- The next largest group, overall, was lone parents (13% of mid-age women). As with

the young women, it was low equivalised household income rather than low personal income that classified these women as being of low socio-economic status. This mostly reflects the fact that these households contain, at most, a single income earner.

Retirement-age women

- The majority of retirement-age women were in couple relationships without dependent children. These women are over-represented among those classified as low socio-economic status based on their personal income. With regard to household wealth, equivalised household income and housing tenure, couple women without dependent children were somewhat under-represented relative to the whole population. This was particularly so for housing tenure.
- Lone women were over-represented in the low socio-economic status groups based on household wealth, household equivalised incomes and housing tenure.
- Lone parents were over-represented on some measures, although overall were a relatively small group, as were those with dependent children.

Over half (56%) of the retirement-age women were not classified as low socio-economic status based on either their personal or equivalised household income (see the full report). The percentages classified as low socio-economic status based only on personal income (17%) and only on equivalised household income (8%) were similar to mid-age women, but among retirement-age women a higher percentage had both low personal and equivalised household income (19%).

- Partnered women without dependent children were more likely than women in other relationships to have both a low personal and a low equivalised household income (22% of these women).
- Women living alone were very likely to be classified as being of low socio-economic status according to their equivalised household income, but not their personal income. Women who were an "other family member" in group households and lone parents were somewhat diverse in their income-based classification of being of lower socio-economic status.

Older women

- Lone older women were over-represented among those classified as low socio-economic status based on their household wealth, low equivalised household income and being in public housing. Couple

Lone older women were over-represented among those classified as low socio-economic status based on their household wealth, low equivalised household income and being in public housing.

women were over-represented based on their personal income.

- Older women who were an "other family member" includes those women living with their child's family. These women were over-represented among those with low personal wealth, but not when based on household measures.

Older women were more likely than women of other life stages to be classified as being of low socio-economic status based on equivalised household income, with 22% having only low household income, and another 22% having both low equivalised household income and low personal income (see the full report). Nine per cent had only low personal income and 47% were not classified as being of low socio-economic status on either of these income based indicators.

- Older couple women were often classified as being of lower socio-economic status based on both equivalised household income and personal incomes (40% of partnered older women).

- As with the retirement-age women, living alone was associated with a higher chance of being classified as being of lower socio-economic status based on equivalised household income, but not on personal income, with 45% having low equivalised household income only and 16% having both low equivalised household income and low personal income.

Summary of these and other findings from the research

From the above analyses it was apparent that some measures of socio-economic status capture a very small percentage of the population (such as being in public housing) whereas others, within certain life stages, capture a large proportion of the population (e.g., low education among retirement-age and older women, low personal wealth and personal income among young women, or low household income among older women). The higher proportion of the population they capture, the less likely the measure is to be useful in identifying those with lower socio-economic status.

The full report contains more detailed analyses of these measures and the correspondence between them. Overall, these analyses provided evidence of the measures of socio-economic status being *not* perfectly correlated, and so not exchangeable. Women classified as being of lower socio-economic status on one measure are not necessarily classified as such

on another. Previous research (not focused on women) is consistent with this, highlighting the fact that different measures pick up on different aspects of low socio-economic status (Dutton et al., 2005; McLachlan et al., 2013). This points to the multi-dimensional nature of socio-economic status that cannot easily be measured using one piece of information such as income or education.

Indicators of socio-economic status based on personal income or wealth yield very different groups of women when compared to those based on household income or wealth. Household measures more often identify lone parents or lone women as being of lower socio-economic status, while individual measures more often identify students, partnered women and older women living with other family members as being of lower socio-economic status. These latter women are also not often counted as lower socio-economic status according to their household circumstances.

These analyses demonstrate very clearly that a life stage approach, or one that takes account of women's ages, is needed to make sense of measures of socio-economic status and to make recommendations on the usefulness of the indicators examined. For example, many young women have low incomes, but their socio-economic status is often protected by their continuing to live in the parental home. On the other hand, many older women have low personal incomes, but often live alone, leaving them at risk of financial hardship. For older women with low personal income, living with other family members (or others) may be a way of avoiding financial hardship inasmuch as it provides opportunities for sharing household resources.

In the full report, further analyses were also done to examine the extent to which there were associations between women's socio-economic status on each of the indicators, and reports of households experiencing financial stress or hardships. This information helped us assess the usefulness of different indicators in identifying those women who experienced some financial difficulties. Additional analyses were undertaken to examine the socio-demographic characteristics of women identified as low socio-economic status on the various indicators.

We found that it is difficult to assert that one indicator is superior to others, whether across all women or within life stages. However, for all life stages, useful indicators were: having *income support payments as the main source of income*, having *low equivalised household income*, and *housing tenure of public housing*

tenant or private rental tenant in receipt of CRA. Eligibility criteria for income support payments and for housing assistance (through public housing or CRA) will be based on a woman's access to financial resources, including her personal and household income. These are especially likely to capture women who are experiencing disadvantage. Low equivalised household income is likely to capture having access to fewer financial resources in many circumstances, although some low-income families may be safe-guarded against this through having access to other financial resources, such as accumulated wealth.

Then, for specific life stages, we suggested that other useful indicators of low socio-economic status were:

- for *young women*: just those listed above were considered most useful, with low personal wealth and low household wealth possible useful indicators;

- for *mid-age women*: in addition to those listed above, low educational attainment and low household wealth were considered to be the most useful indicators, with low personal wealth possibly useful;

- for *retirement-age women*: low household wealth, as well as those listed above, were the most useful, with low personal income and personal wealth possibly useful indicators of low socio-economic status; and

- for *older women*: low personal wealth and low household wealth, in addition to the indicators listed above, were considered most useful, and low personal income possibly a useful indicator.

We nevertheless recommend that in deciding on the "best" indicators of socio-economic status, it is important to question the policy relevance of different indicators. For example, educational attainment may not be a useful indicator in formulating, delivering or evaluating housing policy, but it may be useful for policies that assist women to gain employment.

The importance of recognising measurement issues, and using an appropriate measure of socio-economic status, is discussed below.

Measurement issues in the context of policy

For the formulation of social policy to improve the socio-economic status of women, it is necessary to develop a clear understanding of how gender and age intersect in women's experiences of disadvantage. Here, we have seen that gaining insights into age disparities in socio-economic status is complicated by the vastly different circumstances of women across the life course. Indicators of socio-economic status among young women may not have the same meaning (or value) when used to assess the socio-economic status of older women. Further, the different experiences of women across the life course, and the generational and cohort changes that are always occurring, mean there is a need to monitor differences in women's (and men's) socio-economic status, to consider how different life experiences will lead to later life outcomes for different age cohorts.

The development of policies, programs and services that address socio-economic status will undoubtedly require the definition of eligibility criteria, whether policies are to be broadly focused on the whole population or tightly targeted consistent with a progressive/ proportionate universalist approach. This research underlines how the choice of indicator makes a difference in terms of which women are classified as low socio-economic status. This is relevant if such indicators are used to assess eligibility for programs, services or supports. Use of one indicator (such as receiving income support) may result in the targeting of a different (possibly more disadvantaged) group of women than would be targeted using another indicator (such as women's personal incomes). It is of course the case that such matters are often well thought through in policy development, with policy-makers generally being very aware of their target population.

In selecting a socio-economic status indicator our analyses showed that a key decision is whether women's own characteristics or women's household characteristics better reflect their socio-economic status. Quite different groups of women are identified as low socio-economic status, depending on which

Indicators of socio-economic status among young women may not have the same meaning (or value) when used to assess the socio-economic status of older women.

indicators are used. When basing an indicator on personal income, many women who would be likely to be sharing the resources of others were classified as being of lower socio-economic status; for example, dependent students and partnered mid-age women who were caring for children. However, these women were often not living in low-income households, at least as defined here.

While it seems likely that women identified as being of low income according to both their personal and household incomes would be especially disadvantaged, it is important to be mindful that the definitions of low income—personal or household—used in this report are somewhat arbitrary, as are the definitions of low wealth. They provide an indication of having *relatively* low income (or wealth) when compared to other people in the population. In the case of low personal income, some income support payment recipients were not included, because their rate of payment is somewhat over the threshold of low income used here. In the case of household income, we used equivalised household income, given that this means household income has been adjusted to take account of the different financial needs of families with different compositions. For determining eligibility to payments or services, household income would not typically be equivalised, although certain sources of income may be exempt from calculations. Putting aside measurement concerns though, it does seem likely that women with access to low personal and low household resources would be most at risk of experiencing disadvantage, and so likely to be an important target group for policy.

As we have noted above, it is important to consider that for policy, as in research, a measure of socio-economic status needs to be chosen that best fits the question of interest, whether that measure is used to indicate eligibility for some intervention or service, or whether it is to be used to assess outcomes. Most importantly, this research has shown that an indicator based on women's personal characteristics is likely to mean a focus on different women than would be targeted if women's household characteristics were used.

There is especially a need for appropriate data that allows the monitoring of the socio-economic status of women and the identification of women who are not faring well in socio-economic status terms. There is also a need for programs and services to be evaluated effectively, to allow the identification of policies that do (and do not) work for women. As such, gender issues need to be considered when exploring and reporting on findings. Consideration of gender, age or cohort issues should be central in the policy development process, so that intended as well as unintended consequences, especially for women, can be considered.

Final remarks

To sum up, the research presented here (and more extensively in the full report) provided an examination of the socio-economic status of women in NSW, with a focus on measurement issues. It demonstrated that the way in which socio-economic status is conceptualised and measured makes a difference to who is identified as being of lower socio-economic status. There are certainly challenges to researchers and policy-makers in being able to identify a useful measure, especially given women's patterns of employment participation over the life course, their possible financial dependence on others at particular life stages, and the diverse characteristics of women of different birth cohorts. The choice of measure matters as to whether women are identified as being of lower socio-economic status. So the key recommendation of this research is that care needs to be given in choosing a measure of socio-economic status that best suits the purpose of the measurement and the life stage of the women being examined, and appropriately considers whether household as well as women's own characteristics provide the necessary information to determine a woman's socio-economic status.

Endnotes

1 The full report is available at <www.women.nsw. gov.au/__data/assets/file/0009/298665/Women_ SES_NSW_report.pdf>). The authors would like to acknowledge the contribution of colleagues at the Australian Institute of Family Studies (AIFS) and of the members of the Expert Advisory Group on the Socio-Economic Status of Women in NSW, each of whom provided invaluable advice and guidance.

2 In the report we presented a discussion of the historical literature that considered the socio-economic status of women. Much of this literature was concerned with "status", while the focus of this research project was more on the conceptualisation of socio-economic status as access to resources.

3 Differences between the two data sources may reflect some bias in either the SIH or the Census, differences in the collection of specific data items, or possibly differences in the reference periods (2009– 10 for the SIH and 2011 for the Census).

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