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# Material Deprivation and Social Exclusion Among Young Australians: A child-focused approach

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This report is the first of its kind to apply the deprivation approach to examine deprivation among young Australians using information provided by young people themselves. It builds on earlier projects that developed and applied the approach used here to adults. Like many research projects of its kind, it has involved pulling together input from many sources over a sustained period, each of which was necessary to produce the final product.

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Peter Saunders
Chief Investigator

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# Abbreviations

| | |
|---|---|
| **ASI** | Attitudes to Schooling Index |
| **ABS** | Australian Bureau of Statistics |
| **ACWP** | Australian Child Wellbeing Project |
| **ARC** | Australian Research Council |
| **CDI** | Child Deprivation Index |
| **CMSD** | Child Material and Social Deprivation Index |
| **CRC** | Convention on the Rights of the Child |
| **EU** | European Union |
| **GHS** | Government high schools sample |
| **HREC** | Human Research Ethics Committee |
| **ICSEA** | Index of Community Socio-Educational Advantage |
| **MaD** | Making a Difference Project |
| **MDI** | Material Deprivation Index |
| **MDGs** | Millennium Development Goals |
| **NECDS** | National Early Childhood Development Strategy |
| **OLS** | Ordinary Least Squares |
| **OHI** | Overall Happiness Index |
| **OPHI** | Oxford Poverty and Human Development Initiative |
| **PIs** | Partner Investigators |
| **PRG** | Project Reference Group |
| **SES** | Socioeconomic Status |
| **SEI** | Social Exclusion Index |
| **SPRC** | Social Policy Research Centre |
| **SERAP** | State Education Research Applications Process |
| **SWB** | Subjective Well-Being |
| **SDGs** | Sustainable Development Goals |
| **TSF** | The Smith Family sample |
| **UNICEF** | United Nations International Children's Emergency Fund |
| **UNSW Sydney** | The University of New South Wales |

# Executive Summary

## Background and Context

- There is a growing international consensus that addressing poverty among children and young people is an urgent task. Those who experience poverty in their early years often incur long-term negative effects – scars that are carried into adulthood.
- More than one in six (17.3 per cent) Australian children aged under 15 and close to one in seven (13.9 per cent) young Australians aged 16 to 24 were living in households below the poverty line in 2015-16. Child poverty has declined since 2000 but the rate of decline has slowed since the 2008 financial crisis.
- In 2015, Australia was a signatory to the UN Sustainable Development Goals (SDGs) that will set the global economic and social development agenda for the period up to 2030.
- The first Sustainable Development Goal (SDG) is to 'end poverty in all is forms everywhere' by 2030 and the first target within that goals is to 'reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions'.
- Like other countries – rich and poor – Australia will be judged by its success in achieving these goals.
- The UN Convention on the Rights of the Child (CRC) recognises the right of every child to an adequate standard of living and that the child's views should be given due weight in responding to issues that affect them.
- Together, the SDG and CRC agenda provide a new global impetus to achieve substantial reductions in child poverty between now and 2030.

## Studying Child Poverty

- Developments in the academic literature on the measurement of child poverty have shown that it is possible to implement a child-centred approach that captures the attitudes, views and experiences of children and young people.
- UNICEF has developed and is applying to the world's richest countries a new Child Deprivation Index that represents a 'significant new development in the international monitoring of child poverty'.
- The deprivation approach has been used to examine adult poverty in Australia, but this is the first study that applies the approach to measure poverty among children and young people.
- This quantum leap in child poverty research will produce evidence that has relevance and meaning to young people and greater credibility generally.
- It represents a departure from conventional poverty studies that identify as poor those households with incomes below the poverty line.
- Poverty line studies define children as poor if they live in households that are poor, where this depends on the incomes of adult members of the household.
- In contrast, the deprivation approach adopts a living standards perspective and defines as poor those who are not able to achieve an acceptable standard when judged against prevailing community standards.

- An acceptable standard is identified as one where individuals are able to access items that are regarded as essential (or necessary) by a majority in the community. Those individuals who do not have and cannot afford these items are identified as deprived.
- This version of the deprivation method is called the consensual approach. Under the consensual approach, children and young people are defined as deprived if they do not have but want items regarded as essential by a majority of their peers.
- For young people, the items include material ('things') like adequate food, appropriate clothing and a quiet place to study, and activities ('doings') like going out with family and friends and on school excursions.
- Numerous studies conducted for a broad range of countries over the last two decades have shown that the consensual approach generates important new insights into child poverty.

## The Study

- This study draws heavily on two earlier studies: the *Making a Difference* (MaD) study conducted at the Social Policy Research Centre (SPRC); and the *Australian Child Well-being Project* (ACWP), led by Flinders University, with SPRC involvement.
- The study was funded by a Linkage project grant awarded by the Australian Research Council, supplemented by cash and in-kind support provided by three Partner Organisations (POs): The NSW Advocate for Children and Young People; The NSW Department of Education; and The Smith Family.
- A Project Reference Group provided advice throughout the project. Group members included individuals from each of the three POs and Australian and international experts on child poverty and well-being with experience in conducting research with young people.
- The fieldwork component of the project consisted of two phases: a series of focus group discussions with over 80 young people; and a quantitative survey of over 3,000 young people in NSW aged between 11 and 17 years.
- The structure and content of the survey questionnaire was informed by the focus group discussions and the latest international child poverty research.
- The survey was completed by around 2,700 students in years 7 to 10 attending a NSW government high school, and by about 300 young people participating in the *Learning for Life* program run by The Smith Family.
- Ten focus groups sought young people's views on the items and activities that are essential for all young people to 'live a normal kind of life' in Australia today, distinguishing between needs and wants, and between luxury and basic items.
- The discussions focused on identifying essential items in six broad areas: individual possessions; household needs; food; family and friends; school; and free time.
- Young people's own circumstances shaped their expectations and views about what items and activities they identified as important for young people of their age to live 'a normal kind of life'.
- The reality for many was that household money determined what items and activities they had access to, with many going without or seeking cheaper alternatives to stretch limited resources.
- The focus group discussions influenced the quantitative survey in ways that improved the topics covered, and the terms and meanings used in the survey.

# The Survey

- The *What Young People Need* (WYPN) survey was separated into six sections covering: about you; what you have and do; health and well-being; home and family; friends and socialising; and school and neighbourhood.
- The survey was distributed in hard copy form and completed either at school or home.
- Schools were identified and approached in waves with assistance from the NSW Department of Education. Young people participating in the *Learning for Life* program were invited by The Smith Family to take part and, if agreed, completed the survey at home.
- A total of 52 schools agreed to participate and 2,672 students in years 7 to 10 completed the survey. The survey was also completed by 337 participants in the *Learning for Life* program – The Smith Family (TSF) sample.
- The government high schools (GHS) sample is similar in structure to the population attending all NSW government high schools in terms overall school size.
- The GHS sample contains disproportionate numbers of both least-advantaged and most-advantaged schools, defined using the Index of Community Socio-Educational Advantage (ICSEA). Analysis suggests that this imbalance does not translate into a bias that might distort the findings.
- The GHS and TSF samples share a common profile across most young people characteristics, including age/school year, gender, subjective health status and number of homes for sleeping.
- There are a number of indicators of the lower socioeconomic status of those in the TSF sample:
  - While 32.2 per cent of the GHS sample had at least $20 a week of their own money, this was the case for only 16.9 per cent of the TSF sample;
  - Just over one-fifth (21.0 per cent) of the GHS sample thought that their family did not have enough, or had just enough to get by on, while this was the case for more than three-fifths (60.5 per cent) of the TSF sample.
- When asked to rate their life overall using a scale from 0 ('worst possible life') to 10 ('best possible life'), the mean score for both samples were both high: 7.20 for the GHS sample, and 7.40 for the TSF sample.
- The response patterns for both samples also indicate that most young people have comfortable homes, enjoy their families and are optimistic about their future.
- Both samples also report high levels of safety in different environments: at home; with friends; and at school, although higher levels of feeling safe at school are reported by those in the TSF sample.
- A majority in both samples agree that they are well-connected with others and/or have access to adequate support networks.

# Measuring Deprivation

- The survey asked young people about 24 individual items that have been used in other consensual studies and/or were mentioned in the focus groups as being essential for all young people.
- Two of the items failed to achieve majority support for being essential (across the GHS sample and within each school year) and were removed from the analysis. Further statistical testing resulted in the removal of an additional 4 items, reducing the number of essential items to 18.

- The deprivation rates for each item in the GHS sample vary between 2 per cent (clothes to fit in with others; three meals a day; fruit or vegetables daily; clothes needed for school) and over 20 per cent (a family holiday away each year and going on school trips or excursions).
- For the TSF sample, there is only one item with a deprivation rate of less than 2 per cent (three meals a day) but many more instances where deprivation exceeds 20 per cent, often by a considerable margin (some money to spend or save; a separate bedroom for older children; a meal out with family; a holiday away each year; and money to pay for extra classes).
- Three items feature among the 5 items where deprivation is highest in both samples: some money to spend or save each week; a regular meal out with family; and an annual family holiday.
- Severe deprivation was defined to exist when a young person does not have but wants at least 3 of the 18 items identified as essential for all young people.
- Using this threshold, around one-fifth (18.7 per cent) of the GHS sample and two-fifths (40.4 per cent) of the TSF sample are identified as severely deprived.
- Over one-quarter (29.7 per cent) of young people in the GHS sample are deprived of at least 2 of the 18 essential items and more than one-in-ten (10.9 per cent) are deprived of at least 4 items.
- The corresponding percentages for the TSF sample are 54.6 per cent (deprived of at least 2 items) and 31.2 per cent (4 items).

## The New Child Deprivation Index

- A new Child Deprivation Index (CDI) was constructed by calculating the average of the number of items that each young person is deprived of. The mean CDI value for the GHS sample is 1.27, while that for the TSF sample is more than twice as high, at 2.61.
- Values of the CDI for sub-groups within each sample are compared to provide greater insight into who is most affected by deprivation, within and between the two samples.
- Among the GHS sample, those who sleep regularly in more than one home have higher deprivation than those who always sleep in the same home, but this pattern is not apparent for the TSF sample.
- Deprivation is higher among sole parent families than among couple families in both samples.
- Those in the GHS sample who report having no close friends have a CDI score that is more than double that of those with 4 or more close friends, although this pattern is less apparent for the TSF sample.
- Regression analysis indicates that many of these findings are robust after controlling for other factors. The significantly higher CDI value among the TSF sample remains in place after controlling for these other factors.
- There is a weak relationship between the socio-educational status of each school (as captured by the ICSEA value) and the disadvantage status of students attending each school (measured using the average CDI score).
- The overlap between poverty and deprivation is low for both samples: less than half of young people who think that their family does not have enough to get by on are deprived, and less than half of those who are deprived of at least 3 essential items are poor.
- Poverty and deprivation are measuring different aspects of poverty and the composite ‘consistent poverty’ measure takes account of both.

## Deprivation and Well-Being

- Although causality has not been established definitively, the weight of the evidence suggests that deprivation has a negative impact on the well-being of children and young people - in total and across its different dimensions.
- There is a clear deprivation gradient apparent, with lower levels of life satisfaction and less control over their lives reported by young people experiencing higher levels of deprivation.
- There is also an inverse relationship between the degree of deprivation experienced and four dimensions of young people's contentment: attitude positivity; comfort; family functioning; and school enjoyment.
- Those who express the strongest negative statements about feeling safe at home, with friends and at school have the highest levels of deprivation.
- Those young people who report greater connectedness with family, friends and at school have lower levels of deprivation.
- There is an inverse relation in both samples between the level of deprivation and a composite index of overall happiness.
- Across both samples and for the six indicators of school satisfaction, there is a clear negative association between the degree to which young people are satisfied with their schooling and the level of deprivation.
- There is a clear negative relation between different dimensions of attitudes to school and school performance and the level of deprivation young people are experiencing.
- Both poverty and deprivation have negative effects on the life satisfaction and happiness of young Australians and the overall patterns do not vary greatly across the different measures of disadvantage or well-being.

## Conclusions and Implications

- This report has described, assessed and applied a new method (the 'consensual approach') to identifying and measuring poverty among children and young people in Australia.
- This is the first study of its kind for Australia and the results highlight the value of the approach and the need for further studies to refine the methods and identify the data that needs to be collected.
- An important goal of the research has been to establish whether the consensual approach can be practically applied to young people and if so, if it can generate meaningful findings. The clear and unambiguous answer is Yes.
- Further research is needed into deprivation among children and young people that builds on this study but focuses on the causes and consequences of deprivation and poverty.
- This will require on-going data collection efforts to ensure that changes in the views of children and young people are monitored regularly, understood and incorporated into how the research is designed and conducted, how its findings are disseminated and how they are interpreted and applied by service providers, school administrators and teachers and policy makers.
- The goal should be the routine and regular collection of deprivation data for children and young people to inform debate about child poverty and provide an evidence base for policy development.

# 1 Introduction

## 1.1 Background and Context

It has long been recognised that child poverty has negative impacts. Many young people who are in poverty in their teenage years were also poor during their childhood and will often carry this burden into adulthood. Accompanying this re-occurrence and/or persistence are often a range of negative short-term and longer-term impacts that can be directly linked to poverty. The Productivity Commission (2018: 121) has highlighted the harmful effects of child poverty, arguing that:

> 'Child poverty is of particular concern because of the damage that poverty may do to a child's development, their future productive capacity, and their life prospects more generally.'

These negative effects have been summarised by the Conference Board of Canada (2018: 1) as follows:

> 'Children who experience poverty, especially persistent poverty, are at higher risk of suffering health problems, developmental delays, and behaviour disorders. They tend to attain lower levels of education and are more likely to live in poverty as adults.'

Concern over these effects has been echoed by the OECD Secretary General Angel Gurría, who noted on the release of the *Growing Unequal* report (OECD, 2008):

> 'Child poverty is one of the most destructive and dramatic results of inequality. It will permanently scar a generation, preventing it from ever reaching its full potential.'

The growing body of evidence underlying these claims adds impetus to the urgent need to tackle child poverty. It makes sense to do so not only in social terms by reducing the immediate suffering, but also in economic terms by contributing to longer-term economic potential and capacities. No society that tolerates child poverty can claim to be providing an equal opportunity to all its citizens: some are left behind at a young age and never catch up.

The latest update on poverty in Australia produced by the ACOSS/UNSW Poverty and Inequality Partnership shows that more than one in six (17.3 per cent) children under the age of 15 and close to one in seven (13.9 per cent) youth aged 16 to 24 were living in households below the poverty line in 2015-16 (Davidson, Saunders, Bradbury and Wong, 2018). These estimates take account of housing costs and are based on the widely used international poverty line that is equal to 50 per cent of median income. The child poverty rate is lower than it was at the turn of the century, although the decline has slowed since the 2008 financial crisis, since then it has fallen by less than the overall poverty rate (Davidson et al., 2018: Figures 2 and 3). Some progress has been made, but more needs to be done to address child poverty in Australia.

Better understandings of the extent, nature, causes and consequences of child poverty are leading national governments (most recently in New Zealand) and international agencies to set child reduction targets and timeframes, implement programs and commit the funding required to achieve them. Included among the Sustainable Development Goals (SDGs) agreed to by the international community in 2015 is the goal to 'end poverty in all its forms everywhere' by 2030 and the first target within that goal is to 'reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions'. Unlike the previous Millennium Development Goals (MDGs), that mainly applied to poor and middle-income countries, the SDGs are intended to be universal in scope and impact, applying also to rich countries like Australia, with an overall focus on sustainable and equitable development.

The United Nations International Children's Emergency Fund (UNICEF) Office of Research has recently released its 14th Report Card that focuses on the well-being of children and examines what the SDGs imply for children in rich countries (UNICEF, 2017). The report argues that:

> 'Long-term inclusive and sustainable social goals are best met through attention to the needs of children. Ensuring the well-being and realizing the rights of children (including migrants and refugees) is an essential condition for achieving long-term development goals. Every high-income country invests in its children: healthy, educated children are better able to fulfil their potential and contribute to society. By contrast, problems of child development often carry through into adulthood, with the resulting social costs accruing to the next generation, too. Indeed, achieving the SDGs is about ensuring that future generations have the opportunities enjoyed by the present generation: successful outcomes for today's children will build the foundations for the well-being of our societies tomorrow.' (UNICEF, 2017: 4)

The reference here to the rights of children reflects the important role of the UN Convention on the Rights of the Child (CRC) – enacted in 1990 - in ensuring that governments translate broad statements of intent into concrete actions designed to achieve them. Article 27 of the CRC requires State Parties to:

> '… recognize the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development'

While Article 11 requires State parties to:

> '… assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.'

Together, these two Articles provide the rationale for eradicating child poverty (thus providing each child with an adequate standard of living) and doing so in ways that recognise and reflect children's views on what this means in practice and how it should be done.

UNICEF has acknowledged the limitations of conventional measures of child poverty that are based on the incomes of parents, noting in relation to children that while income measures are important;

> '… such measures are far from sufficient, and can mask the life changing deprivations to their rights they may be experiencing: a certain income level does not necessarily mean a household has all it needs to provide what a child needs for a good start in life, nor that children are prioritised in household expenditures.' (Accessed at: www.unicef.org/socialpolicy/index_48547.html)

Reflecting these concerns, UNICEF has begun to complement its regular monitoring of trends in relative (income) poverty rates in the world's richest countries with a new Child Deprivation Index that shows the percentage of children aged 1 to 16 in each country who lack because their family cannot afford, at least 2 out of 14 items that are seen as necessary for all children (UNICEF, 2012: Figure 1a). The ranking of countries on this measure differs from that based on relative (income-based) child poverty rates, highlighting the fact that the two measures capture different aspects of poverty – one based on income available, the other on items foregone. The deprivation measure is described as a 'significant new development in the international monitoring of child poverty' (UNICEF, 2012: 6) although the UNICEF comparisons based on it do not include Australia because it did not have the data needed to derive the new index.

The European Union (EU) – which has lead the development and application of poverty targets and social indicators more generally in recent years - has recognised the importance of incorporating children's views into measures of their poverty status. For example, a recent report by Atkinson, Guio and Marlier (2017: 43) argues that:

> 'Complementing the EU portfolio of social indicators with a child-specific MD [multiple deprivation] indicator that would take account of the specific living conditions of children, which may differ from their parents' living standards, would be an important step forward.'

More specifically, as noted by Guio, Gordon and Marlier (2012: 209):

> 'Children's needs change as they grow older and their needs are often different from those of adults (e.g. educational needs). Therefore, material deprivation (MD) indicators are required which are age and gender appropriate and which are specific to children's needs.'

The authors derive an 18-item index that is statistically robust and use it to shed important new light on the circumstances of children in different EU member countries.

Building on that work, the EU has recently announced that EU Member States have agreed to adopt a new 17-item Child Material and Social Deprivation (CMSD) index as one of the measures used to monitor progress towards the achievement of the EU's poverty reduction targets (see Guio, Gordon, Marlier, Najera and Pomati, 2018). This is a major development and one that will set a precedent for other countries as they tackle the SDG poverty reduction targets over the next decade.

This new global development agenda that is being driven by the SDGs and supported by actions taken by leading international agencies is driving all countries to ensure that the well-being of children is promoted in both the short and longer-term. At a minimum, this requires countries to address the different forms of economic and social disadvantage experienced by children of all ages, and do so in ways that recognise the views of children and young people about what poverty is and how it affects them. Only then will it be possible to achieve the desired outcomes, in the process contributing to the success of other initiatives designed to help children and young people access developmental opportunities and navigate successfully the transition to adulthood.

At a national level, ensuring that all Australians have the best possible start in life is the basis of the National Early Childhood Development Strategy (NECDS). The Strategy is founded on the idea that early intervention will improve child outcomes and 'foster the health and wellbeing and productivity of our next generation' (Council of Australian Governments, 2009: 4). The aim of the NECDS is outlined on the Federal Government's Department of Education and Training website, which is to:

> '… improve outcomes for all children by building a better early childhood development system which responds to the needs of young children, in particular, vulnerable children and their families.' (see: www.det.gov.au/information-early-childhood-development-strategy)

However, as this report will demonstrate, Australia has a long way to go before it can claim to achieve the laudable goals that underpin the NECDS.

## 1.2 Poverty and Social Disadvantage

As the above discussion makes clear, it is now widely acknowledged – and supported by a variety of evidence - that poverty is a major cause of childhood disadvantage. It is the single biggest challenge facing most vulnerable children and must be tackled head-on. If successful, this will go far in promoting sustainable national development, but also ensuring that everyone has a stake in the development process and is able to participate and benefit.

One important task is to build on CRC Article 11 and ensure that a child-focused approach is taken that provides adequate opportunity for the views of children to affect not only the diagnosis of the problem but also what remedies are necessary. Important developments in the recent academic literature on the concept of child well-being and the measurement of child disadvantage (discussed further later) have shown that it is possible to develop and implement a child-centred approach that captures the experiences and realities of children and young people.

Much of this research has been conducted overseas and been inspired by the work of Ben-Arieh (Ben-Arieh, 2000; Ben-Arieh and Goerge, 2001) and, more recently, by that of Main who has pioneered the empirical application of a child-focused approach (see Main and Pople, 2011; Main and Bradshaw, 2012, 2014, 2016,

2018; Main 2013, 2018).[1] International studies include those conducted recently by Notten and Roelen (2012), Sandbæk (2013), Williams, Murray and Whelan (2014), Ciula and Skinner (2015), García and Ritterbusch (2015), Hakovirta and Kallio (2016), Mishra, Ray and Risse (2017); Chzhen, Gordon and Handa (2018) and Chzhen, Brukhauf and Toczydlowska (2018). Important contributions have also been made by Australian researchers who have been at the forefront of the emergence of the child-focused approach (see for example, Sanson, Mission, Hawkins and Berthelsen, 2010 and Fattore, Mason and Watson, 2012).

Many of these studies reject the income-based approach to measuring child poverty because what this approach actually measures is poverty among children living in poor households, where the poverty status of the household is determined by the income status of adults. This weakness has led many of the new studies to adopt a multidimensional deprivation approach which focuses on the living standard outcomes achieved by children rather than on the resources available to their parents. Not all families with incomes below the poverty line are poor and not all individuals within those families that are poor are themselves experiencing poverty. The deprivation framework overcomes these problems by identifying and estimating child poverty directly, by-passing the reliance of adult data in favour of information that reflects the views and experiences of children themselves.

This new perspective represents a quantum leap in research on child poverty. It combines the latest theoretical developments with empirical applications that place children at the centre. This powerful combination enables the research to produce evidence that has relevance and meaning to children and young people, allowing a better understanding of the issues and assisting key institutions like schools and service providers to deliver what young people need in ways that they can relate to, use and benefit from.

It is important that the scope of child-centric approaches extends not only to what kinds of actions are required but also to how the underlying problem is articulated, examined and understood. As noted above, it is now acknowledged that the conventional (income-based) approach to poverty measurement treats children as effectively invisible, having no impact on where the poverty line is set and making no contribution to the income that determines their poverty status (see Corak, 2006; Saunders, 2015; Main, 2018). Poverty line studies are only able to identify poor households (and the children that are living in them) not poor children as such, and they rely on data collected in adult surveys about adult incomes and other relevant factors such as age, employment and housing status. Yet previous research (Skattebol et al., 2012) has shown that children and young people's perceptions of many of these variables often differs greatly from the kind of information provided by adults – even in relation to basic variables such as who lives in the household. Children's incomes are also not generally recorded, nor are the actions that many children (and parents, particularly mothers) take to place the needs of others ahead of their own.

These problems can only be overcome if an alternative approach is adopted that provides an avenue through which information provided by and about children can affect whether or not they are identified as poor. The focus must shift from the household to the individual and this almost inevitably requires a framework that identifies poverty on the basis of more than just income alone. The deprivation approach developed by Townsend (1979; 1987) and refined in a series of subsequent UK studies by Mack and Lansley (1985; 2015), Pantazis, Gordon and Levitas (2006) and, most recently Dermott and Main (2017) addresses these problems. That approach (often described as 'the consensual approach' – see Nandy and Main, 2015) has been applied in Australia in recent (adult) studies by Saunders, Naidoo and Griffiths (2007) and Saunders and Wong (2012). The consensual approach, applied to children and young people, forms the basis of the current study.

This application of the approach is designed to understand and identify the items and opportunities that young people value and are missing out on – things that they have reason to value (their capabilities – see Sen, 1985, 1999) and the extent to which they are able to achieve them (their functioning). The evidence produced can guide the development of new policy responses that are better able to address the factors that restrict children's well-being and development.

1 Dr Gill Main served as a Principal Investigator on this project and as a member of the Project Reference Group (PRG).

The research project itself builds on two related studies that developed much of the groundwork needed to make it possible. The *Making a Difference* (MaD) project (Skattebol et al., 2012) explored the perceptions of children and young people (aged between 11 and 17 years) who experience economic adversity and social exclusion. Its goal was to understand what disadvantage means to them, how they experience the different forms of exclusion in the family, at school, and in the communities where they live, and how they identify what services they think can make a difference to their lives and futures. Over 130 in-depth interviews were conducted, mainly with children (96 interviews), but also with parents and carers (13), and teachers and service providers (24) in 8 sites across Australia. The findings indicated that many participants did not have incomes adequate to ensure that they could participate in education and social life at a level that most would consider normal in Australia today. Above all, the research highlighted the perilous but complex circumstances facing many young people and pointed to the need for a comprehensive policy response.

The *Australian Child Well-being Project* (ACWP) (Redmond et al., 2016; Skattebol and Redmond, 2018) built on the insights produced by the MaD study and asked children in their 'middle years' (aged 8-14 years) about their lives and well-being, which was conceptualised in terms of what young people themselves think is important, using a variety of subjective and objective indicators. Focus groups and face-to-face interviews with young people were used to inform the development of a national survey that was completed by 5,440 students in Years 4, 6 and 8 in 180 schools across Australia.

The ACWP survey indicated that most young people in their middle years are doing well, reporting high average levels of well-being with respect to their objective circumstances, relationships and how they perceive their lives. However, those belonging to a series of marginalised groups (participants with a disability, young carers, those from an Indigenous background, living in remote areas, culturally and linguistically diverse, and experiencing material disadvantage) were faring worse, with many reporting incidences of hardship such as going to school or bed hungry. Different forms of bullying were also a problem and cause of anxiety for many young people. While governments now recognise that addressing these complex issues requires an integrated approach that reaches across existing policy silos, the ACWP report argued that governments also need to agree on a set of priorities for young people, especially marginalised young people that encompass opportunities for their healthy development.

Together, these two studies addressed the two focal points of the current project – material disadvantage ('missing out') and social exclusion ('left out') – that were the focus of the earlier adult study (Saunders, Naidoo and Griffiths, 2007; 2008). Both factors were prominent in the lives of many of those interviewed in the MaD project, although those interviews also revealed the complex nature of the lives of many young people, adding to the challenges involved in identifying where these problems exist and how severe they are. The ACWP project went further by collecting nationally representative data that allowed the magnitude of some of these problems to be quantified (along with other contributors to and correlates of, well-being). It also generated important new information on aspects of deprivation among young people using information provided by the young people themselves that shed new light on the nature of youth disadvantage. Above all what the ACWP study demonstrated was that surveys of young people that focus on these kinds of issues can be designed and implemented successfully to produce robust data that reflects the views and attitudes of young people.

The aim of the current project was to extend the approaches applied in the MaD and ACWP studies to examine more thoroughly the nature and extent of poverty and social disadvantage among Australian children and young people. This involved drawing on the recent international literature (described in detail in the following chapter) that have applied a child-focused approach to study material deprivation and social exclusion using a mixed-methods approach that is grounded in – and builds upon - children's own views and experiences. Through the successful implementation of such an approach, the study provides a better understanding of the nature and extent of disadvantage among young Australians and provides a platform that can deliver substantial, long-term economic and social returns – for young people themselves and for all Australians.

## 1.3 Report Outline

The remainder of this report is organised as follows. Chapter 2 reviews recent developments in poverty research – including both how poverty is conceptualised and how it should be measured – with a focus on the implications for poverty among children and young people. Chapter 3 describes the aims, scope and structure of the project and of the methods it employed. Chapters 4 and 5 introduce the project's two main stages of fieldwork – the focus groups with young people in Chapter 4 and the survey in Chapter 5. In both cases, the chapters describe what was done and why and provide a summary of the main findings that emerged.

The more detailed findings produced from the analysis of the survey data are presented and discussed in Chapters 6, 7 and 8. First, in Chapter 6 the focus is on describing the main features of the data and what is implied about the economic and social profile of young people in New South Wales. Chapter 7 examines poverty in more detail using the child-focused deprivation approach and describes how the new Child Deprivation Index (CDI) was constructed and examines its overall profile. Further analysis of that index is provided in Chapter 8, which examines how the CDI is related to the survey-based indicators of well-being and a range of indicators of attitudes to schooling and school performance. Finally, the main conclusions of the study and its implications are brought together in Chapter 9.

# 2 Measuring Poverty and Disadvantage among Children and Young People

## 2.1 Conceptualising and Measuring Poverty

The weaknesses of the conventional (income-based) approach to poverty measurement have already been noted, particularly as they impact on the measurement of child poverty. These concerns reflect a broader sense of unease among poverty researchers that the income approach is overly narrow in focus and incapable of producing results that can attract widespread credibility. As the Oxford Poverty and Human Development Initiative (OPHI) has recently noted poverty is essentially a multi-dimensional concept so that;

> '… no one indicator alone [such as income] can capture the multiple aspects that constitute poverty.' (Accessed at: https://ophi.org.uk/policy/multidimensional-poverty-index)

Or as argued by Nolan and Whelan (2007: 146):

> '[there] is an increasing emphasis on the multi-dimensionality of poverty and social exclusion, and on the need to incorporate indicators relating to dimensions other than income.'

This need to gain a better understanding of the nature of disadvantage has been reinforced in the Australian context by the Productivity Commission, which has noted in a report on social disadvantage that low income;

> '… while relatively easy to measure … does not necessarily establish disadvantage … A lack of understanding about disadvantage can … be an impediment to good public policy … [which] … should be built on an evidence-based understanding of the nature, depth and persistence of disadvantage.' (McLachlan, Gilfillan and Gordon, 2013: 3-4)

These concerns about the limitations of the income approach were initially voiced over three decades ago by leading political scientist and poverty researcher Stein Ringen, who argued that the key feature of any poverty measure must be its ability to identify as poor, people 'who live as if they [are] poor [and] do so because they do not have the means to avoid it.' (Ringen, 1987: 162).

Ringen used this definition to distinguish between 'indirect' and 'direct' approaches to measuring poverty, arguing that the income approach is an example of the former approach because it does not directly establish that those identified as poor (i.e. with incomes below the poverty line) actually 'live as if they are poor'. Those identified as poor may lack the income needed to achieve a poverty line standard of living, but they may be able to achieve this standard because they have access to other forms of economic resources (e.g. assets) or because their needs may be low. To establish if this is the case, it is necessary to directly observe the living conditions and standards achieved by people and derive poverty measures that reflect these conditions. This involves comparing the living standard outcomes achieved with those that correspond to a poverty standard and identifying poverty on this basis. This switch in approach from one that examines the *resources available* to one that concentrates on the *outcomes achieved* represents an important advance in how poverty is conceived and measured.

It has seen the emergence of the deprivation approach built on the work of Townsend that is consistent with the direct, living standards approach advanced by Ringen. It also reflects the increasing recognition that poverty is a multi-dimensional concept that cannot be collapsed into a single dimension (e.g. income) without compromising a key aspect of its core meaning. Both features are captured in Townsend's classic modern definition of poverty that underpins his development of the deprivation approach:

> 'Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns and activities.' (Townsend, 1979: 31)

The quote highlights two of the key features that have dominated poverty research in recent decades: the multi-dimensional nature of poverty; and the adoption of a focus on the broader concept of 'resources' rather than just 'income'.

There is, however, a third feature of Townsend's definition that is important in the current context. This is the reference at the beginning not just to families and groups but also to *individuals* living in poverty. It has been noted earlier that the income approach is based on the household as the unit of analysis and identifies poverty status at the household level. Poor individuals live in poor households, by assumption. In contrast, an approach that seeks to identify whether or not *individuals* are poor must adopt the individual as the unit of analysis and – in keeping with the developments described above – must also focus on the living standards achieved by individuals, rather than on the incomes available to households.

Furthermore, in relation to child poverty the living standards perspective that underlies the deprivation approach aligns with the CRC, which as noted earlier, argues that all children have the right to a standard of living that is adequate to meet their physical and mental needs (see also Redmond, 2008). The approach thus not only provides a new perspective that places the living standards of individuals at its centre, but also raises the possibility (at least conceptually) that individuals can be defined to include children and young people.

Running in parallel with these debates over how to conceive and measure poverty has been a strand of the sociological literature referred to as the new 'sociology of childhood' which recognises that children are active agents and should therefore have a say in how their status is identified, measured and assessed (see Qvortrup, 1994; James, Jencks and Prout, 1998 and Mayall, 2002). This body of work has also been influenced by the thinking behind the CRC, arguing that a living standards approach to children and young people that embodies their own views is not only essential if the CRC objectives are to be realised, but will also ensure that the findings are more likely to impact on how child poverty is understood and can be improved.

## 2.2 Researching Social Disadvantage among Young People

As noted above, it is now widely recognised by poverty researchers that while the conventional income approach provides useful information about who faces the greatest risk of poverty, it is not capable of identifying who is actually experiencing poverty (Saunders, 2005). Conceptually, the poverty line approach is flawed because its income focus allows no role for the impact of a broader range of economic (accumulated wealth; access to credit) and non-economic (access to support networks) factors that can alleviate the effects of low-income (Nolan and Whelan, 2007). Practical concerns have also been expressed about the arbitrary nature of the poverty line and the lack of agreement over technical issues such as which equivalence scale to use.[2] These factors can and do exert an important influence on who is identified as poor in general and on the measured poverty status of children in particular (see Nolan and Marx, 2009).

These concerns have assumed particular importance in Australia, where concerns have been raised about the accuracy of the income data reported in household surveys conducted by the Australian Bureau of Statistics (ABS) that are used to estimate poverty (see ABS, 2003; Saunders and Bradbury, 2006; Wilkins, 2014).

2 The equivalence scale describes the needs of different individuals in the household, generally expressed relative to the need of a single adult. A commonly used scale is the 'modified OECD scale' which assigns a value of one to the first adult in the household, 0.5 to each other adult and 0.3 to each child. It implies, for example, that the needs of a couple with 2 children are equal to 1.0 + 0.5 + (2 x 0.3) = 2.1, just over twice those of a single person. The scale allows for the cost of each child to be lower than the costs of each adult and also for economies of scale in household budgeting.

These concerns have led the ABS to experiment with a number of alternative ways of identifying economically disadvantaged households, including estimating the 'consumption possibilities' available to different households (ABS, 2009) and (most recently) adjusting measures of low income households to exclude those in the two lowest deciles (ABS, 2015). These are important developments but do not address the problem that the focus remains on households rather than on the individuals living within them.

Despite the limitations of the income approach to poverty measurement, most poverty researchers accept that (income-based) poverty rate estimates are important because of the role that lack of income plays in causing poverty and the importance of income transfers in alleviating it (see ACOSS, 2016). It is, however, now common to refer to these income-based measures as identifying the *risk of poverty* rather than the actual *level of poverty* because of the issues discussed above. The European Union, for example, includes income poverty rates among its list of social targets but refers to them as 'at risk of poverty rates' rather than as 'poverty rates'. Many academic studies now accompany income-based poverty rates with other estimates that are based more directly on observed living standards.

The limitations of applying an income-based poverty line approach are compounded when it comes to measuring poverty among children and young people because of the restrictions imposed by the income-sharing assumptions embodied in the income approach. This has been recognised by the ABS, who note in explaining the data and concepts used in its *Survey of income and Housing* (SIH) notes that:

> 'Income is a major determinant of economic wellbeing for most people and households. While income is usually received by individuals, it is normally shared between partners in a couple relationship and, often, with dependent children. To a lesser extent, it may be shared with other children, other relatives and possibly other people living in the same household, for example through the provision of free or reduced accommodation costs. Even when there is no transfer of income between members of a household, and no provision of free or reduced accommodation costs, household members are still likely to benefit from the economies of scale that arise from sharing dwellings.' (ABS, 2015)

If income-sharing is less than complete, the poverty status of individuals within the household may be incorrectly identified, with the possibility (implied above) that some individuals living in non-poor households may actually be poor, while some individuals living in poor households may not be poor. This may be a particular problem when older children continue living in the parental home but live in many ways as independent economic units.[3]

These problems cast doubt on the reliability of standard estimates of child poverty because; 'child poverty remains an overwhelmingly adult-centric issue in terms of its conceptualisation and measurement' (Main and Bradshaw, 2012: 505). This runs counter to the theoretical insights provided by the new sociology of childhood and flies in the face of an accumulating body of empirical evidence showing that children in poverty can and do act in various ways to ease the financial strains they feel that they impose on their parents lives and budgets (Ridge, 2002, 2007; Redmond, 2009; Skattebol et al., 2012). In addition, further questions about the value of the poverty line approach are raised by studies showing only a weak relationship between income poverty status and well-being among adults (e.g. Saunders, 2013) and, more significantly in the current context, among children (Bradshaw and Richardson, 2008).

3 The original Melbourne poverty study conducted by Henderson, Harcourt and Harper (1970) excluded units headed by a 'juvenile' from their main poverty rate estimates and the Poverty Commission did likewise (Commission of Inquiry into Poverty, 1975). The latter (p. 223) defined juveniles as between the ages of 15 and 20 inclusive, not in school and not married or responsible for a dependent (under 15) child. It was noted that; 'Obtaining a meaningful figure on the extent of juvenile poverty is difficult, however, because a number may be receiving significant financial help from parents … especially … where young people are living at home'.

## 2.3 A Child-Centred Deprivation Approach

The concerns described above have led to the emergence of new approaches to measuring poverty among children and young people that involve: 'combining qualitative and quantitative measures [and] listening to poor people's own views on what indicators are important' (Poverty Analysis Group Discussion, 2012: 5). Townsend's deprivation (or 'consensual') approach (applied to adults) identifies items that are widely seen as necessary or essential 'for all members of society' and then establishes who does not have and cannot afford these items.[4] The logic of the approach is captured in Figure 2.1, which indicates how an individual's deprivation status can be determined by their responses to three key questions about a list of basic need items: (1) Is the item essential for everyone? (2) Do you have the item? (3) If not, is this because you cannot afford it?

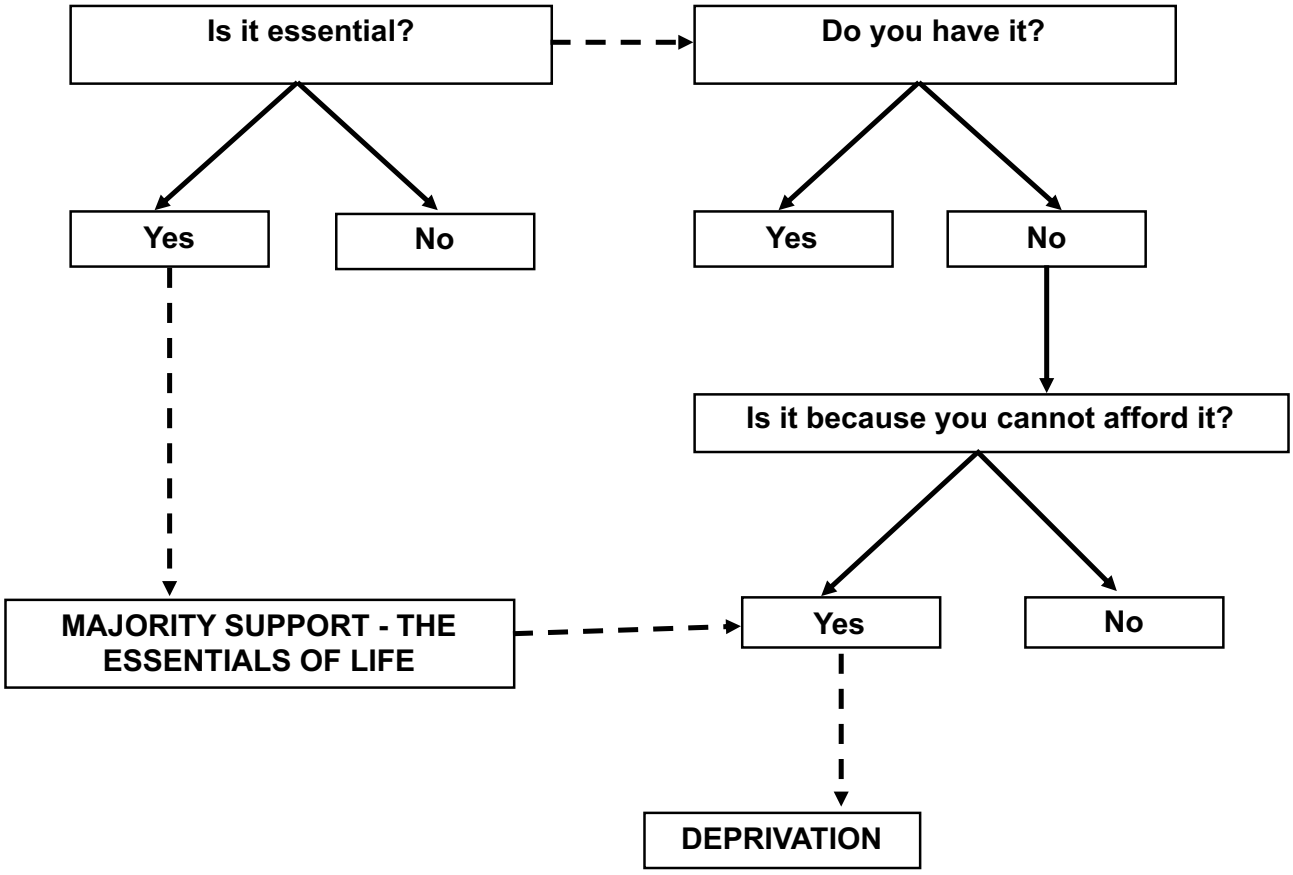
The first step in identifying deprivation then involves establishing which items are regarded as essential by a majority (i.e. by at least 50 per cent of the population – hence the use of the term 'consensual' to describe the approach). The items that satisfy this test can then be regarded as essential to achieve a standard of living that is consistent with prevailing community standards of acceptability. As a further refinement, statistical tests of suitability, reliability, validity and additivity can be conducted to establish whether each of the identified essential items is measuring poverty, is contributing to its explanation and can be added up to derive a summary index (see Gordon, 2017; Guio et al., 2017 and Appendix A for more details).

Once the list of basic need items has been refined in this way, people are identified as deprived of each item if they do not have it and cannot afford it. It should be noted that the emphasis given to *being unable to afford an essential item* ensures that the approach is consistent with a notion of poverty that reflects a lack of resources. Another feature of the approach is that those who are prevented from accessing the essential items can be regarded as 'living as if they are poor'.

The items included in most deprivation studies are designed to capture the different aspects of poverty identified in Townsend's definition (cited earlier), covering; 'the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong'. This list includes not only the 'things' that determine whether a person is materially deprived, but also those 'activities' that are widely engaged in and are often regarded as examples of social exclusion (Saunders, 2011; Hick, 2012).

4 The UK deprivation literature (e.g. Gordon, 2006) has described items as 'necessities' although the word 'essentials' has been used in Australian studies by Saunders, Naidoo and Griffiths (2008) and Saunders and Wong (2012) and is thus used here.

## Figure 2.1: The Logic of the Consensual Approach to Identifying Deprivation among Adults




The deprivation approach seeks to locate the identification of social disadvantage within a living standards framework that embodies notions of 'custom' or 'social norms' that are combined with judgements (informed by evidence) to identify specific instances of disadvantage. It is important to note that deprivation is an explicitly relative concept, since it can only be identified using evidence of what constitutes prevailing community norms, which are intrinsically relative. What counts as deprivation in Australia today will differ from what counts in China today, and from what counted here 50 years ago. The concept is also inherently multi-dimensional, reflecting the different forms that deprivation takes. These are captured by the essentials of life items and can be grouped into a smaller number of dimensions or combined into an aggregate index or score that measures the overall incidence and severity of deprivation.

These aggregate measures are important because they are more readily disseminated and understood by those whose attitudes and actions may be affected by the research. However, there are reasons for applying caution when using aggregate measures because they cannot capture the inter-dependencies that exist between the different elements (or dimensions) yet these may be an important feature of how they operate in practice (for example, being deprived of adequate local transport services may lead to being excluded from participating in after-school sporting or cultural activities). On a more practical level, any aggregation process involves assigning weights to each of the individual factors, but there may be no basis on which to determine how to set these weights.

Many of the indicators used to measure deprivation relate to individuals and thus reflect the status of individuals, irrespective of the status of the household. This insight provides the impetus to apply the deprivation approach to study social disadvantage among children and young people using measures that reflect their views on what items are essential (not the views of adults about which items are essential for children and young people) and that capture the lack of items facing children themselves (not those perceived as lacking by adults).

This approach recognises that children and young people have agency and the extent to which this can be exercised will contribute to the well-being that they perceive. As noted in the ACWP report:

> 'Until recently little was known about how young Australians conceptualise and perceive their own wellbeing, how these conceptualisations and perceptions correlate with other aspects of their lives, and how their lived experience informs their world views. If policies to promote opportunities for all young people to develop to their full potential are to be successfully implemented, then policymakers need to understand this important motivator – how young people in general, and disadvantaged young people in particular, understand their own wellbeing.' (Redmond et al., 2016: 2)

Implicit in the deprivation approach described above is that social exclusion exists when people cannot afford and are thus deprived of the 'normal activities' that define their roles as family and community members, consumers, workers and social agents in society. This varies somewhat from the mainstream literature on social exclusion, which seeks to identify whether individuals and families have the capacity and opportunity to engage in activities that are widely seen as part of normal economic and social functioning and defines as excluded those who are unable to participate for whatever reason (not just because of a lack of income or resources) (Burchardt et al., 2002; Levitas, 2006; Saunders, 2011). The social exclusion literature focuses not only on the role of financial constraints, but also on how other factors, actions (or inactions) and the underlying processes prevent people from participating in different spheres of economic, social, political and civic life.

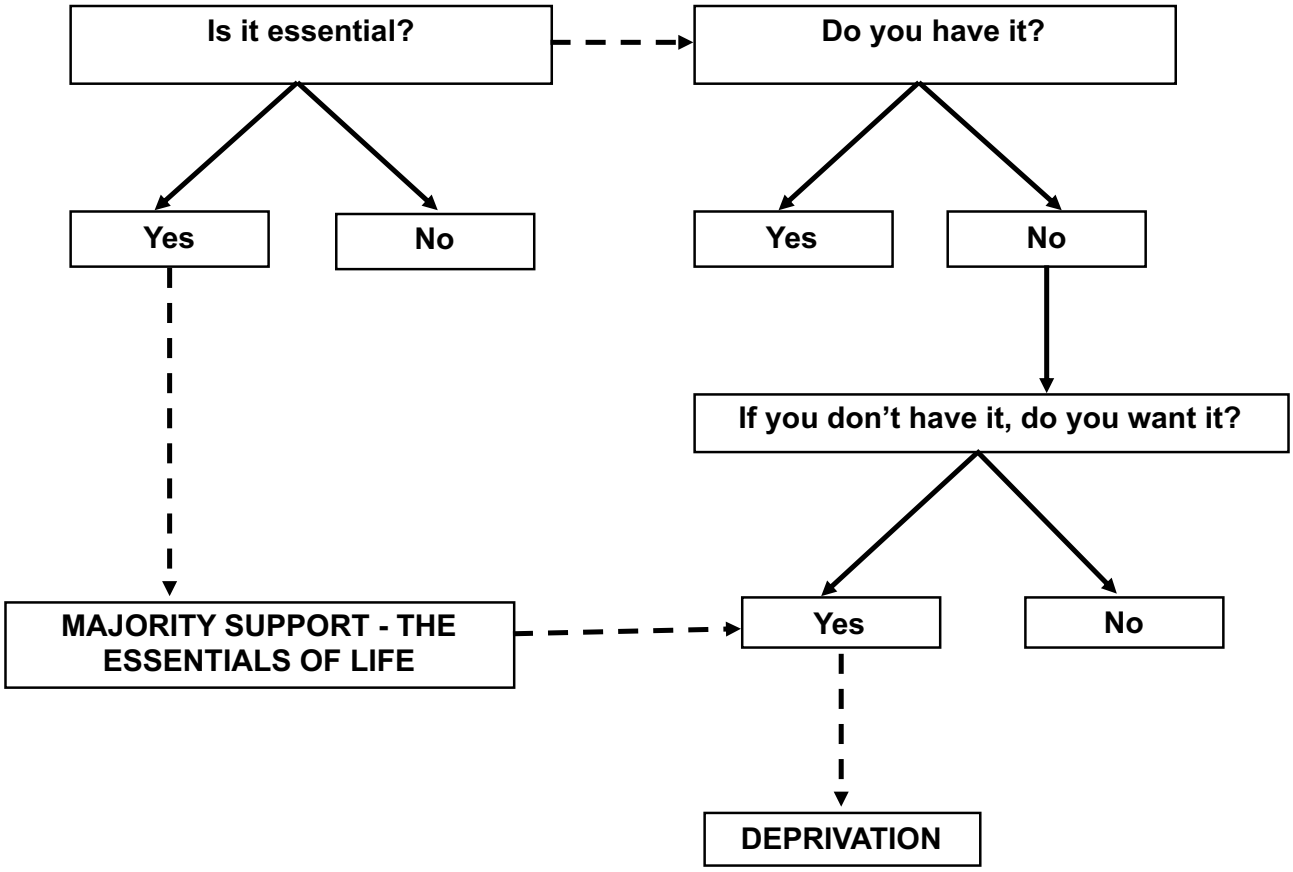
There is on-going debate over the conceptual ambiguity implicit in the notion of social exclusion (Saraceno, 2002; Beland, 2007) and disagreement about whether exclusion can be described as a form of poverty or is a distinct issue (Hick, 2012). However, there is broad agreement with the general proposition that social exclusion is a legitimate form of social disadvantage, whatever its cause. By emphasising a lack of resources as the underlying cause, the deprivation approach is firmly located within a poverty paradigm, and thereby avoids the controversy surrounding where to draw the borderline between poverty and other forms of social disadvantage. This is regarded as a strength of the deprivation approach, particularly when applying it to children and young people, where it is difficult to ascribe the causes of missing out on essential items because young people do not have direct control of the family purse strings. The focus on resources also leads to obvious policy responses – provide the deprived with access to more resources – and while this will not resolve all problems it will go a long way to relieve the more extreme hardships they are experiencing.

It is, however, also important to acknowledge that application of the deprivation approach to children and young people requires some modification to the framework set out in Figure 2.1. In particular, it makes little sense to ask children and young people whether or not the absence of an item reflects that fact that they cannot afford it, since that situation (and the factors that give rise to it) is not under the control of the vast majority of them. This implies that the 'affordability filter' question shown on the right-hand side of Figure 2.1 cannot have the same meaning for children as it does for adults, because of their restricted access to the household's economic resources.

There are thus grounds to identify children as deprived of an item simply because they do not have it, although a better solution is to count them as deprived only if they express a wish to have the items that they are lacking. This introduces a potential compounding factor in the form of what is referred to as 'preference adaption' the tendency for people who are not able to acquire things to say that they don't really want them. Preference adaption can thus introduce a bias into the findings although it is possible to identify where it appears to be present and to suitably qualify them.

With this refinement, the approach to measuring child deprivation becomes as shown in Figure 2.2 and the logic of this modified approach was used to design the survey used to generate the data needed to measure child deprivation.

Figure 2.2: The Logic of the Consensual Approach to Identifying Deprivation among Children




## 2.4 Recent Child-focused Deprivation Studies: A Brief Review

This section highlights some of the main features that have emerged from the rapidly-growing number of studies that have adopted the approach of working 'with' children, rather than 'on' children when estimating child deprivation (Ben-Arieh, 2005). The emergence of the child-centred approach reflects a growing acceptance of the need to listen and pay heed to children's voices when estimating child poverty, however it is conceptualised and measured. As noted earlier, the motivation for many of these studies stems from an approach that gives emphasis to children's rights and to their agency (Redmond, 2009). The growing interest in these topics also reflects the increasing importance of the child indicators movement (Ben-Arieh, 2005) which recognises that children are the appropriate unit of observation and measurement in child-focused studies (Lamb and Land, 2013).[5]

Although European researchers have developed multi-dimensional indices of child poverty that are independent of adult or household measures and go beyond traditional income measures, the data in many of these studies is still collected by surveying adults (see McKay, 2004; Willitts, 2006; De Neurbourg et al., 2012; Whelan and Maitre, 2012; Williams et al., 2014; Whelan and Maitre, 2014). Overall, the findings from these studies indicate that those children identified as deprived in adult-based surveys often differ from those identified as living in households with incomes below the poverty line – even though the findings reflect adult responses and are not based on children's own views.

5 Children's voices can be accounted for in various ways in these studies, which some scholars have described as reflecting a continuum of child-centred research (see Ben-Arieh, 2005).

Many of these studies do not incorporate the trend toward collecting information about subjective measures of child well-being. As Casas et al. (2004) have argued, the focus on children as the unit of analysis requires that attention is given not only to objective, but also to subjective, measures of not only their poverty status, but also their wellbeing. As Main (2014: 452) argues, adults and parents;

> '… cannot be assumed to be able to represent children (particularly older children) either in terms of responses to specific questions, or in terms of broader perceptions of what is important in their lives.'

If the focus is to be placed on children rather than adults/parents, then it is imperative that estimates of child well-being are based on the views and information provided by children themselves.

This approach has been incorporated into a series of studies conducted by UK researcher Gill Main in conjunction with other experts on child poverty measurement and children's well-being (Main and Pople, 2011; Main and Bradshaw, 2012; Main, 2013; Smith and Main, 2017). This body of work has received wide attention and is now accompanied by other studies that have applied similar methods in a variety of different national and international (comparative) contexts (see Swords, 2011; Qi and Wu, 2014; Gross-Manos, 2015; Wang et al., 2015; Chzhen et al., 2016, 2018). These studies are designed to better understand, children and young people's views about what it means to live a 'normal kind of kind' and to ask questions about their circumstances, attitudes and perceived well-being from this perspective.

Main (2013) identifies a number of reasons why studying children's material living standards in a way that allows children to be differentiated from their families is of growing importance. It addresses the issue of unequal power relations within the family or household, and thus allows for the possibility that the material living conditions of children can differ from those of the adults they live with. It also shows that there is not always a negative power imbalance for children and that some children are able to influence their parents' spending decisions (Nicholls and Cullen, 2004) or contribute in other ways to the ability of the family to manage with what it has (Ridge, 2002).

Some recent studies have compared the perspectives of parents and children and studied in detail how children's lives differ. For example, Main and Bradshaw (2012) use data from two surveys, one of which linked parents' and children's data about their material situation and their subjective well-being. The study found that the 10-item child deprivation index developed by the authors explained more of the variation in children's subjective well-being than either parental income or poverty status. As the authors conclude:

> '… this is partly because there were deprived children living in families which were not income poor and non-deprived children living in families which were income poor. Child material deprivation was found to be more strongly related to low subjective well-being than the absence of deprivation was to high subjective well-being.' (Main and Bradshaw, 2012: 503).

In a similar vein, Grodem's (2008) study of child deprivation in Norway looked at three distinct forms of deprivation: housing, consumption and subjective experiences. Her findings indicated that there were overlaps between adult and child deprivation in each of these categories.

Another important consideration when looking at children's (and adults') subjective well-being is the idea of preference adaption, referred to earlier. Research findings suggest that individuals adjust their preferences and ideas about necessities to match their own experiences. As Nobel Prize winning economist and leading international philosopher Amartya Sen has noted:

> 'Our desires and pleasure-taking abilities adjust to circumstances, especially to make life bearable in adverse situations …The deprived people tend to come to terms with their deprivation because of the sheer necessity of survival, and they may, as a result, lack the courage to demand any radical change, and may even adjust their desires and expectations to what they unambitiously see as feasible.' (Sen, 1999: 62-3).

There is evidence from some studies that this form of preference adaption exists among children and young people and can distort the findings from studies that rely on information reported by children if this is not taken into account. For example, Leu, Chen and Chen's study of children in Taiwan found that:

> '… self-defined economic status was strongly associated with the degree of perceived necessities… people who had a low economic status reported a low level of perceived necessities' (Leu, Chen and Chen, 2016: 41).

A similar tendency appeared relevant in some of the focus groups conducted with young people in the current study (see Chapter 4 for further details), where young people found it challenging to think beyond their own circumstances and experiences and based their needs on these personal circumstances and experiences rather than a broader assessment of what all young people need.

## 2.5 Issues Associated with Involving Children in Research

Incorporating children's voices in research studies on child deprivation can take place on a continuum of involvement or participation. That is, they can be involved merely as participants, or as informers or even partners in the development of the study and its methods. Ben-Arieh (2005) identifies five different roles where children should be involved in studying their own well-being: (i) as part of the study design; (ii) as sources of information; (iii) as data collectors; (iv) as part of the data analysis; and, (v) as partners in utilising the data.

The study by Main and Bradshaw (2012) allowed young people to not only voice their opinion by answering the survey questionnaire, they also informed the development of the study instruments through their contributions to focus group discussions. Involving young people at this earlier stage of the research methodology helps to ensure that the questions, asked subsequently of a bigger sample, are relevant to the experiences of young people. Several scholars emphasise the need to ensure that children from minority and disadvantaged groups are included in the design process (Andrews and Ben-Arieh, 1999; Ben-Arieh and Goerge, 2006; Ridge, 2011). Other research studies with an even greater participatory element have involved young people from the very beginning of the project, including in the development of the research questions and selection of the methodological approach at the project formulation stage.

Children and young people can also be involved in data collection, as well as in the analysis and interpretation of the results, and the writing-up of reports (Thomas and O'Kane, 1998; Fattore, Mason and Watson, 2007, 2009), while some other studies have trained children and young people to assist in carrying out studies (Alderson, 1995). Ben-Arieh (2005) suggests that this approach could address some of the methodological issues that exist when adults carry out the research, although he also raises some new practical and ethical concerns that arise when children and young people carry out the research.

A participatory approach is appropriate for small-scale qualitative studies and can make a significant contribution to knowledge about methodological approaches for researching 'with', rather than 'on' children (Ridge, 2011). However, it is not always feasible in larger-scale studies to include children and young people in the data collection and analysis phases of the research. There are other methodological ways to deal with challenges such as power imbalances, as illustrated in Main's (2013) doctoral thesis, which was one of the first quantitative studies to take a child-centric approach and therefore offers valuable insights into this issue.

As noted earlier, a number of child poverty studies estimate a deprivation index for children that is based on parents' responses about children's access to certain resources, items and activities (see, for example, McKay, 2004; Chzhen et al., 2014, 2016; De Neubourg et al., 2014). Grodem (2008) compared responses from parents and children across different domains of deprivation and found that in relation to the housing domain, in addition to the direct indicator (whether children have their own room), children were also asked whether they bring friends to their house. And while children's access to 'cash margins' is often measured by their experiences rather than their expectations of getting money, Grodem asked whether it has ever

happened that their parents could not afford to give them money for school parties, trips, and going out with friends. Swords (2011) also asked directly whether the reason children don't have an item is because their parents cannot afford it: 'Would you like to have it but your parents can't afford it?'.

The literature argues that data should be collected from a variety of sources when measuring child poverty, deprivation and relating this to their well-being (e.g. Ansell et al., 2007; Lipina et al., 2011). Different measures, sources and methods are required to respond to the multidimensional nature of both child deprivation and children's well-being, which are affected by individual, household and community contexts. As mentioned above, it is also increasingly accepted that children themselves should be a source of information about their own well-being, as there is increasing support and evidence that this approach has greater benefits than risks and can increase the validity and reliability of the studies and their findings.

Initially, there were some doubts about the validity of such data. More recently, however, Ben-Arieh and Frønes (2011) point out that 'research shows that studies directly involving children have yielded just as good response rates and reliability as studies using adults. Ben-Arieh (2005) also points out the flaws in using parents and other adults as sources of information for studies about children's lives and experiences, arguing that:

> '… the basic assumption in regard to the source of information issue should be that whenever possible, the best source of information on children's daily activities and lives would be the children themselves". (Ben-Arieh, 2005: 582).

Ben-Arieh and Frønes (2011:469) further defend the validity of child-derived measures, stating that:

> '… it is not only important to identify the voice of children and to anchor that voice in its contexts, the validity of indicators is often based on the simultaneous use of a variety of perspectives.'

There are of course challenges involved in validating these new child deprivation indices. For example, Main and Bradshaw (2012) identified testing the measure against other findings as an issue when developing their index of child deprivation. Their strategy to overcome this was to make sure that the new measure related to, 'but did not replicate' previously tested adult-centric measures of child poverty and previously tested measures of children's subjective wellbeing.

Ben-Arieh (2005) argues that the ethical challenge encountered from including children as active participants in research can also improve the validity and reliability of studies. Similarly, Thomas and O'Kane (1998) argue that participatory research with children can not only improve reliability and validity, but also contribute to ethically sound research with children and young people.

One of the central issues for conducting research with children is the inherent power asymmetry between researcher and subject that this often implies. Mason and Hood (2011) suggest that the appropriate mechanism for adult-researcher and child-participant negotiations is dialogue between children and researchers throughout the research process. This is essential to ensure that children and young people can make an informed decision to participate, decline to participate, or withdraw at any point in the process and is a key requirement of established ethical research principles. Central to this approach is the importance of researchers tailoring their methods of research to 'children's culture of communication', by paying attention to their language, conceptual meanings and understanding of social interactions.

Confidentiality presents another ethical challenge in qualitative research because in-depth information is gathered and carries a risk of subtle forms of psychological harm if participants are asked to disclose sensitive and personal information (Allen, 2002; Main, 2013). This can be accentuated, particularly in focus groups, because participants are not only disclosing information to researchers, but also to other focus group participants.

There are a few implementation processes and issues that need to be considered when conducting focus groups with children and young people, several of which have already been mentioned. For the focus groups in Main's (2013) study, the organisations from which children were recruited were informed of the topics and

schedule for group discussions and were given the option of informing parents if they desired. In contrast, Gross-Manos et al. (2015) used a passive consent procedure with the parents and an active consent procedure for children.

## 2.6 Conclusions

This chapter summarises some of the recent developments in how poverty is conceptualised and measured – in general and as they apply specifically to studies of child poverty**.** This is a field of research that has expanded rapidly over the last three decades, as advances in theory and in the methods used to generate empirical findings have made giant steps forward. Improved ways of data collection have reinforced these factors, bringing poverty research into a new era of improved methods, analyses and dissemination.

Nowhere is the degree of progress more apparent than in relation to the study of child poverty, which has benefited from general developments in the poverty measurement literature (including the emphasis now given to the deprivation approach and to the multi-dimensional nature of poverty) but also from the burgeoning of new ways of involving children and young people in research that is now seen as being conducted 'with them' rather than 'on them'.

The chapter has highlighted the main features that have driven this growth in studies of child poverty, first from the perspective of poverty research more generally, and then with a more specific focus on conducting research on children in the context of child poverty. The material covered, and the studies cited are not intended to be exhaustive as this would require a far more detailed discussion than is possible here. Rather, the aim is to identify developments that have exerted an influence on how the current study was conducted and draw attention to some of the advantages of the approach adopted and some of the pitfalls to be avoided.

# 3 Study Outline, Aims and Methods

## 3.1 Introduction and Overview

The research developments that paved the way for the current project have been described in Chapter 2, as have the projects that provide the basis for its design and conduct. Of particular relevance in this context are the MaD study and ACWP which demonstrate that conducting child-focused research on poverty and social disadvantage is possible in the Australian context and can produce important new insights. Also relevant are the adult deprivation studies that have developed a specific methodology and set of research instruments that can be modified to suit the circumstances of younger people (Saunders, Naidoo and Griffiths, 2007; Saunders and Wong, 2012).

These and the other studies reviewed earlier reflect the latest thinking in poverty research, which can be captured in two simple propositions: (i) the basic aim should be to directly establish whether or not the living standards that people are able to enjoy with the resources available to them are consistent with prevailing community standards; and (ii) that the findings are grounded in the experiences that children and young people face in their lives. The first proposition explains why the deprivation approach is now seen as an important tool for examining poverty, while the first and second together point to the need for a multi-dimensional approach that is capable of capturing the complexities of poverty.

No single methodology can produce the evidence required to test propositions (i) and (ii) and this has led to an important third development, involving the combination of qualitative and quantitative approaches in a single study. As highlighted in the work of the Poverty Analysis Group Discussion, what is needed is an approach that involves:

> '… combining qualitative and quantitative measures [and] listening to poor people's own views on what indicators are important.' (Poverty Analysis Group Discussion, 2012: 5).

This is the approach adopted here.

## 3.2 Research Funding and Partnerships

Base funding for the project was provided by the Australian Research Council (ARC) under Linkage project grant LP140100840. The project was led by a research team based at the Social Policy Research Centre (SPRC) with Partner Investigators (PIs) from each of three Partner Organisations (POs): The NSW Advocate for Children and Young People; The NSW Department of Education; and The Smith Family. These three Partner Investigators were also joined by UK-based researcher Gill Main from the University of Leeds, who is an expert on the new approach to conducting child poverty research (as the earlier discussion makes clear). The three POs supplemented the funding provided by the ARC with considerable cash and in-kind support.

Advice and guidance was provided by a Project Reference Group (PRG) that included the four PIs and three academic experts in the field of children's well-being and disadvantage: Professor Anne Graham (Southern Cross University), Associate Professor Gerry Redmond (Flinders University) and Dr Jen Skattebol (Social Policy Research Centre, UNSW Sydney).[6] The role of the PRG was to monitor progress, provide advice on specific issues as required and provide feedback on the research instruments and outputs (including this

6 Academic experts Redmond and Skattebol worked with Chief Investigator Saunders on the Making a Difference (MaD) and the Australian Child Well-being Project (ACWP).

report) as they were produced. Members of the SPRC research team met regularly with members of the PRG to seek their advice and assistance on many specific components of the project including the practical problems of implementation.

## 3.3 Phases of the Project Plan

The fieldwork component of the project in which the key data on children and young people was collected was conducted in two distinct phases. The first involved a series of focus group discussions with children in years 7 to 10 (ages 11 to 17) organised and conducted through schools and The Smith Family's *Learning for Life* program to explore what young people need (items and activities) to live 'a normal kind (or decent) life'. The results from those discussions informed the design of a questionnaire that formed the basis a state-wide survey of young people in NSW designed to establish the deprivation status of participants and ask a series of questions about children's well-being, their attitudes to, and relations with the schooling/service system and asked for relevant demographic information (e.g. about each participant's age; family type; key relationships; location, etc.);

Participants in the focus groups were recruited through a small number of NSW government high schools who volunteered to be involved and through selected participants in The Smith Family's *Learning for Life* program. The former were identified and contacted with the assistance of PO the NSW Department of Education, while the latter were approached with assistance from PO The Smith Family. The initial aim was to run 12 focus groups – 6 in schools and 6 with service users – with 8 of these held in Sydney and 2 in a rural/regional area of NSW. In practice, however, only 10 groups took place, as explained in Chapter 4. Each focus group discussion involved up to 10 young people and lasted for between 1 and 1 ½ hours. Schools that participated in the focus groups were provided with a voucher for $200 to be used for school development purposes, while young people that were recruited through The Smith Family were offered a $30 voucher to thank them for their time and participation.

The survey was completed by two distinct samples of young people. The first was recruited through NSW government schools identified by the NSW Department of Education, with a target number of 3,000 completed surveys (consisting of 50 participating schools with three classes of 20 students from each school). The second sample was completed by young people participating The Smith Family's *Learning for Life* program, with a target number of 500 completed survey responses. The rationale for including this second sample in this Phase of the research was two-fold: (1) to check that the survey instrument has relevance and applicability to (and could be completed by) young people in the most financially disadvantaged circumstances; and (2) to allow the circumstances of those in this disadvantaged group to be benchmarked against and compared with those young people in the first sample that are representative of the general population of young people in NSW.

The survey questionnaire – the *What Young People Need* (WYPN) survey – was the same for both samples. It contained some of the questions that have been asked in earlier Australian and international surveys of its kind, but also incorporated the key points (about scope, question focus and overall structure) that emerged from the focus group discussions.

A stratified sampling approach was used to recruit the school-based sample, designed to ensure rural/regional participation of close to 20 per cent and the initial contacting of schools took place with this goal in mind. However, as explained in Chapter 5, recruitment of schools proved harder than anticipated and took far longer than planned and a wider net had to be cast to ensure that the total numbers completing the survey within the project's timeframe approached the completion target of 3,000.[7]

Ethics approval was sought separately for the focus groups (HC15457) and the survey (HC15832) and was granted by the University of New Souths Wale Human Research Ethics Committee (HREC). Ethics

7 Each of the schools that participated in the survey were entered into a draw for 4 prizes worth $500 each that they could use for development purposes.

approval was also sought and approved by the NSW Department of Education's State Education Research Applications Process (SERAP).

Each participating NSW government high school was asked to distribute the survey during class time and supervise its completion. The survey was distributed in hard copy form as this was most familiar to those being surveyed and ensured that all young people could participate regardless of the degree of access to computing technology.

The timing of the survey was chosen to fit around other school-based surveys in the field at the time (information about which was provided by the NSW Department of Education). It was initially expected to take place in the first half of 2015, although difficulties with recruitment and other delays led to it being conducted in the middle of 2016 (mainly in school term 3). The WYPN survey was separated into 6 sections, covering: About You (personal characteristics); What You Have and Do; Your Health and Well-being; Your Home and Family; Friends and Socialising; and Your School and Neighbourhood. It included 47 questions and ran to 15 pages.[8] The vast majority of participants had no trouble completing the survey and almost all of those that did, answered all of the questions. The survey was also completed at the same time by a sample of *Learning for Life* users who agreed to participate after being approached by The Smith Family.

## 3.4 Survey Focus and Recruitment

Prior to the survey recruitment processes, the survey instrument was piloted with three groups of young people:

- 103 young people from 3 NSW government high schools;
- 6 young people participating in The Smith Family's *Learning for Life* Program; and
- a group of adults and staff involved in one of The Smith Family's Learning Clubs.

Feedback from the piloting indicated that the survey took between 20 and 25 minutes to complete, which was important given that completion had to be within one school period (between 40 and 60 minutes, depending on the school) to minimise learning disruption. Specific comments on individual questions led to a few minor changes being made to the survey. Additional feedback from PRG members resulted in several other minor changes, but these did not markedly affect the overall shape of the survey.

As noted, the key element of the study was the survey of two separate samples of young people – the first covering around 3,000 students attending a NSW government school (hereafter referred to as the NSW government high schools or GHS sample) and a smaller sample of young people participating in The Smith Family's *Learning for Life* Program (hereafter referred to as The Smith Family, or TSF sample). The aim of the survey was to gather quantitative information from young Australians about how they feel about their lives, what they have and do, what they are missing out on and the information needed to develop measures and indicators of material deprivation and social exclusion among different groups of young people.

A series of questions were asked about the items and activities that have been identified as potential essential items in previous studies of child deprivation and exclusion, modified or extended to capture key elements of the feedback provided by the focus groups described in the following chapter. Other questions sought information about the backgrounds and circumstances of young people (including their family status, living arrangements and access to independent resources of their own), about different dimensions of their well-being and about several aspects of their attitudes to their school and to the schooling process.

The survey was originally planned to be conducted on around 3,000 young people aged between 11 and 16 (studying in Years 6 through to 10) and attending NSW government primary and high schools. However, the scope was later restricted to those in high school years 7 to 10 because the numbers in year 6 were too

8 The survey is available on the project website: https://www.sprc.unsw.edu.au/research/areas/measures-of-social-inequality-and-wellbeing/deyp/ .

small to allow any meaningful analysis to be conducted. A stratified sampling approach was used to ensure that rural and regional students were adequately represented, accounting for approximately one-fifth (20 per cent) of the total sample. Each school was to be asked to select three classes (based on the assumption of an average class size of 20, giving around 60 individual responses from each school) and to supervise its completion during class time. It was estimated that around 100 schools would need to be invited to participate to reach the target sample of 50 schools.

The second sample was expected to include 500 young people participating in The Smith Family's *Learning for Life* program (also in school years 7 through to 10). The Smith Family's *Learning for Life* program is a long-term scholarship program that provides a modest bi-annual payment for each participating student to cover the costs of educational essentials, as well as giving them access to supportive relationships with a *Learning for Life* Family Partnership Coordinator and sponsor, and access to a range of learning support and mentoring opportunities, including programs that support parents and carers. The scholarship is delivered in over 90 communities across Australia and in 2016-17 over 38,000 young people received the scholarship, of whom more than 19 percent were from an Aboriginal and Torres Strait Islander background.

Of the almost 4,000 *Learning for Life* scholarship students who were in Years 7 to 10 and attending a NSW high school in 2016, 1,200 were invited to participate in the study and complete the WYPN survey. Recruitment of TSF sample was handled by The Smith Family, who wrote to *Learning for Life* clients inviting them to participate in the study. Those who agreed to participate were asked to complete the survey at home and mail it back to The Smith Family in an envelope provided.

It should be noted that, as indicated in the above discussion, although both the GHS and TFS samples were asked to complete the same survey, there were important differences in how potential participants were approached and in where those who agreed to participate completed the survey. Both differences have the potential to affect the patterns of results reported, although it was not felt that this would lead to any biases that could distort the survey findings to any marked degree.

Another important factor relates to the implications that can be drawn from any differences in responses provided by the two samples. It is not possible to attribute any differences to experiences gained while on the *Learning for Life* program (a program participation effect) since they might have resulted from how the program participants were selected to join the program in the first place (a program recruitment effect). If, for example, the program selection process favoured those who have a more positive attitude to education, then this might explain any difference between the two samples but would not necessarily be attributable to participation in the program itself. It is important to emphasise that this study did not attempt to evaluate the *Learning for Life* program, nor estimate its impact on those program participants who completed the WYPN survey. It is possible to highlight any differences between the two samples (see below) but harder to establish the underlying causes of these differences.

In the first round of recruitment for the GHS sample, 253 schools were selected and invited to participate in the study. Schools were selected from the NSW Department of Education's Principal Networks and of the 253 schools, 200 were metropolitan-based schools from 28 networks (where a metropolitan school was defined as being located within 100km of the centre of the city of Sydney). The remaining 53 schools were selected from 8 regional networks, selected because they were major regional hubs in the central west of NSW. Of the 200 metropolitan schools approached, 30 agreed to participate and 53 declined, while the remaining 117 did not respond – a school response rate of 15.0 per cent. Of the 53 regional schools approached, 12 agreed to participate and 15 declined, with no response received from the remaining 26 schools – a response rate of 22.6 per cent.

The NSW Department of Education provided the research team with the general email address of each school, which was used to send a letter of invitation to participate in the study, together with a Participant Information Statement. The letter of invitation included a brief description of the study, what participation in the study would involve, and the contact details of the research team. Although the research team searched extensively for the name of each school Principal to ensure that the email was addressed to the correct

person, establishing contact with the school Principal was often difficult and it was often difficult to navigate through the school administrators or 'gatekeepers' to speak directly to the Principal.

Each school was followed up with a phone call/email from the research team in the 2-3 weeks following the initial contact. In many cases, the school requested that the information be sent through again. Schools that were interested in participating completed a school agreement form with the contact details of the Principal or nominated contact as well as the school year(s) that they intended to invite to participate. The research team suggested each school select at least one class in Years 7 or 8 and at least one more from Years 9 or 10 to try and ensure the sample was distributed evenly across all four years, although in practice the selection of years and classes was left to the discretion of each school.

Given the low response rate from the first round of recruitment, it was decided that recruitment be extended to all remaining NSW government high schools. This meant that the stratified approach alluded to earlier was no longer used (even though, in practice, rural and regional schools are well represented in the final GHS sample). The second round of recruitment involved inviting a further 196 schools to participate in the survey. Of these, an additional 14 schools agreed to participate and 2 declined, giving a total sample of 56 schools (30 + 12 + 14) that agreed to participate, although in practice only 52 of these returned completed surveys.[9] These additions brought the overall school response rate for the GHS survey to 10.6 per cent (52/449). This might seem low, but it is important to bear in mind that almost all of the students who were invited to participate in the survey did so and that (as shown later) the pattern of characteristics of the recruited sample is similar to that of all government high school students in the relevant school years/ages in NSW.

All schools that agreed to participate in the study were sent a survey package two weeks prior to the planned survey period that included the Participant Information Statements, information postcards, survey questionnaires, survey envelopes and administration documents for each school. Each Principal (or nominated school contact person) distributed hardcopies of the participant information statement to young people (in the selected years) to take home to their parents or carers. Young people were also given a separate double-sided postcard with information about the study for them to keep. The study also established its own website where schools, Principals, parents, carers and students could look for more information.[10]

The Participant Information Statement was circulated to ensure that the parents, carers and young people were fully informed about the study and had the opportunity to 'opt out' if they wished. Parents or carers did not need to consent to young people participating, although parents, carers and young people could 'opt out' of the research at any point before the completion of the survey. This involved letting the school or research team know prior to survey completion day or by letting the teacher know on the day. After completion of the survey it was no longer possible for students to 'opt out' because names were not recorded making it impossible to know which completed survey was theirs. The only identifier on the survey was the name of the school that the young person attended; the confidentiality of all individual survey participants was thus guaranteed.

School Principals or nominated contact persons were instructed to discuss the Participant Information Statement with young people to ensure that they understood the voluntary nature of the study and make it clear that they could 'opt out' prior to completing a survey. Young people that completed a survey put it in a sealed envelope and returned to the research team. The recruitment process took place between May and September 2016, and young people completed the surveys between July and October 2016.

9 Government high schools excluded from the recruitment process included: senior schools that provide education for young people in Years 11 and 12 only; virtual high schools that use computer technologies to connect young people in rural and remote communities; intensive English schools that provide intensive English learning to newly arrived young people whose first language is not English; distance education schools that provide schooling to geographically isolated young people or those home-based young people with limited educational choice; and schools for young people with a moderate or severe intellectual disability. Recruitment did, however, include inviting fully and partially selective high schools, agricultural high schools, and central and community schools (i.e. 'combined' schools that provide education from kindergarten through to Year 12).

10 The project website address is: https://www.sprc.unsw.edu.au/research/areas/measures-of-social-inequality-and-wellbeing/deyp/.

The sample of 1,200 students participating in the *Learning for Life* program in NSW were mailed a package which included a letter of invitation addressed to the parent or carer from The Smith Family's Head of Research and Advocacy, a Participant Information Statement for the parent or carer, an information flyer for the young person being invited to participate and a copy of the survey, together with a reply-paid envelope to return the survey to The Smith Family. These documents explained the aims of the research study and the role of the survey. The voluntary nature of the survey was also emphasised and young people (and parents or carers) were invited to contact The Smith Family or the SPRC research team if they had any questions or concerns about participating in the research.

Like the school survey, young people participating in the *Learning for Life* program consented to participate by completing the survey and could 'opt out' at any point by not completing it. After completion of the survey, it was no longer possible to 'opt out' because young people's names were not recorded and therefore it was not known which completed survey was theirs. A reminder email was sent to the parents and carers of the young people about 8 weeks after the initial mailout.[11] Recruitment of TSF sample took place between May and September 2016, and the surveys were completed between July and October 2016.

In relation to the GHS sample, recruitment was easier and more successful when the research team had the direct contact details for the school Principal, although this only happened occasionally. It was also generally easier to make direct contact with Principals and nominated staff in smaller schools, which were often those in regional areas. Finally, only a small number of schools in the Sydney city area agreed to participate in the survey. The reasons for this reluctance are unclear, although it meant that more schools from the outer Sydney area were invited to join the study in order to increase the overall sample size.

11 As with the GHS sample, some eligible young people were excluded from the TSF sample. These included young people that: were identified by their Smith Family Coordinator as not suitable for inclusion (for example, the student may have a significant health issue, or the family may have been experiencing trauma); had recently participated in other research conducted by The Smith Family; had a sibling already in The Smith Family survey sample; or were attending a school participating in the survey as part of the GHS sample.

# 4 Talking with Young People Through Focus Groups

## 4.1 Introduction

This chapter focuses on that phase of the project that involved conducting focus groups with young people to find out about the items and activities that they need to live 'a normal kind of life'. The findings from the focus group discussions were used to inform the development of the *What Young People Need* (WYPN) Survey. The methodology of this phase was heavily informed by the advice and research of Partner Investigator, Dr Gill Main, who has pioneered the use of a deprivation approach to measure social disadvantage and exclusion among young people in the UK (see Main, 2013; Main and Bradshaw, 2012).

## 4.2 Recruitment Conduct and Participant Characteristics

Two samples of young people were invited to participate in the focus groups:

- Young people in Years 7 to 10 attending a NSW government high school (hereafter the GHS group); and
- Young people in Years 7 to 10 participating in The Smith Family's *Learning for Life* program (hereafter the TSF group).

In total, 10 focus groups were conducted with 84 young people during the period September to November 2015. Of the 10 focus groups, 7 were with young people attending a NSW government high school and three were with young people participating in The Smith Family's *Learning for Life* program.

Young people were recruited from 6 NSW sites: one inner –Sydney, three outer-Sydney and two regional sites. Table 4.1 shows the breakdown of focus groups by source and year.

### Table 4.1: Summary of Focus Groups by Sample Type and Year

| Government high school (GHS) groups | The Smith Family (TSF) groups |
|---|---|
| 2 x groups with Year 7 students | 3 x groups with mixed high school years (7-10) |
| 1 x group with Year 8 students | |
| 3 x groups with Year 9 students | |
| 1 x group with Year 10 students | |

Young people in years 7 to 10 attending a NSW government high school were recruited from three schools (one regional, one inner-Sydney and one outer-Sydney) to participate in the focus groups. The schools were selected following discussions with the NSW Department of Education and the NSW Secondary Principal's Council. The focus groups were conducted during the school day and kept to a maximum duration of an hour.

The Smith Family recruited young people from their *Learning for Life* program to participate in 3 focus groups, which were conducted after school at three learning centre locations (one regional and two outer-Sydney). This ensured that the location and time was convenient for young people. For example, one focus group was conducted during the time allocated for a learning club, so the time and place was convenient for them. Each focus group was attended by two members of the research team.

All of the invited young people (and their parents/carers) were given a Participant Information and Consent Form with information about the study, what participation involved, what the information will be used for, contact details for the research and ethics teams and a section on consent and withdrawal of consent. Parents/ carers initially consented for young people to participate, however, ultimately it was up to each young person to consent to participate. The research team explained the Participant Information and Consent Form to each focus group when the group met, and all young people had the opportunity to ask the research team questions before deciding whether to participate.

Participation was voluntary, and it was made clear that non-participation would not impact on young people's relationship with The Smith Family, the *Learning for Life* program, the NSW Department of Education or the University of New South Wales. Young people were also told that they could withdraw at any point. Each focus group discussion was divided into two parts and the research team used these to guide the discussions or allowed the participants to lead the discussion into areas that were important to them.

The two parts were:

1. An initial 'brain storm' of the items and activities that young people felt were essential to 'live a normal kind of life'. Young people were asked the following questions:
   - What are luxury items?
   - What are basic items?
   - What are items in the middle?
2. Young people were then asked about 6 areas and the items and activities that were essential to 'live a normal kind of life':
   - Individual possessions;
   - Household needs;
   - Food;
   - Family and friends;
   - School; and
   - Free time

At the beginning of each meeting, participants were asked to complete a short 2-page demographic survey, the results from which are shown in Table 4.2.

## Table 4.2: Characteristics of the Focus Group Participants

| Characteristic | GHS group (%) | TSF group (%) |
|---|---|---|
| **Gender:** | | |
| Male | 41.4 | 46.2 |
| Female | 58.6 | 53.8 |
| **Age (years):** | | |
| 12 | 13.8 | 23.1 |
| 13 | 17.2 | 11.5 |
| 14 | 29.3 | 26.9 |
| 15 | 31.0 | 23.1 |
| 16 | 8.6 | 15.4 |
| **Year at school:** | | |
| Year 7 | 25.9 | 26.9 |
| Year 8 | 15.5 | 34.6 |
| Year 9 | 43.1 | 7.7 |
| Year 10 | 15.5 | 30.8 |
| **Country of birth:** | | |
| Australia | 93.1 | 76.9 |
| Other | 6.9 | 23.1 |
| ATSI: | | |
| Yes | 15.5 | 30.8 |
| No | 84.5 | 69.2 |
| **Living arrangements:** | | |
| Mum | 13.8 | 23.1 |
| Dad | 6.9 | 0.0 |
| Both parents | 74.1 | 57.7 |
| Other relatives | 3.4 | 15.4 |
| Friend | 0.0 | 3.8 |
| Other | 1.7 | 0.0 |
| **Housing Type:** | | |
| Public rental | 15.5 | 34.6 |
| Private rental | 13.8 | 7.7 |
| Own house | 67.2 | 42.3 |
| Temporary housing | 3.4 | 0.0 |
| Other | 0.0 | 15.4 |
| **Young people Job:** | | |
| Yes | 25.9 | 7.7 |
| No | 74.1 | 92.3 |

In total, 84 young people participated in the focus groups. Both samples contained more girls than boys, with 58.6 per cent for the GHS group and 53.8 per cent for the TSF group. The mean age for the total sample was 14 years and 68 per cent of the total sample were aged 14 years and older. This reflects the fact that more of the focus groups were with young people in years 8 and above. Most of the sample was born in Australia (more than 75 per cent for both samples) and nearly a third of the TSF group identified as being from Aboriginal or Torres Strait Islander background.

In terms of living arrangements, 74.1 per cent of the GHS group and 57.7 per cent of the TSF group were living with both parents. However, some young people may have identified as living with 'both parents' but actually live in two separate households. Young people in the GHS group were more likely live in a household that owned their own home (67.2 per cent) compared with 42.3 per cent for the TSF group.

## 4.3 Focus Group Findings

The aim of the focus groups was to find out from young people about the items and activities that were essential for them to 'live a normal kind of life' as well as to inform the design and content of the WYPN Survey. Initially, the research team drafted a list of items and activities based on the current literature and research to guide the discussion. However, the list was a guide only and additions and changes were made to the list based on the focus group discussions with young people.

The following discussion summarises the main issues that emerged from the focus groups. For analytical convenience, it has been organised around the six substantive sections of the WYPN Survey: what young people have and do; young people's health and wellbeing; young people's home and family; young people's friends and socialising; and young people's school and neighbourhood (although some parts of the discussion covered multiple sections).

### What young people have and do

It was clear from the discussions that there were three technology items that all young people could not live without and needed to participate in 'modern society' – a mobile phone, a computer and access to the internet at home. Of these, the mobile phone was overwhelmingly the most important item, with almost all groups agreeing that all young people should have at least a basic mobile phone to communicate with family and friends and for emergency purposes (relating to safety). Other reasons why a mobile phone was important to young people included practical reasons (such as accessing public transport timetables and maps) and for social media and/or entertainment purposes (such as accessing Facebook, Instagram, YouTube and Netflix).

There was some discussion about the appropriate age at which a young person should have their own mobile phone. The general agreement was that a mobile phone became more important with age so more of a 'want' for young people 12 to 14 years and a 'need' for young people 15 years and older.

A computer was key to young people participating in learning. Many of the schools that the young people attended had a 'Bring young own device policy' where young people had to provide a computer device solely for learning purposes.[12] However, many focus group participants did not have a device of their own and were sharing with other household members due to cost. Young people without their own computer were missing out on having and using technology that was key to supporting their engagement in school and learning, all of which had the potential to impact on their attitudes and experiences of schooling as well as their overall well-being.

Access to the internet was also strongly linked with a young person's ability to engage and participate in school. Young people without the internet at home were at a disadvantage in terms of their learning. They spoke about not being able to complete their homework and assignments and one young person summed it up by saying; 'You can't do anything without the internet'. Overall, the preference was for young people to

12 See https://education.nsw.gov.au/policy-library/policies/student-bring-your-own-device-policy-byod.

have access to the internet in their own home, although this was not possible for many of the young people in the focus groups, again due to cost.

High internet costs meant than many households went without, while others sought internet access in other places. Many spoke about accessing the internet via free Wi-Fi connections in their local community as a strategy to overcome lack of internet access at home. This feedback enabled the research team to make the distinction between where young people access the internet in the WYPN survey, distinguishing between 'access to the internet at home' and 'internet access in public places'.

Young people were also asked about the importance of the 'right' type of clothing and footwear to 'live a normal kind of life'. The concept of clothing 'type' varied across groups, sometimes referring to use, brand, functionality and newness. However, despite the variations it was clear from discussions that brand-name footwear was more important to most young people than brand-name clothing.

Some felt that other young people focused more on the shoes they were wearing and that they were more likely to be judged for not having brand-name footwear. Others felt that spending money on brand-name shoes ensured better quality, reliability and comfort. All of which were particularly important for young people participating in activities that required a specific type of shoe (e.g. football boots). There was a slight difference between the views expressed by the young people in the two samples: young people in the TSF group were more likely to give less importance to brand-name clothing and footwear.

Another finding was around the importance of a job to young people, particularly to those in the older age groups. This was not something that was considered in the research team's initial set of questions, but it became clear that having a job was important and based on this, a question was added to the WYPN survey asking whether or not the respondents had a job and how much of their own money they have to spend or save each week.

A job was more likely to be raised by older young people because they were more likely to be at an age where they were employed (or seeking to be). Often, they were no longer receiving pocket money from their parents/carers, so a job was of high importance to them. A couple of young people spoke about not wanting to be reliant or 'take money from' their parents/carers anymore. One young person said:

> 'Your parents shouldn't be giving you pocket money if you have the choice to have a job' (GHS group, inner-Sydney, Year 9, male)

A job also enabled some young people to have some autonomy or 'flexibility' around their own spending decisions and choices. However, this was not the case for other young people in unemployed or low-paid households, where a job was often a way of contributing to household spending rather than their own individual spending:

> 'Both of my parents don't work so it's kind of like I help' (GHS group, outer-Sydney, Year 10, female)

Many young people were also thinking about and planning their future. They acknowledged that to get 'somewhere in life' they needed to start thinking about their future in terms of education and employment aspirations. For example, one young person planning to pursue a trade apprenticeship said that the 'experience' from the job was as important as the money they earned. Another mentioned the importance of having work experience on your resume before you left high school.

Overall, those in years 7 and 8 were more likely to be dependent on their parents for money – either through pocket money or the 'giving' of money at various times. This often meant that their ability to socialise and participate was dependent (and often limited) by their parents or carers spending habits.

The amount of money that young people thought was necessary to live 'a normal kind of life' varied depending on the expectations of the household. For example, some were given a significant amount of pocket money but were responsible for buying their own clothing and footwear as well as paying for social and extracurricular activities. Others received smaller amounts of pocket money but were only responsible for small purchases such as eating out with friends.

## Young people's health and wellbeing

While the WYPN survey focused on young people rating their overall health, those in the focus groups were asked specifically about diet. This enabled the research team to look more closely at young people's understanding of a 'healthy diet' and how it contributes to their overall health and well-being. A balanced diet (with variety) was important to most young people, who were very articulate about what they needed in terms of the different food groups to have a healthy diet. However, while a healthy diet was considered a 'need', the reality was that the amount of money in the household determined the amount of and type of food bought by the household and thus available to them. In practice, many households sought cheaper (and often unhealthier) alternatives. For example, one young person spoke about buying a chicken burger from McDonalds because it was cheaper than buying a chicken sandwich from the local café despite acknowledging that the sandwich would be healthier (and nicer).

Young people also differentiated between food 'needs' and food 'wants'. This was clear in their discussions of 'treats' such as lollies, chocolates, cakes and hot chips. While initially young people said that they could not live without treats, nearly all agreed that these were not essential and more of a 'want' that they could live without. Young people with a job or access to pocket money often used this money of their own to buy treats. As will be discussed later, eating out with family and friends was also an important part of young people's diet.

Overall, it was clear that young people had a good understanding of what a healthy diet meant but often lacked the control (due to a lack of money in the household) to ensure that they had a healthy diet.

## Young people's home and family

Spending time with family was a 'high priority' for most of the young people in the focus groups and this was mainly done through eating out, day trips and holidays. All of these required different levels of household spending, so frequency was often dependent on the amount of money left over in the household after spending on the essentials. Eating out at a local restaurant or club for a special occasion (such as a birthday) was the most commonly mentioned way for families to spend time together. These occasions generally happened more regularly than day trips and holidays. Young people felt that eating out reduced the stress of preparing and cooking a meal and allowed the focus to be on the family spending time together.

Many also spoke about the benefits that day trips and holidays away with family provided, the most important being the opportunity to spend 'family time' away from the stresses of everyday life – school, home and work. Day trips and holidays provided the household with 'a change of scenery'. One young person said:

> 'I go on holidays a lot with my family and it's just a good time for us to bond and not worry about things back at home' (GHS group, inner-Sydney, Year 9, male)

They also spoke about day trips and holidays enabling them to reconnect with family and develop stronger family relationships. One young person said:

> 'It gives me a chance to really relax and reconnect with my family that way' (GHS group, regional, Year 9, female)

Day trips were generally more common than holidays because they were seen as more affordable than 'expensive' holidays. However, while days trips were more common than holidays, the frequency and type of day trips was determined by the amount of money in the household after the essentials had been paid for. For example, households with less money were more likely to go on day trips with minimal (or no) cost such as going to the park or beach, while households with more money were more likely to spend money on an activity such as going to the movies or zoo. It was generally agreed that a day trip once a month was frequent enough.

Holidays generally involved visiting and staying with family. This enabled costs to be kept to a minimum and there was the possibility for later reciprocation. Family holidays also enabled young people to visit other family members that they might not see very often, particularly grandparents. Overseas holidays were generally less frequent due to distance and cost.

Overall, holidays away from home were seen as a 'need' rather than a 'want' for young people. It was agreed by most that holidays were an opportunity for families to spend time together and important for developing strong family relationships. Location didn't matter as long as holidays happened at least once or twice a year. Anything more than that was a 'want'.

In discussions about the family home, young people were asked specifically about the importance of having their own room and a quiet place or desk to study or spend their free time. Both items have been included in previous deprivation studies where adults responded on behalf of young people. The research team wanted to find out from discussions with the young people themselves if these two items were important to them and the answer in both cases was 'yes'.

There was consensus that those aged between 10 and 12 years should have their own bedroom. Young people felt that at this age they need their own 'personal space where it's not shared with anyone else'. A place where they could study and spend their free time. One young person said:

> 'You need your own personal space, especially from year seven through HSC. You need that time to be alone but like if you're like little like primary school I don't think that's such a big… like I don't think it's that important' (GHS group, inner-Sydney, Year 9, female)

Young people also felt that having their own room was more important for siblings of the opposite gender – they felt that once they were 10 to 12 years of age it was 'inappropriate' to share.

However, while it was acknowledged that having one's own room was important, it was common for many of those in our study to be sharing despite being in high school. As one said:

> 'If you're able to afford a room where everyone gets their own amount of space okay but if you're not it's okay' (TFS group, outer-Sydney, male)

A quiet space or desk (not necessarily their bedroom) was generally more important to older groups as the pressures of study and homework increased, young people living in large households and young people living with sibling/s with different study habits. Again, the reality was that while many young people acknowledged that a quiet space or desk was the ideal, this was not the case for them.

## Friends and socialising

How young people spent their free time (outside of school) was discussed in terms of the types of activities that they themselves participated in. Many spent their free time participating in organised activities which varied by gender and sample. Boys generally talked more about organised team sports such as soccer and football, while girls talked more about organised individual sports such as tennis, dancing and swimming. There was also some variation in the level of importance placed on participation in organised activities between the two samples. Young people in the TSF group considered participation in organised activities as less important than young people from the GHS group.

From a social aspect, participation in organised activities was important because it allowed young people to 'meet other people' and 'gain friends'. Young people also spoke about participation helping to alleviate boredom, provide a distraction from school and home as well as the benefits to well-being and mental health. However, like many other items and activities, cost was often the determining factor to participation. Often these activities were 'quite expensive' and so many spoke about seeking cheaper alternatives or not participating.

For some young people, participating in organised activities was not important to them, however socialising with other young people was. Young people identified eating out (fast food or take-away) as an important way

for spending time with friends. It was quick, accessible and cheap and was usually done during lunch time or after school. However, like organised activities, money was needed to participate. One young person said:

> 'Yeah, if you don't have that much money you can't really eat out much' (GHS group, inner-Sydney, Year 9, female)

Alternatives to this included hanging out with friends at their houses because its 'a good way not to spend money on food' or making use of free public spaces where possible.

A couple of young people talked about the importance of having 'personal time' on their own doing activities such as reading, watching television, listening to music and sleeping. One young person said:

> 'We do put time away to go and spend time with our friends, but we also need a bit more private time to do our own things like read books' (GHS group, inner-Sydney, Year 9, male)

Overall, young people wanted to be able to decide how they spent their free time whether this be with friends or on their own. However, one of the constant issues raised throughout the focus groups was how participation was determined by the amount of money in the household.

## Young people's school and neighbourhood

School was an important part of young people's lives, so it is not surprising that they were clear about the items and activities that were important for them to participate in school and learning. The most commonly mentioned school item was the school uniform – also the main school expense for households. The consensus was that a new school uniform at the beginning of Term One each year was essential. However, while this was the preference, many young people spoke about purchasing second-hand school uniforms at a reduced cost from the school uniform shop or from other families. Others spoke about a reciprocal arrangement with other families of handing down uniforms in return for other handed down uniforms.[13] The correct school uniform was also important for young people's feeling of 'fitting in' with the school community. Other more affordable (and accessible) school items mentioned by young people included stationary, lunchbox, drink bottle, and a school bag.

Young people also wanted the opportunity to participate in extra-curricular school activities with choice and variety if this was important to them. One young person said:

> 'It depends on the actual person, it they want to participation then participate but as long as it's there, you can actually do it' (TFS group, outer-Sydney, male)

However, the reality was that like organised activities, these extra-curricular school activities often required additional costs. So, while participation in these activities was important to many young people, they were excluded due to cost.

School camps were considered an extra-curricular activity rather than part of the school curriculum because they required an additional cost. Young people described school camps as a good opportunity to 'form new friendships' by socialising with others outside of the classroom environment while having 'a break from your school'. Young people agreed that they should at least be able to attend a school camp every second year. Other extra-curricular school activities mentioned included sport (the most common), music, drama, chess, dance, debating and technology groups.

In terms of the local neighbourhood, young people identified several public spaces in their local neighbourhood that were important to them to live 'a normal kind of life'. The most commonly mentioned being a park or green space. However, the importance of these items was dependent on whether the young person had access to a backyard at home – these spaces were seen as interchangeable. So, if the young

13 The practice of 'handing down' school clothes when they had been grown out of as a way of saving money was also raised as a common practice by adult participants in the focus groups run as part of a recent budget standards study (see Saunders and Bedford, 2017). There, many low-income families reported passing on school clothes that their children no longer needed and receiving hand-me downs from other families whose older children had also out-grown their school clothes.

person's house had a backyard then public space was less important to them than if their house did not have a backyard, when public space was of high importance. One young person said:

> '[Young people] need some sort of green space. Let's say if they don't have it at home they can get it from the park' (TSF group, outer-Sydney, male).

This discussion about access to green space was important for the research team to understand young people's responses to whether a park or green space was essential in the WYPN survey. The proximity of a park or green space was important for young people, who felt that this type of space was important for them. Proximity was discussed in relation to how long it would take to walk there: a five to ten-minute walk was considered a reasonable distance to travel. There was also some discussion about safety, although this issue was not explored further in the focus groups.

Access to transport was linked to young people's ability to move around their local neighbourhood. It was agreed that a car was 'a big necessity' and that all households 'need' at least one car that could take young people where they need to go. However, for many in the focus groups, a car in their household was not of direct benefit to them because the car was needed for parents or carers working long hours or had to be divided among many members in the case of large households.

Other ways to move around the local neighbourhood included the use of public transport. However, public transport use dependent on the area in which a young person lived. There were some clear differences across location. Young people living in the inner-Sydney sites described public transport as accessible and affordable and consequently more of them were using it to get around and the car become of less importance to them. As one young person said:

> 'Also living like in Sydney like pretty close to everything you don't really need a car that much' (GHS group, inner-Sydney, Year 9, female)

However, for young people living in the regional areas, public transport was described as 'limited' and they were less likely to be using it due to lack of convenience and cost. For many, this impacted on their daily lives and their ability to participate in activities and the broader community. For example, young people spoke about a movie theatre in the next town which they were only able to visit if someone could drive them there because public transport was not convenient. This public space was a place for them to socialise and spend their free time although many were excluded due to access to transport. A car was considered essential to live in a regional area.

In areas where public transport was limited and/or there was only one car in the household, young people moved around their local neighbourhood by walking or riding a bike. Bikes were particularly important for those living in regional areas because bike riding was quicker than walking and allowed them to cover larger distances.

## 4.4 Concluding Comments

It is not surprising that young people's own circumstances shaped their expectations and views about what items and activities are important for young people their age to live 'a normal kind of life'. The reality was that for many of those that participated in the focus groups, money in the household after the essentials had been paid for determined the items and activities that young people had access to. This often made it difficult for them to think more broadly about what all young people need because they often adapted their own preferences to what their family could afford, and this restricted their ability to reflect on what all young people need. Young people regularly sought cheaper alternatives to further stretch their limited resources, and it was clear that money puts limitations on all aspects of young people's lives.

# 5 Sample Characteristics and the Socio-economic Profile of Young People in NSW

## 5.1 Introduction

This chapter describes the general features of the two samples of young people, the government high schools (GHS) sample and The Smith Family (TSF) sample. Results are presented separately for the two samples as the differences in recruitment methods mean that the samples cannot be meaningfully aggregated. Much of the focus is on the larger (GHS) sample, which is more representative of all children and young people in NSW, although comparisons between the two samples will also reveal important information about how they differ, and to some degree, why.

This approach allows the circumstances of the more disadvantaged (TSF) sample of young people participating in the Smith Family's *Learning for Life* program to be compared with those of younger people generally. One goal of the analysis reported in this and the two following chapters is to better understand the circumstances and views of 'mainstream' young Australians and to develop new measures of their status and well-being based on these. They can then provide a measuring rod of disadvantage for other groups that is rooted in a mainstream consensus of what young people think, need and aspire to.

First, a few comments on the representativeness of the two samples and what this implies for the ability to generalise from the survey findings to the relevant populations (of all NSW high school students and all *Learning for Life* program participants). Because of the non-random nature of the methods used to recruit both samples, it cannot be claimed that either is, strictly speaking, *statistically* representative of the populations from which they have been drawn. However, this does not mean that the findings presented and discussed in this and the following two chapters are not *indicatively* representative more broadly of the populations from which the samples have been drawn. As many of the results presented below demonstrate, the school-based (GHS) sample has a similar profile to that of the general student population in many dimensions and there is no reason to think that this is not also the case with the TSF sample.

While it would be unwise to claim that all of the sample findings can are generalisable to relevant aspects of the two populations, this does not mean that it is not possible to draw general conclusions with a high degree of confidence from the sample findings. Given the size of the two samples and the similarities revealed by the comparisons with available population data, there is a low likelihood that any strong biases exist in the survey data, which means that it can form the basis of statements that apply more broadly.[14]

## 5.2 Sample Representativeness

The structure and representativeness of the school-based (GHS) sample can be assessed by comparing selected characteristics of the schools recruited to participate in the study with corresponding data for all NSW government high schools. It is important to establish how well the sample corresponds with those of all young people in NSW government high schools, not least because such comparisons can help identify any sample biases that may distort the findings.

14 The fact that neither sample can be acclaimed to be fully representative of the population from which it has been drawn also prevents the development of a set of weights that could be used to inflate the sample estimates so that they better reflect the underlying populations by adjusting for observed sample biases. This is common practice when analysing survey data like that being presented and examined here but is not possible given how the GHS and TSF survey participants were recruited.

It should be noted that because the *Learning for Life* program is designed specifically for young people in disadvantaged circumstances, the TSF sample is not designed to be representative of all young people and so cannot be usefully compared in this way.[15]

Table 5.1 compares some basic features of the GHS sample with corresponding data for all NSW government high schools.[16] These aggregate comparisons indicate that the GHS sample is reasonably representative of all NSW government high schools. Thus, the GHS sample contains a similar proportion of secondary only and combined schools, is very similar in structure to the NSW student population in terms of the overall numbers of students and teachers and has similar proportions of Indigenous students and students who normally speak a language other than English at home. There are, however, some differences, most notably that the GHS sample contains fewer very small and very large schools than exist in NSW overall.

### Table 5.1: Assessing the Representativeness of the Government High Schools Sample

| Characteristic | Government high schools (GHS) sample: | | All NSW government high schools: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **School type:** | | | | |
| Secondary only | 45 | 86.5 | 401 | 85.7 |
| Combined | 7 | 13.5 | 67 | 14.3 |
| **School size (total enrolments):** | | | | |
| Mean | 673.8 | - | 664.3 | - |
| Median | 658.0 | - | 674.0 | - |
| Minimum | 115.0 | - | 24.0 | - |
| Maximum | 1,479.0 | - | 2,012.0 | - |
| **School size (number of FTE teachers):** | | | | |
| Mean | 55.4 | - | 54.4 | - |
| Median | 57.8 | - | 56.4 | - |
| Minimum | 11.6 | - | 3.4 | - |
| Maximum | 104.8 | - | 209.3 | - |
| **Indigenous enrolments:** | | | | |
| Mean | - | 10.4 | - | 11.1 |
| Median | - | 8.0 | - | 7.0 |
| Minimum | - | 0.0 | - | 0.0 |
| Maximum | - | 68.0 | - | 100.0 |
| **Percentage of students that speak a language other than English at home:** | | | | |
| Mean | 28.9 | - | 27.2 | - |
| Median | 9.0 | - | 9.0 | - |
| Minimum | 0.0 | - | 0.0 | - |
| Maximum | 98.0 | - | 100.0 | - |

Notes and Sources: 2015 MySchool Data (provided by ACARA)

15 It is possible to compare the characteristics of those in the TSF sample with those of all participants in the *Learning for Life* program (or of all NSW program participants) in order to get a sense of how representative that sample is too. Program data for 2016-17 indicates that the program covered 38,000 students from 18,000 families of which 19 per cent were from an Aboriginal or Torres Strait Islander background, 26 per cent from non-English speaking background, 68 per cent with parents not in the labour force or unemployed, 60 per cent lived in a sole-parent family, and around one-third have at least 6 people in the family. Many of these families face a high level of housing instability, resulting in frequent moves, around 40 per cent of students and 50 per cent of parents have a health or disability issue, around 20 per cent of students have attended 4 or more schools and 1 in 20 have attended 6 or more schools.

16 The data in Table 5.1 and some later tables and discussed in the text is sourced from the Australian Curriculum, Assessment and Reporting Authority (ACARA) and are available from ACARA in accordance with its Data Access Protocols.

One important variable that is not covered in Table 5.1 relates to school location. This is an important omission because of the approach used initially to recruit schools and because of the different social and economic contexts that exist within schools situated in different locations: inner city compared with middle and outer-ring suburbs; urban compared with regional and remote, and so on. There is great interest in how schools in different locations compare in relation to the socioeconomic profile and background of students and how these differences are related (if at all) to measures of academic performance. This is therefore an issue that is worth exploring in greater detail to get a better sense of the representativeness of the sample.

This can be done using the Index of Community Socio-educational Advantage (ICSEA) scores for each school. The development and significance of the ICSEA values for each school is explained as follows by ACARA:

> 'The Index of Community Socio-Educational Advantage (ICSEA) is a scale that represents levels of educational advantage. A value on the scale assigned to a school is the averaged level for all students in the particular school … ICSEA was developed to enable fair and meaningful comparisons between schools on the basis of the performance of their students in literacy and numeracy as estimated by the National Assessment Program- Literacy and Numeracy (NAPLAN)' (ACARA, 2011).

As explained by ACARA (2011: 2) the ICSEA score for a school;

> 'It enables fair and meaningful comparisons of the performance in literacy and numeracy of students in a given school with that of schools serving students with similar backgrounds'.

The ICSEA score is derived from ABS data on two dimensions of each school's educational advantage, the first relating to student factors: parents' occupation, and parents' education and the second to school factors: its geographic location and the proportion of Indigenous students. This information is combined to form an index that allows schools across Australia to be compared along a spectrum of advantage/disadvantage. The raw index is adjusted so that it has an overall (Australia-wide) mean value equal to 1,000 and a standard deviation of 100 (this latter adjustment means that 95 per cent of all schools have ICSEA scores that fall between 800 and 1,200). ICSEA score values for individual schools range from a low (for the least advantaged schools) of around 500 to a high (for the most advantaged schools) of around 1,300.

Table 5.2 compares the ICSEA values for schools in the GHS sample with the corresponding values for all NSW government high schools (upper section of Table 5.2) and for those schools that are within one standard deviation below the overall mean (lower section of Table 5.2). It is clear from the upper section of Table 5.2 that the GHS sample contains disproportionate numbers of both least-advantaged and most-advantaged schools, measured using the ICSEA values. Thus, while 27.3 per cent of all NSW schools have an ICSEA score of over 1,000, this is the case for only 9.6 per cent of the GHS sample. Similarly, while 90.4 per cent of sampled schools have an ICSEA score of 1,000 or below, this is the case for only 72.7 per cent of all NSW government high schools. This implies an over-representation of more disadvantaged schools in the GHS sample and a corresponding under-representation of the more advantaged schools – at least when the advantage/disadvantage status of each school is based on its ICSEA score.

## Table 5.2: Comparing ICSEA Scores for the Government High Schools Sample and All NSW Government High Schools

| ICSEA range | Government high schools (GHS) sample: | | All NSW government high schools: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **All schools:** | | | | |
| 600-700 | 0 | 0.0 | 6 | 1.3 |
| 701-800 | 1 | 1.9 | 9 | 2.0 |
| 801-900 | 7 | 13.5 | 61 | 13.5 |
| 901-1,000 | 39 | 75.0 | 252 | 55.9 |
| 1,001-1,100 | 5 | 9.6 | 87 | 19.3 |
| 1,101-1,200 | 0 | 0.0 | 28 | 6.2 |
| 1,201-1,300 | 0 | 0.0 | 8 | 1.8 |
| Total | 52 | 100.0 | 451 | 100.0 |
| Mean | 942.7 | - | 964.6 | - |
| Median | 939.5 | - | 953.0 | - |
| Minimum | 779.0 | - | 617.0 | - |
| Maximum | 1,094.0 | - | 1,262.0 | - |
| **Schools within one standard deviation (= 100) below the mean (=1,000):** | | | | |
| 901-920 | 8 | 20.5 | 45 | 17.9 |
| 921-940 | 11 | 28.2 | 60 | 23.8 |
| 941-960 | 8 | 20.5 | 64 | 25.4 |
| 961-980 | 6 | 15.4 | 47 | 18.7 |
| 981-1,000 | 6 | 15.4 | 36 | 14.3 |
| Total | 39 | 100.0 | 252 | 100.0 |

Source: MySchool Data (provided by ACARA)

The lower section of Table 5.2 indicates that the GHS sample contains a reasonable representation of schools with ICSEA scores just below the overall average, i.e. between 900 and 1,000. Note that the top section of the table indicates that the majority of all schools (55.9 per cent) fall within this range. These comparisons confirm that there is an under-representation of more advantaged schools in the GHS sample, particularly schools with an ICSEA score that exceeds 1,100 (or is more than 10 per cent above the national average). Since the majority of NSW government high schools were invited to participate in the study (as indicated in Chapter 3), this sample bias presumably reflects a combination of differences in the willingness of each school to participate in the study and in their ability to take on the additional workload. It is difficult to be more specific about why the more advantaged schools were less willing to participate in the survey, but the possibility that this has produced a sample bias should be kept in mind.[17]

17 Note that any such bias relates to the characteristics of the schools included in the GHS sample, not in the characteristics of the students that completed the survey. This distinction is discussed in more depth later.

## 5.3 Basic Sample Characteristics

This section presents and describes the main characteristics of survey participants in the GHS and TSF samples. It begins by examining the basic demographic characteristics of the two samples, then examines a series of markers of socioeconomic status, several indirect indicators of poverty or social disadvantage, a series of indicators of happiness and life satisfaction and finally, several measures of attitudes to schooling.

### Demographic profiles

Table 5.3 compares the demographic profiles of the two samples, focusing on age, school year, gender, Indigenous status, health status, disability, language spoken at home and the number of homes where each participant normally sleeps. The majority of those in both samples are between the ages of 12 and 16 and are spread evenly between school years 7 and 10. Because age and school year are very closely related and given that the study focuses on the role and impact of the school environment and how young people relate to their school and other students, the analysis that follows focuses on school year only.

## Table 5.3: Demographic Profiles of the Government High Schools and The Smith Family Samples

| Characteristic | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **Age:** | | | | |
| 11 or under | 4 | 0.1 | 1 | 0.3 |
| 12 | 331 | 12.4 | 54 | 16.0 |
| 13 | 664 | 24.9 | 77 | 22.8 |
| 14 | 687 | 25.7 | 95 | 28.2 |
| 15 | 663 | 24.8 | 60 | 17.8 |
| 16 | 300 | 11.2 | 40 | 11.9 |
| 17 or over | 14 | 0.5 | 1 | 0.3 |
| Missing | 9 | 0.3 | 9 | 2.7 |
| **School year:** | | | | |
| Year 7 | 636 | 23.8 | 94 | 27.9 |
| Year 8 | 670 | 25.1 | 86 | 25.5 |
| Year9 | 670 | 25.1 | 80 | 23.7 |
| Year 10 | 686 | 25.7 | 67 | 19.9 |
| Missing | 10 | 0.4 | 10 | 3.0 |
| **Gender:** | | | | |
| Female | 1,407 | 52.7 | 180 | 53.4 |
| Male | 1,245 | 46.6 | 148 | 43.9 |
| Missing | 20 | 0.7 | 9 | 2.7 |
| **Indigenous status:** | | | | |
| Not Indigenous | 2,371 | 88.7 | 259 | 76.9 |
| ATSI | 281 | 10.5 | 67 | 19.9 |
| Missing | 20 | 0.7 | 11 | 3.3 |
| **Self-assessed health status:** | | | | |
| Excellent | 701 | 26.2 | 88 | 26.1 |
| Good | 1,465 | 54.8 | 179 | 53.1 |
| Fair | 413 | 15.5 | 65 | 19.3 |
| Poor | 74 | 2.8 | 2 | 0.6 |
| Missing | 19 | 0.7 | 3 | 0.9 |
| **On-going disability or medical condition?** | | | | |
| No | 1,999 | 74.8 | 242 | 71.8 |
| Yes | 298 | 11.2 | 69 | 20.5 |
| Don't know | 351 | 13.1 | 21 | 6.2 |
| Missing | 24 | 0.9 | 5 | 1.5 |
| **English normally spoken at home:** | | | | |
| Always/almost always | 2,357 | 88.2 | 306 | 90.8 |
| Sometimes/never | 300 | 11.2 | 29 | 8.6 |
| Missing | 15 | 0.6 | 2 | 0.6 |
| **Number of homes for sleeping:** | | | | |
| One | 2,325 | 87.0 | 304 | 90.2 |
| Two | 271 | 10.1 | 28 | 8.3 |
| No main home | 30 | 1.1 | 2 | 0.6 |
| Missing | 46 | 1.7 | 3 | 0.9 |
| Full sample | 2,672 | 100.0 | 337 | 100.0 |

Notes: ATSI = Aboriginal, Torres Strait Islander or Aboriginal and Torres Strait Islander.

Both samples contain slightly more females than males, participants in both samples report similar (very good) subjective health status, most young people normally speak English at home and live in only one home. The remaining portions (around 10 per cent) of each sample speak a language other than English at home and normally sleep in two or more homes. While more than one-fifth (20.5 per cent) of those in the TSF sample report having a disability or long-term medical condition, this is true for only around half of this (11.5 per cent) of the GHS sample where a far higher percentage report that they 'Don't know' when asked this question. Thus, with a couple of notable (but not unexpected exceptions), the two samples share a common profile across most of the characteristics identified in Table 5.3. The two main exceptions are young people from an Indigenous background or with a disability, which are far more prevalent in the TSF sample.

## Area-level classifications

Information is available from the the NSW Department of Education (NSW DoE) on both the network to which each school belongs and the region where each school is located.[18] However, caution must be applied when presenting this data to ensure that the information does not allow individual schools in the survey to be identified. For example, the breakdown of schools by the NSW DoE network variable is problematic in the current context because some networks contain very few schools, potentially compromising the anonymity of those schools that participated in the survey.

For this reason, the NSW DoE regions have been combined into 5 larger ('analytical') regions in Table 5.4, which shows the number of schools and the number of students in each region (original and combined). This 'analytical' regional classification produces a somewhat uneven distribution of school size across the regions, with the average number of students per school lying between 339 in Western New South Wales region and 821 in the Sydney region.

### Table 5.4: Relating the Five Analytical Geographical Regions to the NSW DoE Regions

| Geographic Region | NSW DoE regions covered | Number of schools | Number of students | ICSEA range | Mean ICSEA score |
|---|---|---|---|---|---|
| 1. Hunter, Northern | Hunter-Central Coast, New England & North Coast | 11 | 530 | 871-983 | 932.2 |
| 2. South Western Sydney | South Western Sydney | 12 | 671 | 897-1,001 | 954.7 |
| 3. Western New South Wales | Western New South Wales | 9 | 421 | 779-975 | 883.2 |
| 4. Illawarra & Southern | Illawarra-South Coast & Riverina | 9 | 506 | 916-999 | 968.1 |
| 5. Sydney | Sydney, Northern Sydney & Western Sydney | 11 | 544 | 896-1094 | 975.7 |
| Total | | 52 | 2672 | 779-1,094 | 945.8 |

The other location-based variable is the ICSEA score, discussed earlier. For the purpose of summarising the survey results, the overall distribution of ICSEA scores has been divided into five 'quintiles' each containing approximately one-fifth of all students in the GHS sample. Thus, the lowest quintile contains (approximately) 20 per cent of the sample from schools with the lowest ICSEA scores, the next quintile contains the 20 per cent of students from schools with the next highest ICSEA scores, and so on up to the top quintile which

18 See https://education.nsw.gov.au/public-schools/going-to-a-public-school/operational-directorates .

contains the approximately 20 per cent of students from schools with the highest ICSEA scores.[19] Table 5.5 shows how these quintiles were constructed and the ICSEA scores that separate them.

### Table 5.5: Ranking of Schools into ICSEA Quintiles

| ICSEA Quintile | Number of schools (a) | Number of students | ICSEA range | Mean ICSEA score |
|---|---|---|---|---|
| First (lowest) | 11 | 584 | 779-908 | 872.0 |
| Second | About 11 | 526 | 909-930 | 921.4 |
| Third | About 11 | 514 | 937-953 | 947.9 |
| Fourth | About 8 | 527 | 954-985 | 975.1 |
| Fifth (highest) | About 10 | 521 | 986-1,094 | 1,021.3 |
| Total | 52 | 2,672 | 779-1,094 | 945.8 |

Note: The number of schools in each quintile differs because the quintiles are defined to contain equal numbers of students

The rankings shown in Tables 5.4 and 5.5 differ in how they are constructed and as a result, each specified sub-group contains different schools and/or students. By design, the latter ranking produces five groups that have increasing mean ICSEA scores, as the final column of Table 5.5 indicates. In contrast, the groupings shown in Table 5.4 reflect geographic differences and there is no clear pattern or ranking of them by other variables – including by the mean ICSEA scores, which are overlapping as can be seen from the final two columns of Table 5.4. The two rankings are different and represent alternative ways of sub-dividing the total GHS sample to explore how other features of the sample vary across different classifications. The insights provided by this part of the analysis will become apparent when the results are presented for each classification in the following chapter.

## 5.4 Indicators of Social Advantage/Disadvantage

### Socioeconomic status

Socioeconomic status (SES) is a complex multi-dimensional concept and there is no single agreed best way to measure it. For this reason, it is preferable to refer to indicators that signpost the variable of interest rather than measures which precisely quantify it, since the latter term conveys an unwarranted impression of objectivity and precision. Table 5.6 summarises a number of SES indicators that relate to the characteristics of the young person themselves or to features of the household in which they are living.

It is important to emphasise that the indicators shown in Table 5.6 (and in most tables presented throughout this report) are derived from information provided in the survey by the young people themselves. That information has been taken at face value as being accurate and no attempt has been made to validate using external data or benchmarks. In addition, the precise extent to which the indicators shown in Table 5.6 accurately capture the socioeconomic status of the young people and their household is likely to vary, and in some instances the meaning attached to specific indicators may be open to interpretation.

19 Note that the quintiles have been defined so that each contains approximately one-fifth of all students in the GHS sample, not one-fifth of all schools. (The actual number of students in each quintile varies between 514 and 584, as indicated in Table 5.5). This approach is appropriate since the focus of most of the analysis that follows is on the extent of deprivation and level of well-being among students. It is possible to re-define the quintiles so that each contains approximately one-fifth of all schools and in this case the number of students in each quintile varies between 437 and 603.

## Table 5.6 Indicators of Socio-economic Status

| Indicator | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **Has had a job or paid work in last 12 months:** | | | | |
| Yes | 1,085 | 40.6 | 71 | 21.1 |
| No | 1,455 | 54.5 | 225 | 66.8 |
| Missing | 132 | 4.9 | 41 | 12.2 |
| **Has at least $20 a week of their own money:** | | | | |
| Yes | 862 | 32.2 | 57 | 16.9 |
| No | 1228 | 46.0 | 232 | 68.8 |
| Missing | 582 | 21.8 | 48 | 14.3 |
| **Household has the following household items:** [(a)] | | | | |
| A dishwasher | 1,710 | 64.0 | 115 | 65.6 |
| Furniture in reasonable condition | 2,585 | 97.7 | 326 | 96.7 |
| Heating for when it's cold | 2,503 | 93.7 | 299 | 88.7 |
| A backyard or outside play area | 2,470 | 92.4 | 310 | 92.0 |
| A garage or car port | 2,384 | 89.2 | 251 | 74.5 |
| **Has moved house at least once in past 12 months:** | | | | |
| Yes | 783 | 29.3 | 82 | 24.3 |
| No | 1,804 | 67.5 | 251 | 74.5 |
| Missing | 85 | 3.2 | 4 | 1.2 |
| **Has moved school at least once in past 12 months:** | | | | |
| Yes | 538 | 20.1 | 69 | 20.5 |
| No | 2,002 | 74.9 | 259 | 76.9 |
| Missing | 132 | 4.9 | 9 | 2.7 |

Note: (a) Three of the household items (furniture; heating; and backyard/play area) were identified as being essential 'for all (adult) Australians' in the research on deprivation reported by Saunders, Naidoo and Griffiths (2007) and Saunders and Wong (2012). The exceptions are the dishwasher (which did not receive majority support for being essential) and the garage or car port which was not included in the list of items.

In general, young people in the TSF sample are far less likely than those in the GHS sample to have paid work themselves, or to have a modest (at least $20 a week) income of their own. They are also far less likely to live in a house that has a garage or car port. Across both samples, there are signs of volatility in the circumstances of many young people, with around one-quarter of both samples having moved house at least once in the last 12 months, and one-fifth having moved school at least once. But overall, there is little difference in the profile of the other SES indicators shown in Table 5.6 between the two samples. There is thus no evidence of any difference in the tendency of those in the two samples to differ in how frequently they have moved either house or school over the last 12 months.

## Poverty

Most poverty studies (e.g. ACOSS, 2016; Saunders, Wong and Bradbury, 2016) estimate poverty by comparing the level of household income (after adjusting for household need using an equivalence scale) with a poverty line that is generally set relative to the median level of (equivalised) disposable income. Information at the household level was not collected in the WYPN survey, nor could it be given the child-focused nature of the survey, since it is not realistic to ask young people to provide detailed information about the incomes of adult household members. This makes it impossible to identify the poverty status of sample members using a conventional (poverty line) approach. However, the WYPN survey instrument asks for information about a number of variables other than income that can be used to provide an indication of whether or not the household in which young people are living can be considered poor, and these are shown in Table 5.7.

In comparing these results, it is important again to bear in mind that they are based on survey responses provided by young people that have not been checked or validated externally, including by their parents/guardians. This does not mean that data provided by parents or guardians is 'better' data, only that the subjective views of children and parents may differ, reflecting their different perspectives and both may not accurately describe the actual situation.[20] There is certainly no suggestion that young people are not fully aware of the circumstances of their household and are unable (or unqualified) to provide a valid response to questions that ask about the economic and social status of the household.

20 It is worth noting in this context that a notable feature of the WYPN survey responses is the relatively small number of 'Don't know' responses or missing values, which suggests that most of the survey respondents could understand what was being asked of them and were able to provide a meaningful response.

## Table 5.7: Indicators of Poverty

| Indicator | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **Jobless household:** | | | | |
| No adults in the household in paid work | 145 | 5.4 | 115 | 34.1 |
| One adult in paid work | 639 | 23.9 | 137 | 40.7 |
| Two or more adults in paid work | 1,785 | 66.8 | 76 | 22.6 |
| Don't know/Missing | 103 | 3.9 | 9 | 2.7 |
| **Lack of money stops you doing what you want to do:** | | | | |
| Very or quite often | 602 | 22.5 | 119 | 35.4 |
| Sometimes | 1,033 | 38.7 | 139 | 41.2 |
| Hardly ever or never | 1,022 | 38.3 | 73 | 21.6 |
| Missing | 15 | 0.6 | 6 | 1.8 |
| **Lack of money stops you buying something you need:** | | | | |
| Very or quite often | 582 | 21.8 | 83 | 24.6 |
| Sometimes | 798 | 29.9 | 134 | 39.8 |
| Hardly ever or never | 1,262 | 47.2 | 113 | 33.6 |
| Missing | 30 | 1.1 | 7 | 2.1 |
| **Lack of money stops you from seeing your friends:** | | | | |
| Very or quite often | 390 | 14.6 | 77 | 22.9 |
| Sometimes | 399 | 14.9 | 70 | 20.8 |
| Hardly ever or never | 1,841 | 68.9 | 182 | 54.0 |
| Missing | 42 | 1.6 | 8 | 2.4 |
| **Does your family have enough money to get by on?** | | | | |
| Not enough | 83 | 3.1 | 29 | 8.6 |
| Just enough | 479 | 17.9 | 175 | 51.9 |
| Enough for a few extras | 1,429 | 53.5 | 123 | 36.5 |
| More than enough | 620 | 23.2 | 7 | 2.1 |
| Missing | 61 | 2.3 | 3 | 0.9 |
| **How often do you go to school hungry?** | | | | |
| Often or always | 180 | 6.7 | 6 | 1.8 |
| Sometimes | 553 | 20.7 | 64 | 19.0 |
| Never | 1,889 | 70.7 | 264 | 78.3 |
| Missing | 50 | 1.9 | 3 | 0.9 |

The results for the GHS sample in Table 5.7 show that there are relatively few of these young people living in a jobless household (5.4 per cent), although many of them face a lack of money sometimes or frequently that prevents them from buying or doing things - 61.2 per cent report facing a shortage of money that prevents them from doing what they want and 51.7 per cent from buying something they need. However, far fewer in the GHS sample (29.5 per cent) are prevented from seeing friends by a lack of money – presumably because this often does not involve any monetary outlay (a point confirmed by the focus group findings reported in Chapter 4). Over one-fifth (21.0 per cent) of those in the GHS sample say that their family does not have enough or has just enough money to get by on, while an alarming 6.7 per cent report going to school hungry always or often and a further 20.7 per cent report going to school hungry sometimes.

The corresponding results for the TSF sample confirm that this group is, as expected, more disadvantaged on all dimensions except going to school hungry 'often or always'.[21] For this group, more than one-third (34.1 per cent) live in a jobless household and the percentages of the TSF sample constrained by a lack of money are also much higher than for the GHS sample: the three instances cited above (doing things you want; buying things you need; and seeing friends) affecting 76.6 per cent, 64.4 per cent and 43.7 per cent of TSF sample, respectively – in all cases around 15 percentage points higher than for those in the GHS sample.

Almost 9 per cent of those in the TSF sample say that their family does not have enough money to get by on (and would thus be defined as subjectively poor) and a further 51.9 per cent say that they only have just enough and are thus living on the margins of poverty. Interestingly, despite this consistent and broadly-based evidence of greater disadvantage among TSF sample, far fewer of them report going to school hungry either often or always (1.8 per cent) or sometimes (19.0 per cent) – making a total of 20.8 per cent, compared with 27.4 per cent of the GHS sample. This possibly may reflect a stronger commitment to schooling among those participating in the *Learning for Life* program, with parents as well as children determined to make the most of the opportunities that are opened by their access to, and participation in the program. However, as noted earlier, it is not possible to establish whether this difference results from participation in the program itself (a participation effect), or was a feature already present before they were selected into the program (a recruitment effect).

## 5.5 Dimensions of Well-being and Life Satisfaction

### Life satisfaction

Life satisfaction is another complex concept that spans many different dimensions of people's lives and their well-being. How these are specified and whether they are combined or kept separate can make a difference to how different groups compare and to their ranking relative to one another. So too can the weights that are applied to the different components of life satisfaction when composite measures are derived. Later, composite indicators of well-being are derived that are used to assess the status of different groups and compare these with different measures of the degrees of social disadvantage.[22]

At this stage, the goal is simply to draw on the reported survey data to compare the circumstances of those young people who responded to the two surveys. No attempt is made initially to combine the different indicators, but they are used individually to describe various dimensions of well-being among young people. Information relating to the following five dimensions of well-being is presented in this initial

21 It is possible that some students report going to school hungry because they are anticipating participating in a 'breakfast club' or something similar when they get to school. This depends on exactly how survey participants interpreted the question about going to school hungry. Another possibility is that students report going to school hungry because of body image issues or eating disorders. These factors suggest that caution should be applied when interpreting the responses to the 'going to school hungry' question.

22 Throughout this and subsequent chapters (except where otherwise stated), because the number of missing value responses is generally small, the detailed tables that follow omit all missing value responses (i.e. those who did not provide an answer to the survey question being examined) and, where relevant, derive all reported summary statistics (mean values; percentages, etc.) are based on the numbers of actual responses to each question or group of questions.

analysis: overall life satisfaction; and satisfaction with four separate dimensions of well-being - autonomy and control; contentment; safety; and connectedness. In each case, the survey responses are summarised and compared, and the general patterns are identified and analysed.[23] Information is provided on the actual questions used to generate the data so that readers can judge for themselves how meaningful the results are and what qualifications might apply in addition to those identified.

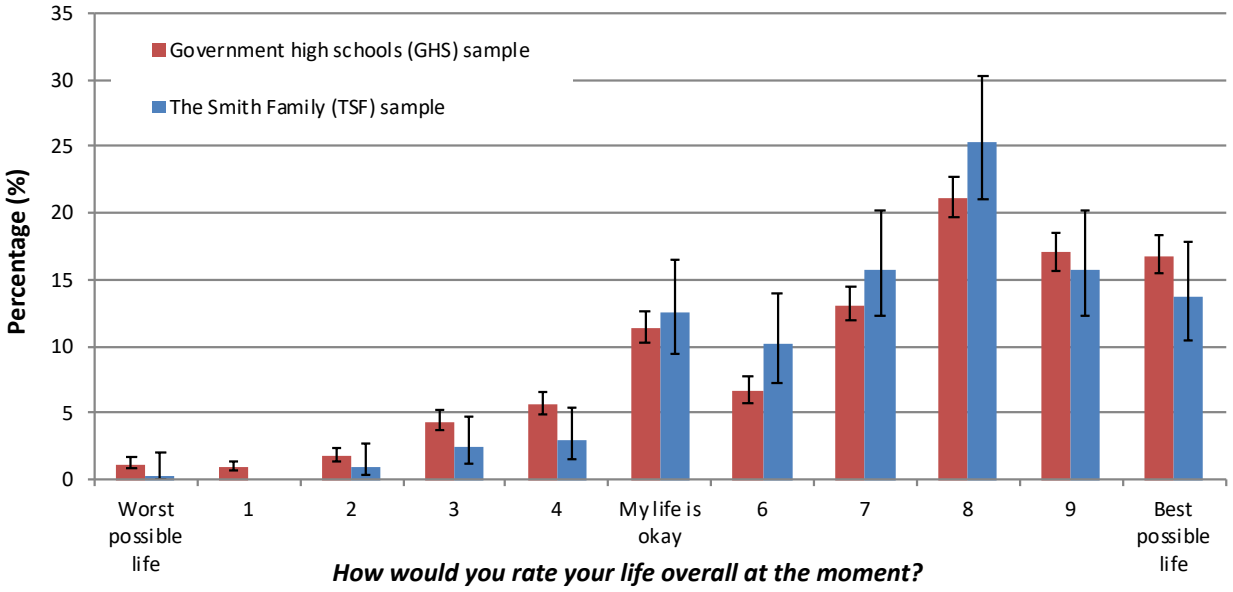
Table 5.8 presents the distributions of responses to a commonly-used survey question designed to establish the respondents' overall level of life satisfaction, while Figure 5.1 presents the same information graphically, showing the confidence intervals so that the statistical significance of the sample differences can be tested. In total around one-third (33.9 per cent) of the GHS sample and slightly less (29.5 per cent) of the TSF sample rate their life satisfaction in one of the top two classes in the scale, indicating that they are living 'the best possible life' currently. There are relatively few responses at the very bottom of the scale, with only one-in seven (13.8 per cent) of the GHS sample and even fewer (6.6 per cent) of the TSF sample rating their life satisfaction as less than 'OK'. This may reflect the common tendency in (adult) surveys that ask these kinds of questions for people to be unwilling to place themselves in either the very highest or very lowest response categories.

### Table 5.8: The Level and Distribution of Overall Life Satisfaction

| QUESTION: How would you rate your life overall at the moment? | | | | | |
|---|---|---|---|---|---|
| Response category | Description | Government high schools (GHS) Sample: | | The Smith Family (TSF) Sample: | |
| | | Number | Percentage (%) | Number | Percentage (%) |
| 0 | 'Worst possible life' | 31 | 1.2 | 1 | 0.3 |
| 1 | | 24 | 0.9 | 0 | 0.0 |
| 2 | | 46 | 1.7 | 3 | 0.9 |
| 3 | | 116 | 4.4 | 8 | 2.4 |
| 4 | | 150 | 5.6 | 10 | 3.0 |
| 5 | 'My life is OK' | 302 | 11.4 | 42 | 12.5 |
| 6 | | 177 | 6.7 | 34 | 10.1 |
| 7 | | 348 | 13.1 | 53 | 15.8 |
| 8 | | 561 | 21.1 | 85 | 25.4 |
| 9 | | 454 | 17.1 | 53 | 15.8 |
| 10 | 'Best possible life' | 446 | 16.8 | 46 | 13.7 |
| Mean response | | 7.20 | | 7.40 | |
| Total | | 2,655 | 100.0 | 335 | 100.0 |

23 Information is presented on the numbers of responses in each identified category although the associated percentage breakdowns exclude all missing values (as noted earlier). This allows the number of missing value cases to be derived.

## Figure 5.1: The Distributions of Overall Life Satisfaction in the Government High Schools and The Smith Family Samples




Overall, this initial look at the situation suggests that while the overall picture of young people's life satisfaction is a good one, there are signs that some young people do not rate their life very highly. However, this appears to be less of a tendency among those in the TSF sample who are more likely to report being very satisfied with their current life (even though none of the reported differences in the specific life satisfaction scores reported by those in the two samples are statistically significant). This is an important finding, given that the TSF sample contains a higher proportion of more disadvantaged students (as shown by some of the indicators already examined and as will be confirmed later).

The life satisfaction question discussed above was also asked recently of a nationally representative sample of students in years 4, 6 and 8 as part of the *Australian Child Well-being Project* (ACWP) described earlier (see Redmond et al., 2016). One of the goals of the ACWP was to better understand the lives and well-being of young Australians in a critical phase of their life cycle, where well-being 'was conceptualised very broadly in terms of what young people themselves think is important' (Redmond et al.,2006: i). Because the ACWP involved a national probability sample, a sampling weight could be developed to adjust for non-response at both school and participant levels so that the weighted sample was representative of the population of Years 4, 6 and 8 students (or middle year's students) across Australia, and these weighted ACWP estimates are used in the analysis that follows.

The ACWP survey included the following question:

> 'Here is a picture of a ladder. The top of the ladder "10" is the best possible life for you and the bottom "0" is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?'.

Aside from the reference to a ladder (often referred to as Cantril's ladder when used in this context; see Cantril, 1965) and the reversed ranking of response options in the surveys themselves, the ACWP and WYPN 'life satisfaction' questions are identical, and it is thus of interest to compare the patterns of responses. This is done in Table 5.9 for the only school year where this is possible (Year 8).

## Table 5.9: Comparing Life Satisfaction among Year 8 Students in New South Wales and Australia

| QUESTION: How would you rate your life overall at the moment? | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Worst possible life | | | | | | | | | | Best possible life | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total |
| NSW | 0.6 | 1.7 | 1.2 | 4.8 | 7.4 | 9.5 | 7.5 | 13.2 | 21.8 | 15.6 | 16.7 | 100.0 |
| Australia | 0.3 | 0.1 | 0.2 | 1.1 | 2.8 | 6.2 | 8.0 | 20.2 | 28.3 | 20.2 | 12.7 | 100.0 |

Sources: WYPN survey and Redmond et al., 2016: Table 12.2.

The pattern of responses derived from the two surveys is broadly similar. For example, 32.3 per cent of the (unweighted) NSW school sample and 32.9 per cent of the (weighted) Australian sample indicated that they had 'the best possible life' providing response ratings of either 9 or 10. In contrast, the proportion indicating that they had the 'worst possible life' (response ratings of 0-2) in the NSW sample (3.5 per cent) was above that for the Australian sample (0.6 per cent) and the NSW percentages exceed those for Australia in each of the 5 lowest categories.[24]

Many factors will be contributing to these differences, including differences in the coverage of the two surveys and in how the question was presented in the two surveys (as an increasing satisfaction list of options in WYPN but as a declining satisfaction ladder in ACWP). This suggests that it would not be wise to draw any conclusions from the comparisons in Table 5.9, other than that the two distributions are similar.

Table 5.10 and Figure 5.2 compare responses to a question asking about the extent of autonomy that young people have in their lives, measured by the degree of choice and control that they feel that they have over their lives and the things that happen to them. This question was included in the WYPN survey and was taken from the surveys used in recent SPRC studies of adult deprivation and exclusion (Saunders, Naidoo and Griffiths, 2007; Saunders and Wong, 2012). However, it is important to point out that the meaning of concepts like 'autonomy' and 'control' may be quite different when applied to young people still at school than to adults who are above voting age (the criteria used to recruit adults into the SPRC surveys). Caution should thus be applied to interpreting these findings and it may be wise to consider using a question that is specifically geared to young people in future surveys of this kind.

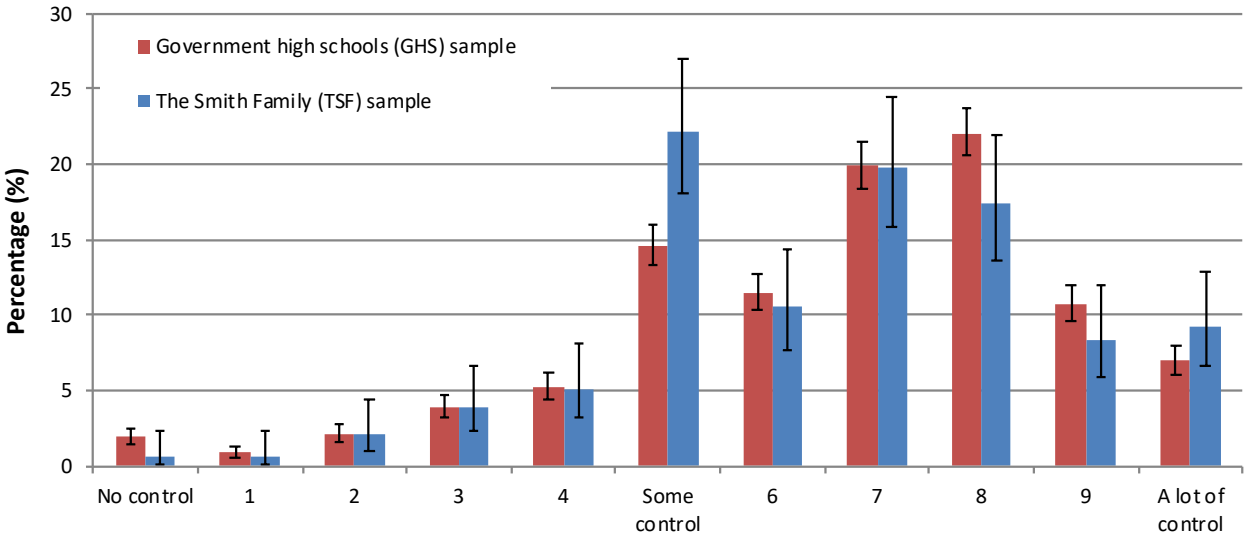
## Table 5.10: Autonomy and Control Over One's Life

| QUESTION: How much control do you believe you have over your own life and the things that happen to you? | | | | | |
|---|---|---|---|---|---|
| Response category | Description | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
| | | Number | Percentage (%) | Number | Percentage (%) |
| 0 | 'No control' | 52 | 2.0 | 2 | 0.6 |
| 1 | | 24 | 0.9 | 2 | 0.6 |
| 2 | | 56 | 2.1 | 7 | 2.1 |
| 3 | | 102 | 3.8 | 13 | 3.9 |
| 4 | | 139 | 5.2 | 17 | 5.1 |
| 5 | 'Some control' | 388 | 14.6 | 74 | 22.2 |
| 6 | | 305 | 11.5 | 35 | 10.5 |
| 7 | | 527 | 19.9 | 66 | 19.8 |
| 8 | | 585 | 22.1 | 58 | 17.4 |
| 9 | 'A lot of | 286 | 10.8 | 28 | 8.4 |
| 10 | control' | 186 | 7.0 | 31 | 9.3 |
| Mean response | | | 6.63 | | 6.57 |
| Total | | 2,650 | 100.0 | 333 | 100.0 |

24 These latter differences may be explained by the slightly older ages of the NSW sample than the ACWP sample.

This point aside, the differences in response between the GHS and the TSF samples (that are equally affected by any weaknesses in the survey question) are small and not statistically significant. There is, however, more of a tendency for the responses to bunch in the middle than is the case for the life satisfaction question analysed earlier, with 8.8 per cent of the GHS sample and 7.2 per cent of the TSF sample reporting having no or low control (a rating score of 3 or less) and around 18 per cent of both samples reporting having a lot of control (a rating of 9 or 10). Overall, the majority (around three-quarters) of both samples indicate that they have 'some control' over their lives (scores of between 4 and 8 on the autonomy scale).

## Figure 5.2: Autonomy and Control Over One's Life in the Government High Schools and The Smith Family Samples




***How much control do you believe you have over your own life and the things that happen to you?***

Table 5.11 compares the patterns of adult and young people responses to the autonomy and control question, drawing on responses produced by the 2010 *Poverty and Social Exclusion Survey in Modern Australia* (PEMA) and WYPN surveys, respectively. In addition to the issues already mentioned, the adult PEMA survey provided a slightly different response scale (ranging between 1 and 10) from the WYPN survey (ranging between 0 to 10). The difference is slight and should not markedly affect the comparisons. Table 5.11 indicates that the two distributions are very similar, and although young people express a slightly lower level of control over their lives than adults (understandably given that the restrictions they face from parents and teachers) the differences are not great enough to suggest that young people do not already feel in control of those aspects of their lives that matter to them.

## Table 5.11: Comparing NSW Young People's and Australian Adult Views on Autonomy and Control

| QUESTION: How much control do you believe you have over your own life and the things that happen to you? | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No control | | | | | Some control | | | | | A lot of control | Total |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| NSW Young People (GHS sample) | 2.0 | 0.9 | 2.1 | 3.8 | 5.2 | 14.6 | 11.5 | 19.9 | 22.1 | 10.8 | 7.0 | 100.0 |
| Australian Adults | - | 0.7 | 0.9 | 2.1 | 5.0 | 12.8 | 13.3 | 19.9 | 26.6 | 11.6 | 7.1 | 100.0 |

Sources: WYPN survey and PEMA survey.

Table 5.12 and Figures 5.3 to 5.6 examine the responses to a series of questions about different components of young people's contentment with their lives. In each case, the WYPN survey asked participants to indicate the degree of their agreement or disagreement with a series of statements and Table 5.12 (and the following two tables) show the breakdown of responses as before. In addition, for each component a mean score has been derived by assigning values of 0 (for 'Strongly disagree' response) through to 4 (for 'Strongly agree' responses) and averaging the responses across groups. It should be noted that the mean scores have all been calculated so that a higher mean score is indicative of a more positive response and higher level of well-being.

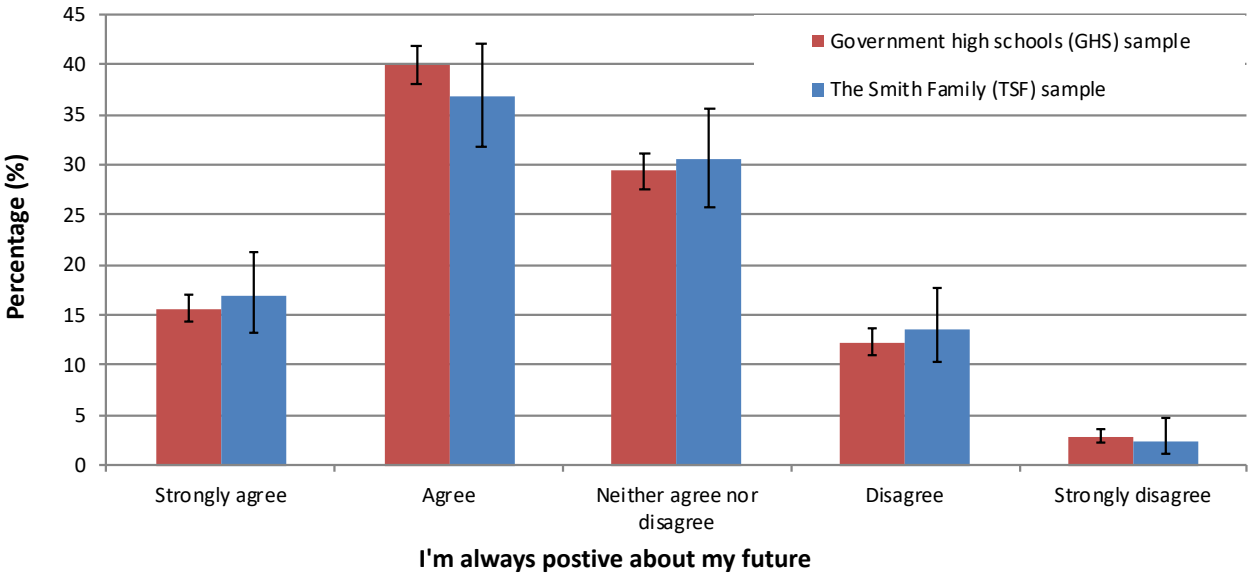
## Table 5.12: Dimensions of Contentment

| Dimension | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **Outlook: I'm always positive about my future** | | | | |
| Strongly agree | 412 | 15.6 | 56 | 16.9 |
| Agree | 1,056 | 40.0 | 122 | 36.7 |
| Neither agree nor disagree | 775 | 29.3 | 101 | 30.4 |
| Disagree | 324 | 12.3 | 45 | 13.6 |
| Strongly disagree | 76 | 2.9 | 8 | 2.4 |
| Mean score | 2.53 | | 2.52 | |
| **Comfort at home: My home is comfortable** | | | | |
| Strongly agree | 1,527 | 57.8 | 162 | 48.4 |
| Agree | 916 | 34.7 | 146 | 43.6 |
| Neither agree nor disagree | 131 | 5.0 | 19 | 5.7 |
| Disagree | 35 | 1.3 | 7 | 2.1 |
| Strongly disagree | 32 | 1.2 | 1 | 0.3 |
| Mean score | 3.47 | | 3.38 | |
| **Family life: My family gets along well together** | | | | |
| Strongly agree | 938 | 35.7 | 94 | 28.1 |
| Agree | 927 | 35.3 | 138 | 41.2 |
| Neither agree nor disagree | 497 | 18.9 | 81 | 24.2 |
| Disagree | 187 | 7.1 | 16 | 4.8 |
| Strongly disagree | 80 | 3.0 | 6 | 1.8 |
| Mean score | 2.94 | | 2.89 | |
| **Schooling: My school is a place that I enjoy being** | | | | |
| Strongly agree | 405 | 15.5 | 62 | 18.7 |
| Agree | 809 | 31.0 | 124 | 37.3 |
| Neither agree nor disagree | 794 | 30.4 | 87 | 26.2 |
| Disagree | 305 | 11.7 | 45 | 13.6 |
| Strongly disagree | 298 | 11.4 | 14 | 4.2 |
| Mean score | 1.97 | | 2.53 | |

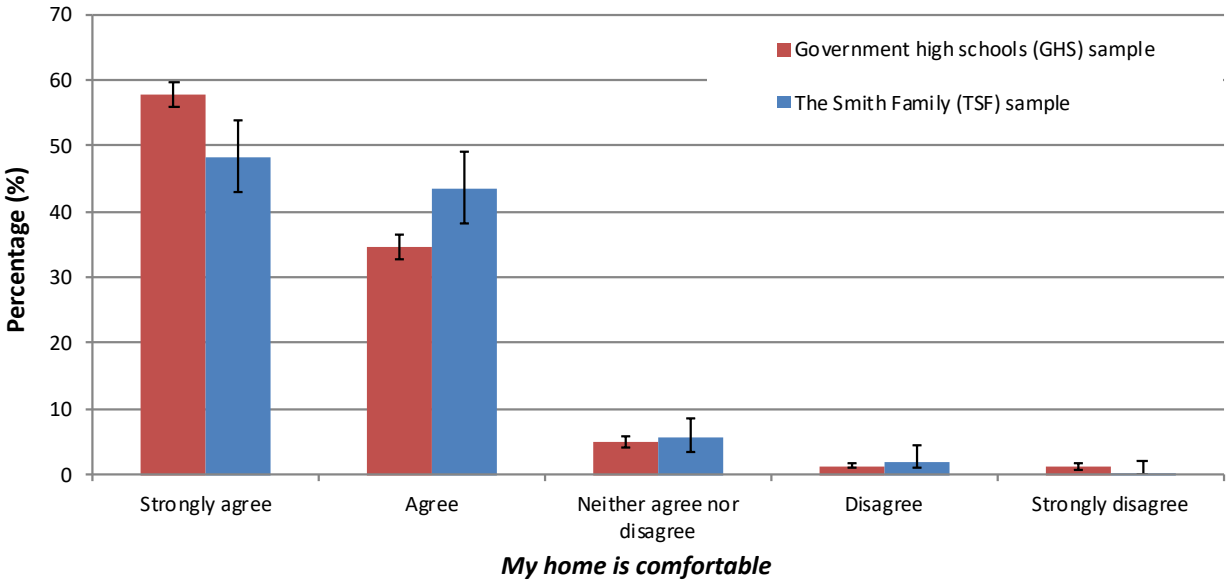
Across all four dimensions of contentment, the responses reveal a positive overall picture for both the GHS and TSF samples. For example, the percentages who agree or strongly agree that they are positive about their future, that their home is comfortable, that their family gets along well and that they enjoy being at school are, for the GHS sample: 55.6 per cent, 92.5 per cent, 70.0 per cent and 46.5 per cent, respectively. The corresponding figures for the TSF sample are very similar: 53.6 per cent, 92.0 per cent, 69.3 per cent and 56.0 per cent, respectively. Only once (in relation to the 'enjoying being at school' variable) does the combined disagree percentage exceed 20 per cent for the GHS sample although even here the corresponding for the TSF sample is lower, at 17.8 per cent.

Aside from this, the response patterns for both samples indicate that most young people have comfortable homes, enjoy their families and are optimistic about their future. There is less strong agreement among the TSF sample with the 'home comfort' and 'family gets on' dimensions – in each case balanced by increased support for the 'agree' option. Interestingly, there is a higher combined level of agreement with the 'enjoy being at school' dimension among the TSF sample, where the combined percentage of 56.0 per cent is well above the corresponding figure of 46.5 per cent among the GHS sample.

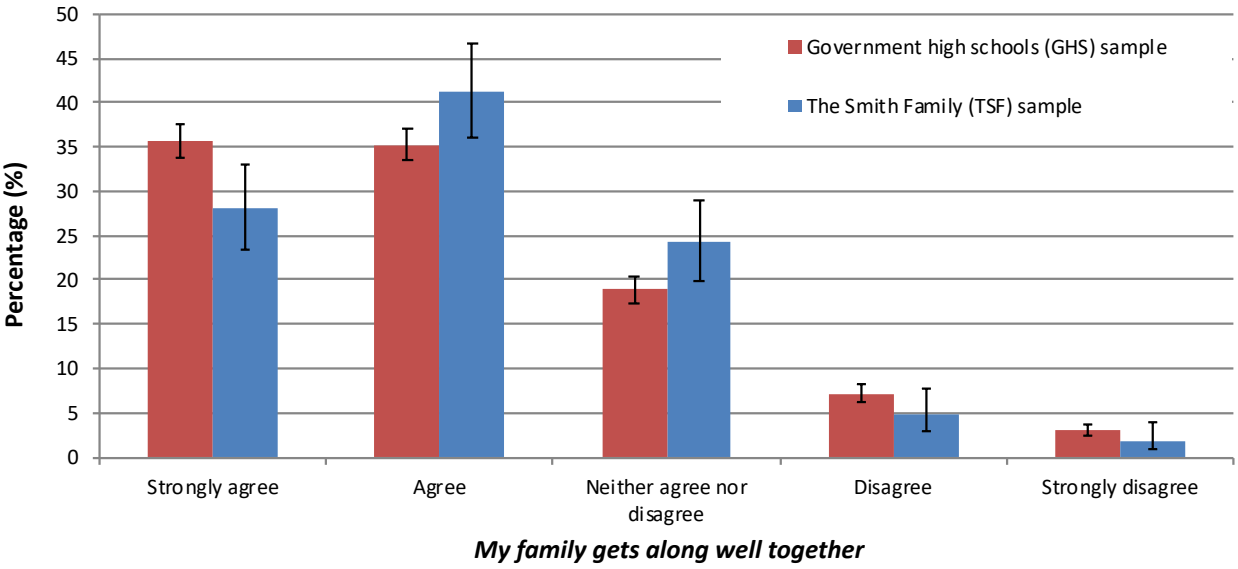
## Figure 5.3: Positive Feelings about the Future in the Government High Schools and The Smith Family Samples



## Figure 5.4: Home Comfort in the Government High Schools and The Smith Family Samples




## Figure 5.5: Family Functioning in the Government High Schools and The Smith Family Samples



## Figure 5.6: Enjoyment at School in the Government High Schools and The Smith Family Samples

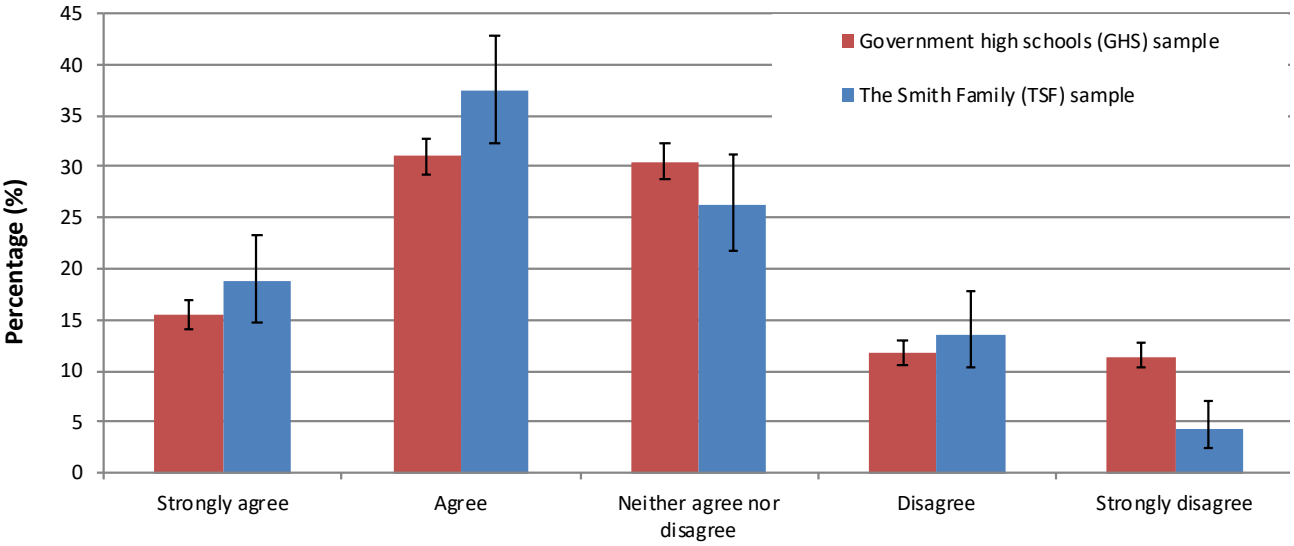
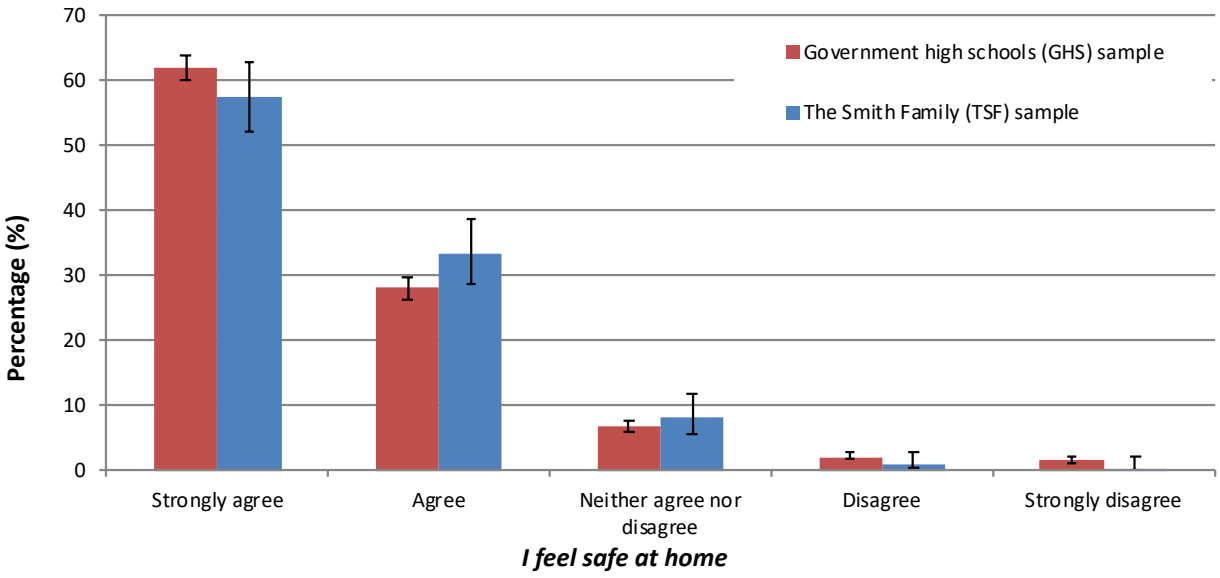



Table 5.13 and Figures 5.7 to 5.9 report results for three dimensions of safety, differentiated by location: safety at home, safety when with friends and safety at school. The overall picture is again positive, particularly in relation to safety at home and with friends. There is less combined support for agreeing with feeling safe and secure at school, but even here the combined 'agree' option represents a strong majority, accounting for 61.3 per cent of responses in the GHS sample and 65.4 per cent of responses in the TSF sample. There are very low levels of combined disagreement (below 4 per cent) with either of the home or friend dimensions, but this rises to 13.8 per cent (GHS sample) and 10.5 per cent (TSF sample), again suggesting that not all respondents regard school as a place they feel safe in – perhaps for fear of bullying (which was shown to be an important issue for many children in the ACWP survey). The combined level of agreement with feeling safe and secure at school is slightly higher among the TSF sample (65.4 per cent) than among the GHS sample (61.3 per cent).

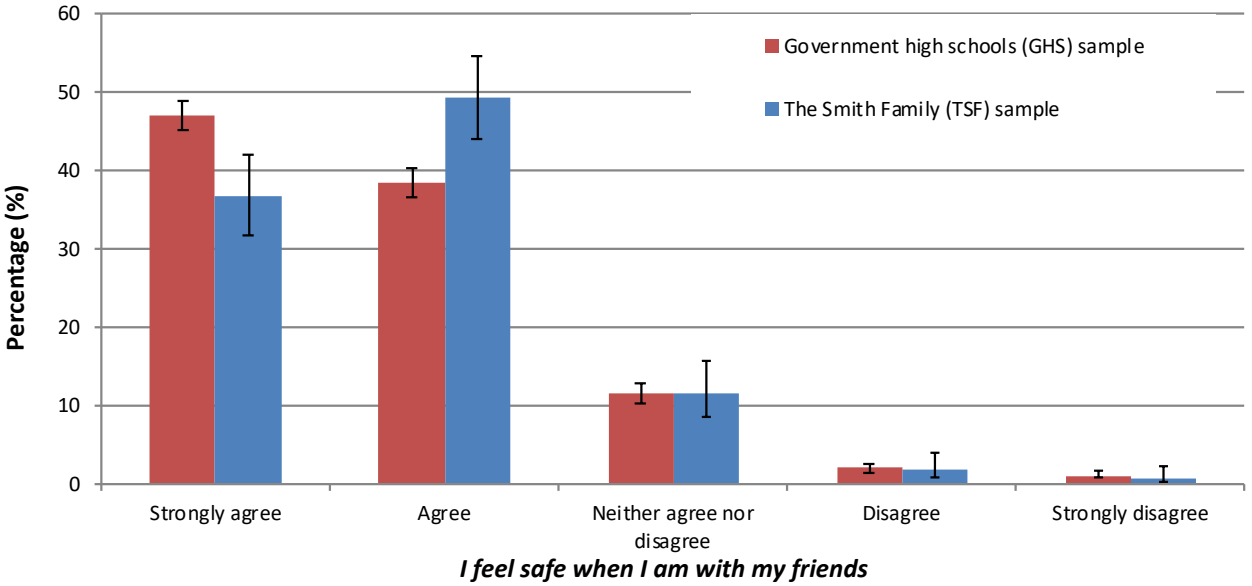
## Table 5.13: Aspects of Safety

| Dimension | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **At home: I feel safe at home** | | | | |
| Strongly agree | 1,632 | 61.9 | 191 | 57.4 |
| Agree | 739 | 28.0 | 111 | 33.3 |
| Neither agree nor disagree | 174 | 6.6 | 27 | 8.1 |
| Disagree | 55 | 2.1 | 3 | 0.9 |
| Strongly disagree | 38 | 1.4 | 1 | 0.3 |
| Mean score | 3.47 | | 3.47 | |
| **With friends: I feel safe when I am with my friends** | | | | |
| Strongly agree | 1,227 | 47.0 | 123 | 36.7 |
| Agree | 1,005 | 38.5 | 165 | 49.3 |
| Neither agree nor disagree | 299 | 11.4 | 39 | 11.6 |
| Disagree | 52 | 2.0 | 6 | 1.8 |
| Strongly disagree | 29 | 1.1 | 2 | 0.6 |
| Mean score | 3.28 | | 3.20 | |
| **At school: My school is a place where I feel safe and secure** | | | | |
| Strongly agree | 557 | 21.4 | 77 | 23.2 |
| Agree | 1,037 | 39.9 | 140 | 42.2 |
| Neither agree nor disagree | 647 | 24.9 | 80 | 24.1 |
| Disagree | 192 | 7.4 | 24 | 7.2 |
| Strongly disagree | 167 | 6.4 | 11 | 3.3 |
| Mean score | 2.63 | | 2.75 | |

## Figure 5.7: Safety at Home in the Government High Schools and The Smith Family Samples



## Figure 5.8: Safety with Friends in the Government High Schools and The Smith Family Samples




## Figure 5.9: Safety at School in the Government High Schools and The Smith Family Samples

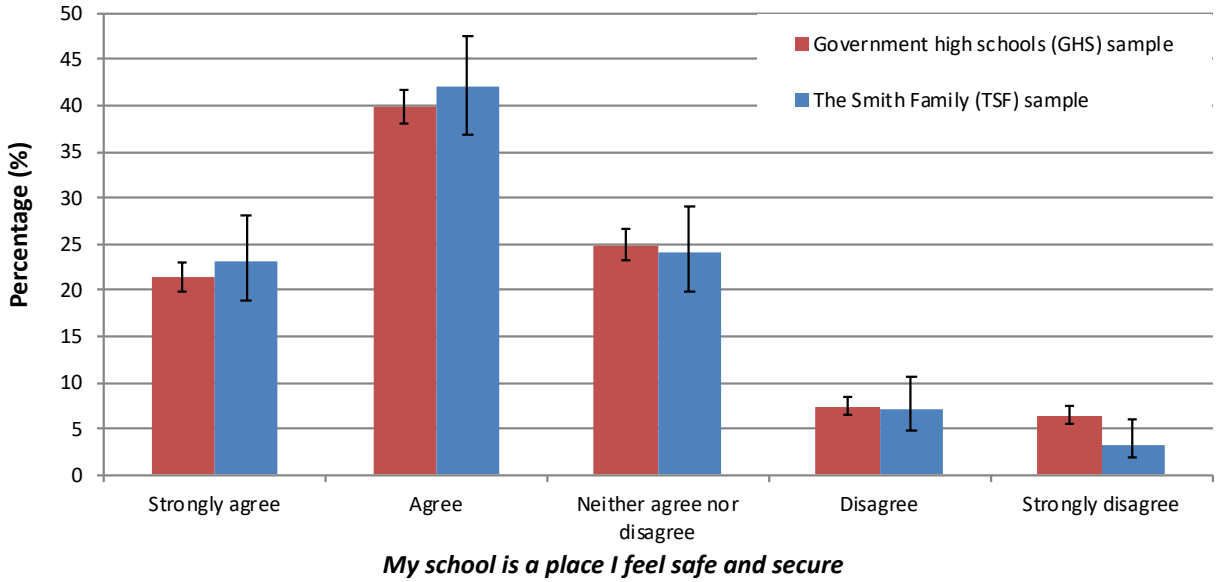
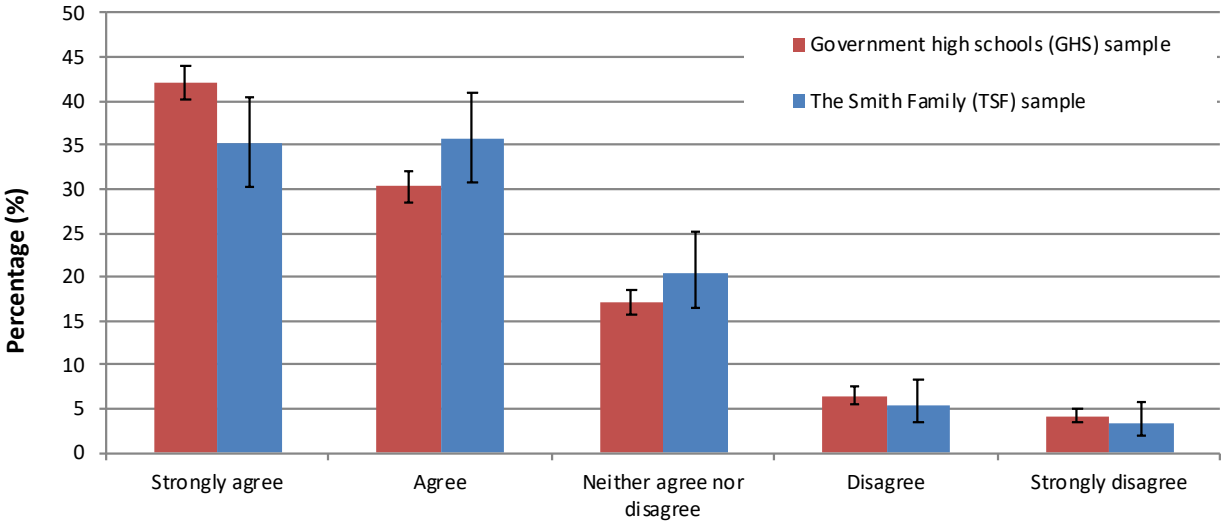



Table 5.14 and Figures 5.10 to 5.12 examine patterns of agreement and disagreement with three dimensions of connectedness: with parents/carers; with friends; and in a school setting. Again, the overall picture is positive, with a majority of respondents in both samples indicating agreement with all three statements about the degree to which they are connected with others and/or have access to support networks. The level of support for the 'with parents' and 'with friends' dimensions are higher among the GHS sample than among the TSF sample, although the reverse pattern is apparent in relation to 'feeling part of the school community'. Here the combined level of agreement is higher (56.3 per cent) among the TSF sample than among the GHS sample (49.5 per cent).

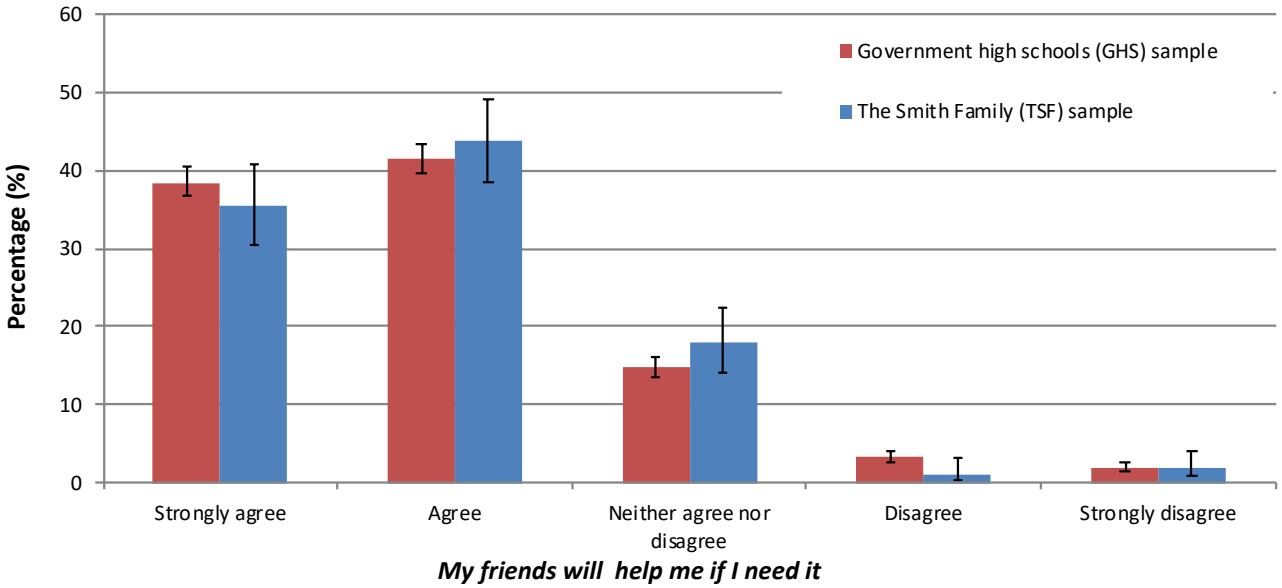
## Table 5.14: Connectedness and Support Networks

| Dimension | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Percentage (%) | Number | Percentage (%) |
| **With family: My parents/carers and I do fun things together** | | | | |
| Strongly agree | 1,102 | 42.0 | 118 | 35.1 |
| Agree | 794 | 30.3 | 120 | 35.7 |
| Neither agree nor disagree | 449 | 17.1 | 69 | 20.5 |
| Disagree | 169 | 6.4 | 18 | 5.4 |
| Strongly disagree | 108 | 4.1 | 11 | 3.3 |
| Mean score | 3.00 | | 2.94 | |
| **With friends: My friends will help me if I need it** | | | | |
| Strongly agree | 1,004 | 38.5 | 118 | 35.3 |
| Agree | 1,081 | 41.4 | 146 | 43.7 |
| Neither agree nor disagree | 387 | 14.8 | 60 | 18.0 |
| Disagree | 87 | 3.3 | 4 | 1.2 |
| Strongly disagree | 52 | 2.0 | 6 | 1.8 |
| Mean score | 3.11 | | 3.09 | |
| **At school: I feel part of the school community** | | | | |
| Strongly agree | 415 | 15.9 | 63 | 19.0 |
| Agree | 874 | 33.6 | 124 | 37.3 |
| Neither agree nor disagree | 793 | 30.4 | 94 | 28.3 |
| Disagree | 280 | 10.7 | 33 | 9.9 |
| Strongly disagree | 243 | 9.3 | 18 | 5.4 |
| Mean score | 2.36 | | 2.54 | |

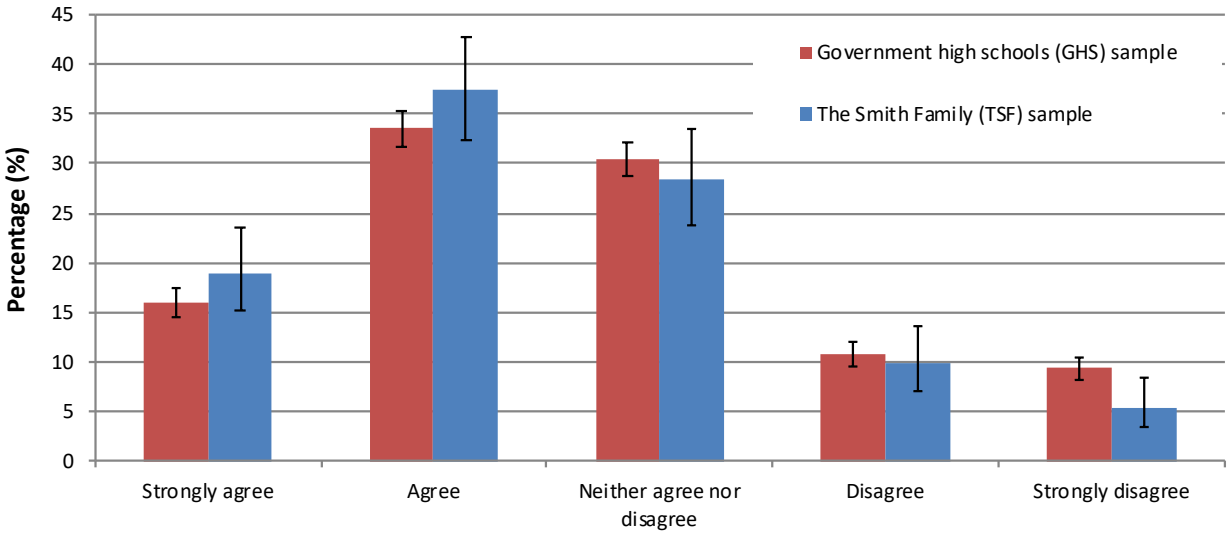
## Figure 5.10: Doing Fun Things with Parents/Carers in the Government High Schools and The Smith Family Samples




## Figure 5.11: Help from Friends when Needed in the Government High Schools and The Smith Family Samples



### Figure 5.12: Feeling Part of the School Community in the Government High Schools and The Smith Family Samples




The general patterns highlighted in the above discussion is given a quantitative dimension when the mean scores are compared across the different domains of well-being, across the different the dimensions within each domain and between the GHS and TSF samples. The two highest mean scores for both samples relate to home: 'my home is comfortable' and 'I feel safe at home', while the two lowest mean scores both relate to school: 'my school is a place I enjoy being' and 'I feel part of the school community'. But even here, the absolute mean values of between 2.0 and 2.5 indicate that the level of disagreement with the identified dimensions is not very high.

The overall impression is thus one of a high level of well-being across most dimensions of their lives, at home, with family, with friends and (with some exceptions) at school. The next step involves constructing composite indices of well-being that combine the dimensions examined separately here and (in the following chapter) to examine how these composite indices relate to the level and forms of deprivation and social disadvantage that young people experience.

## 5.6 Composite Index Construction

Two composite indices have been constructed, relating to overall happiness and overall attitudes to schooling. Both indices embody a large amount of information and provide important summary information on key aspects of young people's well-being. Both are used later to explore how they are associated with other variables relating to the overall circumstances – objective (as reported) and subjective – of young people included in the GHS and TSF samples.

## Overall happiness

The WYPN survey asked young people to indicate how happy they are in five dimensions of their lives, relating to: the things they have; the things they do; their home; the people they live with; and their friends. In each case, a response scale was provided ranging from 0 to 10 with scores of 0 and 1 indicating 'very unhappy', scores of 4-6 indicating 'somewhat happy' and scores of 10 'very happy'. Each answer was assigned the relevant response score, and these were summed across the five dimensions for each sample respondent to derive a total score that ranges from 0 to 50. This aggregate scale was then re-scaled into a compressed (0=10) scale or Overall Happiness Index (OHI) as follows:

Aggregate scale value 0-4, OHI = 0

Aggregate scale value 5-9, OHI = 1

Aggregate scale value 10-14, OHI = 2

Aggregate scale value 15-18, OHI = 3

Aggregate scale value 19-23, OHI = 4

Aggregate scale value 24-27, OHI = 5

Aggregate scale value 28-32, OHI = 6

Aggregate scale value 33-36, OHI = 7

Aggregate scale value 37-41, OHI = 8

Aggregate scale value 42-45, OHI = 9

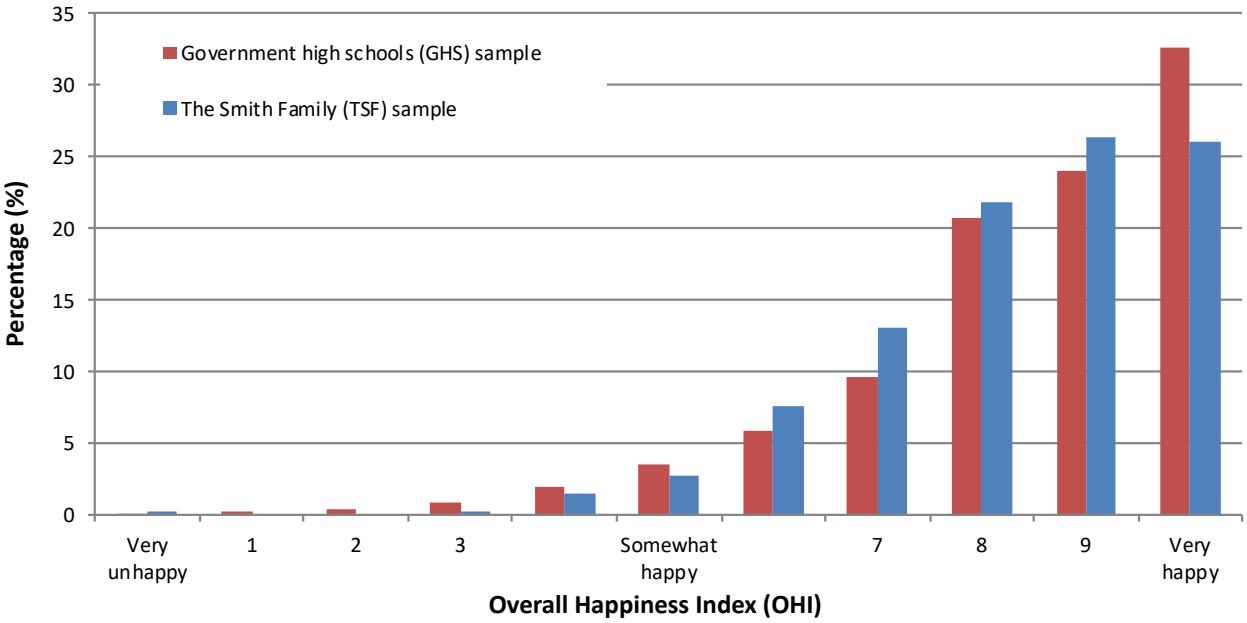
Aggregate scale value 46-50, OHI = 10

The reliability of scales like this can be assessed using the Cronbach alpha statistic, which measures how well the different components of the index are related. The Cronbach alpha varies between 0 and 1 with a higher value indicating a closer association. In the social sciences a value of 0.70 or greater is generally considered to indicate that the index is reliable. For the OHI described above, the Cronbach alpha value is 0.83 for the GHS sample and has the same value for the combined GHS and TSF samples.[25]

It is common for people to indicate that they are happy on most dimensions of their lives when asked in surveys (or at least be reluctant to indicate that they are unhappy), and this is true for those young people who responded to the WYPN survey. As Figure 5.13 indicates, this is also the case for the composite OHI, in which these individual tendencies tend to accumulate and reinforce each other.

25 These estimates are based on restricted samples that exclude any respondents who have one or more missing values for the individual 'happiness' variables.

## Figure 5.13: The Distribution of the Overall Happiness Index (OHI) in the Government High Schools and The Smith Family Samples




In order to validate the derived composite OHI scale, it was compared with the life satisfaction variable described earlier, in which people were asked to rate their 'life overall at the moment' using a scale from 0 -10 where 0-2 represents the 'worst possible life', 4-6 'my life is OK' and 9-10 the 'best possible life'. Table 5.15 shows the mean values of OHI for those who recorded each score on the life satisfaction question for both samples.

One would expect to find that those with the higher levels of happiness across the different dimensions also report higher levels of life satisfaction and this is indeed the case. For example, the mean life satisfaction score of those in the GHS sample with an OHI score of 8 is 6.68, compared with 3.60 for those with an OHI of 4. Both OHI values are slightly higher among the TSF sample but the relativity between them is similar. These results thus suggest that the OHI scale provides a reliable, robust and meaningful measure of the degree to which young people are content with the different aspects of their lives.

## Table 5.15: Mean Levels of Life Satisfaction by Composite Overall Happiness Index (OHI) Values

| OHI value | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Mean life satisfaction score | Number | Mean life satisfaction score |
| 0 – Very unhappy | 3 | 0.00 | 1 | 0.00 |
| 1 | 4 | 3.75 | 0 | - |
| 2 | 9 | 1.78 | 0 | - |
| 3 | 22 | 2.77 | 1 | 2.00 |
| 4 | 52 | 3.60 | 5 | 3.80 |
| 5 | 90 | 4.23 | 9 | 4.33 |
| 6 | 154 | 4.53 | 25 | 5.68 |
| 7 | 249 | 5.69 | 43 | 6.65 |
| 8 | 539 | 6.68 | 72 | 7.01 |
| 9 | 622 | 7.76 | 87 | 7.86 |
| 10 – Very happy | 844 | 8.79 | 86 | 8.67 |
| Total | 2,588 | 7.20 | 329 | 7.36 |
| Missing values | 84 | - | 8 | - |

## Attitudes to schooling

The second composite index relates to overall attitudes to, and general satisfaction with schooling. The attitudes to schooling Index (ASI) is based on responses to the following five WYPN questions:

My school is a place where…

- I feel happy
- I like to go each day
- I feel safe and secure
- I get enjoyment from being there
- I like learning
- I feel part of the school community

In each case, survey participants were asked to indicate which of the following best describes their degree of agreement with each statement: strongly agree; agree; neither agree nor disagree; disagree; and strongly disagree. These responses were assigned scores of 4, 3, 2, 1 and 0 and these scores were then aggregated across the six dimensions to derive an aggregate score that ranges between 0 and 24. It should be noted that a higher score on the ASI implies greater agreement with the positive statements about schooling, so a higher ASI value implies a more positive overall attitude to school and aspects of the schooling experience.

The composite Attitudes to Schooling Index (ASI) was then derived from the aggregate scores as follows:

Aggregate scale 0-3, ASI = 0

Aggregate scale 4-5, ASI = 1

Aggregate scale 6-7, ASI = 2

Aggregate scale 8-9, ASI = 3

Aggregate scale 10-11, ASI = 4

Aggregate scale 12-13, ASI = 5

Aggregate scale 14-15, ASI = 6

Aggregate scale 16-17, ASI = 7

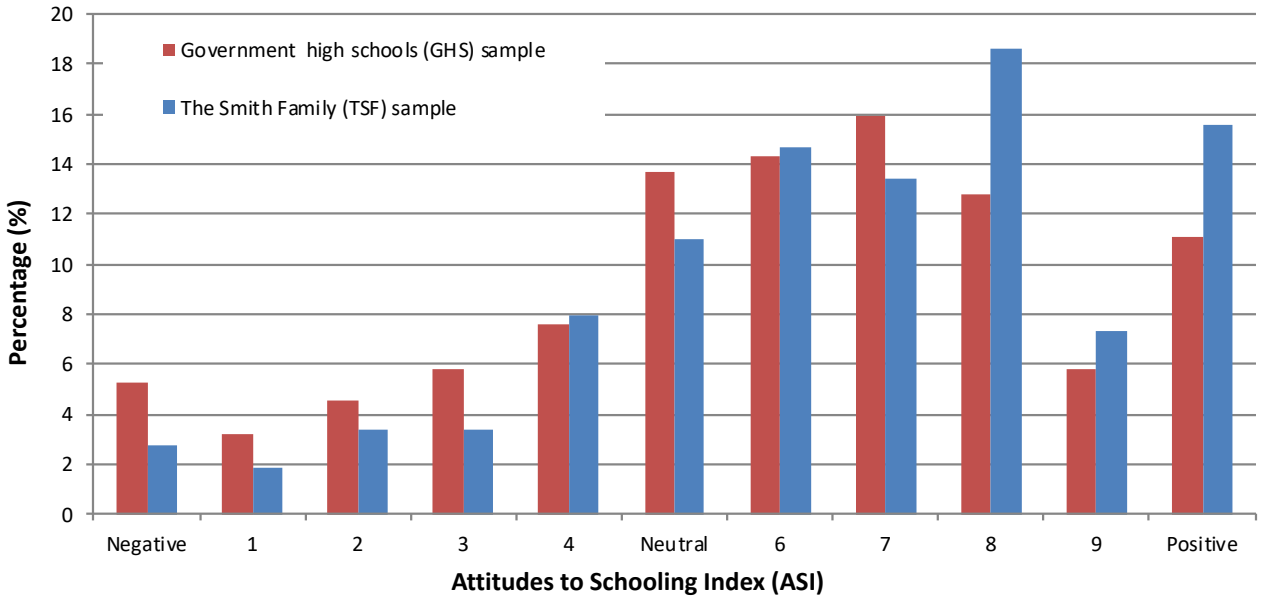
Aggregate scale 18-19, ASI = 8

Aggregate scale 20-21, ASI = 9

Aggregate scale 22-24, ASI = 10

Applying the same treatment of missing values as before, the Cronbach alpha for the ASI composite scale is equal to 0.91 for the GHS sample (and slightly higher if both samples are combined), which is well above the acceptability benchmark value of 0.70. In this instance, however, the scores are more evenly dispersed across the scale than is the case for the OHI, as Figure 5.14 indicates. This is not surprising given that the attitudes to the individual elements of schooling are themselves more widely dispersed than the happiness variables that are used to construct OHI. The happiness variables also used a wider 0-10 scale than the more compress scale of 0-4 used in the schooling variables.

## Figure 5.14: The Distribution of Attitudes to Schooling Index (ASI) in the Government High Schools and The Smith Family Samples



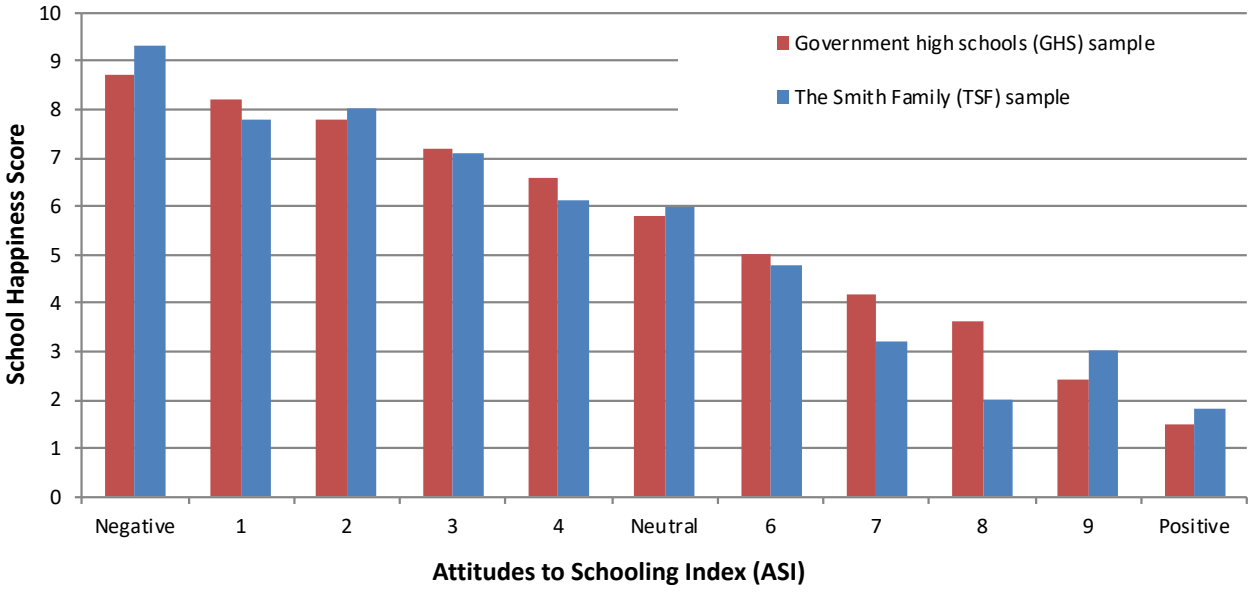

The other striking feature of Figure 5.14 is that attitudes to schooling are generally more positive among the TSF sample than the GHS sample (as can be seen by the higher red bars at the left-hand side of Figure 5.14 and the higher blue bars at the right-hand side). This is consistent with some of the findings presented earlier and although should be treated with caution as already noted, is a feature of the survey results that is of interest given the goals of the *Learning for Life* program.

In order to validate the ASI, it was compared with responses to a survey question that asked 'Overall, how happy are you with your school?'. The results of this comparison are presented in Table 5.16 and illustrated in Figure 5.15. As can be seen, there is a strong positive relation between reported levels of school happiness and the derived values of the composite Attitudes to Schooling index (ASI). As with the earlier OHI, the composite ASI is capturing what is intended: the degree to which the WYPN survey respondents have positive attitudes to different dimensions of their school and related schooling experience.

## Table 5.16: Mean Levels of Reported School Happiness by the Composite Attitudes to Schooling Index (ASI) Values

| ASI | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Number | Mean school happiness score | Number | Mean school happiness score |
| 0 – Negative | 103 | 8.7 | 6 | 9.3 |
| 1 | 85 | 8.2 | 4 | 7.8 |
| 2 | 89 | 7.8 | 12 | 8.0 |
| 3 | 130 | 7.2 | 9 | 7.1 |
| 4 | 172 | 6.6 | 17 | 6.1 |
| 5 – Neutral | 290 | 5.8 | 34 | 6.0 |
| 6 | 319 | 5.0 | 27 | 4.8 |
| 7 | 432 | 4.2 | 62 | 3.2 |
| 8 | 422 | 3.6 | 63 | 2.0 |
| 9 | 166 | 2.4 | 30 | 3.0 |
| 10 – Positive | 356 | 1.5 | 62 | 1.8 |
| Total | 2,564 | 6.5 | 326 | 7.0 |
| Missing values | 108 | | 11 | |

## Figure 5.15: Mean Levels of Reported School Happiness by the Composite Attitudes to Schooling Index (ASI) Values



## 5.7 Summary and Conclusions

This chapter has presented a range of results that highlight some of the key features of the findings from the WYPN survey. It provides a useful introduction to the contents of the survey itself but also presents an initial picture of the circumstances of young people in the two surveys. It is important to emphasise the point made earlier that because of how they were recruited, the two samples are not fully representative of either all NSW government high school students or of all participants in The Smith Family's *Learning for Life* program. However, most of the comparisons between the survey data and relevant population-wide data suggest that most of the survey findings are likely to apply more generally.

Attention has focused on the characteristics of the two samples – what kinds of young people they contain – and how they differ in terms of attributes like age, gender, subjective health status and location as well as attitudes to a range of factors that are known to influence well-being and in terms of reported levels of satisfaction with a number of domains of their lives. The results have been presented for a range of measures and indicators, beginning with those that are related to socioeconomic status and poverty – both of which are important, and whose relation to the new indicators developed below is examined in detail later.

This was followed by considering five key aspects of well-being, as expressed by young people through the WYPN survey: life satisfaction; autonomy and control; contentment; safety and connectedness. These findings are again all of interest because they provide important signposts of the degree to which the young people sampled are coping overall with their lives, have control over their future and have access to the kinds of environments and networks of support that can help them to live a life that is free from threat and exclusion.

Many of the findings indicate that the differences between the GHS and TSF samples are generally small and in the majority of cases, not statistically significant. Those young people who are participating in the *Learning for Life* program may have been chosen because they were financially disadvantaged, but this is not apparent from most of the results presented in this chapter. This may be a consequence of the nature of the variables examined so far, and this possibility is addressed in the next chapter, where a new indicator of deprivation is developed and compared between the two samples. Two important differences that are apparent from the results presented so far are the higher levels of well-being and the more positive attitude to the demands of schooling among those young people who are participating in the Smith Family's *Learning for Life* program.

Finally, these indicators are combined into two broad composite indices – one of overall happiness and the other of attitudes to school and schooling. These composite indicators will be used later to examine in detail the extent to which social disadvantage is associated with differences in these key areas. Through such analysis, it is possible to begin to highlight the adverse effects of social disadvantage on the outcomes that young people achieve and the attitudes that shape their behaviour. This in turn makes it possible to seek to combat these negative effects through appropriate interventions across the range of domains that constitute the life experiences of young people: in the family; in the home, with friends, in the community; and in school.

# 6 Measuring Child Deprivation and Index Development

## 6.1 Introduction

The limitations of applying a conventional, income-based poverty line approach to measure poverty among children and young people have been outlined in Chapter 2, which also describes the logic and methodology of the deprivation approach. Application of that approach is now widely referred to as the 'consensual approach', reflecting its reliance on the views of a majority in the community to identify which items are identified as essential or necessary (see Nandy and Main, 2015). Following Mack and Lansley (1985), the consensual approach defines poverty as 'an enforced lack of socially perceived necessities', and is now widely used to estimate poverty, defined as deprivation.

Most importantly in the current context, the consensus that underlies the approach can apply equally to children as to adults - in terms of the items seen by each group as essential for everyone in their group. The children's rights movement and the new global child poverty reduction agenda described earlier suggest that when applying the method to children, the views on which it is based should be those of children themselves not on adult views about what children need and have. Existing studies based on these insights have demonstrated that the method can be applied to children and young people to derive estimates of deprivation (and poverty) that are based on their views of which items are essential and reports of whether or not people have them (Main and Pople, 2011; Main and Bradshaw, 2012; Main, 2013, 2014). The resulting estimates have increased credibility precisely because they directly reflect children's own views and experiences and are not based on data reported by and relevant to, adults.

This chapter reports the findings from the first attempt to apply the consensual approach to children and young people in Australia.

## 6.2 An Australian Application of the Consensual Approach

The underlying logic of the deprivation/consensual approach as applied to children is illustrated in Figure 2.2 which replicates the adult approach (shown in Figure 2.1) except that the question on a lack of affordability is replaced (following Main, 2013) by asking if essential items foregone are wanted. This question makes more conceptual sense as a way of identifying deprivation among children (where the extent and consequences of resource constraints are not within their immediate control) and is also one that is able to be implemented in practice. From a child's perspective, deprivation means being denied access to things that all young people should have for any reason, not just because of a lack of income (although this is likely to be the main factor in many instances).

Although most of the initial groundwork that led to the consensual approach took place in the UK, quickly spreading to other European countries, Australia has been a laggard but is now catching up on both the application of the deprivation approach and on the refinements needed to apply it to measure child poverty. The current study draws heavily on the insights provided by these previous Australian studies and it is of interest to briefly review what they did and found.

An initial exploration of a child-focused deprivation approach formed part of the ACWP discussed earlier (see Redmond et al., 2016: Chapter 13). The ACWP survey included five questions developed from the work of Main (2013) that relate specifically to the living standards of children and drew on feedback provided by interviews conducted with children. A five-item personal material wellbeing scale was derived by asking:

Here is a list of items that some young people of your age have. Please tell us whether you have each item on the list or whether you'd like to have it.

The items included were: an iPod or other personal music player; some money that you can save each month, either in a bank or at home; the right kind of clothes to fit in with other people your age; my family has enough money for me to go on a school camp; and your own mobile phone. For each item, respondents were asked to indicate either: (1) 'I have this', (2) 'I don't have this but would like it', or (3) 'I don't have this and I don't want or need it'. The results (shown in Table 6.1) represent the first attempt to apply the consensual approach to children and young people in the Australian context and are of considerable interest.

### Table 6.1: Percentages of Children who are Deprived of Child Items and the Incidence of Multiple Deprivation by School Year (unweighted sample size; weighted percentages)

| Categories | Years 4 & 6 | | Year 8 | |
|---|---|---|---|---|
| | Sample size | Percentage (%) | Sample size | Percentage (%) |
| **Item deprivation rates:** | | | | |
| iPod | 574 | 16.3 | 103 | 5.8 |
| Money | 716 | 20.4 | 344 | 19.3 |
| Clothes | 230 | 6.6 | 106 | 5.9 |
| School camp | 381 | 10.9 | 89 | 5.0 |
| Mobile phone | 1,702 | 48.6 | 229 | 12.9 |
| **Incidence of multiple deprivation:** | | | | |
| 0 | 550 | 36.2 | 2,496 | 65.4 |
| 1 or more | 971 | 63.8 | 1,319 | 34.6 |
| 2 or more | 400 | 26.3 | 376 | 9.9 |
| 3 or more | 121 | 8.0 | 128 | 3.4 |
| 4 or more | 31 | 2.0 | 30 | 0.8 |
| 5 | 7 | 0.4 | 8 | 0.2 |
| Child Deprivation Index Score: | 1,521 | 1.01 | 3,815 | 0.49 |

Source: Redmond et al., 2016; Tables 13.3 & 13.4.

They indicate that deprivation varies considerably across different items and age, with its incidence and severity being considerably lower among students in year 8 than those in years 4 and 6. A Child Deprivation Index (CDI) was derived by adding the number of item deprivations for each student and averaging these scores across each school year.[26] The CDI value was close to 0.5 for those in year 8 but twice as high for those in years 4 and 6.

26 The derivation of the CDI in this way assigns an equal weighting to each item when aggregated up to form the overall index. Fernandes et al. (2012) point out that there are advantages in using a non-uniform weighting system to derive an aggregate index but suggest that it is 'an imperfect approximation to real weights…[because] … this methodology does not produce weights that represent how relevant those items actually are to children and to their well-being' (Fernandes et al., 2012: 249-251).

These insights provide by the findings led the report's authors to conclude that:

> 'This is the first systematic attempt to apply the deprivation approach to measure child poverty in Australia. The methods employed and results produced are intended to stimulate others to build on what we have done by refining the approach and developing better applications. The important feature of the approach outlined here is that it builds on what children and young people themselves think constitutes poverty, not on what others (generally parents) think. Although many of the measures used here are rather rudimentary, further research designed to collect better data has the potential to greatly improve the robustness of the results and thereby raise the extent of our understanding. Huge strides have been taken in the literature on adult deprivation over the last three decades and although the application of these methods to children and young people is still at a relatively early stage, it promises much for the future.' (Redmond et al., 2016: 183-4).

These important reflections led in part to the development of the current project and its more detailed application of the consensual approach that is now presented.

## 6.3 Identifying Essential Items and the Incidence of Item-Specific Deprivation

### Identifying essential items

The WYPN survey asked the three questions needed to identify deprivation about each of the 24 items shown in Table 6.2. It is important to recall that the list of items included in the WYPN survey is based on those used in earlier studies of child deprivation, modified to suit Australia and to reflect the feedback provided by the focus groups described in Chapter 4. Table 6.2 shows for each item, the percentage of respondents from the GHS and TSF samples that indicated that the item was essential. Results for the GHS sample are also shown broken down by school year but no such disaggregation of the TSF sample is provided because the focus is on the (consensual) views of all young people and the GHS sample provides a better indication of this than the more restricted TSF sample. It is still possible to compare the aggregate results for the GHS and TSF samples, which as Table 6.2 indicates, are very similar.

## Table 6.2: Support for Identified Items being Essential for All Young People by School Year (percentages)

| Item | Support by school year (%): | | | | Total support (%): | |
|---|---|---|---|---|---|---|
| | Year 7 | Year 8 | Year 9 | Year 10 | Government high schools (GHS) sample | The Smith Family (TSF) sample |
| *A mobile phone* [(a)] | 62.2 | 60.9 | 63.6 | 67.2 | 63.6 | 66.0 |
| A computer or other mobile device | 73.8 | 73.2 | 72.6 | 81.2 | 75.3 | 81.8 |
| *A pair of shoes that fit properly* [(a)] | 97.9 | 97.0 | 97.1 | 98.7 | 97.7 | 97.6 |
| The right kind of clothes to fit in with other people your age | 71.6 | 69.1 | 64.5 | 60.0 | 66.2 | 71.4 |
| Some money (from paid work or from your parents/carers) to spend or save each week | 73.5 | 71.7 | 77.0 | 81.3 | 76.0 | 78.5 |
| *Cable or satellite TV at home* [(a)] | 62.6 | 55.9 | 49.4 | 48.3 | 53.8 | 51.9 |
| Internet at home | 80.7 | 78.3 | 75.9 | 84.0 | 79.8 | 81.2 |
| A family car [(a)] | 93.9 | 93.2 | 89.1 | 90.8 | 91.8 | 87.2 |
| Three meals a day | 95.6 | 96.2 | 96.0 | 96.3 | 96.1 | 96.4 |
| Fruit or vegetables at least once a day | 96.4 | 95.7 | 95.5 | 96.3 | 96.0 | 94.6 |
| Books at home suitable for your age | 86.8 | 82.1 | 76.1 | 73.7 | 79.5 | 85.1 |
| A separate bedroom for each child 10 years and older | 73.9 | 71.5 | 69.1 | 70.0 | 71.1 | 76.1 |
| A meal out with my family at least once a month | 70.0 | 63.6 | 60.0 | 55.7 | 62.2 | 64.7 |
| A holiday away with my family at least once a year | 72.8 | 64.7 | 61.2 | 58.3 | 64.0 | 62.8 |
| *A good education* [(a)] | 98.7 | 98.3 | 96.5 | 97.8 | 97.8 | 97.3 |
| Clothes you need for school (including sports gear) | 95.7 | 95.0 | 92.3 | 95.7 | 94.7 | 96.7 |
| Go on school trips or excursions at least once a term | 74.3 | 67.9 | 67.9 | 64.4 | 68.5 | 77.3 |
| Extra-curricular activities at your school (like sport or music) | 86.9 | 80.4 | 82.2 | 79.6 | 82.1 | 86.4 |
| *After-school tutoring* [(a)] | 44.2 | 38.7 | 39.5 | 44.0 | 41.5 | 46.6 |
| A place at home to study or do homework | 90.4 | 90.1 | 85.9 | 91.8 | 89.6 | 90.2 |
| Money to pay for classes or activities outside of school | 83.2 | 84.4 | 83.2 | 83.1 | 83.5 | 84.9 |
| Internet access in public spaces | 80.6 | 76.5 | 78.9 | 82.7 | 79.7 | 76.4 |
| A local park or green space | 87.4 | 85.9 | 86.5 | 82.7 | 85.5 | 89.7 |
| Access to public transport in my local area | 89.0 | 91.3 | 93.1 | 94.4 | 92.1 | 93.4 |

Note: (a) The six items shown in italics were removed from the analysis after further tests of their suitability, reliability, validity and additivity testing. See text and Appendix A for further details.

The first step towards identifying the items that are essential for all young people involves restricting attention to those items that attract at least 50 per cent support for being 'essential for all young people'. Only one of the 24 items – after-school tutoring – fails to receive majority support from the GHS sample for being essential, while support for a second item - cable or satellite TV at home - only just exceeds the 50 per cent. However, Table 6.2 indicates that this is due to the high level of support received from younger participants (in school years 7 and 8), with support falling short of the required majority threshold among students in years 9 and 10. For this reason, this item was also removed from the list of essential items, bringing the number of essential items down from 24 to 22.

For most of the 22 items, the level of support for them being essential is either stable across school years or declines with age. However, these declines are rather modest, with the largest (around 8 percentage points) occurring for two family-based activities: a meal out at least once a month and a holiday away at least once a year. There are 4 items where the level of support increases with age: a mobile phone; a computer or other mobile device; some money to spend or save each week; and access to local public transport. These patterns seem entirely consistent with the changing needs and preferences of young people as they get older and become more independent of their parents and other family members.

It is also important to point out that the overall degree of consensus about which items are essential is high. Across the entire the GHS sample, the level of support for each of the 22 items being essential exceeds 90 per cent for 7 items, is between 80 and 90 per cent for a further 4 items and is between 70 and 80 per cent for 6 more items, with support for the remaining 5 items below 70 per cent.

Further tests of the statistical properties of the 22 items were conducted to ensure that they satisfy the key requirements of the consensual approach: to collectively capture the same underlying concept; to provide a measure of poverty that reflects individual deprivation; and be able to be combined and added up to produce an overall index of deprivation. These statistical tests establish both the appropriateness and robustness of each item and are based on the approach applied recently to EU country-level data by Guio et al. (2017, 2018) to monitor child deprivation in Europe as part of the EU's social inclusion agenda. The approach is described briefly below, but further details of the method and findings are contained in Appendix A.

The first test of *suitability* is understood as a measure of the face validity of each item (Guio et al., 2017, 2018). The test measures the proportion of the GHS sample who have the item, as well as, the proportion who do not have the item but would like it. A high proportion indicates that young people in the GHS sample attach a high degree of importance to the item both to themselves and more generally for all young people. Using a 70 per cent threshold, only one item, after school tutoring, fails the suitability test.

The second test of *reliability* tests whether the 22 items are closely related as a group and can be combined to form a single consistent scale. This test involves calculating the Cronbach alpha statistic for all 22 items and then re-calculating it after each item in turn is removed. If the Cronbach alpha statistic increases when an item is removed, this suggests that this item is not contributing to the overall explanation of all items and can therefore be removed without any loss of overall explanatory power (see Cronbach, 1951). The Cronbach alpha score for all 22 items was 0.75, and in only two instances did it increase when an item was removed, although in both cases the increase was very small – by 0.0020 (mobile phone) and 0.0013 (a pair of shoes that fit properly).[27]

The third test of *validity* is designed to check whether each of the items captures an aspect of the underlying concept of interest – in this case, poverty. Following Gordon. (2017) and Guio et al. (2017) this involved running regressions of each item in turn on two variables that most closely resemble the child poverty correlates conventionally used in validity tests, yet applicable within a child-orientated survey: going to school hungry and having no money of your own. Simple bi-variate logistic regressions were run to check whether there is a significant relationship between each of these two variables and not having each essential item.

27 A second test of reliability based on Item Response Theory described by (Guio et al., 2012, 2017; Szeles and Fusco, 2013) was also applied although this did not affect the results produced using the Cronbach alpha test.

The validity testing results suggested that 3 items might not be valid indicators of poverty status: a mobile phone; a family car; and a good education.

Finally, an *additivity* test was applied to check that being deprived of each individual item contributes positively to the overall level of deprivation. This test is designed to ensure that when individual item deprivations are added up, a higher score implies a higher level (or greater severity) of deprivation. This test involved checking how the incidence of deprivation for each item varies with the responses to the following WYPN survey question: 'How often does a lack of money stop you from buying something you need?' – to which five response categories were provided: very often; quite often; sometimes; hardly ever; and never. The responses were checked to see if the level of deprivation declines as the implied level of financial hardship decreases. No item failed this version of the additivity test.

The results from the reliability, validity and additivity testing (summarised in Table A.1 in Appendix A) suggest that four additional items should be removed from the list of essential items that will be used to identify deprivation: a mobile phone; a pair of shoes that fit properly; a family car; and a good education. These four items were thus removed, bringing the final list of the 'essentials of life' for young people down from 22 to 18 (shown in non-italics in Table 6.2).[28] The removal of the mobile phone form the list of essential items might seem strange, given the high importance attached to this item by participants in the focus groups, summarised in Chapter 4. However, the focus here is on identifying items that, as a group, can best identify poverty among children and the results indicate that having a mobile phone does not overall, contribute to this exercise.

Having identified the 18 items that form the basis of child deprivation, attention now focuses on the levels of deprivation of each of these items. Table 6.3 and Figure 6.1 show the percentages of the GHS and TSF samples that do not have each item and those that do not have but want each item. It is important to note that the deprivation incidence rates shown in Table 6.3 (and later) all use as the denominator the total numbers that responded to the relevant survey, not just those who responded to the relevant survey question. This approach thus treats all those who do not respond to a specific item (the missing values) as having the item and thus not being deprived of it and thus produces a conservative estimate of deprivation (Guio et al., 2018). This approach was preferred to one which removes those who do not respond to the relevant question (the standard treatment of missing values) because this would result in a substantial reduction in sample size (and hence a loss in efficiency) given the large number of items and questions involved – particularly when it comes to examining multiple deprivation rates.[29]

28 Factor analysis was also applied to see whether or not a smaller number of these 18 items could be identified as a single factor that explains a large percentage of the variation that exists among all 18 items. However, the factor analysis results did not provide compelling evidence that a smaller list of items could be used, and all 18 items were thus maintained.

29 A third option, often used in other studies, involves imputing an estimate to replace missing values using information provided in other survey questions (e.g. about the characteristics of those who fail to answer specific questions). This approach has not been used here.

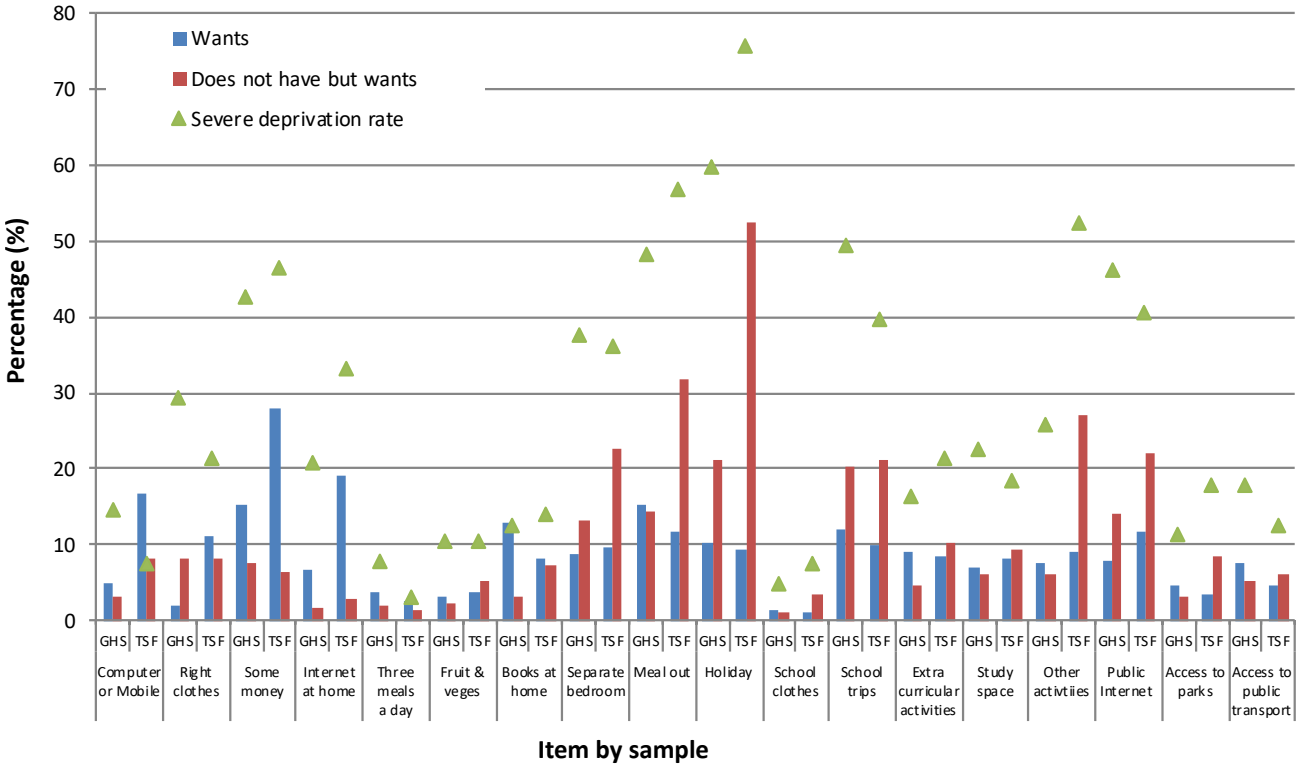
## Table 6.3: The Incidence of Item-Specific Non-Ownership and Deprivation Rates (unweighted percentages)

| Item | Government high schools (GHS) sample | | | The Smith Family (TSF) sample | | |
|---|---|---|---|---|---|---|
| | Does not have | Does not have but wants (Deprived) | Severe deprivation (a) | Does not have | Does not have but wants (Deprived) | Severe deprivation (a) |
| A computer or other mobile device | 8.2 | 5.0 | 14.6 | 20.1 | 16.7 | 29.4 |
| The right kind of clothes to fit in with other people your age | 10.2 | 2.1 | 7.4 | 19.3 | 11.0 | 21.3 |
| Some money (from paid work or from your parents/carers) to spend or save each week | 22.8 | 15.2 | 42.4 | 34.2 | 27.8 | 46.3 |
| Internet at home | 8.4 | 6.8 | 20.8 | 22.0 | 19.0 | 33.1 |
| Three meals a day | 5.6 | 1.9 | 7.6 | 4.1 | 1.4 | 2.9 |
| Fruit or vegetables at least once a day | 5.4 | 2.3 | 10.4 | 9.0 | 5.1 | 10.3 |
| Books at home suitable for your age | 16.1 | 3.1 | 12.4 | 15.6 | 7.3 | 14.0 |
| A separate bedroom for each child 10 years and older | 22.1 | 13.3 | 37.6 | 32.2 | 22.5 | 36.0 |
| A meal out with my family at least once a month | 29.7 | 14.4 | 48.2 | 43.5 | 31.9 | 56.6 |
| A holiday away with my family at least once a year | 31.5 | 21.2 | 59.8 | 61.8 | 52.5 | 75.7 |
| Clothes you need for school (including sports gear) | 2.6 | 1.1 | 4.8 | 4.4 | 3.4 | 7.4 |
| Go on school trips or excursions at least once a term | 32.3 | 20.4 | 49.4 | 31.3 | 21.3 | 39.7 |
| Extra-curricular activities at your school (like sport or music) | 13.6 | 4.6 | 16.2 | 18.9 | 10.3 | 21.3 |
| A place at home to study or do homework | 12.9 | 6.0 | 22.4 | 17.5 | 9.3 | 18.4 |
| Money to pay for classes or activities outside of school | 13.7 | 6.2 | 25.8 | 36.0 | 27.0 | 52.2 |
| Internet access in public spaces | 21.9 | 14.1 | 46.2 | 33.6 | 22.0 | 40.4 |
| A local park or green space | 7.7 | 3.1 | 11.2 | 12.1 | 8.6 | 17.7 |
| Access to public transport in my local area | 12.8 | 5.1 | 17.8 | 10.7 | 6.1 | 12.5 |

Note: Severe deprivation refers to those who are deprived of at least 3 essential items, with the column figures showing the deprivation rates for each item amongst those who are identified as severely deprived using this measure. The base numbers relevant to the severe deprivation rates are 500 and 136 for the two samples, respectively and the rates have been expressed as percentages of these bases. (See the text for further explanation).

The item-specific deprivation rates for the GHS sample vary between 2 per cent or less for several items (clothes to fit in with others; three meals a day; fruit or vegetables daily; clothes needed for school) to over 20 per cent for a family holiday away each year and going on school trips or excursions. In contrast, for the TSF sample, there is only one item with a deprivation rate of less than 2 per cent (three meals a day) but many more instances where deprivation rates exceed 20 per cent, often by a considerable margin (some money to spend or save; a separate bedroom for older children; a meal out with family; a holiday away each year; money to pay for extra classes; and internet access in public places).

## Figure 6.1: The Incidence of Item-Specific Non-Ownership and Deprivation Rates (percentages)




There is only one item (three meals a day) for which the deprivation rate is lower in the TSF sample than in the GHS sample, but the level of deprivation is very low for both samples and the difference is also very small – too small to allow any inferences to be drawn. For all the remaining 17 items, deprivation is higher among those in the TSF sample and the difference in deprivation rates is largest for three items: a meal out with family once a month (17.5 percentage points), a holiday away with family (31.3 percentage points) and money to pay for out-of-school classes (20.8 percentage points). There are only 2 items where deprivation rates are similar in the two samples: going on school trips and excursions; and access to public transport in the local area.

The difference between the 'does not have' and the 'deprived' columns in Table 6.3 measures the proportions in each sample that indicate that they do not want an essential item that they do not have. For example, while 10.2 per cent of those in the GHS sample indicate that they do not have 'the right kind of clothes to fit in with others' the deprivation rate for this item is only 2.1 per cent because the remainder (8.1 per cent) of those that do not have the item indicated that they do not want it. In contrast, for this same item, almost twice as many in the TSF sample (19.3 per cent) do not have it and while a similar proportion (8.3 per cent) say that they do not want it, this still leaves the deprivation rate at 11.0 per cent – five and a half times higher than that in the GHS sample. It should be noted that the similar percentages (both close to 8 per cent) in both samples who say that they do not want an item that they do not have suggests that there is no support for the preference adaption hypothesis discussed earlier.

More generally, it is of interest to note that while the percentage indicating that they do not want each item varies considerably across the 18 items, the differences for each specific item between the two samples are very similar. This again is at odds with the notion of preference adaption, which would suggest that those who are more disadvantaged with a higher likelihood of being deprived of an item tend to adjust to their disadvantage and become less likely (relative to those who are less disadvantaged) to say that they want an item that they do not have.

Three items feature among the five items where deprivation is highest in both samples: some money to spend or save each week; a regular meal out with family; and an annual family holiday away. Two of these items relate to activities undertaken with the family, these findings illustrating how deprivation can undermine the ability of families to enjoy basic pleasures together as a unit and acts to exclude them from activities that most others take for granted.

The third and sixth columns of Table 6.3 show a measure of item-specific severe deprivation. It has been deprived by first identifying only those who are experiencing a severe level of overall deprivation, defined here as those who are deprived of at least 3 essential items (see Table 6.4 below) and then deriving the individual item deprivation rates for this sub-sample of the GHS and TSF samples. This measure, although imperfect, allows attention to be focused on the circumstances of those who are most severely deprived.[30]

These results can be viewed in two different ways. In both cases, it is important to remember that the specific items shown in Table 6.3 are being used here as *indicators* of poverty not as measures and should thus not be interpreted literally as measures or be used to form the basis of specific actions about each particular item. There is no suggestion, for example, that young people should be given the money needed to pay for out of school classes or that such classes should be provided free, only that not attending such classes when wanting to is an indication that the person involved is likely to be poor.

Attention now focuses on which items have the highest deprivation rates among those who are most severely deprived overall. The resulting picture (shown in the third and sixth columns of Table 6.3 and by the green triangles in Figure 6.1) reveals which of the 18 essential items those young people who are most deprived are missing out on. The deprivation rates of each item among the full sample and just among the sub-sample that is most severely deprived using the measure described above can also be compared to get a sense of which specific items, when missing but wanted, best identify the most deprived groups. Both approaches have been applied to the two samples and the following discussion draws out the findings and their implications.

Beginning with the first approach, the 5 items where the severe deprivation rates in Table 6.4 are highest for the GHS sample are (in descending order): an annual holiday away with family; able to go on school trips and excursions; a meal out with family once a month; internet access in public places; and some money to spend or save each week. For the TSF sample they are: an annual holiday away with family; a meal out with family once a month; school camps and excursions and other extra-curricular school activities; some money to spend or save each week; and internet access in public places. Four items appear in both lists: an annual holiday away with family; a meal out with family once a month; some money to spend or save each week; and internet access in public places.

This last item (internet access in public places) is clearly an issue for both groups, being an item that many see as essential for all young people, but one that many are not able to access. Two of the remaining three items refer to social activities centred on the family, while the third (money of one's own) is a key factor that determines of the autonomy and independence of young people. Each of the remaining two items that appear in only one list relate to school activities - participating in school camps or excursions and in other extra-curricular school activities. Both are items that often require a financial contribution from parent, and where this is the case the payment acts as a barrier preventing young people who are most severely deprived from engaging in these activities.

30 This threshold results in around one-fifth (18.7 per cent) of those in the GHS sample and more than two-fifths (40.4 per cent) of those in the TSF sample being defined as severely deprived (see Table 6.4).

The second approach involves calculating and then comparing the differences between overall item deprivation rates for the two samples (shown in Table 6.2) and for the corresponding sub-samples that are identified as most deprived on the above measure (shown in Table 6.3). Again, the discussion focuses on the 5 items for each sample where these differences are largest. For the GHS sample, the 5 items are (again in descending order): an annual holiday away with family; a meal out with family once a month; internet access in public places; going on school camps and excursions; and having some money of their own to spend or save each week. In this instance, the same 5 items also have the largest deprivation rate differences for the TSF sample, although the ranking of the five items differs slightly. The school-based items among these 5 also tend to be ranked somewhat higher by the TSF sample than by the GHS sample. It is striking, however, that the same 5 items feature in the both approaches, confirming that they are indeed the kinds of items that those who experience severe levels of deprivation are most likely to have to forego.

One criticism of the approach adopted in the above analysis is that the method used to identify severe deprivation is rudimentary and arbitrary. The use of any threshold (for example, being deprived of at least 3 essential items) to identify deprivation or severe deprivation may produce misleading results in the same way as setting a poverty line can distort the picture of poverty. Those who are just below the threshold are not included as deprived or poor, but their circumstances differ only marginally from those who are just above it, who are included. In addition, the use of a threshold implies an 'all-or-nothing' approach that takes no account of the severity of deprivation (or poverty) experienced. These criticisms can be addressed by developing an index of deprivation, and this approach is now examined.

## 6.4 Multiple Deprivation

Having examined how the incidence of deprivation varies across individual items, we now consider the incidence of multiple deprivation and the development of a Child Deprivation Index (CDI).[31] The pattern of incidence of multiple deprivation in the two samples is shown in Table 6.4 and illustrated in Figure 6.2. For the GHS sample, the results indicate that well over one-quarter (29.7 per cent) of all surveyed students are deprived of at least 2 of the 18 essential items, more than one-in-ten (10.9 per cent) are deprived of at least 4 items, and almost one-in-twenty (4.6 per cent) are deprived of at least 6 items. The corresponding percentages for the TSF sample are 54.6 per cent (2 items), 31.2 per cent (4 items) and 15.4 per cent (6 items). Thus, not only is the overall level of deprivation higher among the TSF sample, so too is the severity of deprivation, particularly at the higher (most severe) levels. The extent to which the incidence of multiple deprivation in the TSF sample exceeds that in the GHS sample increases proportionately as the level of multiple deprivation increases.

When these results are compared with those produced for adults using the same approach (see Saunders and Wong, 2012: Table 5.3), the patterns are quite similar.[32] For example, the incidence of multiple deprivation among adults (based on 24 items) in 2010 is estimated to be 24.5 per cent (at least 2 items), 13.1 per cent (at least 4 items) and 7.6 per cent (at least 6 items). However, child deprivation falls away more quickly than adult deprivation, as indicated by comparing the proportions that are deprived of at least 10 items: 0.8 per cent for young people in the GHS sample, compared with 2.1 per cent for adults. Even here though, the corresponding estimate for the TSF sample is 2.7 per cent, above that for adults.

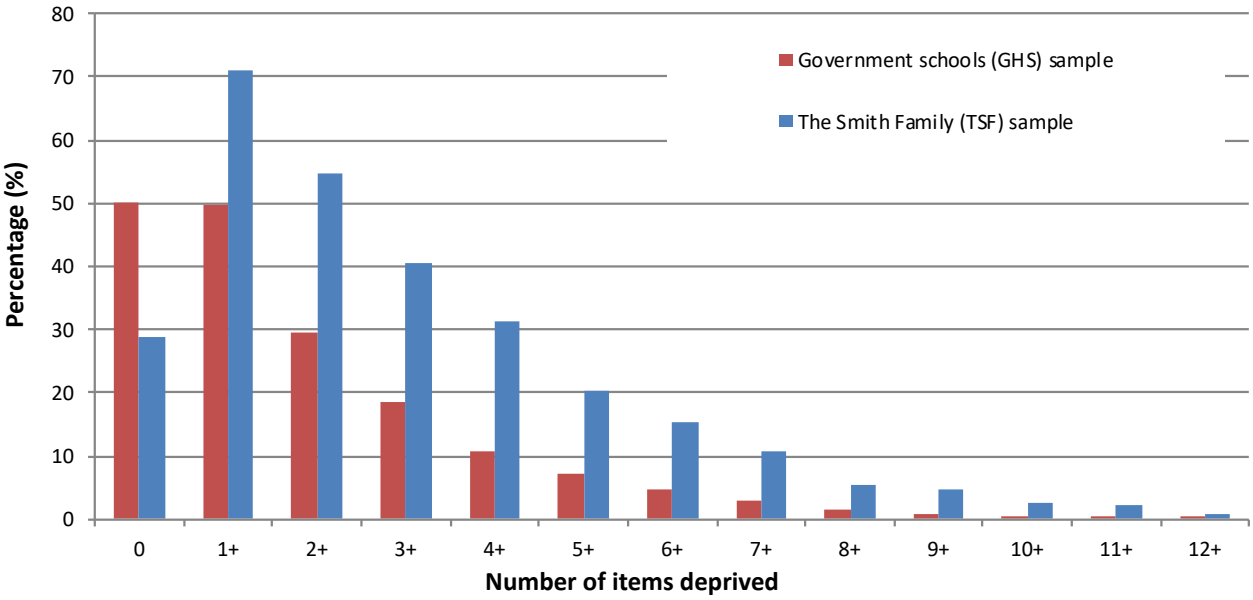
31 This stage of the analysis involves combining the responses across the 18 'essentials of life' items and it is here that the treatment of missing values becomes particularly important. As explained earlier, this is because although the numbers of missing values are relatively low for each individual item, they can cumulate across the range of items and lead to a considerable reduction in the overall sample size that represents an inefficient use of the survey data.

32 The adult deprivation study conducted by Saunders and Wong (2012) applied weights that are proportional to the age and sex composition of the population.

## Table 6.4: The Incidence of Multiple Deprivation (sample percentages)

| Number of deprivations | Incidence rate | |
|---|---|---|
| | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
| 0 | 50.3 | 28.8 |
| At least 1 | 49.7 | 71.2 |
| At least 2 | 29.7 | 54.6 |
| At least 3 | 18.7 | 40.4 |
| At least 4 | 10.9 | 31.2 |
| At least 5 | 7.2 | 20.5 |
| At least 6 | 4.6 | 15.4 |
| At least 7 | 2.8 | 10.7 |
| At least 8 | 1.5 | 5.6 |
| At least 9 | 0.8 | 4.8 |
| At least 10 | 0.5 | 2.7 |
| At least 11 | 0.2 | 2.1 |
| At least 12 | 0.1 | 0.9 |
| Child Deprivation Index (CDI) | 1.27 | 2.61 |

## Figure 6.2: Comparing the Incidence of Multiple Deprivation




The final row of Table 6.4 shows the overall mean value of the new Child Deprivation Index (CDI) for each of the two samples. (How the CDI index is constructed, and its main properties are discussed in the following section). Again, the estimate is considerably higher for the TSF sample (2.61) than for the GHS sample (1.27) – more than twice as high, highlighting the stark deprivation differences between the two. The mean value of the corresponding adult index (even though based on a larger number of essential items – 24 rather than 18) was slightly above that for children, at 1.30 in 2010 and 1.43 in 2006 (see Saunders and Wong, 2012: Table 5.3).

Before leaving this initial analysis of the structure of deprivation, it is of interest to separate the 18 essential items into two broad groupings: one that captures material deprivation, or a lack of 'havings' the things that young people want; and social exclusion, or a lack of participation in 'doings' or essential activities. This is a useful disaggregation because the two forms of overall deprivation have often been the focus of different strands in the research literature, particularly since the emergence and growing interest in the concept of social exclusion (see Hills, Le Grand and Piachaud, 2002; Levitas, 2006; Nolan and Whelan, 2007; Saunders, 2011).

Any separation based on the nature and characteristics of the items identified as essential is, however, likely to introduce an element of ambiguity into which items fit where. For example, does the absence of the equipment and clothes needed to participate in school sports represent a form of material deprivation (the item is missing) or a form of social exclusion (since the absence of the item may prevent the participation that would otherwise occur)? Is the lack of internet access at home a material lack (no access to the infrastructure itself) or is it a form of exclusion that prevents young people from communicating with friends and thus serves to isolate them? There are no clear-cut answers to these questions. This perhaps explains why Townsend, in his original definition, explicitly included both elements under the one definition that covers both 'participate in the activities' and 'have the living conditions and amenities which are customary' as forms of deprivation.[33]

In seeking to establish such a separation, the starting point must be the nature of the items themselves since this provides a clue to the needs that underlie them. For purely pragmatic reasons, there is also much to be said for a delineation that ends up with two groups of equal size since it then becomes easier to compare the deprivation rates in the two areas.

With these considerations in mind, the 18 essential items have been separated into the two broad dimensions as follows:

## Material deprivation items:

1. Three meals a day
2. Fruit or vegetables at least once a day
3. Clothes you need for school (e.g. sports gear)
4. A place at home to study/do homework
5. Money to pay for classes or activities out of school
6. Books at home suitable for your age
7. A computer or other mobile device
8. Some money to spend or save each week
9. A separate bedroom for children aged 10 and over

## Social exclusion items:

1. Access to public transport in my local area
2. A local park or green space
3. Extra-curricular school activities (e.g. sport or music)
4. Internet at home
5. Internet access in public places
6. Go on school trips or excursions at least once a term
7. Clothes to fit in with other people your age
8. A family holiday away at least once a year
9. A meal out with family at least once a month

33 In a later paper, Townsend (1987) does distinguish between material deprivation and social deprivation.

Incidence rates for the two broad forms of deprivation for each of the two samples are presented in Table 6.5 and illustrated in Figures 6.3 and 6.4. The results indicate that across both samples, the incidence of social exclusion exceeds the incidence of material deprivation. For example, while around one-in-nine (11.0 per cent) of the GHS sample are deprived of at least 2 material items, almost twice as many (21.2 per cent) are excluded in at least 2 social dimensions. And while 1.9 per cent are deprived of at least 4 material items, the corresponding social exclusion rate is again around twice as high, at 4.4 per cent. The same patterns are apparent amongst the TSF sample although here the incidence rates are all higher and the incidence of multiple deprivation becomes more pronounced as the number of items lacking increases.

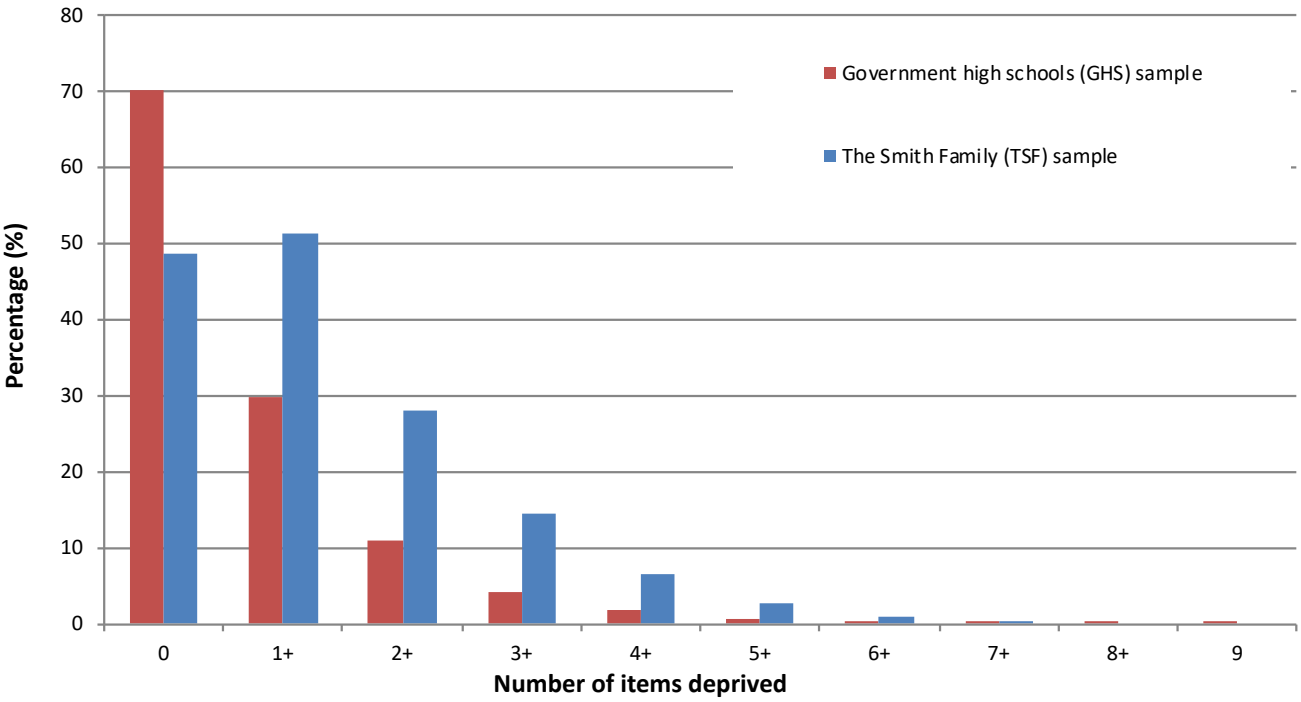
### Table 6.5: The Incidence of Multiple Material Deprivation and Social Exclusion

| Number of deprivations | Incidence rate: | | | |
|---|---|---|---|---|
| | Material deprivation | | Social exclusion | |
| | Government high schools (GHS) sample: | The Smith Family (TSF) sample: | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
| 0 | 70.2 | 48.7 | 59.1 | 36.8 |
| At least 1 | 29.8 | 51.3 | 40.9 | 63.2 |
| At least 2 | 11.0 | 27.9 | 21.2 | 41.8 |
| At least 3 | 4.3 | 14.5 | 10.0 | 26.1 |
| At least 4 | 1.9 | 6.5 | 4.4 | 14.2 |
| At least 5 | 0.6 | 2.7 | 1.7 | 7.1 |
| At least 6 | 0.2 | 0.9 | 0.6 | 3.3 |
| At least 7 | 0.1 | 0.3 | 0.3 | 1.2 |
| At least 8 | 0.1 | 0.0 | 0.1 | 0.0 |
| At least 9 | 0.0 | 0.0 | 0.0 | 0.0 |
| Index scores | 0.48 | 1.04 | 0.79 | 1.57 |

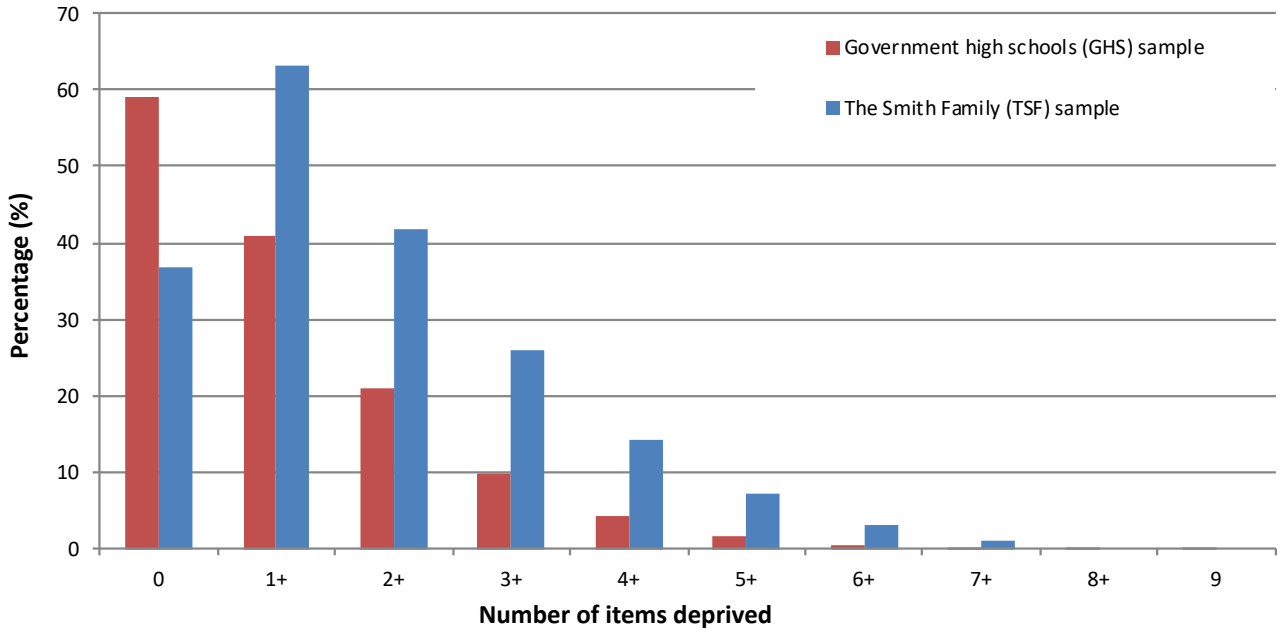
The final row of Table 6.5 shows the values of the Material Deprivation Index (MDI) and Social Exclusion Index (SEI) that have been derived in the same way as the overall CDI shown in the final row of Table 6.4.[34] For the GHS sample, the overall CDI value of 1.27 shown in Table 6.4 can be split into a material deprivation component that accounts for 0.48/1.27 = 37.8 per cent of the total, with the remaining 62.2 per cent attributable to the social exclusion component. For the TSF sample, the CDI total of 2.61 can be split into a material deprivation component that accounts for 1.04/2.61 = 39.8 per cent, while the social exclusion component accounts for the remaining 60.2 per cent. It is remarkable that despite all the differences between the two findings for the two samples that have already been described, the proportionate break-up of overall deprivation into these two components is almost identical within each sample.

34 Note that, within each sample these indexes sum up by definition, i.e. MDI + SEI = CDI.

## Figure 6.3: Comparing the Multiple Incidence of Material Deprivation




## Figure 6.4: Comparing the Multiple Incidence of Social Exclusion



## 6.5 Development and Analysis of a New Child Deprivation Index (CDI)

It is common in deprivation research (and in the literature on multi-dimensional poverty measurement generally) to develop an index or scale that measures the severity (or depth, or extent) of overall deprivation at the individual level. A higher score on the index signifies that deprivation is deeper or more severe. Any such index should draw on the information about the deprivation of specific items although there are different ways in which such information can be combined. The simplest approach involves deriving a simple 'sum-score' by adding up the number of item deprivations experienced by each individual. These individual scores can then be averaged across the whole sample or for sub-samples within it to compare the circumstances of different groups. This approach has been used widely in previous studies of deprivation and social exclusion in Australia and internationally, including in the literature on child deprivation (e.g. Main and Pople, 2011; Main and Bradshaw, 2012).

As noted earlier, a sum-score index assigns the same weight to each form of deprivation when constructing the index, although some have argued that different weights should be applied. Two forms of weighting have been proposed in the deprivation literature: *prevalence weighting*, where the weights are proportional to the percentage of the population that actually owns each essential item; and *preference weighting* where the weights are proportional to the percentage that regard each item as essential (Halleröd, Bradshaw and Holmes,1997; see also Van den Bosch, 2001). There is no agreement on which of these two weighting schemes is better, nor on whether either of them is superior to the unweighted (sum-score) approach. Studies that have examined the impact of applying different weighting schemes to the results have tended to conclude that the use of weights does not markedly affect the conclusions drawn, so most studies use the unweighted approach because of the simplicity of its construction and explanation.

The equal weights (sum-score) approach has been used here to derive a Child Deprivation Index (CDI) for each young person in each of the two samples, where CDI is equal to the number of the 18 essential items that that each young person is deprived of. The final row of Table 6.4 shows the overall mean value of CDI score derived on this basis for each of the two samples. Consistent with the different levels of multiple deprivation described above, the values of the CDI for the two samples differ substantially: 1.27 for the GHS sample and more than twice this, at 2.61 for the TSF sample. Note that these averages are calculated for the entire samples and thus include the substantial percentage of both samples (50.3 per cent of the GHS sample and 28.8 per cent of the TSF sample) that are not deprived of any items (see Table 5.4) and thus have a sum-score value of zero. The average index values within each sample for those who experience at least one form of deprivation will therefore be far higher than the overall sample averages.

The CDI can also be calculated for sub-groups within each of the two samples defined on the basis of socioeconomic characteristics such as age, gender, disability status, family type, school type and location, and so on. When these sub-group CDI scores are compared, it becomes possible to identify the kinds of factors that lie behind the differences in deprivation and to gain an insight into the factors driving deprivation.

As an example of the application of this approach, Table 6.6 shows the CDI values for those that are deprived of each of the 18 essentials of life items identified in Table 6.3. These results show which specific forms of derivation are most strongly associated with a severe level of overall deprivation. For the GHS sample, the 5 items where those deprived of that item have the highest CDI scores are (in descending order): clothes you need for school (including sports gear); fruit or vegetables at least once a day; three meals a day; money for out-of-school classes or activities; and books at home suitable for your age.

For the TSF sample, the corresponding 5 items are: three meals a day; clothes needed for school (including sports gear); access to public transport in my local area; fruit or vegetables at least once a day; and the right kind of clothes to fit in with other people your age. Three items are common to both lists: three meals a day; clothes needed for school (including sports gear); and fruit or vegetables at least once a day. These 3 items

have amongst the lowest deprivation rates (see Table 6.3), which is not surprising since the small numbers who miss out on these items are likely to be facing the highest levels of deprivation. It is not possible to go further than highlighting these patterns since, as noted earlier, the items are indicative only.

These findings are interesting and valuable, but they are not without their limitations. It can be argued that they place too much reliance on specific examples of individual (item) deprivation, whereas as emphasised earlier, the individual estimates are only indicators of the underlying phenomena of interest – lacking the resources required to achieve an acceptable standard of living and avoid poverty. They should thus be seen as indicators of poverty rather than as actual measures of it, as Berthoud and Bryan (2008) have argued. Secondly, one would expect a relationship to exist between item-specific deprivation rates and measures of overall deprivation severity because the latter measures are derived from and based on, the former.

### Table 6.6: Mean Child Deprivation Index (CDI) Scores for those Deprived of Each Essential Item

| Essential item | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Numbers deprived | Mean CDI score | Numbers deprived | Mean CDI score |
| A computer or other mobile device | 124 | 3.71 | 50 | 5.22 |
| The right kind of clothes to fit in with other people your age | 50 | 4.78 | 32 | 7.31 |
| Some money to spend or save each week | 363 | 3.51 | 79 | 5.04 |
| Internet at home | 165 | 4.04 | 57 | 4.98 |
| Three meals a day | 46 | 5.93 | 4 | 9.75 |
| Fruit or vegetables at least once a day | 56 | 6.38 | 15 | 7.33 |
| Books at home suitable for your age | 73 | 5.56 | 21 | 6.33 |
| A separate bedroom for each child 10 years and older | 313 | 3.61 | 66 | 5.15 |
| A meal out with my family at least once a month | 333 | 4.04 | 92 | 5.13 |
| A holiday away with my family at least once a year | 491 | 3.62 | 150 | 4.17 |
| Clothes you need for school (including sports gear) | 26 | 6.57 | 10 | 7.90 |
| Go on school trips or excursions at least once a term | 455 | 3.40 | 62 | 5.79 |
| Extra-curricular activities at your school (like sport or music) | 107 | 4.69 | 30 | 7.23 |
| A place at home to study or do homework | 137 | 5.09 | 27 | 7.26 |
| Money to pay for classes or activities outside of school | 145 | 5.67 | 79 | 6.01 |
| Internet access in public spaces | 322 | 4.17 | 63 | 5.70 |
| A local park or green space | 73 | 5.31 | 25 | 6.72 |
| Access to public transport in my local area | 118 | 4.85 | 18 | 7.39 |

These arguments suggest that a degree of caution should be applied when drawing implications from comparisons of CDI scores like those in Table 6.6. But they do not undermine the value of examining how the CDI varies across different socioeconomic groups as a way of better understanding the patterns of deprivation and highlighting potential underlying causal factors. The tables that follow examine the characteristics of groups that face the highest levels of child deprivation as measured using the CDI, beginning with how deprivation varies with basic demographic characteristics (Table 6.7). This is followed by exploring how the CDI varies with characteristics of the household in which young people are living (Table 6.8) and by their family type and number of close friends (Table 6.9).[35]

Table 6.7 shows that there are variations in the level of deprivation in each school year within the GHS sample but no consistent trend, up or down. In contrast, the TSF sample – where deprivation is much higher in all years - shows a clear downward trend across the four years, with the result that the deprivation gap and relativity between the two groups is narrower in year 10 than in year 7. Girls show up as more deprived than boys across both samples, although the gender deprivation relativity is higher in the GHS sample (1.42) than in the TSF sample (1.22). Boys in the TSF sample are also relatively more deprived than boys in the GHS sample (a CDI ratio of 2.27).

## Table 6.7: Child Deprivation Index (CDI) Values by Basic Demographic Characteristics [(a)]

| Characteristic | Child Deprivation Index (CDI) | |
|---|---|---|
| | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
| **School year:** | | |
| Year 7 | 1.21 | 3.08 |
| Year 8 | 1.32 | 2.63 |
| Year 9 | 1.26 | 2.49 |
| Year 10 | 1.30 | 2.21 |
| **Gender:** | | |
| Female | 1.48 | 2.87 |
| Male | 1.04 | 2.36 |
| **Indigeneity:** | | |
| Aboriginal or Torres Strait Islander (ATSI) | 1.55 | 2.58 |
| Non-ATSI | 1.25 | 2.66 |
| **Subjective Health status:** | | |
| Excellent | 0.90 | 2.15 |
| Good | 1.22 | 2.49 |
| Fair | 1.86 | 3.46 |
| Poor | 2.51 | 9.50* |
| **Disability:** | | |
| Yes | 1.62 | 2.91 |
| No | 1.13 | 2.51 |
| **English spoken at home:** | | |
| Always/almost always | 1.24 | 2.57 |
| Sometimes | 1.64 | 3.22 |
| Never | 1.20 | 1.50* |
| Full sample | 1.27 | 2.61 |

Notes: Survey participants who do not fit into the specified categories and/or who did not respond to the relevant questions are excluded. An asterisk (*) indicates that the estimates are based on less than 20 observations.

35 The estimates in these tables exclude all sample participants that did not provide the relevant information about their circumstances.

The gender differences in deprivation are of interest and warrant further examination. Focusing just on the GHS sample (where the numbers involved are far greater) the two items where the deprivation difference between girls and boys is highest (between 7 and 8 percentage points) are 'a meal out with family at least once a month' and 'a holiday away with my family at least once a year'. These are followed by another two items where the difference is between 5 and 6 percentage points: 'go on school trips or excursions' and 'internet access in public places'. One would expect the final item to be the same for both genders although the difference might reflect concerns over safety for girls. In the case of all 4 items, there is no evidence of a gendered preference adaption effect, whereby girls are less likely than boys to say that they want things that they do not have and thus show up as more deprived of those items. In summary, there is no obvious evidence of the factors that might explain the higher deprivation rates for girls than boys, although as the regression results reported later indicate, this difference remains apparent even after controlling for the impact of other factors.

Returning to the other results shown in Table 6.7, deprivation is higher among those from an Indigenous background in the GHS sample, but not for the TSF sample. There is a clear health gradient in both samples where those with the perceived lowest levels of health also experience the highest levels of deprivation. The gradient is steepest among the TSF sample, although in some instances the numbers are very small, so these results should be treated with caution. It is also important to bear in mind that these comparisons focus on one characteristic at a time, whereas some participants will belong to several groups: for example, someone from an Indigenous background may have poor health and only speak English at home some of the time. This makes it difficult to draw conclusions about the impact of individual factors, although this issue is addressed in the regression modelling presented later.

It is also not possible to establish the direction of causation from the cross-section results presented in Table 6.7 (and the others that follow): for example, does a higher level of deprivation result in poorer health or does poorer health lead to a higher level of deprivation (or to a tendency to report a higher level)? This latter effect seems unlikely in practice, and the positive association between subjective health status and deprivation that is apparent in both samples is important enough to warrant further examination. There is also a clear association between disability status and deprivation, at least in the GHS sample. However, a large proportion of participants in both surveys answered, 'Don't know' when asked about their disability status and the level of deprivation for this group is above that for those who answered 'Yes'. This suggests that the relationship between disability and deprivation also warrants further detailed examination.

Table 6.8 explores how deprivation varies with other features of the household in which survey participants are living. All survey participants were asked if they normally sleep in the same home/house, sleep regularly in two homes with different adults (e.g. with each of their separated parents) or did not have a main home. Among the GHS sample, those who sleep in more than one home have higher deprivation than those who always sleep in the same home, but this pattern is not apparent in the TSF sample.[36]

36 The percentages indicating that they regularly slept in two homes were 10.1 (GHS sample) and 8.3 (TSF sample) while around 1 per cent of both samples indicated that they had no main home.

## Table 6.8: Child Deprivation Index (CDI) Values by Household Characteristics [a]

| Characteristic | Child Deprivation Index (CDI) | |
|---|---|---|
| | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
| **Usually sleeps in:** | | |
| One home | 1.24 | 2.60 |
| Two homes | 1.41 | 2.61 |
| **Number of adults in paid work:** | | |
| None | 2.39 | 2.75 |
| 1 | 1.54 | 2.54 |
| 2 | 1.04 | 2.72 |
| More than 2 | 1.24 | 1.07* |
| **Moved house in last year:** | | |
| No | 1.16 | 2.31 |
| Yes – once | 1.46 | 3.26 |
| Yes – more than once | 1.97 | 4.24 |
| **Moved school in last year:** | | |
| No | 1.21 | 2.38 |
| Yes – once | 1.48 | 3.31 |
| Yes – more than once | 2.25 | 3.86 |
| **Ownership of household items:** | | |
| Dishwasher – yes | 0.97 | 2.40 |
| Dishwasher – no | 1.82 | 2.74 |
| Furniture in reasonable condition – yes | 1.23 | 2.58 |
| Furniture in reasonable condition – no | 3.08 | 4.25* |
| Heating when it's cold – yes | 1.19 | 2.38 |
| Heating when it's cold – no | 2.77 | 4.94 |
| Backyard or outside play area – yes | 1.22 | 2.49 |
| Backyard or outside play area – no | 2.05 | 4.50 |
| Garage or car port – yes | 1.18 | 2.53 |
| Garage or car port – no | 2.15 | 2.90 |
| Family pet – yes | 1.20 | 2.43 |
| Family pet – no | 1.46 | 3.01 |
| Full sample | 1.27 | 2.61 |

Notes: (a) Survey participants who do not fit into the specified categories and/or who did not respond to the relevant questions are excluded. An asterisk (*) indicates that the estimates are based on less than 20 observations.

Deprivation is highest for both samples among those who are living in a jobless household – one that contains no adults in paid work – but is also high among households with only a single adult earner. It is only for two-earner households that the level of deprivation drops markedly in the GHS sample, but this effect is not present in the TSF sample, where deprivation is high and largely independent of how many adults are in paid work. It should be noted that the question refers only to whether or not adults are working, not to whether they work full-time or part-time, or whether or not they are low-paid.

Two indicators of variability in the living conditions facing young people were examined, relating to whether and how often they had moved house or changed school in the last year. In both instances and for both samples, those who appear to be in more volatile circumstances and report such changes have higher levels of deprivation than those with more stable home and schooling arrangements. Those who had moved multiple times fare particularly badly in terms of the level of deprivation experienced, the deprivation scores for this group exceeding the average for all groups by over 55 per cent for the GHS sample, and by over 62 per cent for the TSF sample (moved house more than once) and by over 77 per cent for the GHS sample, and by 48 per cent for the TSF sample (moved school more than once).

Finally, in part to check that the CDI is indeed capturing the material circumstances of the young people and the households where they are living, the lower section of Table 6.8 compares CDI values for those who do and do not possess a list of basic household items such as a washing machine, decent furniture and access to adequate heating when needed. Some of these items have been shown to be regarded as essential by a majority of adults in recent studies (see Saunders, Naidoo and Griffiths, 2007; Saunders and Wong, 2012) so they are capturing to some extent the level of deprivation in the household.

In all instances and across both samples, those who report having each item have lower CDI values than those who say they do not have them. The difference is largest in relation to the furniture and heating variables, both of which are identified as essential items in the adult studies referred to above. This evidence is thus consistent with the CDI scores capturing something that is 'real' about the living conditions that the survey respondents are experiencing, confirming the validity of the deprivation results.

The upper panel of Table 6.9 examines how the mean CDI scores vary across family types, defined according to the number of parents/other adults and children family members.[37] Some of these results, particularly for the TSF sample, are derived from very small samples and this should be kept in mind. The first four rows of Table 6.9 compare the mean CDI values of children either with or without siblings who are living either with both parents or with only one parent. For the GHS sample, the results are consistent with the patterns revealed by conventional (income-based) poverty studies (see, for example, ACOSS, 2016), which is that deprivation is higher among sole parent families than among couple families and is also higher (although only slightly) among multiple-child families than among single-child families. The former finding is also apparent for the TSF sample, but not the latter although sample size is a problem here that confounds the results.

37 The survey question that is used to construct family type (numbers of adults and children and their relation to the respondent) asks about people who are living with each survey respondent.

## Table 6.9: Child Deprivation Index (CDI) Values by Family Type and Number of Friends [a]

| Characteristic | Child Deprivation Index (CDI) | |
|---|---|---|
| | Government high schools (GHS) sample | The Smith Family (TSF) sample |
| **Family type:** | | |
| Couple, one child | 1.15 | 2.00* |
| Couple, more than one child | 1.17 | 2.65 |
| Sole parent, one child | 1.31 | 2.60 |
| Sole parent, more than one child | 1.37 | 2.53 |
| Couple living with grandparent(s), one or more children | 1.35 | 3.40* |
| Couple living with other adults, one or more children | 1.19 | 6.75* |
| Sole parent living with grandparent(s), one or more children | 1.76 | 2.55* |
| Sole parent living with other adults, one or more children | 2.27 | 4.00* |
| **Number of close friends:** | | |
| None | 2.36 | 2.57* |
| 1 | 1.95 | 2.91 |
| 2 | 1.65 | 3.31 |
| 3 | 1.41 | 1.91 |
| 4 | 1.25 | 3.53 |
| 5 or more | 1.08 | 2.34 |
| Full sample | 1.29 | 2.61 |

Notes: Survey participants who do not fit into the specified categories and/or who did not respond to the relevant questions are excluded. An asterisk (*) indicates that the estimates are based on less than 20 observations.

Deprivation is also higher among families where the parent or parents are living with other adults, particularly if they are grandparents of couple families, but not if they are grandparents of sole parent families. (Note that the 'other adults' for sole parent families may often include the parent's new partner). Again, the patterns are somewhat different for the TSF sample, although here again, small sample size is an issue. Some of these results are difficult to interpret because the reasons underlying the observed living arrangements are difficult to identify. For example, parents in highly deprived families might choose to live with their grandparents as a way of sharing resources and stretching their limited resources further, thus reducing the level of deprivation they experience. If this were the case, it would not be valid to conclude that living with grandparents causes increased deprivation.

The lower panel of Table 6.9 compares CDI scores by the number of close friends reported by the participants in each survey. There is a clear pattern within the GHS sample for the CDI score to decline consistently as the number of close friends increases. Those who report having no close friends have a CDI score that is more than double that of young people with 4 or more close friends and this difference is substantial given the overall variation in CDI scores described in earlier tables. Again, however, the same pattern does not exist for the TSF sample, where although there is a broad tendency for the CDI to be higher for those with fewer close friends, small sample size again makes it difficult to discern the patterns clearly.

It is, however, worth noting that a majority of both samples actually report having at least 3 close friends, this group accounting for over 80 per cent of the GHS sample and over 72 per cent of the TSF sample. This still means that a significant minority in both samples have fewer than 2 close friends and face higher deprivation than those with more close friends.

## Regression analysis

The results presented and discussed so far in this section focus on the relationships between deprivation and the socioeconomic characteristics of individuals and groups in the two samples. Each characteristic is examined in isolation and attention has been drawn to particular aspects of the findings where these appear to be of interest. One limitation of this approach is that by considering each factor in isolation, no account is taken of the interactions that exist between the different factors examined. This can distort the results and lead to inappropriate conclusions being drawn about the nature of the underlying relationships.

For example, Table 6.7 shows that for the GHS sample, deprivation is somewhat higher among those from an Indigenous background than for those who are not, and that it is also higher among those who report having poor health than among those who say they are in excellent health. Given that it is well known that Indigenous Australians suffer from poorer health than non-Indigenous Australians at all ages, it is possible that the subjective health status variable is acting as a proxy for Indigeneity and that the cause of higher deprivation among this group operates through the adverse effects of poor health, not through Indigeneity. Such propositions can only be tested using a multi-disciplinary framework that allows for the effects of Indigenous status and subjective health status together in order to see which effect dominates. This does not resolve the issue of causality although it does provide a better identification of the key associations between the variables being examined.

The most common and simplest form of regression analysis is Ordinary Least Squares (OLS) although this approach requires that the variables included in the analysis conform with a set of assumptions, not all of which are satisfied by the WYPN survey data. For example, the dependent (left-hand side) variable to be used in the analysis is the Child Deprivation Index (CDI) which is an integer (whole number) 'count' variable defined over a limited range (0-18) for each individual, not a continuous open-ended variable (like income, measured in dollars per week or per year). This implies that the OLS approach is not strictly appropriate when running regressions and that a different estimation method should be used that takes account of the form (and more important, the distribution) of the dependent variable. Despite this, only OLS results are reported below, because although the theoretically more appropriate (negative binomial) regression models have also been estimated, they have little impact on the reported results

Before the regression analysis was conducted, the GHS and TSF samples were combined into a single dataset and a 'sample membership' variable was specified as a zero-one dummy variable. This is the first and only time that the data are used in this way, but it is important in this component of the analysis because it allows the impact of sample membership (GHS or TSF) on deprivation to be tested after controlling for the impact of all other variables.

The regression modelling results reported here were undertaken in two stages. In the first stage, a 'base model' is estimated that relates the calculated CDI value for each survey respondent to a range of variables that describe their basic socioeconomic characteristics – their age, gender, disability and Indigenous status, and so on as set out in Table 6.7. The second stage then involves extending the base model to include, one at a time, a number of other variables (a sub-set of those included in Tables 6.8 and 6.9) that capture aspects of the respondent's household such as the number of adults in paid work, the number of homes that the respondent normally lives in, the presence or otherwise of any siblings, and so on. Finally, all of the second-stage variables were included altogether in a final specification to see which ones continue to show up as important.[38] The approach is acknowledged as being somewhat 'data-driven' and rudimentary but the results

38 A number of extensions of the regression modelling strategy are currently being examined and tested and the results and implications will be reported in due course.

are more robust than those presented so far and provide more insight into the role of each of the factors that are driving the observed differences in deprivation.

The dependent and independent variables included in the regression analysis are identified and defined in Table 6.10 and the results from the different specifications are presented in Table 6.11.

### Table 6.10: Specification of Variables Used in the Regression Analysis

| Variable Name | Definition |
|---|---|
| **Dependent variable:** | |
| CDI | Child Deprivation Index (as defined in the main text); range 0 - 18 |
| **Base model Independent variables:** | |
| Year | School year (years 7 – 10): Reference category = year 7 |
| Gender | Male = 0; Female = 1 |
| Indigenous | = 1 if Indigenous or Torres Strait Islander, = 0 otherwise |
| Subjective health status (SHS) | Good = 2; fair = 3; poor = 4: Reference category =excellent |
| Disability (DIS) | = 1 if has a disability or long-term medical condition, = 0 otherwise |
| No English (ENG) | = 0 if speaks English at home always; = 1 if speaks English at home almost always, sometimes or never |
| Sample | = 0 if from GHS sample; = 1 if from TSF sample |
| **Stage 2 independent variables:** | |
| No paid work (NOWORK) | = 0 if no jobs or paid work over last 12 months; if Yes = 1 |
| Homes (HOMES) | = 0 if usually sleeps in same home; = 1 if regularly sleeps in two homes or has no regular home |
| No family (NOFAM) | = 0 if lives with members of family; = 1 otherwise |
| No mother (NOMOTH) | = 0 if lives with mother in main home; = 1 otherwise |
| No father (NOFATH) | = 0 if lives with father in main home; = 1 otherwise |
| Siblings (SIBS) | = 0 if does not live with other children; = 1 if does live with other children |
| Jobless (JOBLESS) | = 0 if at least one adult in household in paid work; = 1 if no adults in household in paid work |
| No friends (NOFRIENDS) | = 0 if has at least one close friend; = 0 if no close friends |

## Table 6.11: Explaining the Child Deprivation Index: Regression Results

| | Model specification: | | | | |
|---|---|---|---|---|---|
| | Base Model | Base model plus other explanatory variables | | | |
| | (i) | (ii) | (iii) | (iv) | (v) |
| School Year (1 = Year 7) | | | | | |
| 2=Year8 | -0.02 | -0.03 | -0.02 | 0.00 | -0.02 |
| 3=Year9 | -0.09 | -0.03 | -0.09 | -0.08 | -0.09 |
| 4=Year10 | -0.13 | -0.05 | -0.13 | -0.12 | -0.14 |
| Female | 0.41*** | 0.39*** | 0.40*** | 0.41*** | 0.41*** |
| ATSI | 0.26* | 0.29* | 0.25* | 0.23 | 0.24* |
| Health status | *** | *** | *** | *** | *** |
| 2=Good | 0.31*** | 0.31*** | 0.30*** | 0.30** | 0.30** |
| 3=Fair | 0.96*** | 0.99*** | 0.96*** | 0.95*** | 0.94*** |
| 4=Poor | 1.60*** | 1.64*** | 1.64*** | 1.55*** | 1.59*** |
| Disability | 0.21 | 0.23* | 0.22 | 0.21 | 0.21 |
| No English | 0.16 | 0.12 | 0.17** | 0.15 | 0.16 |
| Sample | 1.33*** | 1.25*** | 1.34*** | 1.34*** | 1.33*** |
| Paid work | | -0.35*** | | | |
| Homes | | | 0.22 | | |
| No family | | | | 0.70** | |
| No mother | | | | | 0.16 |
| No father | | | | | |
| Siblings | | | | | |
| Jobless | | | | | |
| No friends | | | | | |
| Constant | 0.67*** | 0.82*** | 0.65*** | 0.66*** | -0.67*** |
| n | 2928 | 2767 | 2901 | 2902 | 2928 |
| F | 26.95*** | 25.52*** | 25.15*** | 25.04*** | 24.85*** |
| r2 | 0.092 | 0.100 | 0.095 | 0.094 | 0.092 |

Note: The asterisks (*/**/***) indicate the level of statistical significance (p. 0.10/0.05/0.01)

Table 6:11: Explaining the Child Deprivation Index: Regression Results (continued)

| | Model specification: | | | | |
|---|---|---|---|---|---|
| | Base model plus other explanatory variables | | | | Full model (x) |
| | (vi) | (vii) | (viii) | (ix) | |
| School Year (1 = Year 7) | | | | | |
| 2=Year8 | -0.03 | -0.02 | -0.01 | -0.04 | -0.03 |
| 3=Year9 | -0.09 | -0.09 | -0.07 | -0.10 | -0.01 |
| 4=Year10 | -0.15 | -0.13 | -0.09 | -0.15 | 0.00 |
| Female | 0.41*** | 0.41*** | 0.36*** | 0.40*** | 0.32*** |
| ATSI | 0.23* | 0.26* | 0.18 | 0.25* | 0.15 |
| Health status | *** | *** | *** | *** | *** |
| 2=Good | 0.29** | 0.31*** | 0.28** | 0.31*** | 0.27** |
| 3=Fair | 0.92*** | 0.96*** | 0.95*** | 0.94*** | 0.92*** |
| 4=Poor | 1.56*** | 1.60*** | 1.78*** | 1.58*** | 1.89*** |
| Disability | 0.20 | 0.21 | 0.19 | 0.20 | 0.18 |
| No English | 0.19* | 0.15 | 0.17 | 0.14 | 0.11 |
| Sample | 1.26*** | 1.33*** | 1.09*** | 1.32*** | 0.96*** |
| Paid work | | | | | -0.37*** |
| Homes | | | | | 0.06 |
| No family | | | | | 1.25*** |
| No mother | | | | | 0.11 |
| No father | 0.30*** | | | | 0.28** |
| Siblings | | 0.12 | | | 0.34** |
| Jobless | | | 0.72*** | | 0.77*** |
| No friends | | | | 0.69** | 0.81** |
| Constant | -0.65*** | -0.77*** | -0.42* | -0.64*** | -0.53* |
| n | 2928 | 2928 | 2828 | 2885 | 2622 |
| F | 25.96*** | 24.83*** | 26.01*** | 25.10*** | 20.54*** |
| r2 | 0.097 | 0.089 | 0.010 | 0.095 | 0.124 |

Note: The asterisks (*/**/***) indicate the level of statistical significance (p. 0.10/0.05/0.01).

Looking first at the base model results (specification (i) in Table 6.11), they show that all variables except school year, disability status (DIS) and language (does not speak English at home, ENG) have the expected sign and are statistically significant. The insignificance of the disability variable may reflect the inclusion on the base model of the health status variable, which may be capturing the effects associated with disability. The results of the base model indicate that the mean CDI value for girls is 0.41 higher than it is for boys, while being from an Indigenous background is associated with an average increase in the CDI of 0.26. The gradient linking child deprivation and subjective health status is also shown to be numerically important and statistically significant. Perhaps most important, the deprivation impact associated with belonging to the TSF sample also shows up as large and significant. The coefficient on the 'sample membership' variable implies that belonging to the TSF sample is associated with an increase in the value of CDI of 1.33 (compared to

the reference category, belonging to the GHS sample). This is consistent with the earlier findings, which indicated that the mean CDI value for the TSF sample (2.61) is about twice that for the GHS sample (1.27) – a mean difference of 1.34.

When the other variables are included one at a time into the base model, the results show that the variables that are statistically significant are: has some paid work (which has the expected negative sign given how this variable is defined; see Table 6.10), the family variable (NOFAM), the lives with father variable (NOFATH), lives in a jobless household (JOBLESS) and has no close friends (NOFRIENDS). When entered separately like this the implied impacts are thus that the level of deprivation is higher for young people who have had no paid work over the last 12 months, do not live with family members, do not live with their father, lives in a jobless household, and has no close friends. The results also indicate that the statistical significance and size of the variables included in the base model do not change when these additional variables are included in the model. The 'gender' variable, for example, which has a coefficient value of 0.41 in the base model has a coefficient that varies between 0.39 and 0.41 across all other specifications. The 'sample membership' variable (TSF or GHS) coefficient of 1.33 in the base model, varies somewhat more falling between 1.09 and 1.34 across the different specifications.

The final column in Table 6.11 shows the results when all of the variables are included into the regression model simultaneously. This has almost no impact on the statistical significance of individual variables, with those that were significant when included alone remaining significant and those that weren't remaining insignificant. The only substantive change is the decline in the value of the 'sample membership' variable, to 0.96 in the 'full model' compared with 1.26 in the 'base model'. Much of this decline can be attributable to the inclusion of the jobless household variable, which alone resulted in a decline in the size of the 'sample membership' coefficient to 1.09. As shown earlier in table 5.7, more than one-third (34.1 per cent) of those young people in the TSF sample live in a jobless household – far higher than the 5.4 per cent of those in the GHS sample that are in this situation. Joblessness is thus a key determinant of the level of child deprivation (as many adult studies have shown) even when the data used to examine the relationship is provided by children themselves.

The regression results thus confirm that many of the effects associated with the variables that have been shown earlier to be associated with the dependent variable (CDI) when they are examined in isolation retain their importance (numerically and statistically) when they are included together in a multivariate model. This indicates that the effects identified are not statistical aberrations but are robust across alternative model specifications. This in turn suggests that the effects being examined are probably causal, even though the precise mechanisms through which many of them operate remain unclear and require further analysis.

Overall, the regression findings highlight the value of the multivariate approach and provide support for the view that the sample data provides many new insights into the nature and causes of deprivation among young Australians.

## 6.6 The Locational Dimension of Deprivation

This section focuses attention on how deprivation varies with the location of the school attended by young people.[39] The analysis proceeds in two parts: first, attention focuses on how deprivation varies across regions or geographic areas defined according to where each school is located; second, the association between the mean deprivation level of students within each school and the ICSEA scores for the school is examined.

Chapter 5 outlined two ways of segmenting the sample according to the characteristics of the participating schools, one based on the region/geographic location of each school, and the other on a ranking of schools by their ICSEA scores. In both cases, the full GHS sample was split into five approximately equal-sized sub-groups (or quintiles) that are differentiated by either their location or

39 Information is also available from the survey responses on where the young people are actually living (as opposed to where their school is located), but in most instances, this will be close to that of their school and is unlikely to affect the patterns described.

ICSEA value (see Tables 5.4 and 5.5).[40] Differences in the mean CDI values for young people in each quintile under the two methods are then presented and discussed.

Table 6.12 shows how the location-based quintiles are defined, the numbers of schools and students in each quintile and the mean CDI values for young people attending schools in each location. Three of the five regions (regions 1,3 and 4) contain only schools with ICSEA scores below the Australia-wide average of 1,000 and the mean CDI scores for these three regions are either at or slightly below the overall mean CDI value (1.27) for all schools. In contrast, regions 2 and 5 which contain the more advantaged schools in the GHS sample (with ICSEA scores close to or above 1,000) both have mean CDI values that are close to 1.30, i.e. above the overall sample average.

Table 6.12 thus indicates that when the GHS sample is split into five broad geographic regions, there is relatively little variation between them in terms of the average levels of child deprivation (as measured by the CDI). The lowest mean CDI value (1.21) is in Region 4 and the highest is in Region 5 (1.31). However, the findings also indicate that there is considerable variation in mean CDI scores within each of the regions, particularly within the Sydney region, where the mean CDI score varies between 0.84 in Northern Sydney and 1.54 in Western Sydney. It is also likely that the variation between schools within each of these sub-regions would be greater again, making it even harder to identify any clear patterns or draw any substantive conclusions. It is not possible to examine this issue in more detail without compromising the confidentiality of the schools that participated in the survey. However, what is striking about the findings in Table 6.12 is the lack of any simple (inverse) relationship between the ICSEA values of each school and the mean CDI score of students within that school.

### Table 6.12: Mean Child Deprivation Index (CDI) Scores by School Geographic Location

| Region | Number of students | Mean ICSEA score | ICSEA range | Mean CDI Score |
|---|---|---|---|---|
| **Region 1 (11 schools):** | | | | |
| Hunter-Central Coast | 230 | 953.6 | 928-983 | 1.12 |
| New England | 107 | 903.7 | 897-910 | 1.37 |
| North Coast | 193 | 922.4 | 871-953 | 1.38 |
| Total, Region 1 | 530 | 932.2 | 871-983 | 1.27 |
| **Region 2 (12 schools):** | | | | |
| South Western Sydney | 671 | 954.7 | 897-1,001 | 1.30 |
| **Region 3 (9 schools):** | | | | |
| Western New South Wales | 421 | 883.2 | 779-975 | 1.25 |
| **Region 4 (9 schools):** | | | | |
| Illawarra-South Coast | 309 | 978.5 | 916-999 | 1.20 |
| Riverina | 197 | 951.7 | 925-977 | 1.23 |
| Total Region 4 | 506 | 968.1 | 916-999 | 1.21 |
| **Region 5 (11 schools):** | | | | |
| Northern Sydney | 57 | 1,094.0 | 1,094-1,094 | 0.84 |
| Sydney | 134 | 1,056.8 | 1,001-1,085 | 0.91 |
| Western Sydney | 353 | 925.9 | 896-954 | 1.54 |
| Total Region 5 | 544 | 975.7 | 896-1,094 | 1.31 |
| All schools | 2,672 | 945.8 | 779-1,094 | 1.27 |

40 This analysis has not been extended to the TSF sample, because detailed information about the school is not available.

Attention now focuses on examining the variation in mean levels of child deprivation within each school when schools are ranked by their ICSEA values rather than arranged according to where they are geographically located. The full sample of schools has been separated into ICSEA quintiles in two ways: first, by dividing the total number of schools (52) into five approximately equal-sized quintiles (each containing around 10 schools); and second, by specifying the quintiles so that each contains approximately the same numbers of students.

Results based on both approaches are shown in Table 6.13. Because the two ways of identifying the ICSEA quintiles produce very similar patterns, the following discussion focuses on the ranking by number of students (shown in the upper panel of Table 6.13). There is a clear tendency for the mean CDI score to decline across the ICSEA quintiles and although the change is not very large in absolute terms, it assumes greater significance when viewed in relative terms. For example, the mean ICSEA scores in the top and bottom quintiles are 1,021.3 and 872.0, respectively, implying an ICSEA relativity of 1.171 (or a proportionate increase of 17.1 per cent moving up the quintiles). In contrast, the corresponding values of the CDI mean scores are 1.14 and 1.38, implying a relativity of 1.211 or a proportionate decline of 21.1 per cent. Thus, the relationship between the ICSEA scores and CDI mean values is close to one-to-one when expressed in relative (percentage) terms. The alternative (school-based) ranking (shown in the lower panel of Table 6.13) changes these estimates slightly but does not affect the overall pattern.

### Table 6.13: Mean Child Deprivation Index (CDI) Scores by School ICSEA Quintiles

| ICSEA quintile | Number of students | ICSEA scores: | | | CDI score |
|---|---|---|---|---|---|
| | | Minimum | Maximum | Mean | |
| **Quintiles based on numbers of students** | | | | | |
| Lowest | 584 | 779 | 908 | 872.0 | 1.38 |
| Second | 526 | 909 | 930 | 921.4 | 1.42 |
| Third | 514 | 937 | 953 | 947.9 | 1.19 |
| Fourth | 527 | 954 | 985 | 975.1 | 1.21 |
| Highest | 521 | 986 | 1,094 | 1,021.3 | 1.14 |
| **Quintiles based on numbers of schools** | | | | | |
| Lowest | 584 | 779 | 908 | 872.5 | 1.38 |
| Second | 437 | 909 | 928 | 920.7 | 1.40 |
| Third | 603 | 929 | 953 | 943.5 | 1.24 |
| Fourth | 445 | 954 | 982 | 970.6 | 1.16 |
| Highest | 603 | 983 | 1,094 | 1,020.7 | 1.19 |

The results from the analysis are consistent with the 'ecological fallacy' which asserts that not all disadvantaged (or advantaged) individuals live in disadvantaged (or advantaged) areas, and conversely that not all individuals living in disadvantaged (or advantaged) areas are themselves disadvantaged (or advantaged). In the current context, the fallacy implies that there is a mis-match between those identified as disadvantaged based on the characteristics of the school they attend (as identified using the ICSEA approach) when the disadvantage status is the average for each student (as identified using the CDI approach). What is clear is that the individual-level approach that is the focus of this report has an important contribution to make when examining the overall profile of social disadvantage among young people. This is particularly true when the focus is on poverty, since this is fundamentally a characteristic of individuals, rather than of the area in which they are living.

This is not to deny that area does not matter, as numerous studies have highlighted how areas defined in various ways experience differing degrees of disadvantage (ABS, 2008; Australian Government, 2012; Vinson, 2007). Nor does it mean that the area where one lives cannot exert an influence on the degree of disadvantage or deprivation experienced by those who live there. Indeed, this possibility is captured in the specification of several of the essential items used to estimate deprivation, including lacking adequate public transport, a park or play area or public internet access. However, this does not prevent the area-level and individual-level approaches from capturing different factors and forces, thus producing different results and having different implications for policy.

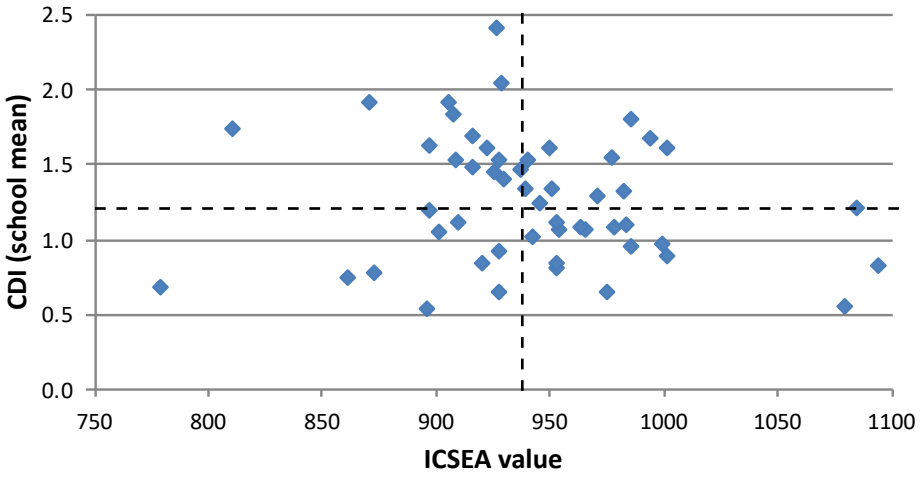
The above analysis has focused on the relationship between the area-based ICSEA scores of each school and the individual-based mean CDI values of sampled students from each of those schools. The strength of that relationship is examined further in Figure 6.5, which plots the two variables against each other for each of the 52 government high schools that participated in this study. There is only a weak (negative) relationship between the two variables, and there are many 'outliers' that deviate from any discernible overall pattern - as is shown by those observations that fall in the north-east and south-west quadrants of Figure 6.5. This latter finding was the basis for noting earlier (in Chapter 5) that the fact that the GHS sample is not representative of all NSW government high *schools* based on their ICSEA scores does not mean that the sample is not representative of all *students* attending NSW government high schools.

This is confirmed when a simple linear regression model is estimated that relates the mean CDI scores (dependent variable) to the ICSEA values (independent variable). This produces the following result:

$$CDI = 2.360 - 0.001\ ICSEA$$

The estimated coefficient on the ICSEA variable is not only very small numerically but is also not significantly different from zero statistically ($p = 0.27$), indicating that the hypothesis that there is no (linear) relationship between the two variables cannot be rejected on statistical grounds. What this analysis does suggest, however, is that directing assistance to disadvantaged students identified on the basis of the ICSEA value of their school would not be an efficient way of targeting resources to the most disadvantaged students.

## Figure 6.5: The School-level Relationship between the ICSEA Values and Mean CDI Scores




Note: The vertical and horizontal dotted lines signify the mean values of the ICSEA score and the school-level CDI value, respectively.

In order to examine this issue in more depth, Figure 6.5 has been split into four quadrants separated by the mean values of ICSEA and CDI. The resulting four quadrants contain schools with high (i.e. above-average) ICSEA scores and high CDI values (north-east quadrant; H-H), high ICSEA scores and low (i.e. below-average) CDI values (south-east quadrant, H-L), low ICSEA scores and low CDI values (south-west quadrant, L-L) and low ICSEA scores and high CDI values (north-west quadrant, L-H). Of these, the H-L and L-H quadrants are of considerable interest since the degrees of disadvantage implied by the two variables appear to conflict. And this is particularly true of several ('outlier') schools where the degree of

conflict is particularly acute, i.e. those schools that lie closest to the north-east and south-west corners of Figure 6.5. Although this issue is not pursued further here, there is potentially much to be gained by more in-depth research designed to better understand what it is about the features of these outlying schools that is contributing to this apparently perverse combination of school-level and student-level disadvantage measures.

## 6.7 The Association between Deprivation and Poverty

This section of the report examines the relationship between deprivation as measured using the CDI scores and the poverty status of young people or of the household in which they are living. Because information was not collected (nor could it have been) on the household income of the survey participants, several indirect indicators of poverty are used in this analysis. These indicators were defined and described earlier (see Table 5.7 and surrounding text) and they are repeated in Table 6.14, which also shows how the mean CDI scores vary with each poverty indicator.

### Table 6.14: Child Deprivation Index (CDI) Scores for Young People Identified as Poor using Different Poverty Indicators [a]

| Indicator | Government high schools (GHS) sample: | | The Smith Family (TSF) sample: | |
|---|---|---|---|---|
| | Percentage of sample | Mean CDI score | Percentage of sample | Mean CDI score |
| **Jobless household:** | | | | |
| No adults in the household in paid work | 5.4 | 2.39 | 34.1 | 2.75 |
| One adult in paid work | 23.9 | 1.54 | 40.7 | 2.54 |
| Two or more adults in paid work | 66.8 | 1.10 | 22.6 | 2.39* |
| **Lack of money stops you doing what you want to do:** | | | | |
| Very or quite often | 22.5 | 2.05 | 35.4 | 3.88 |
| Sometimes | 38.7 | 1.31 | 41.2 | 2.42 |
| Hardly ever or never | 38.3 | 0.77 | 21.6 | 0.95 |
| **Lack of money stops you buying something you need:** | | | | |
| Very or quite often | 21.8 | 1.95 | 24.6 | 3.53 |
| Sometimes | 29.9 | 1.32 | 39.8 | 3.07 |
| Hardly ever or never | 47.2 | 0.93 | 33.6 | 1.55 |
| **Lack of money stops you from seeing your friends:** | | | | |
| Very or quite often | 14.6 | 1.94 | 22.9 | 3.59 |
| Sometimes | 14.9 | 1.50 | 20.8 | 3.59 |
| Hardly ever or never | 68.9 | 1.09 | 54.0 | 1.98 |
| **Does your family have enough money to get by on?** | | | | |
| Not enough | 3.1 | 3.83 | 8.6 | 3.66 |
| Just enough | 17.9 | 2.29 | 51.9 | 3.13 |
| Enough for a few extras | 53.5 | 1.08 | 36.5 | 1.69 |
| More than enough | 23.2 | 0.62 | 2.1 | 2.29* |
| **How often do you go to school hungry:** | | | | |
| Often or always | 6.7 | 2.92 | 1.8 | 5.00* |
| Sometimes | 20.7 | 1.82 | 19.0 | 4.00 |
| Never | 70.7 | 0.98 | 78.3 | 2.23 |

Notes: Missing values and/or Don't Know responses have been omitted (so that percentages do not sum to 100). The numbers affected are shown in Table 5.7. An asterisk (*) indicates that the estimate is based on less than 20 observations.

The results in Table 6.14 provide strong evidence of a positive relationship between poverty and deprivation for both the GHS and TSF samples across all of the poverty indicators. In virtually all instances, the CDI value increases as the severity of poverty implied by the indicator rises. For example, for the indicator that most closely captures (in young people's eyes) the poverty status of their family (the 'income managing' question that asks whether their family has enough money to get by on), there is a clear gradient linking the perceived adequacy of family income and the level of deprivation experienced by the young person.

A similar gradient is also apparent in relation to the last indicator shown in Table 6.14 (going to school hungry), where the frequency of this occurring is higher for higher levels of deprivation, as measured by the CDI. These results suggest not only that deprivation is capturing an aspect of poverty but also that the young people who participated in the survey are actually experiencing the effects of the poverty, including by 'going without' or (even worse) 'going to school hungry'.

In relation to the 'income managing' or 'getting by' question, it is of interest to note that just over one-fifth (21.0 per cent) of those in the GHS sample indicate that their family income is either not enough or only just enough to get by on, while the corresponding percentage of the TSF sample is almost three times higher, at 60.5 per cent. This percentage for the GHS sample is similar to the percentage defined earlier as being in severe deprivation by being deprived of at least three essential items (18.7 per cent; see Table 6.4). These two approximately equal-sized groups of around one-fifth of the GHS sample can thus be regarded as experiencing social disadvantage when identified using two alternative approaches: one based on assessing the perceived (subjective) adequacy of family income (a poverty approach) and the other based on not having items regarded as essential for all young people (a deprivation approach). In both cases, the information used to identify poverty or deprivation status is provided by young people themselves.

This makes it possible to examine who is experiencing neither condition (those who are neither poor nor deprived), who is experiencing only one of the two conditions (those who are poor but not deprived or deprived but not poor) and those who fall into the 'overlap' category and are experiencing both conditions (those who are both poor and deprived). Several adult poverty studies have examined the degree of 'overlap' between those identified as disadvantaged using each of the poverty and deprivation approaches, with those in the overlap group being identified as 'consistently poor' (Nolan and Whelan, 1996; Perry, 2002; Saunders and Naidoo, 2009, 2018). The results that emerge when such an exercise is applied to young people using the GHS and TSF samples are presented in Table 6.15 and illustrated in Figure 6.6.[41]

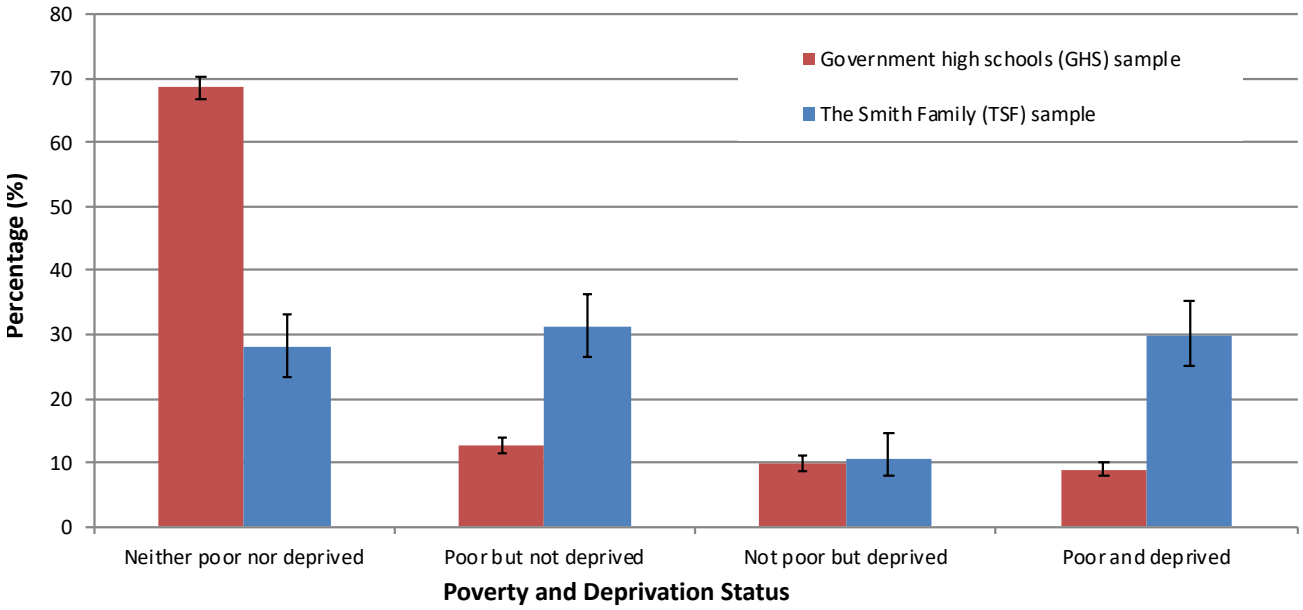
### Table 6.15: Overlap between Deprivation and Poverty (sample percentages) [(a)]

| Government high schools (GHS) sample: | | Deprivation status: | | |
|---|---|---|---|---|
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 68.6 | 9.8 | 78.4 |
| | Poor | 12.6 | 9.0 | 21.6 |
| | Total | 81.2 | 18.8 | 100.0 |
| **The Smith Family (TSF) sample:** | | **Deprivation status:** | | |
| | | **Not deprived** | **Deprived** | **Total** |
| Poverty status: | Not poor | 28.1 | 10.8 | 38.9 |
| | Poor | 31.1 | 29.9 | 61.0 |
| | Total | 59.2 | 40.7 | 100.0 |

Notes: Deprivation status is defined according to whether or not each person is deprived of three or more items. Poverty status is defined according to whether or not family income is perceived as being not enough or just enough to get by on. The available sample sizes are 2,611 (GHS sample) and 334 (TSF sample). Respondents are excluded if they did not respond to all of the relevant survey questions.

41 It should be noted that the definition used to define who is poor used in this overlap analysis is broader than that used earlier to define poverty (e.g. in Table 5.7 and when conducting the robustness analysis in Appendix A. This can be justified on the grounds that the overlap analysis is easier to interpret when the size of the two sub-samples (of poor and deprived young people) are of roughly the same size.

## Figure 6.6: Overlap between Deprivation and Poverty (sample percentages)




Looking first at the GHS sample, Table 6.15 shows that more than two-thirds of the sample (68.6 per cent) are neither poor nor deprived. However, over half of the 21.6 per cent that are identified as poor using responses to the 'income managing/getting by' question (12.6 per cent out of 21.6 per cent or 58.3 per cent) are not deprived of at least three essential items.[42] Similarly, just over half (9.8 per cent out of 18.8 per cent, or 52.1 per cent) of those identified as deprived are not classified as poor. The 'overlap' group – those who are identified as both poor and deprived – accounts for 9.0 per cent of the GHS sample and more than three times this for the TSF sample (29.9 per cent). Put another way, only around two-fifths (41.7 per cent) of those young people in the GHS sample who are defined as poor are also deprived (9.0/21.6 = 0.417), while the corresponding figure for the TSF sample is close to one-half (49.0 per cent: 29.9/61.0 = 0.490).

In both instances, the fact that these overlaps are so low indicates that the two approaches produce different findings on who is most disadvantaged. This in turn implies that the choice between the two approaches matters, since it affects who is identified as disadvantaged. Of course, the fact that the results produced by the two methods are *different* does not indicate which is *better* - although this issue is examined in the next chapter. What the results do indicate, however, is that that the size of the overlap for young people is very similar to that estimated in recent SPRC studies of adult deprivation, as is the finding that the overlap is higher amongst the more disadvantaged sub-groups (see Saunders, Naidoo and Griffiths, 2007: Table 13; Saunders and Wong, 2012: Table 8.10). These similarities provide further confirmation that the consensual approach is able to produce meaningful results when applied to children and young people.

The poverty and deprivation approaches should not be viewed as alternatives and both have something to contribute to a better understanding of the nature of social disadvantage and who is affected. This important point has been recognised in (adult) deprivation studies that have developed the concept of 'consistent poverty' to refer to those who simultaneously have both an inadequate level of income (or are income poor) and are deprived of a threshold number of essential items (see Nolan and Whelan, 1996, 2012; Saunders and Naidoo, 2009, 2018). Table 6.15 implies that when the consistent poverty approach is applied to the WYPN survey data, just under one-in-eleven (9.0 per cent) of the GHS sample are identified as consistently poor. It is hard to argue that those young people who fit within this overlap group are not doing it tough, living in households that have neither the economic resources to make ends meet and experiencing multiple forms of deprivation.

42 Note that the sample percentages shown in Table 6.15 differ slightly from those in Table 6.14 because the sample sizes are different: in order to be included in the analysis for Table 6.15, respondents must provide answers to the questions required to establish both their deprivation and poverty/income managing status.

The consistent poverty estimates for the TSF sample reveal once more that those in this group are experiencing a higher and more intense level of social disadvantage, however it is measured. The overall poverty rate for this group is almost three times that for the GHS sample - 61.0 per cent compared with 21.6 per cent - while just over half (31.1 per cent of 61.0 per cent, or 51.0 per cent) of those in poverty are also deprived – a proportion that is very similar to that for the GHS sample. As noted earlier, the overall deprivation rate is also more than twice as high among the TSF sample (40.7 per cent) than among the GHS sample (18.8 per cent) again highlighting the greater disadvantage of the former group. As a consequence of these higher incidence rates, almost one-third (29.9 per cent) of the TSF sample fit within the above definition of being consistently poor – i.e. are both poor and deprived – a figure that exceeds the percentage that is neither poor nor deprived (28.1 per cent) and more than three times the consistent poverty rate for the GHS sample.

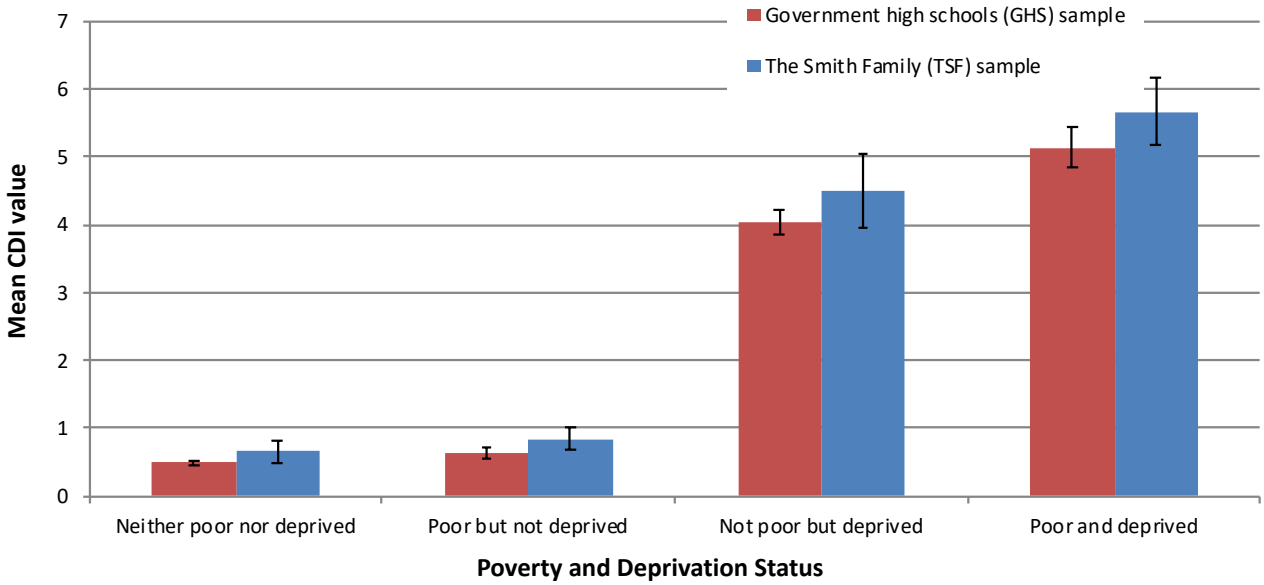
Table 6.16 and Figure 6.7 show the mean values of the CDI for those that fall into each cell of the two-by-two social disadvantage matrix shown in Table 6.15. The striking feature of these results for both samples is the similarity in CDI values when groups are differentiated according to their poverty status compared with when they are differentiated according to their deprivation status. For example, for the GHS sample, the ratio of the CDI values for the poor and non-poor groups is 2.52/0.94 = 2.68, whereas the corresponding ratio for the deprived/not deprived groups is 4.56/0.52 = 8.77. Looked at differently, the mean CDI value for those who are neither poor nor deprived of 0.50 increases only marginally to 0.65 for those who are poor but not deprived but shows a much sharper increase to 4.03 for those who are deprived but not poor.

### Table 6.16: Mean Child Deprivation Index (CDI) Values by Poverty and Deprivation Status (sample percentages) [a]

| Government high schools (GHS) sample: | | Deprivation status: | | |
|---|---|---|---|---|
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 0.50 | 4.03 | 0.94 |
| | Poor | 0.65 | 5.14 | 2.52 |
| | Total | 0.52 | 4.56 | 1.28 |
| **The Smith Family (TSF) sample:** | | **Deprivation status:** | | |
| | | **Not deprived** | **Deprived** | **Total** |
| Poverty status: | Not poor | 0.66 | 4.50 | 2.72 |
| | Poor | 0.85 | 5.66 | 3.32 |
| | Total | 0.76 | 5.35 | 2.63 |

Note: (a) See Note to Table 6.16.

Figure 6.7: Mean Child Deprivation Index (CDI) Values by Poverty and Deprivation Status (sample percentages)




Similar patterns are apparent for the TSF sample, although here again the CDI values are higher for all combinations of poverty and deprivation, reflecting the greater level of disadvantage among this group. Although it is to be expected that the CDI values for both samples are strongly related to whether or not deprivation exceeds the threshold used to identify deprivation, what is surprising is the rather weak relation between deprivation and poverty implied by the results in Table 6.16. This re-affirms the point made earlier that the two approaches are capturing different aspects of social disadvantage.

Overall, these results indicate that the level of child deprivation as measured by the Child Deprivation Index (CDI) is far more sensitive to whether or not deprivation exists (as measured here) than to whether or not poverty exists. This suggest that deprivation provides a better basis for establishing the presence and extent of social disadvantage than does poverty – at least when these two approaches/measures are based on the views expressed by young people themselves and are considered in isolation. However, as noted earlier, there is no reason to choose between these different approaches since both have a role to play in identifying disadvantage and both should thus feature in any comprehensive attempt to identify and measure social disadvantage. The consistent poverty measure described earlier does just that and should play a central role in future analysis of this kind.

## 6.8 Summary and Conclusions

This chapter has examined in detail the extent, form and degree of deprivation experienced by young people using the consensual approach that has been developed and applied for the first time in Australia. The approach has been shown to be capable of practical implementation, as indicated by the fact that the WYPN survey respondents had few difficulties understanding what was asked of them and providing the relevant information. It is also important to emphasise that the items included in the survey and used to construct the measures examined in this chapter are based in part on information provided through the focus groups conducted with young people described in Chapter 4 and are also consistent with and draw on, recent international research on child deprivation. The research has not only involved speaking with young people but has drawn on the information they have provided to develop measures that better capture the multiple forms of social disadvantage they are facing.

The results reveal the important yet largely unexplored role that deprivation studies can play in highlighting the nature and extent of social disadvantage among children and young people in Australia. The broad nature of the items used to identify deprivation provides important new insights into what matters for young people – material things, as well as activities and features of the communities in which they live – and where they are missing out on things that are seen as essential for all young people by a majority of their peers. The comparisons between the two samples reinforces many of these insights by highlighting what the more disadvantaged (TSF) sample has to go without compared with other young people in the more representative school-based (GHS) sample.

The analysis itself has adopted a largely descriptive approach focusing on the main features of the survey data and examining differences between sub-groups as a way of identifying what features – personal as well as relational and contextual - are most closely associated with deprivation. In overall terms, setting a deprivation threshold of at least three items produces a deprivation rate of almost one-fifth (18.7 per cent) among the GHS sample and more than double that (40.4 per cent) among the TSF sample.

More detailed analysis of the survey data reveals several notable deprivation gradients, including between deprivation and subjective health status and between deprivation and the number of close friends that young people report that they have. Both results suggest that the causes of deprivation are complex but also that the consequences are profound. Those young people who might be described as having faced disruptive events in the recent past – such as having moved school or house more than once in the last year – are also shown to face higher deprivation rates. Many of these patterns continue to exist when other factors are controlled for in a multi-dimensional regression analysis, suggesting that they are not simply statistical artefacts but represent part of the reality of young people's lives. It is, however, acknowledged that a better understanding of the underlying relationships and associated causes, effects and transmission mechanisms are important questions that require further examination.

The analysis also shows that the individual-level Child Deprivation Index (CDI) that represents a summary measure of severity, correlates rather poorly with the community-level Index of Community Socio-educational Advantage (ICSEA) that is now widely used to rank schools according to the status of the area and to a limited extent the socioeconomic status of students. It is well known that not all poor people live in poor areas (and that not all rich people live in rich areas) but the comparison of school level ICSEA data with the derived CDI values for each school provides important new evidence on how different approaches are capable of producing different profiles of disadvantage within and between areas and (government) schools.

The final section of the chapter explored how deprivation aligns (or overlaps) with a more conventional poverty measure that captures the ability (perceived by young people) of their household to make ends meet with the resources that are available to them. This analysis confirms adult deprivation studies, that have found that although the deprivation approach is broadly consistent with one based on a poverty approach, there are important differences. Overall, these findings suggest that the deprivation approach is better able to discern who is facing the more severe levels of social disadvantage although it is acknowledged that this is another issue that warrants further detailed study. Even so, this is an important finding, one that provides the rationale for exploring in more detail the flow-on impacts of the different forms of social disadvantage on the subjective well-being of young people. This important topic is examined in the next chapter.

# 7 Deprivation, Well-Being and Schooling

## 7.1 Introduction

This chapter extends the analysis presented in Chapters 5 and 6 by examining how the level of deprivation experienced by young people (as measured by the Child Deprivation Index, CDI) is associated with different indicators of their well-being, and with a number of variables that capture young people's experience of, attitudes to and aspirations for, their school and their views on the quality of their schooling experience. These latter variables are either taken directly from information reported in the WYPN survey or have been derived from those responses using the methods described in earlier chapters.

The aim of this part of the analysis is to provide a better understanding of how being deprived varies with a number of dimensions of young people's feelings and attitudes. The focus is on the statistical associations that exist between these variables and while causation may be inferred, it cannot be proven definitively because causation may run from well-being to deprivation or in both directions - at least to some degree Despite this, the weight of the evidence presented here is consistent with the view – supported by many of the other studies referred to earlier – that higher levels of deprivation among young people causes young people to experience and report lower levels of life satisfaction, lower levels of well-being and more negative attitudes to many aspects of schooling.

## 7.2 Deprivation and Subjective Well-Being (SWB)

The analysis in Chapter 5 identified five broad dimensions of well-being: overall life satisfaction; autonomy and control; contentment; safety; and connectedness and support networks. In addition, to providing the information needed to develop these measures, the WYPN survey contains information about the extent to which participants are happy across a number of dimensions of their lives and these responses have been combined to produce a composite measure of overall happiness – the Overall Happiness Index (OHI) - that was shown to be closely associated with reported levels of life satisfaction.

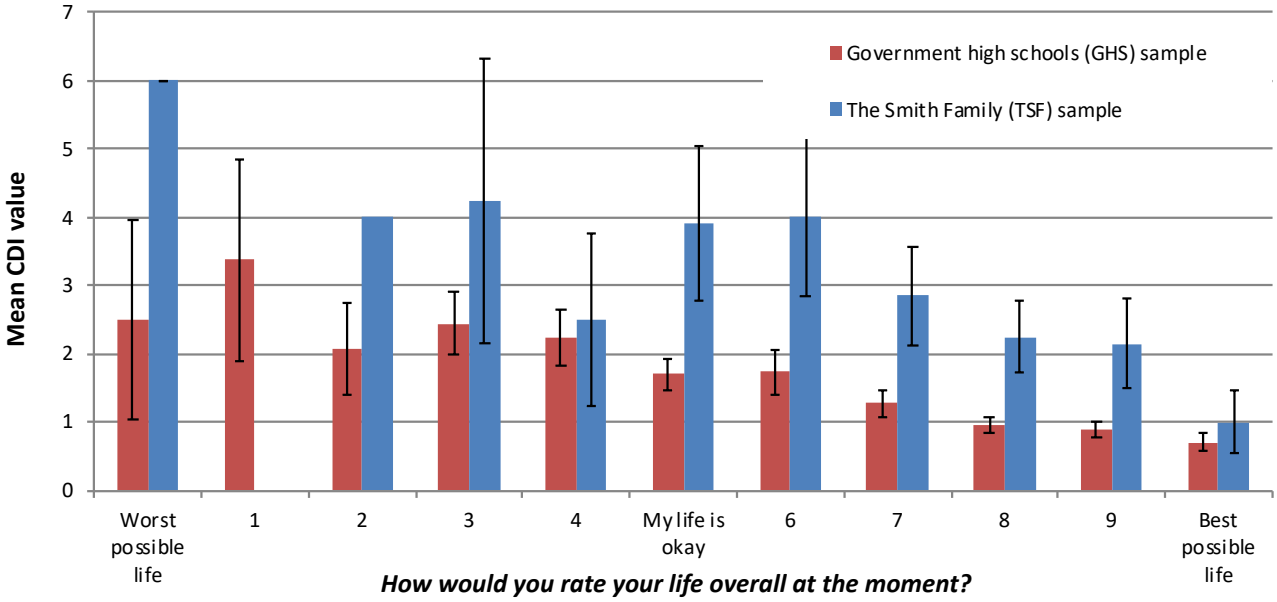
The analysis begins by showing in Table 7.1 how the level of deprivation (as measured by the CDI) varies within samples with two indicators of well-being: overall life satisfaction ('How would you rate your life overall at the moment?') and autonomy and control ('How much control do you believe you have over your own life and the things that happen to you?'). In both instances, responses were provided on a scale ranging from zero (worst possible life/no control) to 10 (best possible life/a lot of control). The patterns are illustrated in Figures 7.1 and 7.2, which also show the confidence intervals for each response.

## Table 7.1: Child Deprivation Index (CDI) Values by reported Levels of Life Satisfaction and Degree of Autonomy

| Life satisfaction: | | | | Autonomy and control: | | | |
|---|---|---|---|---|---|---|---|
| Response options | | Government high schools (GHS) sample | The Smith Family (TSF) sample | Response options | | Government high schools (GHS) sample | The Smith Family (TSF) sample |
| Worst possible life | 0 | 2.48 | 6.00 | No control | 0 | 3.19 | 4.50* |
| | 1 | 3.38 | - | | 1 | 1.63 | 6.00* |
| | 2 | 2.07 | 4.00 | | 2 | 2.52 | 3.29* |
| | 3 | 2.44 | 4.25 | | 3 | 2.72 | 3.92* |
| | 4 | 2.23 | 2.50 | | 4 | 2.35 | 4.18* |
| My life is OK | 5 | 1.70 | 3.90 | Some control | 5 | 1.56 | 3.53 |
| | 6 | 1.73 | 4.00 | | 6 | 1.39 | 2.23 |
| | 7 | 1.27 | 2.85 | | 7 | 1.05 | 2.44 |
| | 8 | 0.94 | 2.25 | | 8 | 0.86 | 1.93 |
| Best possible life | 9 | 0.89 | 2.15 | | 9 | 0.73 | 2.00 |
| | 10 | 0.70 | 1.00 | A lot of control | 10 | 0.74 | 1.45 |

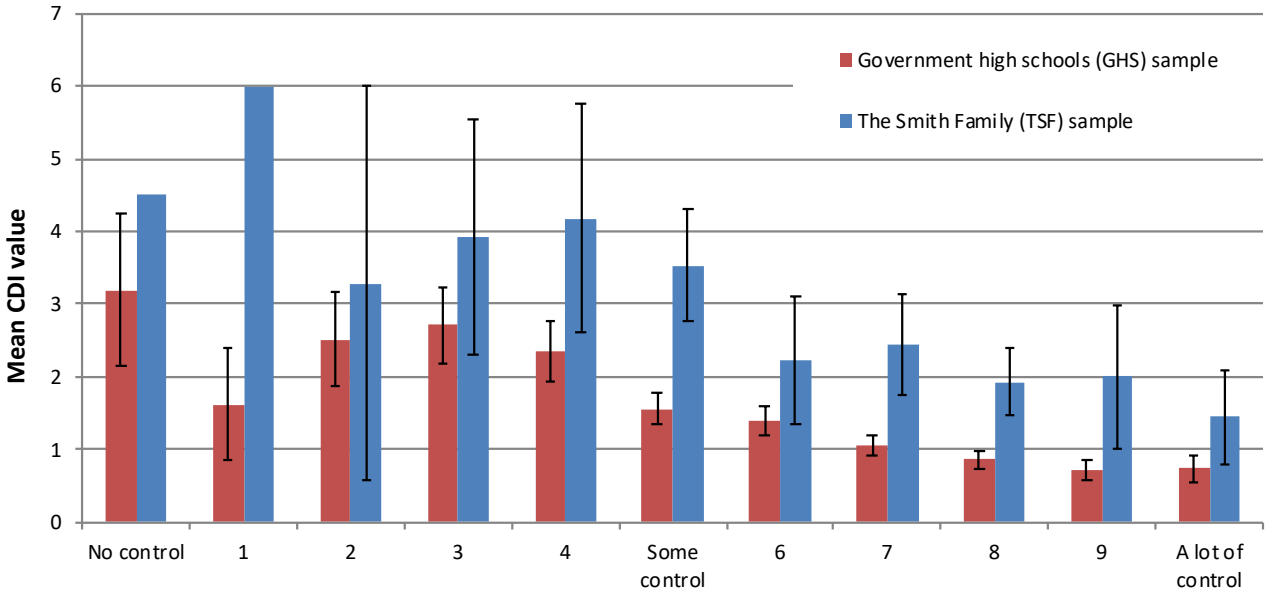
Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

## Figure 7.1: Child Deprivation Index by Life Satisfaction




Notes: (a) The Smith Family sample for Life satisfaction =0 has only 1 respondent so the 95% CI could not be calculated; (b) The Smith Family sample for Life Satisfaction =2 has only 3 respondents so the 95% CI is very wide and has been omitted

## Figure 7.2: Child Deprivation Index by Autonomy and Control




Note: The 95% CIs have not been included for lowest 2 categories of the TSF sample because the sample sizes are very small (n=2)

There is a clear deprivation gradient apparent within both samples, with lower levels of life satisfaction and less control over their lives reported by young people with higher CDI scores, i.e. experiencing higher levels of deprivation. Figures 7.1 and 7.2 indicate that many of these observed differences are statistically significant (as indicated by the fact that the confidence intervals do not overlap). Focusing on the range of responses between 2 and 8 (i.e. omitting the extreme values, where it is well known that survey respondents are generally unwilling to place themselves when responding to these kinds of questions in social surveys), the steepness of the gradient is similar in relation to life satisfaction in both the GHS and TSF samples, although in relation to autonomy and control, it is considerably steeper for the former, even though (consistent with the results presented in Chapter 6) the actual CDI scores are consistently higher among the latter group.

Tables 7.2 to 7.4 show how the level of deprivation varies with the other three dimensions of well-being identified in Chapter 5: contentment; safety; and connectedness. Table 7.2 indicates that there is a clear inverse relationship between the degree of deprivation experienced and all four dimensions of contentment: positivity; comfort; family functioning; and school enjoyment.[43] Taken at face value the results show larger effects among the GHS sample for all but the last dimension (enjoyment of schooling). For example, comparing the CDI values for those in the GHS sample who 'strongly disagree' with those who 'strongly agree' with each statement, shows a differential equal to 1.97, 3.59, 4.67 and 1.61 for the four dimensions of contentment. Although sample size is an issue for the smaller TSF sample, the overall pattern is similar and again indicates that there is a strong negative association between contentment and the degree of deprivation.

43 A degree of caution should be applied to some of these results, since some of the results (particularly) for the TSF sample are based on a small sample, making it difficult to discern the underlying trend.

## Table 7.2: Child Deprivation Index (CDI) Values by Dimensions of Contentment

| Dimension | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| **Outlook: I'm always positive about my future** | | |
| Strongly agree | 1.03 | 2.27 |
| Agree | 1.09 | 2.53 |
| Neither agree nor disagree | 1.33 | 2.55 |
| Disagree | 1.91 | 3.56 |
| Strongly disagree | 2.03 | 2.25* |
| **Comfort at home: My home is comfortable** | | |
| Strongly agree | 0.86 | 1.80 |
| Agree | 1.61 | 3.07 |
| Neither agree nor disagree | 2.82 | 5.74 |
| Disagree | 3.77 | 4.00* |
| Strongly disagree | 3.09 | 2.00* |
| **Family life: My family gets along well together** | | |
| Strongly agree | 0.75 | 1.52 |
| Agree | 1.22 | 2.45 |
| Neither agree nor disagree | 1.64 | 3.44 |
| Disagree | 2.39 | 5.00* |
| Strongly disagree | 3.50 | 5.00* |
| **Schooling: My school is a place that I enjoy being** | | |
| Strongly agree | 0.99 | 1.53 |
| Agree | 1.21 | 2.60 |
| Neither agree nor disagree | 1.32 | 2.76 |
| Disagree | 1.54 | 3.62 |
| Strongly disagree | 1.59 | 4.14* |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

Table 7.3 examines the relationship between deprivation and the three dimensions of safety identified earlier: safety at home; safety when with friends; and safety at school. Again, those who express the strongest disagreement with the positive statements about feeling safe have the highest levels of deprivation. In this instance, the 'strongly disagree'/'strongly agree' relativities across the three dimensions for the GHS sample are: 3.19 (at home), 2.07 (with friends) and 2.09 (at school). Again, the precise patterns are less clear among the TSF sample, except in relation to feeling safe and secure at school.

### Table 7.3: Child Deprivation Index (CDI) Values by Aspects of Safety

| Dimension | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| **At home: I feel safe at home** | | |
| Strongly agree | 0.93 | 1.95 |
| Agree | 1.50 | 3.26 |
| Neither agree nor disagree | 2.66 | 4.74 |
| Disagree | 3.36 | 4.33 |
| Strongly disagree | 2.97 | 2.00* |
| **With friends: I feel safe when I am with my friends** | | |
| Strongly agree | 1.23 | 2.24 |
| Agree | 1.28 | 2.62 |
| Neither agree nor disagree | 1.36 | 3.72 |
| Disagree | 1.73 | 3.00* |
| Strongly disagree | 2.55 | 2.00* |
| **At school: My school is a place where I feel safe and secure** | | |
| Strongly agree | 0.98 | 2.06 |
| Agree | 1.11 | 2.43 |
| Neither agree nor disagree | 1.44 | 3.13 |
| Disagree | 1.93 | 3.33 |
| Strongly disagree | 2.05 | 3.73* |

Notes: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

Table 7.4 compares the CDI values of those who report differing levels of agreement with statements that reflect their degree of connectedness as reflected in the strength and resilience of support networks. The patterns are similar to those described above, although in this instance they are clearly apparent among both samples. Here, the 'strongly agree'/'strongly disagree' CDI relativities among the GHS sample are: 4.31 (family); 2.01 (friends) and 2.35 (school), while the corresponding values for the TSF sample are: 3.65 (family); 1.81 (friends) and 2.46 (school).

### Table 7.4: Child Deprivation Index (CDI) Values by Connectedness and Support Networks

| Dimension | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| **With family: My parents/carers and I do fun things together** | | |
| Strongly agree | 0.75 | 1.67 |
| Agree | 1.22 | 2.66 |
| Neither agree nor disagree | 1.85 | 3.29 |
| Disagree | 2.40 | 3.67* |
| Strongly disagree | 3.23 | 6.09* |
| **With friends: My friends will help me if I need it** | | |
| Strongly agree | 1.13 | 2.49 |
| Agree | 1.25 | 2.60 |
| Neither agree nor disagree | 1.55 | 2.83 |
| Disagree | 2.05 | 1.50* |
| Strongly disagree | 2.27 | 4.50* |
| **At school: I feel part of the school community** | | |
| Strongly agree | 0.85 | 1.60 |
| Agree | 1.14 | 2.55 |
| Neither agree nor disagree | 1.33 | 2.89 |
| Disagree | 1.64 | 3.48 |
| Strongly disagree | 2.00 | 3.94* |

Notes: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

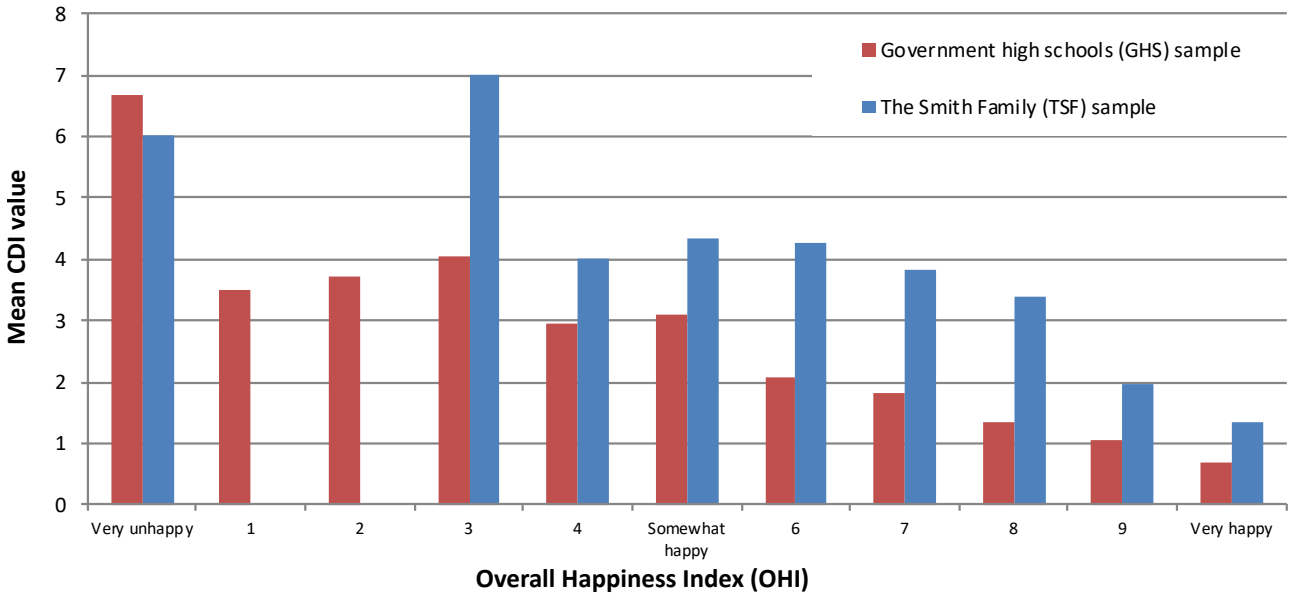
Table 7.5 and Figure 7.3 examine how deprivation varies with the composite of Overall Happiness Index (OHI) described earlier. For both samples, there are very few observations with low values of OHI (because a low score on the composite index requires low scores on all of its components) and this produces some variability at the lower end of the scale. Focusing therefore on the patterns for OHI values of 5 and above, there is a clear tendency for the CDI value to fall as OHI rises within both samples. For example, comparing those with OHI values of 8 and 5 (i.e. omitting the extreme and rarely reported values, 9 and 10 as well as those below 5) shows a decline in CDI from 3.10 to 1.36 (or by 56.1 per cent) for those in the GHS sample, and from 4.33 to 3.38 (or by 21.9 per cent) for those in the TSF sample. These are again substantial declines given the limited range over which the two indices are defined and reinforce the earlier results about the negative impacts associated with experiencing deprivation.

### Table 7.5: Child Deprivation Index (CDI) Values by the Overall Happiness Index (OHI)

| OHI value | | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|---|
| 0 | Very Unhappy | 6.67* | 6.00* |
| 1 | | 3.50* | - |
| 2 | | 3.70* | - |
| 3 | | 4.05* | 7.00* |
| 4 | | 2.96 | 4.00* |
| 5 | Somewhat happy | 3.10 | 4.33* |
| 6 | | 2.07 | 4.28 |
| 7 | | 1.81 | 3.84 |
| 8 | | 1.36 | 3.38 |
| 9 | | 1.06 | 1.95 |
| 10 | Very Happy | 0.69 | 1.34 |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

### Figure 7.3: Child Deprivation Index (CDI) Values by the Overall Happiness Index (OHI)




## 7.3 Deprivation and the Schooling Experience

Turning now to the relationship between deprivation and different aspects of the schooling experience, Table 7.6 shows how CDI scores vary with the strength of expressed satisfaction with different elements of schooling. For all six indicators of satisfaction and across both samples, there is a clear negative association between the degree to which the satisfaction levels are negative (as reflected in the percentage of 'strongly disagree' responses) and the level of deprivation as captured by the CDI.

For example, comparing as before the ratio of CDI values for those who 'strongly disagree' with each statement with those who 'strongly agree' the results for the GHS sample are: 2.09 (happy at school); 1.78 (like to go to school); 2.09 (feels safe and secure at school); 1.61 (enjoys being at school); 1.48 (likes learning at school); and 2.35 (feels part of the school community).

The corresponding ratios for the TSF sample are: 3.47; 1.81; 1.81; 2.71; 1.58; and 2.46, respectively. In other words, those in the school-based GHS sample who express strong disagreement with each of the positive statements about school satisfaction are between one and a half and two times more deprived than those who strongly agree with each statement. For those in the TSF sample, the corresponding deprivation relativities between those with negative and positive attitudes to school are between one and a half and three and a half.

## Table 7.6: Child Deprivation Index (CDI) Values by Satisfaction with School

| Dimension | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| **My school is a place where I feel happy** | | |
| Strongly agree | 0.92 | 1.61 |
| Agree | 1.12 | 2.55 |
| Neither agree nor disagree | 1.46 | 2.88 |
| Disagree | 1.53 | 2.79 |
| Strongly disagree | 1.92 | 5.58* |
| **My school is a place where I like to go each day** | | |
| Strongly agree | 1.00 | 2.09 |
| Agree | 1.17 | 2.48 |
| Neither agree nor disagree | 1.22 | 2.77 |
| Disagree | 1.47 | 3.00 |
| Strongly disagree | 1.78 | 3.78* |
| **My school is a place where I feel safe and secure** | | |
| Strongly agree | 0.98 | 2.06 |
| Agree | 1.11 | 2.43 |
| Neither agree nor disagree | 1.44 | 3.13 |
| Disagree | 1.93 | 3.33 |
| Strongly disagree | 2.05 | 3.73* |
| **My school is a place where I get enjoyment from being there** | | |
| Strongly agree | 0.99 | 1.53 |
| Agree | 1.21 | 2.60 |
| Neither agree nor disagree | 1.32 | 2.76 |
| Disagree | 1.54 | 3.62 |
| Strongly disagree | 1.59 | 4.14* |
| **My school is a place where I like learning** | | |
| Strongly agree | 1.14 | 2.21 |
| Agree | 1.35 | 2.72 |
| Neither agree nor disagree | 1.20 | 2.87 |
| Disagree | 1.29 | 2.94* |
| Strongly disagree | 1.69 | 3.50* |
| **My school is a place where I feel part of the school community** | | |
| Strongly agree | 0.85 | 1.60 |
| Agree | 1.14 | 2.55 |
| Neither agree nor disagree | 1.33 | 2.89 |
| Disagree | 1.64 | 3.48 |
| Strongly disagree | 2.00 | 3.94* |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

Table 7.7 shows how the composite Attitudes to Schooling Index (ASI) described in Chapter 5 varies with the level of deprivation across the two samples. As noted earlier, the ASI has been constructed so that a higher value implies greater agreement with the questions used to construct it, which therefore implies a more positive attitude to schooling. However, a degree of caution should again be applied to the higher ASI value observations for the TSF sample which are based on samples of less than 20 observations. Focusing on the range where sample size and extreme values are not an issue (i.e. on ASI values between 4 and 8), the more positive attitude to schooling is associated with a decline in the CDI index from 1.64 to 1.11 (or by 32.3 per cent) for those in the GHS sample, and from 3.81 to 2.05 (or by 46.2 per cent) for those in the TSF sample.

These are both very substantial declines given how the ASI has been constructed and suggest that addressing the deprivation facing those most severely affected has the potential to improve negative attitudes to schooling and (although not proven) result in improved school performance.

### Table 7.7: Child Deprivation Index (CDI) Values by Composite Attitudes to Schooling Index (ASI) Values

| ASI value | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| 0 - Negative | 1.89 | 3.78* |
| 1 | 1.69 | 5.00* |
| 2 | 1.53 | 3.18* |
| 3 | 1.57 | 3.00* |
| 4 | 1.64 | 3.81 |
| 5 - Neutral | 1.40 | 2.31 |
| 6 | 1.27 | 3.21 |
| 7 | 1.10 | 2.55 |
| 8 | 1.11 | 2.05 |
| 9 | 1.03 | 2.88 |
| 10 - Positive | 0.83 | 1.55 |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

Table 7.8 and Figure 7.4 show how the CDI values compare with different responses to the WYPN survey question that asks directly how happy young people are with their school. The trends are again clear: those who express greatest happiness with their school have the lowest levels of deprivation. This pattern is apparent among both the GHS and TSF samples, although it is of interest to note that the overall level of school satisfaction is consistently higher among those in the TSF sample.

## Table 7.8: Child Deprivation Index (CDI) Values by Happiness with School

| Overall, how happy are you with your school? | | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|---|
| Very unhappy | 0 | 1.90 | 4.00* |
| | 1 | 2.16 | 2.29* |
| | 2 | 1.72 | 4.80* |
| | 3 | 1.86 | 4.30* |
| | 4 | 1.49 | 3.46* |
| Somewhat unhappy | 5 | 1.49 | 2.55 |
| | 6 | 1.37 | 3.24 |
| | 7 | 1.21 | 2.95 |
| | 8 | 1.09 | 2.52 |
| | 9 | 1.13 | 1.84 |
| Very happy | 10 | 0.86 | 1.64 |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

## Figure 7.4: Child Deprivation Index (CDI) Values by Happiness with School

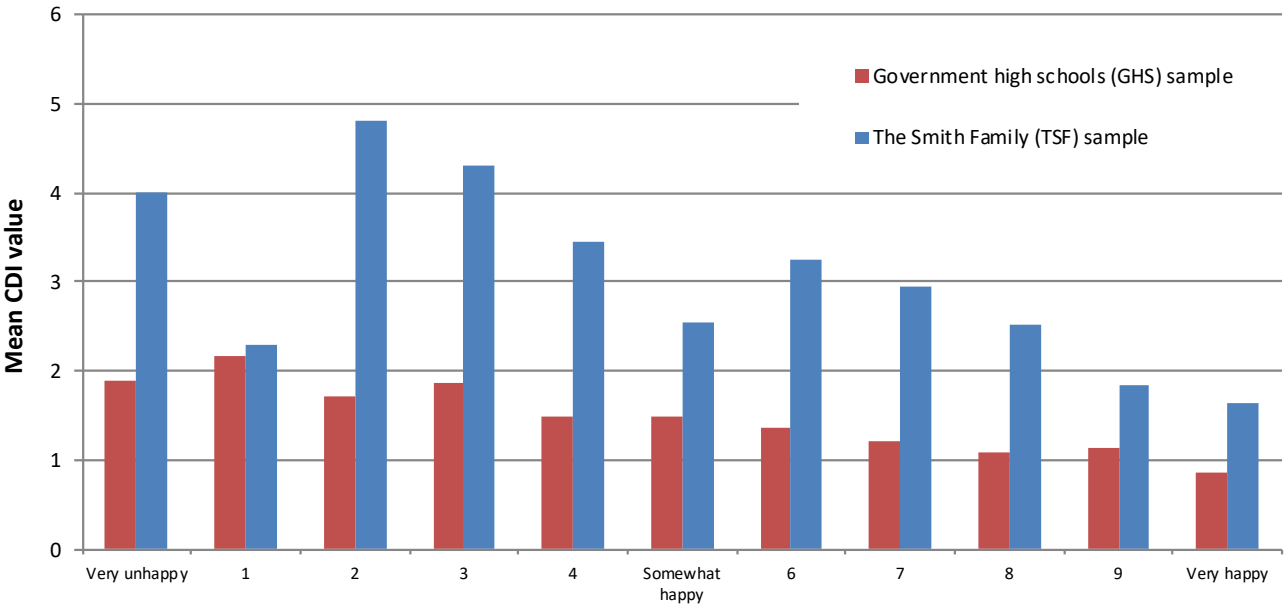



Table 7.9 and Figure 7.5 examine the association between deprivation and several indicators of school performance. The dimensions covered relate to how well young people think they are doing at school, how much weight they place on getting good marks in school tests and exams and their views about how far they intend to continue their education – in school and beyond. In each case, the response categories to the relevant survey questions are shown along with the mean CDI values for those who provide each response.

In all cases, there is a clear negative relation between how well students feel they are doing at school and the level of deprivation they are experiencing. Comparing the CDI values for those who say they are doing 'very well' with those who say they are doing 'not very well', the results show that the mean CDI value for those in the GHS sample in the latter group is much higher than those in the former group – 1.51 compared with 0.95, a relativity of 1.59. For the TSF sample, the corresponding values are 2.80 and 1.02, implying an even larger relativity of 2.74.

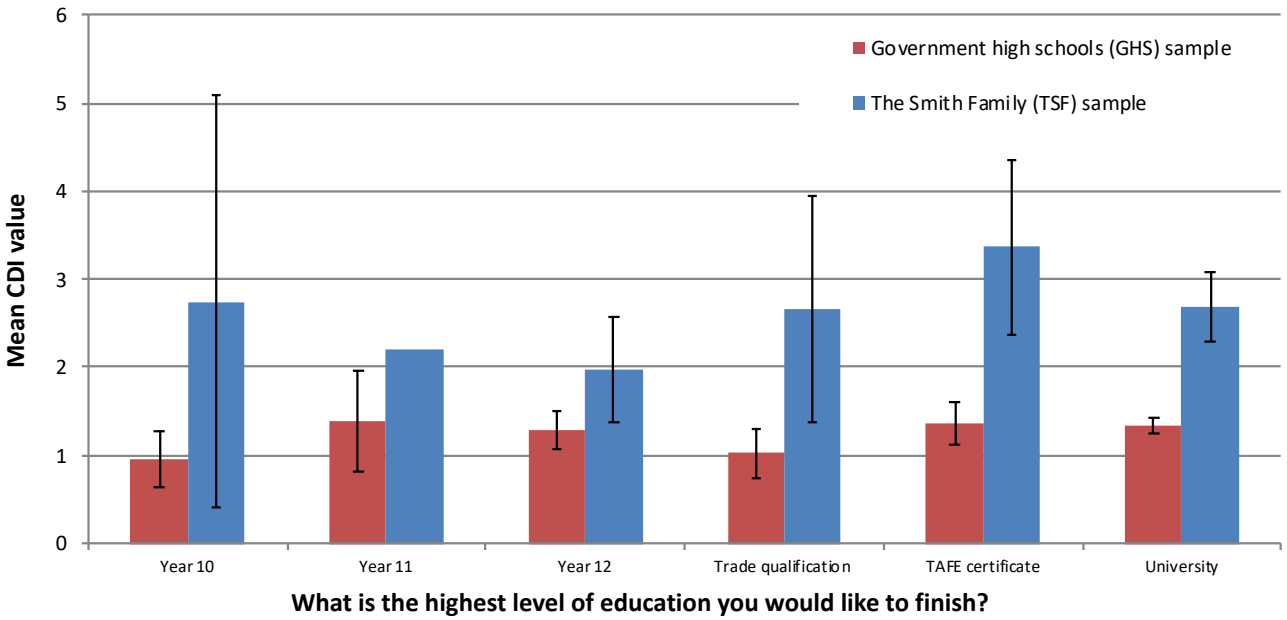
A similar pattern exists for the second indicator (importance of good marks) where the CDI relativity between those who think this is 'not at all important' and those who think it is 'very important' are 1.49 and 1.32, implying a relativity of 1.13 (GHS sample) and 6.00 and 2.85, implying a relativity of 2.11 (TSF sample). In relation to future education plans, no clear pattern is discernible although this may reflect the different stages of education that sample participants are at currently, which is likely to influence the reliability of stated views about their future plans (and the realistic nature of those views).

### Table 7.9: Child Deprivation Index (CDI) Values by Indicators of School Performance

| Dimension | Government high schools (GHS) sample: | The Smith Family (TSF) sample: |
|---|---|---|
| **Overall, how do you feel you are doing at school at the moment?** | | |
| Very well | 0.95 | 1.02 |
| Quite well | 1.20 | 2.84 |
| Not very well | 1.51 | 2.80 |
| Not at all well | 2.42 | 4.46* |
| Not sure | 1.42 | 2.48 |
| **How important do you think it is for you to get good marks in your school work, exams or tests?** | | |
| Very important | 1.32 | 2.85 |
| Quite important | 1.24 | 2.32 |
| Not very important | 1.19 | 2.00* |
| Not at all important | 1.49 | 6.00* |
| Not sure | 1.62 | 2.36* |
| **What is the highest level of education you would like to finish?** | | |
| Year 10 | 0.95 | 2.75* |
| Year 11 | 1.39 | 2.20* |
| Year 12 | 1.28 | 1.97 |
| Trade qualification (apprenticeship) | 1.03 | 2.65 |
| TAFE certificate (or similar) | 1.36 | 3.37 |
| University | 1.33 | 2.69 |

Note: An asterisk (*) indicates that the estimate is derived from a sample of less than 20 cases.

Figure 7.5: Child Deprivation Index (CDI) Values by Expected Level of Education Completion




## 7.4 Deprivation, Poverty and Well-Being

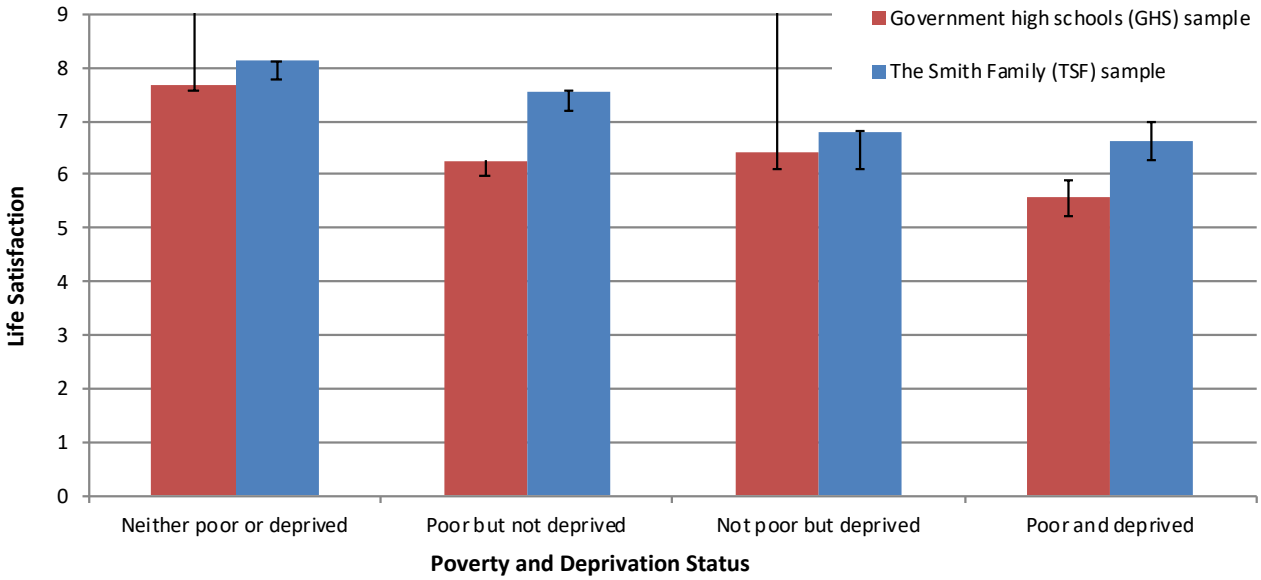
This section examines how the well-being indicators and attitudes to schooling vary with the two-by-two classification of deprivation and poverty status introduced in Chapter 6 when examining the 'overlap' issue. The two indicators of well-being used are life satisfaction and the composite Overall Happiness Index introduced earlier and the results for each are shown in Tables 7.10 and 7.11, respectively.

Table 7.10 and Figure 7.6 show that the mean life satisfaction score of those in the GHS sample who are neither deprived nor poor is 7.68. For those who are not deprived but poor the score declines to 6.26 whereas for those who are not poor but deprived, the score decreases slightly less, to 6.40. For those who are both poor and deprived, the mean life satisfaction score is smaller again, at 5.57. The declines in life satisfaction are thus similar when those who are not deprived become poor and when those who are not poor become deprived. The overall decline in life satisfaction between those who are neither poor nor deprived and those who are both poor and deprived is 27.5 per cent (5.57/7.68 = 0.725).

Table 7.10: Mean Life Satisfaction Scores by Poverty and Deprivation Status

| Government high schools (GHS) sample: | | Deprivation status: | | |
|---|---|---|---|---|
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 7.68 | 6.40 | 7.52 |
| | Poor | 6.26 | 5.57 | 5.97 |
| | Total | 7.46 | 6.01 | 7.19 |
| **The Smith Family (TSF) sample:** | | **Deprivation status:** | | |
| | | **Not deprived** | **Deprived** | **Total** |
| Poverty status: | Not poor | 8.13 | 6.81 | 7.45 |
| | Poor | 7.56 | 6.63 | 7.10 |
| | Total | 7.84 | 6.67 | 7.36 |

## Figure 7.6: Mean Life Satisfaction Scores by Poverty and Deprivation Status



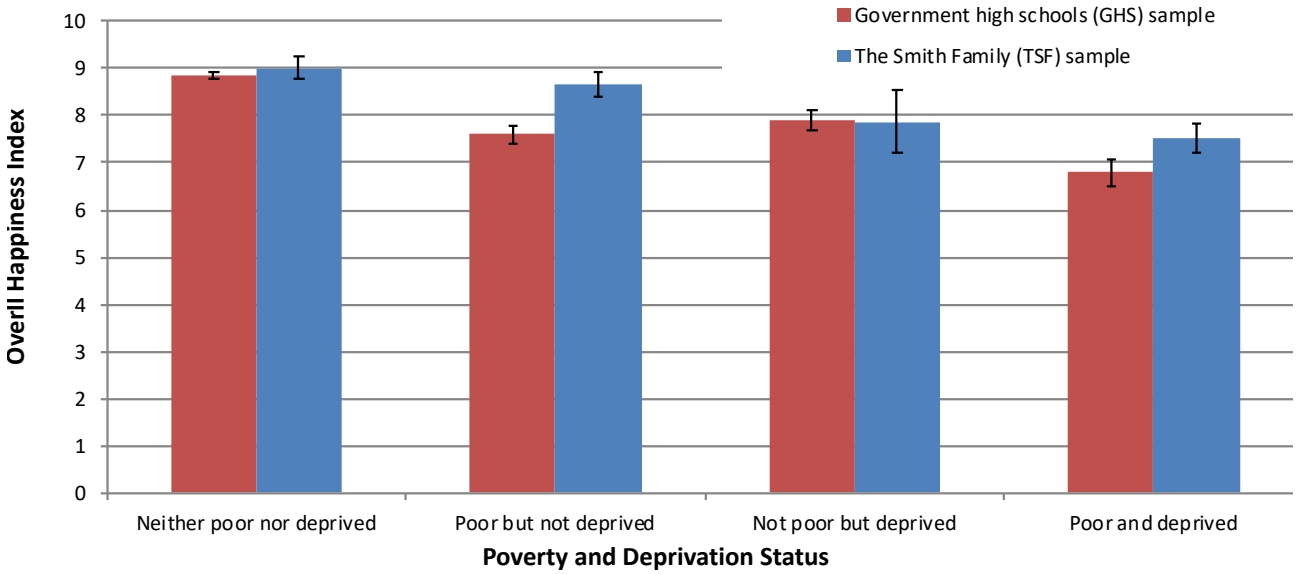

For those in TSF sample, the patterns are similar although in line with earlier findings (Table 5.8 and Figure 5.1), the mean life satisfaction levels are consistently higher across all combinations of poverty and deprivation status. In this case, the results imply that those who are not deprived experience a decline in life satisfaction from 8.13 to 7.56 (7.1 per cent) if they become poor, while those who are not poor experience a decline in life satisfaction from 8.13 to 6.81 (16.2 per cent) if they become deprived – the latter change producing the larger decline in this case. The comparison between those who are neither poor nor deprived and those who are both poor and deprived results in an overall decline in life satisfaction of 19.5 per cent (6.63/8.13 = 0.815).

Table 7.11 and Figure 7.7 present results for a similar analysis of how differences in the value of the Overall Happiness Index (OHI) vary with changes in the poverty and deprivation status of young people. In this case, the decline in overall happiness associated with moving from being neither poor nor deprived to being both poor and deprived is 23.1 per cent for the GHS sample (6.80/8.84 = 0.769) and 16.4 per cent for the TSF sample (7.52/9.00 = 0.836). For both samples, the decomposition of this overall decline into that portion associated with becoming poor and that portion associated with becoming deprived are very similar.

## Table 7.11: Mean Overall Happiness Index Values by Poverty and Deprivation Status

| Government high schools (GHS) sample: | | Deprivation status: | | |
|---|---|---|---|---|
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 8.84 | 7.88 | 8.72 |
| | Poor | 7.59 | 6.80 | 7.25 |
| | Total | 8.65 | 7.36 | 8.41 |
| **The Smith Family (TSF) sample:** | | **Deprivation status:** | | |
| | | **Not deprived** | **Deprived** | **Total** |
| Poverty status: | Not poor | 9.00 | 7.86 | 8.68 |
| | Poor | 8.64 | 7.52 | 8.08 |
| | Total | 8.81 | 7.60 | 8.32 |

## Figure 7.7: Mean Overall Happiness Index Values by Poverty and Deprivation Status




The declines shown in Tables 7.10 and 7.11 might seem to be rather modest and thus be interpreted to imply that the effects of being poor and/or deprived on life satisfaction and happiness are also rather modest. However, any such conclusion would not be warranted, for two reasons: first because the range of variation in the two indicators being examined is restricted to between 0 and 10 (and in most cases is further restricted by the general unwillingness to rate oneself in either of the extreme categories when answering these kinds of questions), so that what seems like a small absolute is actually large in relative terms; second, because although the effects are numerically small, they are statistically significant and thus 'real' and therefore important to acknowledge and take into account.

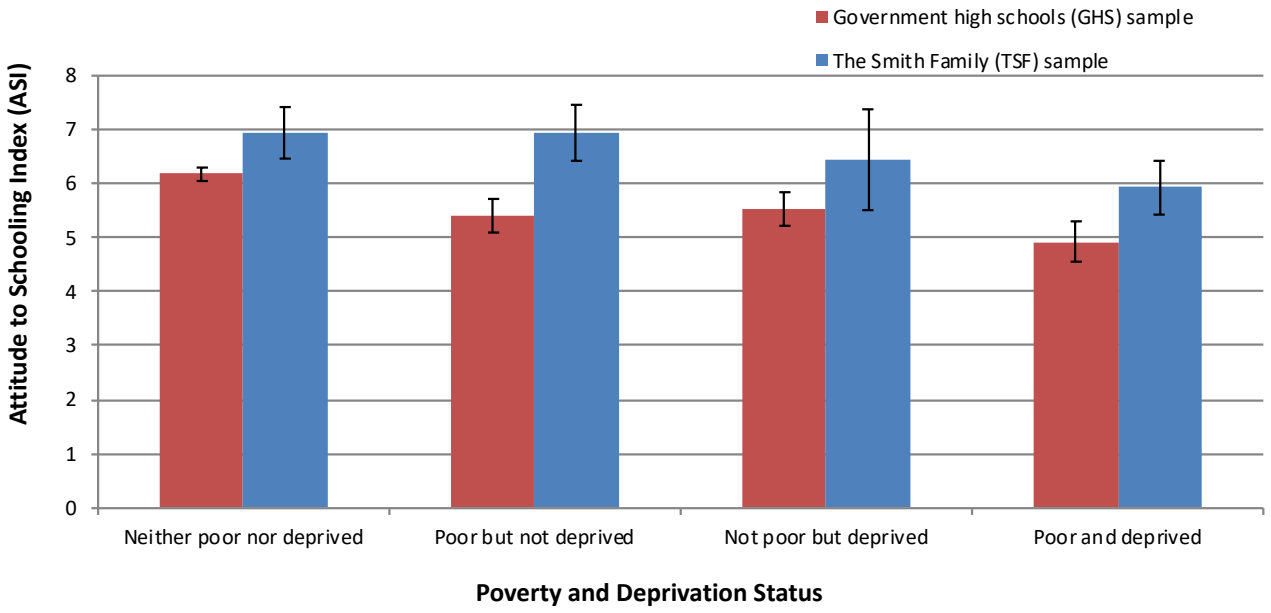
What is clear from this analysis is that both poverty and deprivation as measured here have negative effects on both the life satisfaction and happiness of young Australians. One can dispute some of the details of the indicators used (for example, the rather crude poverty measure, the arbitrary nature of the threshold used to define deprivation and the specification of the composite happiness index) but the patterns that emerge from the analysis are statistically strong and robust, i.e. the overall patterns do not vary greatly across the different measures of disadvantage or well-being. Furthermore, the fact that both poverty and deprivation are shown to have negative impacts that are broadly similar in size reinforces the conclusion drawn earlier that both have a role to play in producing better measures – and a more evidence-based understanding – of the determinants and consequences of youth social disadvantage.

Before leaving this analysis, it is of interest to explore the association between poverty and deprivation status and the composite Attitudes to Schooling index (ASI) developed and described earlier. The results are shown in Table 7.12 and illustrated in Figure 7.8. For both samples, there is a substantial increase in the value of ASI (implying a more positive attitude to schooling) when those who are neither poor nor deprived are compared with those who are both poor and deprived. Thus, for the GHS sample, the ASI values for the two group are 6.18 and 4.92 (a differential of 25.6 per cent) while for the TSF sample they are 6.95 and 5.93 (a differential of 17.2 per cent). And as noted earlier, the ASI values are consistently higher for those in the TSF sample than for those in the GHS sample. For both samples, being poor (compared to being not poor) and being deprived (compared to being not deprived) contribute approximately the same proportions to this overall change, so that both poverty and deprivation in isolation have a negative impact on attitudes to schooling that reinforce each other.

## Table 7.12: Mean Attitudes to Schooling Index Values by Poverty and Deprivation Status

| Government high schools (GHS) sample: | | Deprivation status: | | |
|---|---|---|---|---|
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 6.18 | 5.53 | 6.10 |
| | Poor | 5.40 | 4.92 | 5.20 |
| | Total | 6.06 | 5.24 | 5.91 |
| **The Smith Family (TSF) sample:** | | **Deprivation status:** | | |
| | | Not deprived | Deprived | Total |
| Poverty status: | Not poor | 6.95 | 6.43 | 6.80 |
| | Poor | 6.93 | 5.93 | 6.43 |
| | Total | 6.95 | 6.06 | 6.58 |

## Figure 7.8: Mean Attitudes to Schooling Index Values by Poverty and Deprivation Status



## 7.5 Summary and Conclusions

The results in this chapter have explored how poverty and deprivation among young people affects their well-being and attitudes to schooling. Once again, it must be emphasised that the direction (and even the existence) of causality has not been definitively established, although the statistical associations that are apparent in the survey data provide strong grounds for believing that they do exist and work in the directions implied by the text. The detailed results speak for themselves and do not need to be repeated here. However, the overall patterns show that across all of the indicators and dimensions examined those young people who live in families that do not have enough or only have just enough to get by on or who are deprived of at least three of the items regarded as essential by a majority of all young people have lower levels of well-being and more negative attitudes to schooling than those who are faring better.

The fact that this finding is robust across the many different indicators examined adds weight to the view that the findings point to real effects that need to be acknowledged, further examined, better understood and addressed if the experience of social disadvantage outside of school is not to continue to impede the progress of those affected within school. There is only so much that schools themselves can do to overcome the social disadvantages that many of their students confront in many aspects of their lives. School policies can make a difference, but they need to be accompanied by social policies that tackle poverty and deprivation at source. This will make it easier for young people to succeed at school and contribute to higher levels of their well-being, now and in the future.

# 8 Concluding Reflections

This report began by noting that child poverty is an issue attracting growing concern in an increasing number of countries. While all forms of poverty are a source of concern, child poverty is particularly disturbing, for two reasons: because an increasing body of evidence shows that poverty experienced during childhood impacts negatively on child development and can leave long-term scars; and because children cannot be held responsible for causing their poverty and are hence its 'innocent victims'. This explains why many countries have set child poverty reduction targets and timelines.

Australia is yet to join this group although its performance in addressing child poverty is about average among OECD countries and there is much to be done. Making major in-roads into the current level of child poverty is a pre-condition for ensuring that all Australians have the same opportunities to achieve their full potential from the moment they are born. This involves having a clear understanding of the nature of child poverty and developing the tools needed for its identification, measurement and monitoring.

The current methods, while important, are inadequate when it comes to measuring child poverty since the focus is primarily on assessing the adequacy of the incomes of adults through poverty line studies. The income approach identifies which children are living in poor households, but not which children are themselves poor and it also fails to acknowledge or incorporate the views of children and young people themselves. These weaknesses suggest that the current approaches need to be supplemented by new ones that address these limitations.

Against this background, the focus of this report has been on describing, assessing and applying a new method (the 'consensual approach') to identifying and measuring deprivation among children and young people in Australia. The approach is now widely used in adult studies of poverty but can also be applied to children and young people – in this case to young people aged between 11 and 17 years. It addresses the limitations of the conventional (income-based) approach and shifts the focus away from adults onto children and young people by incorporating their views about what should be measured and utilising data that they have provided to produce new measures. This shift means that children and young people are placed at the centre of the approach and are not seen as 'adult dependants' that are a drain on the resources of the household to which they do not contribute and about which they have no views.

Because the focus of most poverty studies is implicitly on adults, the information collected refers to adults and little attempt is made to collect information from children and young people, or to ask them how they experience poverty and what it means to them. But if all forms of poverty are to be better understood, research needs to become more focused on the actual living conditions of all individuals, how these are constrained by the resources available and what impact this has on their lives and well-being. If poverty means anything, it is to be forced to go without the items needed to satisfy basic needs and achieve an acceptable standard of living, when judged against prevailing community standards. These features are as real for children as they are for adults and child poverty is a feature of children as individuals not an inevitable consequence of adult poverty.

In contrast with the income approach that underpins poverty line studies, the deprivation approach pioneered by British sociologist Peter Townsend, defines poverty to exist when people cannot afford items that are widely owned, used or undertaken and are customary in their society. The approach has been refined over the last four decades by identifying which items are regarded as necessary or essential 'for everyone' by a majority in that community. This emphasis on identifying items that are widely regarded as essential has led to the approach being described as the 'consensual approach'.

In practice, the consensual approach asks people in surveys whether they think that each of a list of items regarded as potentially essential for meeting basic material and participatory needs are essential 'for everyone'. Those items that receive majority support are then examined further, and people are then asked if they have each item and if they do not, whether this is because they cannot afford it. Deprivation is then defined to exist when someone does not have and cannot afford items that are seen by a majority as essential for everyone.

Importantly, the consensual approach allows those who are surveyed to set the key parameters around how deprivation is defined, since they (collectively) select which items satisfy the majority support threshold that is its core element. Individual experiences and attitudes are thus given priority over decisions that would otherwise be taken by those who are conducting the research - as is normally the case when poverty lines are set. This feature means that the consensual approach is better grounded in the experience of poverty and gives its findings greater credibility.

Above all, the consensual approach can be applied to anyone who is able to complete a survey that collects the relevant information. The last five decades has seen an expansion in the number of studies applying the consensual approach to estimate adult poverty, and this trend has more recently been extended internationally to studies that apply the approach to measure poverty among children and young people.

This approach is being increasingly adopted by agencies like the OECD and UNICEF that have a particular interest in child poverty. An increasing number of individual countries are also applying the approach and utilising the findings to develop better measures of child poverty. This does not yet extend to Australia, although it is a signatory to the UN Sustainable Development Goals (SDGs) agreed to by all countries in 2015. The SDGs include explicit targets for reducing poverty, including child poverty, by 2030 and Australia will be judged by its ability to meet these globally agreed targets.

Aside from a limited application of the approach in the recent *Australian Child Well-Being Project* (ACWP), the consensual approach has not yet been applied in Australia to measure poverty among children and young people. This gap is addressed by the current study, which represents the first comprehensive and systematic attempt to apply the consensual approach to young Australians. This has involved conducting a survey of over 2,300 New South Wales government high school students aged between 11 and 17 and on a sample of over 300 disadvantaged young people who are participating in The Smith Family's *Learning for Life* program.

An important goal of the research has been to establish whether the consensual approach can be applied to young Australians and if so, if it is capable of generating important new insights into the extent and nature of child and youth poverty and disadvantage. The project has involved two pieces of fieldwork with young people, the first involving focus group discussions to find out what young people think about the basic building blocks of the consensual approach, including how they distinguish between luxury items that only the wealthiest can access and basic items that should be available to everyone to lead 'a normal kind of life'. These discussions shaped the design and content of the second piece of fieldwork, a quantitative survey - the What Young People Need (WYPN) survey - that collected the information needed to apply the consensual approach.

The WYPN survey was completed by over 3,000 young people, either attending a NSW government high school or participating in The Smith Family's *Learning for Life* program. The choice of two distinct samples was deliberate, because a large representative sample of all young people is necessary to be able to identify those items that are widely regarded in the community as being 'essential for all'. At the same time, applying the same survey to a group of young people that are known to be experiencing financial disadvantage provides a way of road-testing the approach's ability to identify the key dimensions of social disadvantage and differentiate between the two groups.

The survey was completed by both samples in mid-2016 and one encouraging aspect was that participants had few problems answering the questions and providing reasoned and consistent responses. The main area where problems were encountered was in relation to specifying the details of their household, an issue that is known to present similar problems in adult surveys of this kind and reflects the complexity, diversity and fluidity of today's living arrangements.

This led to the study's first, important conclusion, which is that the consensual approach can be applied in practice to young people in the Australian context. The survey was well-received by participants, many of whom welcomed the opportunity to express their views and influence the details of the research. The data generated by the survey have allowed a range of new indicators to be derived that have in turn led to new insights into the nature of child and youth poverty.

The survey responses resulted in 18 items being identified as essential for all young people to lead a 'normal kind of life'. The items include: a mobile phone; the right kind of clothes to fit in; internet at home; a family car; fruit and vegetables at least once a day; books at home suitable for your age; a meal out with family at least once a month; go on school trips or excursions at least once a term; and extra-curricular activities at school (like sport or music). The list highlights the diverse needs of young people and reflects the different domains of their lives – at home with family, with friends, in their local community and at school.

Over half (50.3 per cent) of the school-based government high school (GHS) sample are not deprived of any of the 18 items, compared with only 28.8 per cent of those in the more disadvantaged The Smith family (TSF) sample. This gap increases in relative terms as the severity of deprivation increases, with 54.6 per cent of the TSF sample deprived of at least 2 items (compared with 29.7 per cent of the GHS sample) and 31.2 per cent deprived of at least 4 items (compared with 10.9 per cent). Severe deprivation was defined to exist when a young person does not have at least 3 of the 18 identified essential items that they want. On this basis, 18.7 per cent of the GHS sample and 40.4 per cent of the TSF sample are severely deprived. Across both samples, deprivation rates are higher for those items that capture aspects of social exclusion (missing out on important social activities) than among those items that capture material deprivation (missing out on having the 'things' that most young people see as essential).

A new Child Deprivation Index (CDI) was derived by calculating the total number of essential items that each young person was deprived of – for each sample in total and for sub-groups within each sample. The mean value of the CDI was 1.27 for the GHS sample and 2.61 for the TSF sample – a similar two-to-one relativity to that applying to the severe deprivation rates described above. Sub-groups within each sample that had above-average CDI values include: girls; young people from an Indigenous background; those who report their health status as 'fair' or 'poor'; and those with a disability or on-going health condition; those who sleep regularly in two homes; those living in a household where no adult has a job; those who had moved house more than once in the last year; and those who moved school more than once in the last year. These latter variables highlight the important role that volatility in life conditions – where one lives and goes to school - plays in exposing children and young people to poverty and deprivation.[44] Higher CDI values also exist for young people living with only one parent and those who live in households with adults other than their parent(s), including grandparents. Finally, CDI values are higher for those in both samples who report having 2 or fewer close friends (compared to those with 3 or more).

The statistical relationship between the new CDI and the existing measure of school socioeconomic status (ICSEA) is weak. This low degree of overlap reflects the fact that the CDI mean averages out the individual disadvantage of sampled students in each school, while the ICSEA score measures the disadvantage status of the school itself, based mainly on the characteristics of parents and location, not on the circumstances of the students who study there.

There is also a rather weak relationship between those young people who are identified as poor on the basis that they live in households that do not have enough (or only just enough) to make ends meet and those who are deprived of at least 3 essential items that they want. Only around half of those in the GHS sample who are identified as poor on this measure are deprived, and a similar proportion of those identified as deprived are poor. The two approaches are different and capture different aspects of disadvantage and both should be used to fully understand the complete picture.

44 It is acknowledged that there is a genuine issue over the direction of causation in regard to both of these variables. It is possible, for example, that those with high levels of derivation are forced to move house for affordability reasons and that this results in the young people involved also having to move school. If this is the case, then the volatility variables are consequences of deprivation rather than causes.

These and other results and comparisons presented and discussed throughout the report provide an important new insight into the nature of youth disadvantage in Australia and highlight the groups that are most affected by its different manifestations. It is important to remember that these estimates are based on data provided by young people themselves and are derived from measures that reflect what items young people think are essential for them. The indicators developed here are specifically child-centred and this gives them more credibility than measures like household poverty rates that treat children as passive and invisible.

Further analysis of the survey data reveals that across a series of indicators of subjective well-being, those who are most deprived (have the highest average CDI values) also have lowest levels of well-being – in total and across its different dimensions. The level of deprivation also varies inversely with feelings of satisfaction with, safety at and the degree of connection with school, and with the importance attached to the schooling process and to doing well at school.

These statistical associations are examples of the negative outcomes that often accompany deprivation. They include how young people perceive themselves, how they think they are faring, how content they are with their current situation and their aspirations for the future. Although based on statistical associations with causation not definitively established, it seems intuitively far more plausible that causation runs from deprivation to well-being and to attitudinal and aspirational outcomes than in the reverse direction. The fact that similar patterns exist across each of the indicators (some of them composite in construction) provides further support for this view.

The findings are not, however, free of limitation and the findings require appropriate qualification. This is the first Australian study of its kind and further studies are needed – conducted in other parts of the country and involving different groups of young people – to establish whether or not the findings reported here are robust and if not, what refinements are needed. The goal should be to refine the methods as a precursor to the routine and regular collection of deprivation data for children and young people to inform debate about child poverty and provide an evidence base for policy development.

It is important to remember that the deprivation items are only indicators that act as signposts to the underlying phenomena of interest – youth poverty – and should not be interpreted literally as measures. There is no suggestion, for example, that those deprived of any single item should be given it, but rather that the lack of a wanted but essential item is an indication that poverty exists. When this occurs multiple times across different items, the degree of confidence that this conclusion is correct increases. An obvious response is to provide young people with greater access to needed items and this will involve addressing the resource and other constraints that they currently face. These constraints are real and have detrimental impacts, and it is on understanding and addressing these that attention needs to be focused.

Notwithstanding these qualifications, the overall conclusion from the study is that the deprivation that exists among significant numbers of young people in NSW is a cause for serious concern. It results not only in children missing out on items that their peers agree are essential for all young people, but has negative effects on their well-being now and, through the impacts on school motivation and performance, are also likely to have detrimental longer-term effects.

Central to the success of this study has been the focus on taking account of the views of children and young people in how the research instruments have been developed, applied and interpreted. These views are not static but will change as society and its accepted norms evolve. Poverty research must adjust to keep abreast of these developments if it is to remain relevant to the lives of young Australians. This will require on-going data collection efforts to ensure that changes in the views of children and young people are monitored regularly, understood and incorporated into how the research is designed and conducted, how its findings are disseminated and how they are interpreted and applied by service providers, school administrators and teachers and policy makers.

Children are the nation's most valuable resource, but one that must be cherished and allowed to develop to fruition. Helping them to navigate the difficult pathways through their early teenage years will have a life-changing bearing on the kinds of citizens that emerge. Deprivation among children and young people serves as an obstacle that prevents many of them realising their full potential and unless addressed it will also have a negative impact on Australia's ability to achieve the SDGs to which it signed up to in 2015. The timetable for their achievement is by 2030 and time is running out!

There is an urgent need to be vigilant about the importance of tackling all forms of social disadvantage at source. This requires us as a nation to be able to identify where such disadvantage exists, to be able to measure and better understand it and thereby be better equipped to more effectively address it. The child-focused approach provides a framework for achieving this by building on the perceptions, attitudes, experiences and aspirations of young people themselves. It should form part of all future research on child and youth poverty and can produce findings that will help shape a better Australia.

# Appendix A: Validating the Child Deprivation Index

Four statistical tests - suitability, validity, reliability and additivity - were conducted on the original 24 items included in the WYPN survey. The goal of these tests was establish that the items selected are robust and appropriate measures of individual deprivation and able to be aggregated into an overall index of deprivation. The tests follow the approach developed by Pantazis, Gordon and Levitas (2006) and Gordon (2006) as part of the deprivation indicator construction methodology for the UK *1999 Poverty and Social Exclusion Survey*, where they advocated; 'using standard scientific methods to ensure that all components [included in the deprivation index] were valid, reliable and added up' (Pantazis et al.: 64). The approach has since been refined by Gordon and Nandy (2012) and applied by Guio et al. (2012, 2017, 2018) to measure child deprivation in the EU. It has been endorsed by Gordon (2017: 3) as an integral way of setting 'an 'objective' poverty line'.

Table A.1 presents a summary of the results for each of the tests, followed by a description of the tests and the decision rules used to determine if an item passed or failed each test. The specific results for each test are not included but are available on request from the authors. As the tests relate to the robustness of the items for use amongst the general population of all young people, the tests were applied to data produced by the government high schools (GHS) sample as this is more representative of the views of all high school students in the (NSW) community.

## A.1 Consensus and Suitability of the items

The first set of tests determines if there is a consensus about which items are considered 'essential for all young people'. The consensus threshold is set so that only those items that are considered essential by at least 50 per cent of respondents are included. To ensure horizontal consensus across different age groups of young people, the test was also applied separately to the survey responses from each school year. One item, (after school tutoring) failed to exceed the 50 per cent support threshold for being essential across the four school years (and hence in total). A second item, (cable or satellite TV at home) exceeded (just) the 50 per cent threshold in total but failed this for school years 9 and 10 and was also dropped from the deprivation analysis, bringing the number of items down from 24 to 22.

Following Guio et al. (2012, 2016 and 2017), the suitability test distinguishes between respondents considering items as essential for all young people (that is, establishing a consensus as above) and considering items to be essential for themselves (that is, establishing their degree of importance). To satisfy the latter criterion, the suitability tests are based on the proportion of young people assumed to want an item (defined as the sum of the proportion who have it and the proportion who do not have an item but would like it). A 70 per cent threshold was then applied to exclude items as failing the suitability test. As Table A.1 indicates, only one item (after school tutoring) failed the suitability test.

## Table A.1: Summary of Suitability, Validity, Reliability and Additivity Tests

| Item | Consensus | Suitability | Reliability | Validity | Additivity | Overall Decision |
|---|---|---|---|---|---|---|
| 1. A mobile phone | Y | Y | N | N | Y | N |
| 2. A computer or other mobile device | Y | Y | Y | Y | Y | Y |
| 3. A pair of shoes that fit properly | Y | Y | N | Y | Y | N |
| 4. The right kind of clothes to fit in with other people your age | Y | Y | Y | Y | Y | Y |
| 5. Some money to spend or save each week | Y | Y | Y | Y | Y | Y |
| 6. Cable or satellite TV at home | N | Y | Removed from reliability, validity and additivity | | | |
| 7. Internet at home | Y | Y | Y | Y | Y | Y |
| 8. A family car | Y | Y | Y | N | Y | N |
| 9. Three meals a day | Y | Y | Y | Y | Y | Y |
| 10. Fruit or vegetables at least once a day | Y | Y | Y | Y | Y | Y |
| 11. Books at home suitable for your age | Y | Y | Y | Y | Y | Y |
| 12. A separate bedroom for each child 10 years and older | Y | Y | Y | Y | Y | Y |
| 13. A meal out with my family at least once a month | Y | Y | Y | Y | Y | Y |
| 14. A holiday away with my family at least once a year | Y | Y | Y | Y | Y | Y |
| 15. A good education | Y | Y | Y | N | Y | N |
| 16. Clothes you need for school (including sports gear) | Y | Y | Y | Y | Y | Y |
| 17. Go on school trips or excursions at least once a term | Y | Y | Y | Y | Y | Y |
| 18. Extra-curricular activities at your school (like sport or music) | Y | Y | Y | Y | Y | Y |
| 19. After school tutoring | N | N | Removed from reliability, validity and additivity | | | |
| 20. A place at home to study or do homework | Y | Y | Y | Y | Y | Y |
| 21. Money to pay for classes or activities outside of school | Y | Y | Y | Y | Y | Y |
| 22. Internet access in public spaces | Y | Y | Y | Y | Y | Y |
| 23. A local park or green space | Y | Y | Y | Y | Y | Y |
| 24. Access to public transport in my local area | Y | Y | Y | Y | Y | Y |

## A.2 Reliability of the Items

The reliability of each item was tested using Classic Test Theory (CTT), which involves estimating Cronbach's alpha statistic as a measure of the internal consistency of a scale, that is, how closely the 22 items are related as a group. The Cronbach's alpha statistic was calculated for all 22 items and then separately after removing each item in turn. If the Cronbach alpha was higher when a specific item was removed than for all 22 items, this suggests that the item can be removed without any loss in overall explanatory power (Cronbach, 1951) and hence that item can be regarded as failing the reliability test. The overall test scale Cronbach's alpha statistic for the 22 deprivation items was 0.75 which is higher than the 0.70 generally regarded as 'satisfactory' in most social science research studies (Nunally, 1978). Two items failed the classic test of reliability: a mobile phone (alpha = 0.7525) and a pair of shoes that fit properly (alpha = 0.7518), although in both the increase in the alpha statistic was very small.

## A.3 Validity of the Items

The validity of each of the 22 items was assessed by determining if each item exhibits a positive and significant relationship with a set of independent variables known to be correlated with the latent construct of poverty (Gordon, 2017; Guio et al., 2012, 2016 and 2017). This involved running separate binary logistic regressions with each deprivation item as the dependent variable and one of two poverty/low socioeconomic indicators as the independent variable. The two variables used for the validity tests (each re-coded from ordinal into binary form) were: 'Going to school hungry' (sometimes, often, or always versus never) and 'No money of your own' (no money versus some money of my own to spend or save each week). [45]

The decision rule applied in this case was that an item is treated as failing the validity test if either of the results of the logistic regressions are insignificant. After conducting 44 tests of validity and using a 5 per cent significance level, three items failed the validity test: a mobile phone which was insignificant against the 'hungry' poverty indicator; a family car which was insignificant in relation to the 'no money' indicator; and a good education which was insignificant in relationship to the 'no money' indicator.

## A.4 Additivity of the Items

The aim of this test is to establish that when individual deprivation items are aggregated, the resulting index score actually implies a higher level of overall deprivation. Although, additivity is normally tested using an ANOVA model with second-order interactions of items by the level of equivalised disposable household income (see Guio et al. 2018), the simpler form applicable to the WYPN Survey involved examining if the incidence of deprivation for each item decreases as the perceived level of financial hardship of the young person's family decreases.

The financial hardship question included in the WYPN survey was 'Thinking of your current situation, which of the following BEST describes your family?' with four response categories: do not have enough, just enough to get by on, enough to get by on, and more than enough to get by on. No items failed the additivity test as the proportion deprived for each item decreased as the implied (subjective) level of financial hardship decreased.

The combination of results from the suitability, validity, reliability and additivity tests thus suggests that original 24 items can be reduced to 18 items considered appropriate measures of individual deprivation and through aggregation into an overall index of deprivation. The 6 items that failed to pass at least one of the tests are: cable or satellite TV at home; after-school tutoring; a mobile phone; a pair of shoes that fit properly; a family car; and a good education, and these items were dropped from the deprivation analysis.

45 The two poverty indicators used by Guio et al. (2012 and 2017) for measuring child deprivation at the EU level were income poverty (as conventionally defined by a poverty line set relative to median income) and an indicator of subjective poverty (based on the degree of difficulty in making ends meet). Neither variable is available from the WYPN survey, so the two poverty/low socio-economic status indicators used in the validity analysis were treated as those most closely resembling the poverty correlates used in conventional validity tests.

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