

Indicators of Social and Family Functioning

Indicators of Social and Family Functioning

SR Zubrick, AA Williams, SR Silburn, (TVW Telethon Institute for Child Health Research, Perth, Western Australia) and

G Vimpani (Child and Youth Health Network, University of Newcastle)

May 2000

Department of Family and Community Services.

© Commonwealth of Australia 2000

ISBN 0 642 44986 4

This work is copyright. Apart from any use as permitted under the *Copyright Act* 1968, no part may be reproduced by any process without prior written permission from the Commonwealth, available from AusInfo. Requests and inquiries concerning reproduction and rights should be addressed to the Manager, Legislative Services, AusInfo, GPO Box 1920, Canberra ACT 2601.

The views expressed in this paper are those of the authors and do not represent the views of the Minister for Family and Community Services or the Department of Family and Community Services.

www.facs.gov.au

For information contact the Department of Family and Community Services on 1300 653 227. People with a hearing or speech impairment can contact the Department on its telephone typewriter (TTY) on 1800 260 402.

TABLE OF CONTENTS

Ackr	nowledgements	Vi
Glos	sary	vii
Exec	utive summary	ix
Term	s of reference	Х
Proje	ect background	Х
Findi	ngs	Х
1.	Introduction	1
	Background	2
	Terms of reference	3
	Scope	4
2.	Methods	5
	Defining the project	5
	Searching the literature	5
	Conducting a national workshop	6
3.	The relationship between social and family functioning and child health and well-being	7
	Characteristics of health and well-being outcomes	8
	Child health and social/family functioning: Ecological links	10
	Distinguishing indicators of social and family functioning from health and well-being outcomes	11
4.	Resource domains which influence social and family functioning	14
	Income	16
	Time	21
	Human capital	24
	Psychological capital	27
	Social capital	30
	The mix and interaction of family resources	32
	The accumulation and loss of family resources	33
	Availability of data	34
	Associating indicators of social and family functioning with outcomes of interest	35

5.	A reference instrum family functioning	nent for measuring indicators of social and	38
	The ISAFF refe	erence instrument	39
	Using the ISA	FF Reference Instrument	43
6.	Conclusion and recommendations		50
	Where to fror	m here?	50
	Conclusion		51
	Recommendations		51
	References		53
Appe	ndices		59
	Appendix A:	A summary of international and national activity relevant to the development of indicators	59
	Appendix B:	A summary of international and national activity relevant to the development of indicators	61
	Appendix C:	Participants at the National Workshop on Indicators of Social and Family Functioning	66

TABLES AND FIGURES

Tables		
Table 1	Child health and well-being outcomes: problems of developmental health	13
Table 2	Possible indicators defined in terms of the proposed measurement framework	17
Table 3	Proposed core indicators of social and family functioning	37
Table 4	Key words/sites used in the web search	59
Figures		
Figure 1	Ecological contexts shaping child development	11
Figure 2	Relationship between number of risk factors and verbal IQ at 4 years	15
Figure 3	Comparison of Family Income with Children's Academic Competence and Mental Health	20
Figure 4	Comparison of Caregiver Employment Arrangements Status with Children's Academic Competence and Mental Health	23
Figure 5	Comparison of Level of Parental Education with Children's Academic Competence and Mental Health	26
Figure 6	Comparison of Family Conflict with Children's Academic Competence and Mental Health	30
Figure 7	Comparison of Perceptions of Neighbourhood Violence with Children's Academic Competence and Mental Health	32

ACKNOWLEDGEMENTS

This project was made possible by a grant from the former Commonwealth Department of Health and Family Services, now the Commonwealth Department of Family and Community Services. Work proceeded in collaboration with the Department of Health and Aged Care from November 1998 to June 1999.

We would like to thank the members of our steering committee, in particular Christine Kilmartin, Graham Vimpani, Richard Eckersley, Barbara Wellesley, Suzy Saw, Victor Nossar, Stephen Zubrick, Sven Silburn, Margaret Dean and Alison Stanford, for constructive input at all stages of this work.

Our appreciation also goes to Barbara Dunlop and Andrew Webster, from the Australian Bureau of Statistics, and Lynelle Moon, from the Australian Institute of Health and Welfare, for their contribution to the national workshop and continued support of the project. We would also like to thank Lisa Wood and the Western Australian Health Promotion Foundation for their comprehensive contribution to the review on social capital, and Ian Rouse for his valuable contribution in facilitating the workshop.

GLOSSARY

causal pathway framework

The specification of relationships between causes and outcomes.

causal factor

A causal factor is any factor that modifies, as distinct from being merely associated with, the risk of disease of poor outcome. Modifying a causal factor produces a change in the likelihood of developing a disease or poor outcome.

disability adjusted life year (DALY)

Expresses years of life lost to premature death and years lived with a disability of specified severity and duration. One DALY is one lost year of health life.

discretionary control

The amount of personal control an individual can assert in meeting demands in a particular setting (e.g. at work). Also referred to as demand latitude.

health

A state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity.

indicators

Risk and protective factors that increase or decrease outcomes. In this document the indicators of interest are those of social and family functioning which are of relevance to child health and well-being outcomes.

outcomes

see problems of developmental health

problems of developmental health

These are health and well-being outcomes that involve higher frequency/lower intensity problems encompassing health, learning, behaviour and socialisation that interfere with development, adaptation, and coping in life situations. Examples include intrauterine growth retardation, conduct disorders, school failure, teenage pregnancy and drug abuse. These were previously referred to as the 'new morbidities'.

protective factors

Those characteristics, variables or hazards that, if present for a given individual, make it less likely that this individual, rather than someone selected at random from the general population, will develop a disorder or adverse outcome.

proxy measures

Measures that are substituted for or that represent other measures. Proxy measures are usually more indirect measures of a characteristic, property or phenomenon which is difficult to measure directly. For example, child abuse behaviours are difficult to measure directly by asking questions about such behaviours and their occurrence. Measures such as the occurrence of childhood injury or burns may be sometimes used as proxy measures of child abuse.

risk factors

Those characteristics, variables or hazards that, if present for a given individual, make it more likely that this individual, rather than someone selected at random from the general population, will develop a disorder or adverse outcome.

EXECUTIVE SUMMARY

According to a recent OECD Forum report (January, 1997),

'pressures on social cohesion are likely to evolve over the next two decades as unemployment, earnings inequality, demographic shifts, technological progress, open trade, and greater competition in less constrained market places, continue to contribute to economic and social turbulence.'

Australia is no less immune to these pressures, with a perceived decline in social cohesion which has placed stress on family and social functioning. Rapid economic and social change can manifest as serious problems in the developmental health and well-being of children, young people and their families. These problems include child abuse, early school failure, truancy, depression and suicide, alcohol and drug abuse, teenage pregnancy, juvenile offending, violence, relationship and family breakdown.

Many families where the adults have experienced unhappy childhoods and poor modelling by their own parents face other difficulties such as lack of support, loneliness, isolation and an inability to participate in mainstream society. Breaking this cycle by investing in social and human capital within families has been shown to be a net financial benefit to a community.

There is strong bipartisan support for investing in social capital and strengthening communities to more effectively tackle some of Australia's current problems. Families, schools and community leaders are now expressing alarm and concern at the impact of change on families and communities. This concern is being expressed in demands for strategies to deal with early school drop out, truancy, depression and suicide, alcohol and drug abuse, juvenile offending, violence, crime, unemployment, homelessness, and child abuse and neglect.

The high prevalence and persistence of these problems are indicative of the growing burden shared by education, health, justice, and family and children's services. Their impact imposes substantial economic, personal and social costs to governments, families, and communities who are seeking ways to prevent or reduce them.

Current information systems do not collect adequate prevalence and risk factor data at the population level to inform government decision-making in tackling these societal problems. The lack of relevant indicators of social and family functioning as key determinants of these outcomes is a serious impediment to the capacity of departments to produce the relevant information to guide government policy and the development of preventive strategies.

Terms of reference

The project focussed on these issues:

- which measures of social and family functioning have been shown to be valid and reliable in Australian circumstances;
- which of these measures are the most useful in interpreting the impact of changes in family and social life on developmental health outcomes for young Australians; and
- what is the feasibility of including any of these in routine population-wide surveys such as the Census, the Australian Health Survey or other social surveys undertaken by the Australian Bureau of Statistics (ABS).

Project background

Several government initiatives form the background of this project:

- the 1992 Commonwealth report on Health Goals and Targets for Australian Children and Youth which specified as one of its five goals the enhancement of family and social functioning;
- the 1995 release of the national policy on *The Health of Young Australians* and the 1996 release of the *National Health Plan for Young Australians*. This plan called for a national information strategy for measuring and reporting on the health of young Australians; and
- a 1998 workshop on the National Child Health Information Framework which recommended that indicators of social and family functioning be identified for routine use in national, state and local health and related data collections.

Findings

A 1999 workshop on Indicators of Social and Family Functioning with 40 leading scientists and policy makers in Australian research and government developed a framework for indicators of social and family functioning. The framework proposed in this report was supported by those attending the national workshop.

- Within government and research there is a need to analyse the link between serious outcomes in child health and well-being on one hand and indicators of social and family functioning on the other, and to do this across different populations within Australia.
- At present the analysis of the link between outcomes in child health/wellbeing and indicators of social and family functioning is not possible. This is because either indicator data are not being collected or are collected in nonstandard ways. Data sources cannot be compared or combined.

- The rationale for selecting indicators of social and family functioning should be based on the principle of causal pathways. Such a rationale identifies opportunities to modify risks which have been associated with increases and decreases in the prevalence of problems of developmental health and wellbeing. This allows the development of prevention strategies and better intervention.
- Indicators should be chosen from the five 'resource' domains of family and social functioning: income, time, human capital, psychological capital and social capital (see Table 3, p.37). While there may be some limitations in their usage, these indicators and their items represent the best method to secure better data to describe current Australian family and social functioning.

It is recommended that

- 1. A set of indicators of social and family functioning be selected on the basis of their capacity to measure risk exposures known to be on the causal pathways of poor health, educational, social and criminological outcomes. These indicators should be included in the regular social and health survey publications of key government agencies on children, young people and their families. Population health researchers should also be encouraged to incorporate these indicators into research designs.
- 2. The set of indicators of social and family functioning developed by the national workshop be accepted. They cover five key resource domains for social and family functioning relevant to child health and well-being outcomes:
 - time
 - income
 - human capital
 - psychological capital
 - social capital.
- 3. The 'Indicators of Social and Family Functioning Reference Instrument' (ISAFF-RI) (*see Chapter 5*) be used as an indicative measure to assess the acceptability and usefulness of such indicators.
- 4. A technical advisory group be established, drawn from key agencies—the Australian Bureau of Statistics (ABS), the Australian Institute of Health and Welfare (AIHW) and the Australian Institute of Family Studies (AIFS)—together with leading scientists and information managers, to trial, review and refine this and similar instruments capable of describing population and large sample trends and characteristics for use in government and research settings.

5. Once appropriately developed, these indicators be considered in the current National Health and Medical Research Council (NHMRC) review of the national surveillance and screening of children and young people.

These findings and recommendations represent important achievements. Many of the key agencies responsible for reporting national, state and regional trends have sought direction for their collection of data on Australian family and social functioning.

This report, supported by an analysis of the current health and social science literature, combined with a process of comprehensive consensus building among leading Australian health and social scientists and policy makers, makes a unique contribution in directing attention and specifying actions to improve these essential data collections.

Current Australian efforts to address many of the problems that children and young people experience can only be evaluated over time through the implementation of better measures of social and family functioning.

This report directs a more concerted effort in the collection and reporting of both outcomes and indicators of social and family functioning. The broad framework provided by the indicators can be applied across a range of government and non-government activity that supports families and children.

1: INTRODUCTION

The heart of why we are developing indicators of social and family functioning is not only to tell the world what the current and past profile of child and family well-being is, but also to predict the nature, extent and duration of possible patterns of future impacts on child well-being, if certain courses of action aren't taken or stopped (1).

It is now increasingly recognised that the physical and mental health, coping skills and competence of human populations arise in large part as a function of the overall quality of the social environment during their developmental years (2). However, data that describe the developmental health and well-being and the social circumstances in which Australian families are living are in short supply (3, 4).

Much is known and regularly published that describes Australia's economic productivity and standard of living. In contrast, surprisingly little is known and published that describes the well-being of Australian families, or how Australians view their social and family circumstances.

These observations have been given further impetus from strong bipartisan support for investing in social capital and strengthening communities as a way of effectively tackling some of Australia's current problems. The decline in social capital seemingly affects the capacity of the community to counter the growing burden of these problems.

'As societies become more complex, supplies of social capital can tend to diminish. People can feel that they are losing sight of what it means to be part of a community. They may feel that somehow, they are missing something; that they cannot trust and rely on others as much as they did in the past ... When communities start to disintegrate, they need something to help regenerate community spirit ... The Government is committed to fostering an environment in which all can play a part in building up social capital ... A price cannot be put upon the rich networks, social cohesion and expanded opportunities that strategic partnerships create' (5).

Social capital refers to the quality and depth of relationships between people in a family or community. Social capital is defined 'as the processes and conditions among people and organisations that lead to accomplishing a goal of mutual benefit. Those processes and conditions are manifested by four interrelated constructs: trust, cooperation, civic engagement, and reciprocity' (6).

The concept of social capital has been given prominence by Putnam (7) who examined the association between the strength of communities and their economic well-being. It was popularised in Australia by Eva Cox in the 1995 ABC Boyer Lectures (8). Since then, there has been considerable support for the development of social capital building policies by current Federal and State Governments.

In the systematic monitoring and reporting of social and family functioning several questions may be answered. Just how do families see themselves managing? What do they do with the resources that they have and how are these managed on behalf of children and other family members? What is the impact of economic and social policy on family and social functioning?

Just as the economic circumstances of Australia are regularly reported over time, how might we characterise social and family functioning and report this in ways that are helpful to families, communities and the many sectors that seek to support them? These are some of the important questions that need to be answered in order to monitor, promote and support the health and well-being of children, families and communities.

Background

This project has its origins in the 1992 Commonwealth report on Health Goals and Targets for Australian Children and Youth (9). This report specified five key goals and targets that would, if implemented, seek to:

- reduce the frequency of preventable premature mortality;
- reduce the impact of disability;
- reduce the incidence of vaccine-preventable disease;
- reduce the impact of conditions occurring in adulthood, but which have their origins or early manifestations in childhood or adolescence; and
- enhance family and social functioning.

(9, p.11)

The singling out of the enhancement of family and social functioning as an area for particular intervention in the 1992 report was notable. For example, at that time there was increasing evidence showing the benefits of improving parenting as a strategy to reduce child abuse (9, p.83).

By 1995 the release of the national policy entitled *The Health of Young Australians: A national policy for children and young people* represented the first formal commitment by Commonwealth, State and Territory Governments to work cooperatively to promote, maintain and improve the health status of all Australian children and young people (10). This was a significant policy commitment and was soon followed in 1996 by the release of *The National Health Plan for Young Australians* (11).

In this plan, two key action areas acknowledged the importance of family functioning. The first action area, 'Health and Supportive Environments', specified inter-sectoral action to improve and maintain the health of young Australians with a specific focus on family functioning and support. The other action area of 'Research, Information and Monitoring' called for the development of a national information

strategy for measuring and reporting on the health of young Australians. This would mean developing measures suitable for monitoring the social determinants of health. Many of these measures relate to social and family functioning.

In March 1998 the AIHW convened a workshop on the 'National Child Health Information Framework'. (4) This workshop was specifically convened to address the research, information and monitoring needs that arose from the *National Health Plan for Young Australians*. The aims of the workshop were to:

- evaluate the scope for monitoring and reporting on child health;
- identify gaps and deficiencies in available information on child health;
- outline a framework for identifying possible indicators for national child health reporting; and
- seek input for a developmental plan for child health information.

Workshop participants recognised that a variety of indicators of family and social functioning had been considered or were in use by different research groups around Australia. However, routinely reported national health statistics did not include specific measures of family and social functioning as either outcome measures or explanatory variables.

Some proxy measures were in current use (such as single parent family) but these were seen to be inadequate. It was therefore agreed that funding should be sought to try and identify a set of indicators that could be included in routine collections, as well as used by researchers in child and youth health research. Hopefully, other domains of research and policy that involved children, such as welfare and justice, would also see these as desirable and move to use them.

In mid-1998 the former Commonwealth Department of Health and Family Services, now the Commonwealth Department of Family and Community Services, awarded a grant to the TVW Telethon Institute for Child Health Research to further the collaborative development of indicators of social and family functioning.

Terms of Reference

The terms of reference and broad objectives of this project were to determine:

- which measures of social and family functioning had been shown to be valid and reliable in Australian circumstances;
- which of these measures were the most useful in interpreting the impact of changes in family and social life on health outcomes for young Australians; and
- what was the feasibility of including any of these in routine population-wide surveys such as the Census, the Australian Health Survey or other social surveys undertaken by the ABS.

Scope

This report addresses the above objectives. It contains a rationale and framework to meet the emergent demand within Australia for measurement indicators of social and family functioning. This report details core indicators for measuring trends in, and the social circumstances of, children, families, and communities. These indicators have been assembled through a review of national and international scientific and policy initiatives in social indicators. Additionally a national workshop of leading scientists, government agencies and policy makers was held to develop a consensus on these indicators.

It should be noted here that the formulation of a proposed framework to measure social and family functioning is centred on outcomes for child health and wellbeing. However, the measures proposed and described in this document should also properly inform a *wider* appreciation of Australian well-being. As such, the proposed indicators describe important aspects of Australia's social capital, and in so doing extend and balance the measures of economic capital that are routinely used to chart national progress and capacity.

2: METHODS

We should look for indicators in a comprehensive search of the knowledge base (12).

The methodology was guided by the key objectives for this project. The broad objective was to identify which indicators of social and family functioning were most useful in interpreting the impact on health of changes in family and social life.

Specific outputs of the process included:

- an audit of key international and Australian activity in the area of indicator development (see appendix B*);
- dissemination of key articles/reports on indicator development to participants in a national workshop (see appendix B);
- · a two-day national workshop on indicators of social and family functioning;
- · distribution of a workshop report to workshop participants; and
- presentation of a final report to the Commonwealth Department of Family and Community Services.

In achieving these, the project methods were staged as follows:

- an initial exercise to determine and define the parameters of the project for the time available;
- a literature search and search of the World Wide Web on indicator use and development; and
- a national workshop for key stakeholders to process the findings of the literature search and to reach consensus on indicators of social and family functioning.

Defining the project

The initial phase of the project included:

- contacting key researchers and centres in Australia and New Zealand for information on current research activities, suggested indicators of social and family functioning, and useful reference sources;
- reviewing key background documents (3-4, 9-12);
- reviewing the nature and extent of child and adolescent morbidity and mortality (13-17);
- reviewing the risk and intervention research to identify the risk and protective factors on causal pathways to health and well-being (18-31); and
- reviewing comparative national family policies (32-35).

Searching the literature

The major purpose of the literature search was to identify possible indicators of

social and family functioning and to develop a measurement framework that would assist the development of public policy and practice.

The search strategy relied significantly on both a literature search and search of the World Wide Web. The search was limited to research since 1990. There was a particular emphasis on seeking current work and work in progress. The principal search engines for the web were the Northern Light Search Engine, Dogpile, and Beaucoup, although others were used. A summary of findings of key international and national initiatives and activities is presented in appendix B. The key search words/sites used to locate information may be found in Table 4 in appendix A.

In addition to the web search and literature search, several key Australian and New Zealand researchers identified by the project steering committee were contacted personally and by letter. They were asked to provide input and feedback in regard to developing indicators of social and family functioning. Their responses identified areas of local, national and international activity, as well as issues of concern, which subsequently informed project development and workshop proceedings.

Conducting a national workshop

The second stage required the engagement and enrolment of key Australian leaders and academics in the process of indicator development. This was achieved through the active participation of stakeholders in a two-day national workshop sponsored by the Commonwealth Department of Family and Community Services. Three weeks before the workshop, selected key readings and articles from the review of the research were distributed to participants, together with a discussion paper outlining the emerging need for indicators of social and family functioning.

The workshop process allowed for evidence-based discussion, debate and decision-making, and maximised the opportunity for consensus on indicators of social and family functioning. It developed the rationale for the selection, development and use of indicators of social and family functioning at the national, state and regional levels, and reached consensus on core indicators that measure basic aspects of time, income, human capital, psychological capital and social capital.

This consensus view was achieved across major government agencies, namely the AIHW, the AIFS and the ABS, as well as key stakeholders, researchers, policy makers and practitioners.

Appendix C lists the participants of the workshop, which was held on 12–13 April 1999. The workshop report was distributed to all workshop participants and informed the preparation this report.¹

¹ Copies of the workshop report are available from the Commonwealth Department of Family and Community Services.

3: THE RELATIONSHIP BETWEEN SOCIAL AND FAMILY FUNCTIONING AND CHILD HEALTH AND WELL-BEING

Now, more than ever, families are faced with an increased range of choices about how they organise and manage their work and family responsibilities. These decisions are made in a social context that includes: the composition of the family; the resources available in terms of employment, income and time; their knowledge and skills in parenting; the supports available from family, friends and neighbours; and the extent to which these are backed up by broader community support and services and environmental factors such as 'family friendly' industrial relations policies, and access and entitlement to child care and other benefits (17).

The interaction between children's health on one hand and their family and social environments on the other is a focus of this chapter. Understanding aspects of this interaction is important in deciding first, which child health outcomes should be measured and, second, which family and social factors are important in preventing, reducing or increasing the health outcome of interest.

There is a prodigious national and international effort underway to specify indicators of social and family functioning (36-44)². Researchers and policy makers have identified significant challenges in specifying a framework for measuring social and family functioning. These challenges include:

- selecting from the quantity of what might be measured;
- identifying the value base underpinning such measurements;
- determining the feasibility of collecting such information;
- assessing the reliability and validity of the measures;
- establishing the stability of measures over time; and
- describing the theoretical basis for linking indicators to outcomes of interest.

Within Australia, the ABS has had a major role in the provision of social statistics as well as in the development of social indicators over the past 20 years. Central to the idea of monitoring social well-being is the importance of developing appropriate social indicators. Social indicators are the statistical constructs which are presumed to measure social well-being. They measure aspects of people's lives which we care about directly. The ABS defines social indicators as

'measures of social well-being which provide a contemporary view of social conditions and monitor trends in a range of areas of social concern over time' (45).

Readers should also note Appendix B which contains major Internet sites for the development of indicators of social and family function and social capital.

The objectives of the ABS social reporting program are to:

- provide a broad description of Australian society;
- monitor changes in social conditions over time;
- provide policy makers and planners (both government and private) with a basis for decision making;
- provide information to enable progress towards social goals to be monitored;
- promote understanding and informed discussion in the community about the directions in which society is going and about the policies pursued by governments; and
- add value to and increase the use of social, demographic and labour data held by the ABS.

In 1995 the ABS created the Family Statistics Unit (FSU) as part of the its Community Statistics Section. The FSU provides a focus for family statistics both within and outside the ABS. It specifically works to increase the quality, range and relevance of ABS family data. It does so by engaging in regular consultation with data users about their statistical requirements; collecting survey data on families; working towards the integration of family statistics across the ABS collections; and undertaking analytical research and report writing activities aimed at disseminating family-related data. The FSU will play a primary role in furthering the development of ABS social indicators, particularly as they relate to family functioning and the well-being of children (45).

In addition to the ABS, the AIHW also has a major role in the development and monitoring of health outcomes and of indicators of social and family functioning (13). As noted in Chapter 1, the AIHW is responsible for the current National Child Health Information Framework and participated in the workshop for the development of this report.

In 1998 the AIHW published the first national statistical report on the health of Australian children. This report presented information on both the health status of Australian children and on the determinants of health (13). Significantly, it noted that information on the interaction between children's health and family and social environmental factors needed to be developed further to allow comprehensive reporting at the national level (13, p.3).

Characteristics of health and well-being outcomes

Governments in developed countries around the world have been confronted with increasing rates of complex psychosocial problems. Keating and Hertzman (2) have identified them as problems of 'developmental health'. These problems arise as a result of the interaction between changes in the social environment and human biology, a process which frequently leads to the phenomenon of 'biological embedding.'

Outcomes of biological embedding are seen in the systematic differences in psychosocial/material circumstances from conception onward. These differences are so embedded in human biology that they can account for the gradients in developmental health across socioeconomic status.

These outcomes are associated with significant personal, social and economic costs. Across the developmental lifespan, problems include maternal depression (especially postnatal), foetal growth retardation associated with poor nutrition and substance abuse, developmental and learning problems, bullying, aggression and antisocial behaviour, teenage pregnancy, child abuse and neglect, alcohol and drug abuse, eating disorders, suicide, and depression. Many of these problems are not new, however. What is new is their increasing prevalence and burden, visibility, complexity and persistence, particularly in association with socioeconomic inequality.

Prevalence and burden. Using measures of disability adjusted life years (see glossary), Murray and Lopez (46) have shown that mental health disorders emerge as a highly significant component of global disease burden when disability, as well as death, is taken into account. Their projections show that mental health conditions could increase their share of the total global burden by almost half, from 10.5% to almost 15% in 2020. This is a bigger proportional increase than for cardiovascular diseases (46).

In Australia there is evidence of high rates of poor parental mental health (17.7%), particularly maternal depression (47). The rates of mental health problems in children and adolescents are nearing the adult rates at earlier developmental periods (i.e. there is an earlier onset).

The increase in the prevalence and earlier onset of these disorders is almost certainly driven by changes over time in rates of biological risk exposure (e.g. nicotine, substance abuse) as well as large societal changes in basic economic, political and social environments (48).

Visibility. Not only are these problems extensive, but they are also very visible and of increasing concern to sectors other than health—criminology, education, public health, child, adolescent and adult mental health, and family and children's services. Key concerns shared across sectors are child abuse, early school leaving, truancy, depression, alcohol and drug abuse, juvenile offending, unemployment, teenage pregnancy, violence, crime and youth suicide.

Complexity and persistence. Most of the psychosocial problems are complex problems which involve a complex interplay of a number of causal risk factors. Importantly, large populations of individuals are being exposed to multiple risks. These multiple risks have both latent and cumulative effects on outcome (2, *49).

Latent effects may result from adverse exposures early in life. They are associated with poorer outcomes regardless of intervening circumstances (e.g. low birthweight and the subsequent risk of heart disease). Consequently these types of problems are particularly resistant to change and pose significant challenges for researchers and planners in designing programs of intervention and prevention. The reduction of these problems will entail extended time frames due to their very complexity, and because many of them emerge over long periods.

Socio-economic gradients and inequality. There is now a widening disparity between economic prosperity and the well-being of families and communities (50). Social inequality and disadvantage contribute significantly to differences in people's health, influencing factors such as stress levels, smoking, diet and exercise. These affect people's sense of self worth, sense of control and optimism, and social attachment.

The extent to which this disparity is matched by unequal distribution in measures of national social capital and well-being is unknown because national measures of economic capital growth and productivity do not extend to cover these dimensions.

Child health and social/family functioning: Ecological links

In considering the causes of child health problems, it is important to appreciate the contexts in which children live their lives—the family, the school, and the community—and the interaction between them. These settings are inter-related and interdependent. They are set within a wider social, economic, cultural and political context. Changes in one context have the capacity to influence changes in others.

Of particular interest are the influences these contexts have on health and other outcomes (24). Also of interest is the manner in which these contexts define, enhance and/or limit opportunities for healthy development. Because of the complexity of the relationships between children, families and communities this system has been described as an 'ecological' system (see Figure 1).

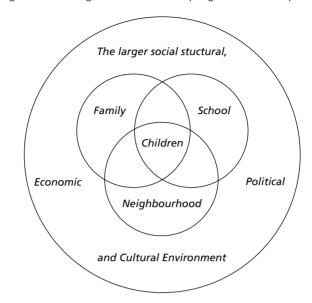


Figure 1: Ecological contexts shaping child development

There is increasing acceptance for the idea that an ecological perspective provides the best framework for understanding the processes by which many of Australia's most burdensome conditions develop and persist into the next generation (1, 24). This ecological context influences and defines the mechanisms that link individual and family life to particular health outcomes. At present, current health and demographic information systems do not contain reliable and valid measures describing these contexts and the changes affecting them.

A measurement framework is needed to enable a better estimation of the quantum and mix of resources characteristically available to families and communities. Regular measurement of these resources over time will then permit a better assessment of their causal relationship to subsequent outcomes of interest. These outcomes may be in areas such as health, education, community services and iustice. For example, changes in the economic environment in which communities are set will simultaneously exert changes on the matrix of work, attachment, care and support in which families and individuals operate. In turn, these changes are likely to be causally related to the well-being of individuals in families in communities. So, in selecting measures of social and family functioning, a causal pathways framework is proposed for guiding decisions about the relative utility of any given indicator. This causal framework will reflect the ecological contexts in which children live and will include the wider social, economic, cultural and political contexts.

Distinguishing indicators of social and family functioning from health and well-being outcomes

Two forces principally drive the emerging demand for indicators of social and family functioning. The first is the increasing diversity, prevalence and burden of

problems of developmental health (48, 51). These problems (see Table 1) are the *outcomes*. These outcomes are of interest to several government and non-government sectors. Among these sectors are health, education, welfare and justice.

The second is the absence of measures of social and family functioning that are known to be on the causal pathways of these serious outcomes. These measures are the *indicators* of interest in this report.

Table 1 lists the major disorders that comprise those serious child health problems, or 'problems of developmental health', that are the outcomes of interest. They are organised around the broad areas of physical health outcomes, mental health outcomes, risk behaviours, academic outcomes, and social outcomes. These problems reflect the acknowledged burden now facing health, education, welfare, justice and other agencies, and for which the prevalence in Australia has been well documented in recent years (13-17). It is these outcomes for which a framework of social and family indicators is needed.

The connection between cause and outcome is implicit in any discussion of indicators. Unfortunately, the specification of indicators frequently occurs in the absence of any clearly articulated causal framework. When this happens the indicator becomes an end in itself rather than a means to an end (32). Distinguishing indicators of social and family functioning from health and well-being outcomes is a critical task as it underpins the development of a useful measurement framework.

It is now recognised that most of the diseases that represent a significant burden to human populations are caused by multiple factors. Many diseases are caused by the joint action and interaction of genes and environment. Psychosocial problems are prominent 'diseases' that comprise what Keating and Hertzman (2) have called the problems of developmental health. Consequently, it is seldom possible to identify a single principal cause similar to an infectious agent. Therefore a causal factor is properly viewed as being *any factor that modifies (as distinct from being merely associated with) the risk of disease* (52). It is this concept of risk modification or prevention that requires distinguishing indicators from outcomes.

Table 1

Child health and well-being outcomes: problems of developmental health

Physical health outcomes

low birth weight/premature birth maternal depression (esp. postnatal) Sudden Infant Death Syndrome unintentional injury failure to thrive

Developmental and learning outcomes

poor attachment/bonding/connectedness poor cognitive development speech and language

Mental health outcomes

attention problems

- irritability
- inattention
- impulsivity aggression delinquency social problems emotional problems
- anxiety
- depression
- suicidal ideation/completion

Risk behaviours

substance use
- alcohol
- smoking
- illicit drugs
eating disorders
early sexual activity
teenage parenting

Academic outcomes

truancy

early school leaving poor academic achievement low participation in school activities attachment to a deviant peer group alienation

Social outcomes

family breakdown child abuse and neglect children in institutions children in care detached youth criminal behaviour

4: RESOURCE DOMAINS WHICH INFLUENCE SOCIAL AND FAMILY FUNCTIONING

Indicators of social and family functioning are statistical measures of observable features in our economic, social and cultural environment that are known to be on the causal pathways that lead to outcomes of interest. An outcome is the statistical measure of a desired result. This result may be reflected in an increase in resiliency or capacity on one hand, or, as a serious psychosocial problem on the other.

The 1999 National Workshop on Indicators of Social and Family Functioning brought together leading scientists, policy makers and practitioners to review and develop a consensus position regarding, principally, a theoretical framework for the measurement of these indicators (75). In addition, and contingent upon an agreed theoretical framework for such measurements, workshop participants were asked to consider proposing items and/or scales for use in measuring and describing social and family functioning. This chapter presents the theoretical basis for the adoption of a framework for the measurement of social and family functioning. Chapter 5 then presents a Reference Instrument for use in the measuring and monitoring of social and family function.

National Workshop participants adopted a broad theoretical framework for the measurement of indicators of social and family functioning as developed by Brooks-Gunn (24) and the earlier work of Haverman and Wolfe (25, 26) and Coleman (53). This framework takes as its point of reference those family and social 'resources' to which children, in theory, have access and which are relevant to developmental health outcomes. There are five major categories of *resources* that might be mobilised on behalf of children:

- Income
- Time
- · Human capital
- Psychological capital
- Social capital.

Resource domains need not all be of a similar level and it is important to appreciate that for any individual child these resource areas may be *relatively* well-endowed or *relatively* impoverished. Indeed, the value of this theoretical framework resides in the necessity to look *across* the resource domains, rather then focussing on a single measure. For example, children may live in families which are rich in income but poor in the amount or quality of time they have available for their children (i.e. families described as being 'cash rich and time poor'). Such a scenario may arise for two-income families where both parents are

working full-time, where work demands and personal stress are high, and where there are reduced opportunities for interacting with children. Similarly, Australia's Indigenous community presents an example of accumulated risk exposure, where resources of income, human capital and psychological capital are poor, and where social capital has been eroded, cumulatively impacting on the health and wellbeing and academic outcomes for Indigenous people.

It is important to keep in mind that individuals, families and communities may *accumulate resources*, or they may experience considerable impoverishment and *accumulate risk* in one, a few, or all domains. Such patterns of multiple risk exposure, in turn, have a cumulative effect on outcome. Figure 2 for example shows the relation between number of risk factors and verbal IQ at 4 years.

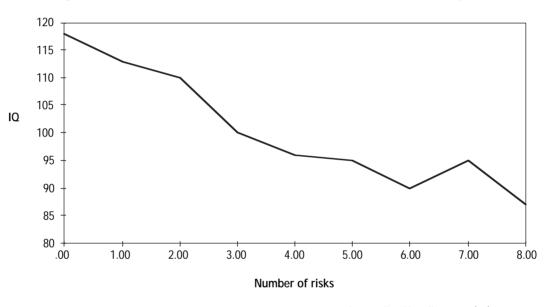


Figure 2: Relation between number of risk factors and verbal IQ at 4 years

Sameroff & Chandler, 1975 (54)

The *interaction* of these resource domains is also important. Families and communities often attempt to make decisions and trade-offs among resource areas in attempts to be better off. For example, a dual income family may resort to one parent working part-time in order to provide more time to care for and support the children. Similarly, erosion in one resource area may ultimately lead to compensations that result in impoverishment in another with a negative effect on outcomes. For example, loss of income may result in increased stress, increased marital conflict and a change in parental discipline style, all of which may accelerate the child's development of conduct disorders. These resources cumulatively interact and contribute to whether the child feels a sense of belonging, a sense of being valued, and a sense of being supported through developmental life stages.

Participants at the National Workshop were asked to consider the range of possible indicators within each of the domains of this framework. Table 2 shows the full range of measurements initially considered by the workshop participants. Some discussion of each of these domains is warranted here.

Income

Income has traditionally been a key indicator used to describe families and infer how they are managing. Whether one sees income as the primary measure of the economic base of the family or as defining a standard below which issues of basic subsistence and survival dominate, income remains a critical family resource that may be used on behalf of children.

Governments judge their policies with great care where they are seen to affect increases or decreases in family income. Importantly, income may purchase resources from the other resource areas. For example, a family that chooses to hire home help may do so in order to purchase time to spend with family members or to purchase childcare in order to maintain employment.

Of course, the underlying reason for collecting information on income may be to assess the accumulation of income (i.e. wealth), or the instrumental uses of it. Income details may be offset against debt information. Nevertheless, in order to assess these domains, basic information on income must be requested. Too often basic data collections in health, welfare and education avoid obtaining this critical information.

There are many purported proxies of income. They include educational level and occupation. However, these proxies confound several other resource areas, and in the main, if income is the desired indicator, then the data gathered should be drawn directly from questions and information about income (see Example 4.1).

Table 2: Possible indicators defined in terms of the proposed measurement framework

1. TIME	2. INCOME	3. HUMAN CAPITAL
 PARENTAL EMPLOYMENT Maternal - in labour force/full-time/part time/casual Paternal - in labour force/full-time/part time/casual Hours of paid work Hours of unpaid labour Parent/child activities & interactions Amount of time spent by parents with child Activities between parent and child Meals together Outings School related activities Reading to child Helping with homework Total time together Frequency of time with dad Frequency of meals with two parents Amount of time spent with child on a typical weekday 7am-9pm Amount of time spent with child on a typical weekend day Time spent with child on leisure activities Time child spends watching television, playing video games, internet etc Time spent with spouse Time spent in housework per day 	 MATERIAL RESOURCES Family income – total/by source/most detailed Summary measures of family income Income data on a monthly/yearly/every few years basis Family assets Disposable family income Financial strain (ratio of debts to assets) Poverty - current/sustained/lifetime Welfare receipt - current/sustained/ lifetime Health insurance coverage Fringe benefits received Tenure: rent or own home 	PARENTAL/CARER EDUCATION Highest grade/qualification completed Parental/carer physical health Parenting Disciplinary techniques Rules of behaviour House rules for child regarding homework, TV watching, bedtime, dating Monitoring behaviour Parent/child communication Communication frequency, styles and/or content of communication between parent and child Positive interaction Warmth Acceptance/punitiveness Hostility Aversive parenting Consistent parenting Modeling Culturally acquired knowledge, beliefs, attitudes, values and traditions Participation in religious activities Participation in traditional/cultural practices Knowledge of the world gained through personal life experience

Sources: Eurosocial Report 62/1997; Eurosocial Report 56/1995; Federal Interagency Program on Child and Family Statistics (USA); Indicators of Children's Wellbeing (USA); National Longitudinal Survey of Youth (USA); Survey of Income and Program Participation (USA); Integrating Federal Statistics on Children (USA); National Longitudinal Survey of Children and Youth (Canada); Dunedin Study (NZ); Healthway—Social Capital Constructs (WA); Survey of Community Groups & Organizations in the Western Suburbs of Adelaide; Measuring Social Capital in Five Communities in NSW (NSW); ACER Social Development Objectives of Education (Australia); Report of the Scientific Committee on Families and Mental Health (University of Queensland).

Table 2

4. PSYCHOLOGICAL CAPITAL 5. SOCIAL CAPITAL 6. OTHER CONFOUNDING FACTORS Parent/child conflict • Trust - see WHO/EURO Working group, Family Type Conflict between parents potential indicators Table 1 Within Household Family cohesion Civic involvement - see WHO/EURO Working · Biological vs step parent Reports of physical violence within the family group potential indicators Table 2 Divorced vs never married single parent Family dysfunction Social engagement - see WHO/EURO Working • Cohabiting parent - parental status of other Parental mental health group potential indicators Table 3 parent also identified Parental depression measures Reciprocity - see WHO/EURO Working group Foster parent Satisfaction with parenting potential indicators Table 4 Adoption Job satisfaction Participation in local community Other adult family members in household Stressful life events Proactivity in a social context Family size Perceived stress Feelings of trust and safety · Teenage parent family Perceived level of social support Neighbourhood connections Outside household Neighbourhood violence and crime Parental self efficacy Non resident parents Number of job changes Family and friends connections Relations with relatives outside household Living in crowded conditions Tolerance of diversity Children in institutions Four or more children at home Social or cultural discrimination Parental marital bistories Occupational complexity Value of life · Availability and involvement of Residential mobility history Work connections non-resident parent Strain/gains of work to parenting Measures of school and classroom characteristics **Child Care** • Strain/gains of work to marriage (curriculum, student body demographics) • Longitudinal history of child care arrangements Sense of neighbourhood Type of care arrangement Neighbourliness Ratio of child to adult caregivers Sense of community Caregivers training Social participation Caregivers educational background Participation in sports Number of child care changes over a year Membership in clubs Number of child care arrangements in a week Member of a club or group Hours in child care per week • Civic participation Type and characteristics of provider Civic involvement · Costs of child care Participation local community activities Participation in school activities **Early Childhood Experiences** Social Trust · Ever in child care arrangement Availability of support services Age at first child care arrangement Philanthropy · Hours in first child care arrangement

Example 4.1 – A question about individual income

In which of these groups was your gross income before tax in the financial year 1998/99?

- * Include family allowance and other benefits, child support, superannuation, wages and salaries, overtime, dividends, business income, interest.
- * Do not deduct tax, superannuation payments, health insurance payments.)

a.	<\$58	(<\$3001 per year)	1
b.	\$58-\$96	(\$3001 – \$5000 per year)	2
c.	\$97-\$154	(\$5001 – \$8000 per year)	3
d.	\$155-\$230	(\$8001 – \$12000 per year)	4
e.	\$231-\$308	(\$12001 – \$16000 per year)	5
f.	\$309-\$385	(\$16001 – \$20000 per year)	6
g.	\$386-\$481	(\$20001 – \$25000 per year)	7
h.	\$482-\$577	(\$25001 – \$30000 per year)	8
I.	\$578-\$673	(\$30001 – \$35000 per year)	9
j.	\$674-\$769	(\$35001 – \$40000 per year)	10
k.	\$770-\$961	(\$40001 – \$50000 per year)	11
l.	\$962-\$1154	(\$50001 – \$60000 per year)	12
m.	\$1155-\$1346	(\$60001 – \$70000 per year)	13
n.	>\$1346	(>\$70000 per year)	14
0.	Don't know		15
p.	Refusal		16

after (17)

Several models describe how parental income might affect children's life chances (43). The 'resource investment' model suggests that higher family income leads to greater child well-being through increased parental purchasing power to invest in food, housing, medical care, and education. An alternative model examines the indirect effects of economic deprivation on child well-being via increases in family stress, which diminish the caregiver's ability to provide stability, adequate attention, supervision, and cognitive stimulation to their children. A third model focuses on the effects of caregiver norms and values on children. This theory suggests that children's success in the world is affected by caregiver norms and values, which are dependent on a caregiver's type of employment, community and position in the social hierarchy. Each of these models assumes that greater economic resources will improve the well-being of children either directly or indirectly (43).

There are extensive associations between income and many of the child health outcomes in Table 1. A recent Canadian report charted no less than 27 associations between direct measures of income and outcomes that range from low functioning families on one hand to older teens who are neither employed nor in school (56). Figure 3, taken from the Western Australian Child Health Survey (15), demonstrates the impact of income on child mental health problems and academic competency.

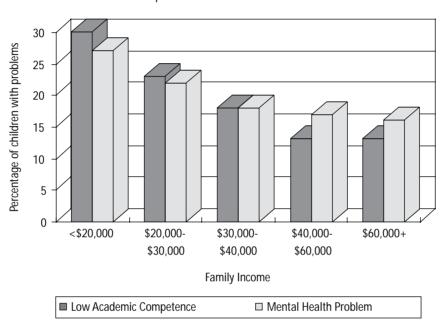


Figure 3: Comparison of Family Income with Children's Academic Competence and Mental Health

after (15)

Income information is frequently cited as perilous to collect. However, as Duncan and Petersen (57) demonstrate, there are many ways of collecting these data that are acceptable to respondents and that secure good quality information without jeopardising the data quality, interview or interviewer (see Example 4.2). In Australia, income data comprise some of the basic measures collected by the ABS.

Example 4.2 – A question about family income

What was the total combined income of all members of this family in 1999? Please include money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other money income received by you or any other family member.

\$_____In 1999.

IF DON'T KNOW OR REFUSED:

Would it amount to \$30,000 or more?

IF YES: Would it amount to \$50,000 or more?

IF YES: Would it amount to \$75,000 or more?

IF NO: Would it amount to \$40,000 or more?

IF NO: Would it amount to \$15,000 or more?

IF YES: Would it amount to \$20,000 or more?

IF NO: Would it amount to \$10,000 or more?

(57)

Time

Time is a commodity and is identified as such by most families. Indeed, while time is frequently characterised along dimensions of both quality and quantity, it is also regularly understood by placing a value on it in economic and social terms. Along with income, time represents one of the most commonly used and reported indices of family and social function.

Time as a family resource for children generally refers to the *time that caregivers* have available for themselves and other family members. Time utilisation measures may need to include both the amount of time and the quality of the time available. Time is needed for the mobilisation of other family resources and to provide an opportunity to use resources on behalf of self and other family members.

Examples of measures of quantity (as opposed to quality) of time might include parental hours in paid employment (see Example 4.3), hours of formal child care, or hours engaged in parent-child activities (e.g. supporting homework, reading with or to the child, involvement in family outings or in sporting, leisure or recreational activities).

Example 4.3 – A question about time	
In your main job, how many hours per week do you usually w	ork, including paid overtime?
(Interviewer: round <u>upwards</u> to nearest hour)	hours
How many hours a week are you available to spend time do and/or family (count waking hours only)?	ing things with your partner
(Interviewer: round <u>upwards</u> to nearest hour)	hours
	after (17)

Employment may affect the time available to the mother and father for family activities and may limit leisure time. A mother's time in the labour force is often taken as a problematic indicator of time not available for parenting. The total number of parental hours available to children is dependent on how many parents are in a family and how much they work outside the home. As more children are being raised in households with only one parent or in households where both parents are employed full time, these households have fewer hours available for both child care and employment. Collection of data on these effects for both dual-parent or single-parent households is much needed (58).

Measures of time and time use are many and varied. The Australian Bureau of Statistics has traditionally collected information on time use by household members. Similarly, the Australian Institute of Family Studies has assessed the significance of time to families and detailed the manner in which families attempt to balance the complex demands of work and family (59).

These studies show that work is a major barrier to the amount and quality of time available for family use. Practically speaking, there is only so much time in a week and so many hands that can supply the care a family needs. Employment erodes the energy available for the care of all family members and disrupts continuity in family caring. In the past, the traditional roles for couple families were of a father who worked and a mother who stayed home. In effect this arrangement tied the father's time and energy to securing family income and the mother's time and energy to the care of the family. While this arrangement is a choice that many families still make today, data sources show this choice being made less and less (17).

The effect of such choices for children is illustrated in Figure 4. This chart uses data from the 1996 WA Child Health Survey to show the percentage of Western Australian children living in various family circumstances (i.e. one or two parent households) and parental working arrangements (i.e. one or both parents in full-

time or part-time work or unemployed). It also shows the proportion of children within each of these categories having low academic competence and/or mental health problems.

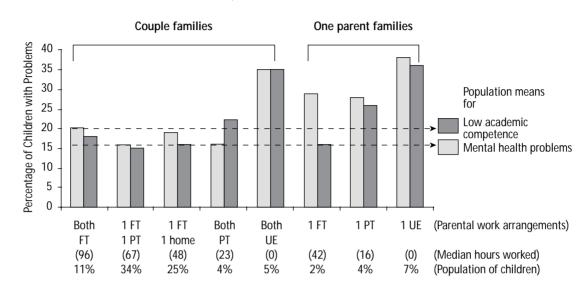


Figure 4: Comparison of Caregiver Time at Work with Children's Academic Competence and Mental Health

Not surprisingly, the time that caregivers have for themselves and other family members is frequently measured indirectly (e.g. by proxy)—chiefly, the amount of time spent in (paid) employment. Questions like 'In your main job, how many hours per week do you usually work including overtime?' are used to gather these data. Time in paid employment is an important proxy measure of time purportedly available for use for oneself and for the family. However, other features of time use (such as unpaid work), or direct measures of time spent in providing care for children and others are needed.

Data show that time use as a family measure is a critical proxy variable. This requires assessing time resources in two-caregiver families, in sole-caregiver families, and in families that have more diverse or varied family structures (17). Another measure of time that is useful is the time that children spend in formal care (e.g. day care, out-of-school care) or informal care. This again supplies an important proxy measure of how families are managing the complex task of work and family responsibilities.

Finally, we should note here the distinction between the *quantity* of time available for family members and the *quality* of the time used for family members (see Example 4.4). The distinction between quality time and quantity time is an important one. Caregivers frequently state that while the quantity of time available to them to care for family members in actual hours and minutes may be

small, their use of this time (i.e. its quality) may be directed to achieve quite particular outcomes for individual family members.

While, on the face of it, these assertions appear reasonable, data to better describe what constitutes the quality dimension of time are rare. Quality as opposed to quantity of time available to children may be better distinguished as a function of the human capital and psychological capital available to the child within the time available for any parent/child interaction.

Example 4.4 – Some questions measuring quality time

	Not like him/her	Somewhat like him/her	Very much like him/her
This parent shares many activities with me	1	2	3
This parent likes to talk and be with me	1	2	3
This parent spends time with me	1	2	3
This parent talks with me very much	1	2	3
This parent enjoys doing things with me	1	2	3
			(60)

Quality time, that is, the quality of an interaction, may be directly related to the opportunities that exist for contribution, for learning new skills and competencies, and receiving recognition or feedback. There also may be a point where the *quantity* of time available to give care to oneself and others becomes so restricted that both the subjective and practical effects of this erode the quality component.

Whatever the nature of it as a family resource, aspects of time should be measured to better describe its characteristics and its role as a commodity. Regular and better measurement of the time dimension in family functioning will also allow a fuller development of a model of family functioning that encompasses the full range of resources used by family members to support and care for themselves and others.

Human capital

Time and income are the most commonly referred to of the resources that family members have to meet the tasks of caring for themselves and others. However, they are not the only resources that families may have.

Human capital refers to those resources that families may be able to use on behalf of children (including a caregiver's knowledge, skills and experience about how the world works). These resources include such things as a caregiver's own education and training, their employment, their culturally-acquired knowledge, beliefs, attitudes and aspirations for their children, and values and traditions concerning parenting and family life (58).

The most accessible measures of human capital are the caregiver's educational level, training and experience, and their employment status. Most of these measures are measured directly in the national population census of Australia and in regular Australian labour force statistics (see Example 4.5).

How old were you when you left school?		
·· ·· , ·· ,		
Did not go to school	1	
14 years or younger	2	
15 years	3	
16 years	4	
17 years	5	
18 years	6	
19 years or older	7	
Don't know	8	
What was the highest grade or year completed at school (Interviewer: estimate nearest equivalent if education was not		
Primary school	1	
Year 8	2	
Year 9	3	
Year 10	4	
Year 11	5	
Year 12	6	
Don't know	7	
Please indicate the highest level of education you have c	ompleted:	
Never attended school	1	
Primary school	2	
Some high school	3	
Completed high school (year 12 or equivalent)	4	
Some study toward a tertiary degree or diplom	a 5	
Completed tertiary degree or diploma	6	
Completed other qualification (e.g. trade certifi	cate) 7	

A proxy measure that is frequently used as a measure of human capital is occupation. However, there are more hazards than advantages in using occupation as a measure of human capital, as it confounds measures of education, with levels of training, experience, social status and income. For example, as can be seen in Figure 5, the WA Child Health Survey (15) found that the prevalence of child mental health problems and low academic competence was significantly associated with the level of parental education.

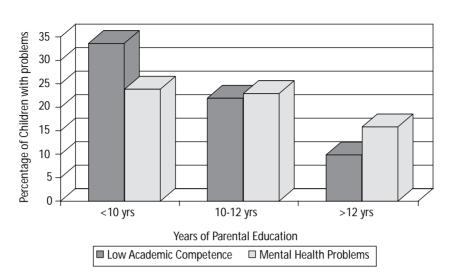


Figure 5: Comparison of Level of Parental Education with Children's Academic Competence and Mental Health

after (15)

The *knowledge and skills* that parents have in rearing their children comprise another important human capital resource. These skills have been measured in many studies by asking parents and/or young people to assess parenting practices and skills (16, 59-64). Some of the most important skills include monitoring and supervision, setting rules and limits, positive role modelling of communication skills, problem-solving and decision-making skills, and providing engaging age-appropriate activities (Example 4.6). Knowing where children are, who they are with, and what they are doing is important information for positively managing and monitoring their behaviour.

All of these skills have been shown to be empirically associated with child well-being (58). A more extensive measure of parenting *style* administered to parents has been developed by Arnold et al (65) and is used widely in Australian contexts. The *style* in which parents carry out these activities also spans another family resource area—that of psychological capital.

Example 4.6 – A measure of parenting

Tick the number box for each statement that best fits the way you feel your parents acted

My parents (or step parents or foster parents)...

		Never	Sometimes	Often	Very often
a.	Smile at me	~1	~2	~3	~4
٠.	Want to know exactly where I am and what I am doing	~1	~2	~3 ~3	~4
c.	Soon forget a rule they have made	~1	~2	~3	~4
d.	Praise me	~1	~2	~3	~4
e.	Let me go out any evening I want	~1	~2	~3	~4
f.	Do tell me what time to be home when	~1	~2	~3	~4
	I go out				
g.	Nag me about little things	~1	~2	~3	~4
ĥ.	Only keep rules when it suits them	~1	~2	~3	~4
i.	Make sure I know I am appreciated	~1	~2	~3	~4
j.	Threaten punishment more often than	~1	~2	~3	~4
	they use it				
k.	Speak of the good things I do	~1	~2	~3	~4
l.	Do find out about my misbehaviour	~1	~2	~3	~4
m.	Enforce a rule or do not enforce a rule depending upon their mood	~1	~2	~3	~4
n.	Hit me or threaten to do so	~1	~2	~3	~4
0.	Seem proud of the things I do	~1	~2	~3	~4
	seem producer are amage 1 as	-	-	Ü	(61)

Psychological capital

Families also have access to psychological capital resources that can be used on behalf of children and young people. Psychological capital includes parents' mental health, the level of family cohesion, the perceived level of family support and the level of stress and conflict within the family (Example 4.7). The establishment of a non-threatening and non-violent emotional climate and level of control or coercion are also critical components of the family psychological capital. Many of these factors have been shown empirically to be associated with child well-being.

Other resources include a sense of personal control, self-direction and autonomy, and the availability of others to provide emotional support. An important aspect of psychological capital that is not regularly measured is *self-efficacy*. Self-efficacy refers to how well individuals believe that they can manage and meet the demands and tasks of daily living (17).

Example 4.7 – A question about emotional support

Do you have anyone in particular to whom you can talk or confide in about yourself or your problems?

Yes 1 No 2

Example 4.7a – Some questions about potential family stressors

Have any of the following events happened in your family during the past 12 months? (Note the term 'close family member' means a parent, child, grandparent or relative living in the household)

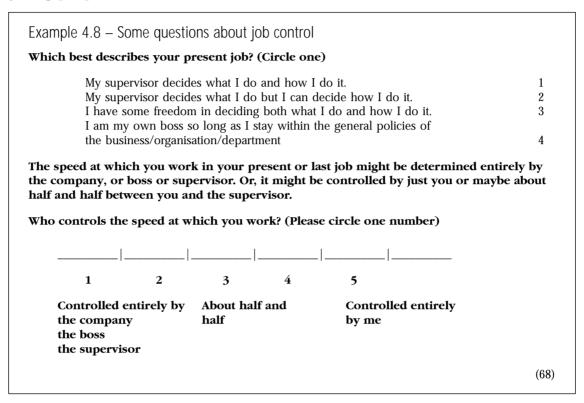
/		
a.	A close family member was very ill or had been hospitalised	1
b.	Unemployment/financial problems	1
c.	Serious family arguments	1
d.	A close family member was away from home a lot	1
e.	A favourite family pet died	1
f.	A close relative died	1
g.	Child's best friend moved away	1
ĥ.	Family member in drug/legal strife	1
I.	Close family member had serious emotional problems	1
j.	Parents were separated or divorced	1
k.	A close family member was robbed	1
l.	Trouble with child care	1
m.	New household members	1
n.	Child frightened by someone's behaviour	1
0.	Struggled to provide the necessities	1
p.	High family mobility	1
q.	Unsafe neighbourhood	1
r.	Close family member has a physical handicap	1
S.	House is very crowded	1
t.	Child witnessed bad injury	1

after (17)

Another aspect of psychological capital is *occupational complexity*. Occupational complexity refers to the amount of self-direction and autonomy available to individual workers on the job. Self-direction and autonomy are dimensions of the parental working environment that have been shown to have a critical impact on child-rearing values and behaviours (66). Importantly the amount of autonomy and discretionary control (*see glossary*) that individuals have in their work has a significant impact upon their health (eg. rates of coronary heart disease, general well-being) (67). For men particularly, changes in job complexity have been shown to have significant positive effects on their adult personality that subsequently influence aspects of parenting (68). Parents in high complexity occupations place less emphasis on direct methods of parental control. Instead their parenting style encourages the child's internalisation of parental norms and the development of personal responsibility.

It should also be noted that jobs which encourage autonomy and self-direction have been shown to affect the parent's intellectual flexibility and sense of self-efficacy and positively affects parent/child interactions at home (Example 4.8).

The lack of opportunity for less educated women to acquire jobs that encourage autonomy and self-direction has ramifications for the mother's role satisfaction, as well as for the quality of the home learning environment she provides for her children (58). These aspects of family resources have attracted considerable attention in the study of the causes of serious behaviour problems in children and young people.



Psychological capital is not commonly measured in large scale population surveys; however, parental mental health has been a current focus of Australian statistical collections self-efficacy (15-17, 47). Marital breakdown, maternal depression and paternal alcoholism in particular, have a significant impact on parent–child bonding and attachment, and the human and psychological capital available to the child (e.g. parental monitoring and responsiveness to the child's needs). These variables have been measured in large Australian studies. Families have generally understood the importance of these measures and found them to be acceptable (4, 15-17, 47). Other key measures such as parental self-efficacy and family discord are less often measured but show significant associations with many of the serious problems shown in Table 1 (15, 17). For example, children in the WA Child Health Survey families who reported high levels of family conflict had almost double the rates of mental health problems or low academic competence (Figure 6).

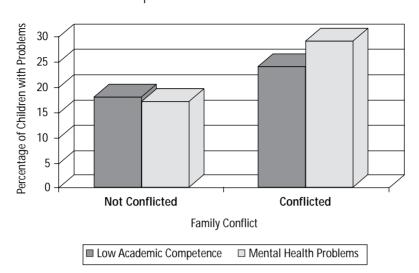


Figure 6: Comparison of Family Conflict with Children's Academic Competence and Mental Health

Social capital

Social capital is a concept that has received considerable attention in recent times (3, 7, 8, 68). In the context of a community setting, the term 'social capital' refers to the specific processes among people and organisations, working collaboratively in an atmosphere of trust, that lead to accomplishing a goal of *mutual social benefit* (69). Social capital does not refer to individuals, the means of production or to the physical infrastructure. Instead it is a relational term that connotes interactions among people through systems that enhance and support that interaction. Kreuter, Lezin and Koplan (70) identified four constructs of social capital: trust, civic involvement, social engagement and reciprocity. These constructs can be described as follows:

- **trust** is the belief that an individual, group, or organisation can be relied upon to act in a consistent, fair, rational and expected manner—criteria that are of course shaped by the individual's own values and beliefs.
- **civic involvement** is participation in activities that directly or indirectly contribute to a community's well-being. These include solitary activities such as voting or newspaper readership, as well as interactive activities, e.g. joining organisations that have civic improvement agendas.
- **social engagement** refers to the interactions that foster connections among community members or organisations. These connections include not only the organised groups that characterise many types of civic involvement, but also informal connections that have no organised or specific purpose, e.g. knowing one's neighbours or socialising with them.
- **reciprocity** refers to the expectation of a return on one's investment—the faith that an action or good deed will be returned in some form in the future.

Individuals, of course, may have access to resources outside of the immediate family. For example, networks of relatives, friends and work colleagues may provide caregivers and important resources that interact with those available in the wider community. A father whose daughter needs a job may know a friend in the local community who can arrange one. Here the father's knowledge about the world of work and his access to a friend or acquaintance (i.e. human capital) interacts with community employment resources and reciprocity (i.e. social capital) to secure a job opportunity.

Just as importantly though, there are other domains of social capital that may be required to keep families healthy, that instil a sense of well-being and future, and keep them productive and engaged. Together with domains already mentioned, support within the neighbourhood, trust in others and in governments; volunteerism, reciprocity and social engagement may allow for safer environments and improvements in infrastructure. These interactions may provide the 'glue' that keeps communities together (71).

They have also been shown to be context specific. For example, Silburn et al (17) showed significant variations in neighbourhood support for families living in Western Australia's urban and rural areas (Example 4.9). Neighbourhood support was generally higher for families living in rural areas. Another example has been reported by Weatherburn and Lind (72) showing that the likelihood of juveniles from crime-prone neighbourhoods being involved in crime is twice as great as that for juveniles from neighbourhoods without crime problems. These observations take into account the level of parental supervision and the age and gender of the juvenile. Finally, using Australian data, Onyx and Bullen (73, 74) have shown that social capital is generally higher in rural areas than in urban areas and that it is generally available regardless of individual material wealth or income level.

```
Example 4.9 – An example of a question that measures some aspect of social capital
Do you know any of your neighbours well enough to do any of the following:
(Tick if applicable)
              have a child minded for an hour in an emergency?
              have a child minded regularly?
     b.
              borrow $5 until you go to the bank?
     C.
     d.
              borrow something else?
              water the garden for you if you are away?
     e.
     f.
              feed your pets if you are away?
              have a talk with you if you are feeling down?
     g.
h.
              get small items of shopping if you are ill?
     I.
              keep an eye on your home if you go away?
                                                                                        after (17)
```

The measurement of social capital is currently the focus of much interest and activity (69). A comprehensive review of the area is beyond the scope of this

report although there are several Australian reviews available as well as other work in progress (69, 71, 73, 74). More research on social capital is needed and a core set of social capital measures as they relate to families and children needs to be assessed for their relevance and relationship to particular outcomes of interest. An example of this from the WA Child Health Survey shows an increased proportion of children with mental health problems and low academic competence among those living in areas characterised by higher rates of perceived neighbourhood violence (Figure 7).

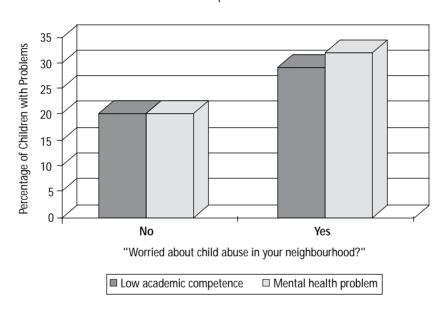


Figure 7: Comparison of Perceptions of Neighbourhood Violence with Children's Academic Competence and Mental Health

Finally, as Baum has noted, social capital is not a 'panacea for socio-economic hardship' nor is it the case that all social capital is necessarily good or health-promoting (75). The current interest in and focus on social capital is important, however, because it calls attention to the social context in which families live and operate.

The mix and interaction of family resources

The family resource domains discussed above have included time, income, and human, psychological and social capital. At any point a family may have a mix of resources available to them that may or may not be mobilised on behalf of family members. For example, income might be used to purchase human capital (e.g. house cleaning) to offset losses in time that is needed or desired for other purposes (e.g. recreation, employment). Family networks might be used as a human capital domain to lower losses in income associated with the need for paid formal child care. These examples call attention to and define the dynamic nature of family resources. Such a description moves beyond the traditional economic characterisation of the family as merely a unit of 'time and income'.

Frequently policy decisions by governments and agencies alter one or more aspects in the family resource mix affecting other resources. For example, changes that decrease eligibility for child care payments (i.e. a form of income) may lead to a decrease in educational or employment opportunities (e.g. a decline in human capital) by sole parents who must stay home and care for children. From the child's point of view this dynamic nature of family resources illustrates an important concept: that the family does not exclusively control children's access to the full set of resources likely to enhance their health and well-being. Instead, the mix of family resources for children is influenced directly by government, community and neighbourhood sectors as well as the personal circumstances and histories of the caregivers. The pattern of interaction among the resource domains may therefore promote better (or worse) outcomes for children.

Finally, we should note here that there is no 'one best' indicator of social and family functioning when these resource domains are taken into account. For example, increases in the amount of time a family has to spend together may be of little value in a family whose resource mix is characterised by low income and low human or psychological capital. Similarly, increases in income may not be followed by increases in the psychological capital of a family.

Because of the way in which resources mix and interact, a selection of indicators from *each* of the resource domains is needed, to enable a more comprehensive description of social and family functioning.

The accumulation and loss of family resources

Just as income may accumulate and be consumed or lost, so may some or all of the other family resource domains. These resources may also be transmitted intergenerationally. For example, Figure 5 shows the relationship between parental education on one hand and childhood outcomes such as mental health problems and low academic competence on the other (14). This finding is common in both cross-sectional and longitudinal research.

In general, where parents are better educated, their children tend to achieve higher levels of education, and indeed lower levels of many other problems. In this way the human capital of a family (e.g. parental education) is also moved intergenerationally to other family members. It may move intergenerationally within the *same* resource domain (i.e. better education for the children) and/or to *different* resource domains (i.e. better mental health for the children). This small example can be applied across the family resource domains in considering the accumulation of each of the various resources, whether it be the accumulation of income, time, human capital, psychological capital, or social capital—some families may accumulate these resources both in the present and intergenerationally.

Of course, families can experience impoverishment in any of these five resource domains. The use of the indicator framework proposed in this report allows attention to be focussed on the question of 'impoverishment of what?' Many families experience considerable or profound levels of poverty across all resource domains. This can be a challenge for individuals, communities and governments who seek to intervene and assist families in breaking the cycle of poverty. Increases in income may not always be translated into improvements in child and family outcomes if the family resource base has low human or psychological capital also requiring improvement.

Similarly, families in some communities (e.g. rural) may be confronted by significant economic downturns and a marked decline in the sustainability of the local community and its social capital base. This may place excessive demands on the other family resources. Thus, a chain of events may result that lowers family income, leads to excessive compensation with time at work, and results in high levels of individual and marital breakdown (i.e. decrease in psychological capital).

These few examples are used to illustrate the way in which family resources may be accumulated or lost. This resource base is dynamic and responsive to forces well beyond the boundary of the immediate family. For some families, their setting within a particular community may result in significant barriers to the access of important family resources. For other families, a history of poverty across these resource domains may have resulted in major difficulties in their capacity to renew or develop particular resource domains and to move the family out of a cycle of intergenerational poverty. Still other families may be seen to move from strength to strength, weathering adversity and responding with resilience.

Evidence is now emerging that addressing adverse developmental health outcomes will require comprehensive strategies that target more than one of the resource dimensions available for families. This concept is incorporated in the notion of mutual commitment, which acknowledges that money is not all that is required to address the problem associated with disadvantage. This is an important rationale for seeking a better measurement of a range of indicators of social and family functioning.

Availability of data

As previously indicated, the availability of data that describe the indicators of income, time, and human, psychological and social capital is variable. Part of this variability reflects the ease of collection while some is due to the absence of a general framework for understanding family resources and linking them to outcomes of interest. Participants at the 1999 National Workshop on Indicators of Social and Family Functioning discussed both the theoretical framework for data collection in this area and the availability of such information. The framework proposed in this report was supported by those attending the national workshop (see appendix C).

Workshop participants were asked to review the individual items and scales presented in Table 2 with a view to suggesting which of these could or should be developed for wider use. Importantly, participants were asked to identify those measures currently in use within Australia and which could be developed for further use and or greater reporting. A general summary of those items or scales within the proposed framework of indicators of social and family functioning is presented in Table 3. *Indicators that are available in current collections by the ABS, the AIHW and the AIFS are highlighted.* Table 3 also contains examples of indicators that overlap resource domains and that confuse one resource domain with another, making it virtually impossible to assess the effect that the indicator has on the outcome of interest.

Note that the indicators of social and family functioning presented in Table 3 are not designed to be all-inclusive. Instead, they are a distillation of those indicators presented in Table 2. As such Table 3 presents a relatively small 'reference' framework of indicators that may be workable in the short to medium term and that would allow some meaningful longitudinal measurements.

Associating indicators of social and family functioning with outcomes of interest

Finally, and before turning the presentation of a reference instrument (*see Chapter 5*), we should comment here that one of the major challenges facing policy makers and those who wish to implement and evaluate policies is the disassociation of indicators of social and family functioning from the measurement of targeted outcomes. For example, health professionals may wish to implement interventions in mental health that seek to reduce or prevent serious behavioural disturbances in children. Health data may allow a regular assessment of the number of children who are referred and treated within health facilities for these serious conditions. However, it is usual for health information systems to only collect information about the presenting problem (i.e. diagnosis) and perhaps the resources used to treat the problem (i.e. length of stay). Little if any additional information is collected and reported on the determinants of either the onset or the persistence of the problem.

While some agencies and services collect indicator data of the type described in this report, the practice is not commonplace. In general it is not usual for health services to collect and retain as part of their health information system any of the indicators in Table 2.

This causes two problems. First, it prevents identification of the relationships between possible social and family determinants and the outcomes of interest (in this case, serious behaviour problems). Secondly, it prevents the assessment of the impact of policies or other events that seek to prevent or reduce these problems.

A small set of indicators of social and family functioning regularly associated with key outcome data would greatly improve this situation and assist in the provision of accurate and timely information for policy and planning needs. In practical terms, families presenting at services would need to be approached for these data in ways that secure their consent and ensure that they understand the need for this information, in monitoring population health. This is not without challenge or cost, but without these data, the costs of planning, program implementation and evaluation are likely to be higher.

Table 3: Proposed core indicators of social and family functioning

Time Income Human Ca			Psychological Capital	Social Capital
Parental hours in paid employment	Total family income	Parental/carer education	Stressful life events	Neighbourhood, violence & crime
Hours in unpaid labour	Disposable family income	Parental/carer physical health	Parental mental health	Social or cultural discrimination
Parental employment status (full-time, part time, casual)	Level of welfare benefits (current, sustained & lifetime)	Culturally acquired knowledge, attitudes, beliefs, values & traditions	Level of self-efficacy, mastery/personal control/autonomy & self- direction	Availability of support services
Hours of formal child care	Financial strain (ratio of debts to assets)	Parental/carer skills and competencies	Family conflict (discord, violence, abuse)	Trust
Hours engaged in parent–child activities (supervising homework, outings, recreational & leisure activities)			Family cohesion	Social supports/extended kir & community contacts
Time child spends watching television (playing video games/internet)			Perceived level of social support	Social participation and engagement
			Parenting/carer style (encouraging, detached, coercive, inconsistent)	Reciprocity
				Civic involvement
	Measu	res that confound resource do	omains	
	Family ty	pe (original, step & blended, sol	le parent)	

Family type (original, step & blended, sole parent)

Available non resident parent(s)

Stability and quality of care

5: A REFERENCE INSTRUMENT FOR MEASURING INDICATORS OF SOCIAL AND FAMILY FUNCTIONING

.... writing sufficiently clear and 'simple' questions is hard-won, heavy duty work for survey researchers. It requires special measures to cast questions that are clear and straightforward in four important respects: simple language, common concepts, manageable tasks, and widespread information (79).

In this Chapter we present a small and restricted set of items and scales that can be used to derive indicators of social and family functioning. At the outset we should comment that several considerations guide this selection.

First, the items and scales are *principally designed to be used in population monitoring or in settings where there is a need to describe large samples* rather than individual families or individuals within families. As such they are not designed to be used to assess risk exposures for a single *individual*. Instead, they are designed to assess population characteristics and risk exposures of large populations and samples. These risk exposures operate over time within populations and, despite demonstrated and so called 'weak causal' associations, they in fact produce a substantial burden for individuals, families and communities (51).

Second, the proposed items and scales allow both the measurement and reporting of changes in social and family functioning over time (i.e. monitoring trend) as well as permit defining samples or populations who are exposed to risks that are relatively higher or more numerous (i.e. targeting). While it would be tempting to characterise a given item or scale as being either primarily a 'trend indicator' or an 'indicator for targeting intervention or prevention' this is a distinction of use or intent rather than a distinction that is intrinsic to the item or scale itself. Participants at the National Workshop on Social and Family Functioning held the view that there was an urgent need for population monitoring of trends over time in social and family functioning. However it was also acknowledged that if the items and scales needed for monitoring trends were selected with care, then they would have considerable use in defining populations and samples suitable for the targeting of interventions - particularly as these interventions related to prevention. Readers should note that the theoretical framework for prevention intervention is currently the subject of considerable Commonwealth development under the National Mental Health Strategy and the National Public Health Partnership where prevention intervention is seen to span three key settings: whole populations (i.e. universal interventions), populations with elevated risks (i.e. selected interventions), and populations with early emergent problems or symptoms (i.e. indicated interventions).

Third, the technical development and presentation of item reliabilities, scale reliability and validity, and associated correlates in some (but not all) of these areas remains to be done. This development is the subject of a specific recommendation regarding future work.

In general the indicator items and scales that appear here have been selected to:

- be easily and readily understood by the public;
- assess both positive and negative aspects of well-being;
- have a stable meaning over time;
- anticipate the future and provide baseline data for subsequent trends;
- provide complete coverage of the population or event being monitored;
- assess dispersion across given measures of well-being, the duration that children spend in a given status, and assessment of cumulative risk factors experienced by children;
- measure progress in meeting social goals for child well-being at the national, state and local levels;
- be available for relevant population subgroups (37).

In presenting the items for the reference instrument it is important to note that the participants at the 1999 national workshop on indicators of social and family functioning were of the view that the *number and range of indicators should be limited to a few standard variables*. This does not prohibit the collection of other data in these domains; indeed, this is seen as desirable. However, a few standard items, if routinely collected across Australian settings and populations, would greatly enhance the comparability of data and permit tracking of changes over time.

Finally, as noted in Chapter 4, the data from many (but not all) of these items and scales are already collected through the work of the Australian Bureau of Statistics, the Australian Institute of Health and Welfare and the Australian Institute of Family Studies. Readers of this document may wish to review Tables 2 and 3. In distilling the information in Table 2 to produce Table 3 the National Workshop participants were mindful of the work already under way in Australia. The reference instrument produced here reflects many of the priorities listed in Table 3. It is seen as an effort to value add to the data currently being collected within Australia. As such, the proposed reference instrument is a beginning point for further use and development.

The ISAFF Reference Instrument

The questionnaire presented in this section is called 'The Indicators of Social and Family Functioning Reference Instrument' (ISAFF-RI). We have deliberately termed it a 'reference' instrument to denote it as an indicative instrument rather

than an instrument in final form. Our intent in the design of this instrument is to suggest a minimal data set as a beginning point for the more rigorous development of an instrument capable of describing population and large sample trends and characteristics.

The instrument has been designed on the assumption that a caregiver (e.g. a mother or a father) is the respondent. This is as much for convenience of presentation as it is to acknowledge that the presentation of the items is influenced by the mode of their collection. We have assumed that this instrument has been given to the caregiver of a specific child. Our focus on collecting these data from a caregiver has been selected by way of illustration and is in keeping with the general approach adopted in this monograph: namely a focus on social and family factors that influence the developmental health and well-being of children. Of course, other modes of collection are possible. Where required this instrument would need to be revised and modified to make it appropriate and suitable for other modes of collection.

We acknowledge that both in design and science the selection of items and scales presented below will need to be assessed for their acceptability and usefulness. Many of the items and scales have had an extensive use. Some have not. Others (notably those in the social capital domain) are the subject of intense development within Australia and it would be expected that the ones suggested here would be replaced with measures of known validity and reliability as they become available. We should stress that these data should be collected concurrently with information about outcomes of interest (see Table 1). Each of the sections of the instrument are explained below.

Section A: About your family

Item 1. Section A contains a single item (item 1) that provides minimal contextual information about the structure of the family. It avoids the historical tendency of grouping families into 'one parent' and 'two parent' families and instead acknowledges that family transitions occur when families move from being original families to sole parent families and, for many, re-form into step and blended families. There is also scope for caregivers to describe their family composition as being 'extended' or 'other'. This is a general indicator item that supplies a broad demographic description and enables analysis of trends over time in the rate of family re-formation. As noted in Chapter 4, this item confounds several resource domains affecting child and family outcomes and on its own is of limited use.

Section B: About your family income

The two items (and an additional probe item) in this section comprise the indicators for income.

Item 2. This is a five-point scale that does not request a direct estimate of family income. It is used to estimate 'financial strain'. A similar question has been used in ABS surveys of household expenditure.

Item 3. In contrast to item 2, item 3 requests direct information about combined family income. For respondents uncertain about their actual level of income, a probe is offered allowing some estimate of income category. Item 3 is generally modelled from ABS census questions, while the probe for those who are uncertain, is taken from suggestions by Duncan and Petersen (57). Together data from these items would permit adequate descriptions of median gross income in samples and populations as well as estimating proportions of families affected by financial strain.

Section C: About your time

Two measures of time are used in this section: the amount of time a caregiver is in paid employment, and the amount of time a child is in day care.

Items 4 and 5. These items identify and sequence caregivers who are unemployed or out of the labour force beyond item 6.

Item 6. This item requests caregivers to estimate the amount of time spent in paid employment. It is measured in hours.

Items 4, 5 and 6 are designed to be asked of both caregivers thereby allowing an estimate of the total time a family unit allocates to work. These items are generally modelled after ABS questions. While not as precise as the questions routinely asked in labour force surveys, the data from these questions would allow adequate comparisons with national labour force statistics or permit the ABS to respond to requests for custom tables from their data in order to match these indicator items.

Item 7. Caregivers are asked to estimate the time that a given child in the family spends in child care.

In seeking to measure some aspect of time allocation in families the participants at the National Workshop agreed that these items were more likely to be 'proxies' of more direct estimates of time spent caring for oneself and one's family. However, they were none-the-less important indicators – particularly if collected concurrently with the other information in the ISAFF Reference Instrument.

Section D: About your well-being

The items in this section are measures of psychological capital.

Item 8 contains 12 items probing for specific life stresses. These include death and problems with health, relationships, money and the law and represent some of the most stressful events reported by Australian families (16, p 45). The scale

is a simple count of the number of stresses a family reports in the span of the past 12 months.

Item 9 asks the caregiver if they have been treated for an emotional or mental health problem. This item has been used in Australian population studies (14, 15, 16) and is a general indicator of an existing or previously existing mental health concern affecting the caregiver(s).

Item 10 is the general scale of the McMaster Family Assessment Device (76, 77). It has an extensive use in studies of Australian populations (14, 15, 16) and can be scored, following the reverse coding of relevant items, by summing the response categories. It is considered a reliable and valid estimate of general family functioning.

Item 11 measures the degree of control the respondent has in a given job environment. It is modelled after work by Kohn (68) and, while largely untested in Australian settings, its theoretical support and relationship to health and well-being outcomes is well documented (79).

Section E. About your neighbourhood

The questions in this section measure some aspect of social capital in the form of connectedness to the immediate neighbourhood and the experience of crime in the area.

Item 12. The items in the short scale comprise questions about connectedness to the immediate neighbourhood environment. They have been used in Canadian and Australian population surveys (16) where rural and urban variations have been shown.

Items 12 and 13 probe for experiences of theft, assault or property damage and if so, inquire if these have happened in the immediate neighbourhood.

At the time of the National Workshop on Social and Family Indicators workshop participants acknowledged that the domain of social capital was under intensive development in Australia and that, at present, no 'optimal' indicator questions for social capital had been tested and validated in the Australian context. This was seen to be an area for further development.

Section F. About your education, health and parenting style

These questions gather information about human capital within families.

Item 15 measures the primary and secondary educational level of the caregiver. Measures of education are generally acknowledged to be among some of the most powerful estimates of human capital and are closely associated with health and other outcomes in developed and developing countries.

Item 16 complements the measure of caregiver education by requesting information about the experience of tertiary education.

Item 17. This is a general indicator of caregiver health. It has been used extensively in Australian population studies where it has been shown to be associated with other health and social outcomes.

Items 15, 16 and 17 should be requested of both caregivers (where present in the family). This allows a more comprehensive estimate of human capital (in the form of caregiver education) in the family unit.

Item 18. This is the 30 item Arnold Parenting scale (65). Responses to this scale can be used to describe various parenting styles and practices. It has been used extensively in Australian studies of both large samples and populations where it has been shown to be acceptable to families and a valid and reliable estimate of parenting style.

This is the largest single scale in the ISAFF Reference Instrument. A smaller, measure of parenting style was the subject of a considerable search, but failed to produce an instrument that had acceptable properties. Other parenting scales have been used (16, 17) however, the respondents were adolescents, not parents. As the general focus of the ISAFF Reference Instrument is on data collected from adult caregivers, the Arnold Parenting Scale was selected. The scale may be coded and, with appropriate reverse coding, scored to describe caregiver parenting style.

As data are collected with this scale it will become possible to assess the internal reliability and validity of the scale for possible reduction to a fewer number of items. In the meantime, given the importance of parenting style and practices as a critical feature of the human capital of families, the Arnold is the scale of choice for this.

Using the ISAFF Reference Instrument

The ISAFF Reference Instrument (ISAFF-RI) is designed to illustrate the minimum item domains that should be considered in the measurement of social and family functioning. Thus, we would contend that if social and family functioning is to be measured then the minimum domains to be considered for measurement are: time, income, and human, psychological and social capital. We have selected specific items and illustrated them here (see below). In the first instance we would suggest that they should be used. This will allow an assessment of their acceptability and usefulness. It will also allow sufficient data to be collected to further assess reliability and validity.

The ISAFF-RI is also designed to illustrate a minimum data set of items and scales. Social and family functioning is a vast topic offering a multitude of theories and opportunities for their development and measure. We have opted to restrict the

ISAFF-RI in its overall size and burden to the respondent. This instrument is a reference instrument. The items are not 'set in stone' and we would expect this instrument to be used and developed. What is critical are the concepts underlying the choice of the domains and the specific choice of these items and scales as the initial ones to use.

In what settings should the scales be used? Participants at the National Workshop on Social and Family Functioning held the view that key agencies – among them the Australian Bureau of Statistics, the Australian Institute of Family Studies, and the Australian Institute of Health and Welfare – should consider this instrument and its content from their perspectives as national agencies that are in a position to collect and report these data. Similarly, state health, education and family and community services may wish to consider the ISAFF-RI and its use within large samples of their client populations. There is also scope for the use of the ISAFF-RI in specific projects or interventions where an accurate description of the social and family characteristics of participants is needed. Finally, researchers are critically positioned to consider the measurement domains and their use in a variety of research applications: epidemiological studies, clinical trials, and interventions where characteristics of social and family functioning may be critical.

In closing this chapter we would comment that the real value in the measurements we are suggesting will emerge through their collection over time. This will allow comparisons of trends and a fuller description of their association with other data gathered routinely: notably economic and health data. This will permit a more comprehensive understanding of the associations between social and family functioning on one hand and, for example, economic and health trends and outcomes on the other.

ISAFF REFERENCE INSTRUMENT Version 1 - April 2000

3. What was the total combined income of all

members of this family (this past year)?

from business, farm or rent, pensions,

you or any other family member.

\$_____ (this past year)

[] DON'T KNOW OR UNSURE?

Would you say that the total combined income of all members of this family this past year

Please include money from jobs, net income

dividends, interest, social security payments and any other money income received by

Introduction
ISAFF Reference Instrument

Institute for Child Health Research

Perth, Western Australia

These questions seek information about your family and about your social circumstances. By having a better description of how families function and the nature of their social circumstances improvements can be made in a variety of health and community services. This information will also allow a better understanding of how families and communities change over time. Your participation in completing these questions is voluntary and the answers you provide are confidential. No information will be released that would identify individuals or individual families.

A. About your family

We can save a lot

11.	About your failing	might be:
1.	How would you describe your family (tick one that best applies)?	a. [] Less than \$20,000 b. [] Between \$20,000 and 29,999
	[] Original family (i.e. children with both biological or adoptive parents)	c. [] Between \$30,000 and 39,999d. [] Between \$40,000 and 49,999
	[] Step/ blended family (i.e. step relationships exist within the family)	e. [] Between \$50,000 and 59,999 f. [] Between \$60,000 and 69,999
	[] Sole parent family[] Extended family: (please describe):	g. [] \$70,000 or more
		C. About your time (to be asked of each caregiver)
	[] Other: (please describe):	4. Are you currently in paid employment?
		[] No
		[] Yes → GO TO Q6
В.	About your family income	5. I want employment and cannot find it.
2.	Which words best describe your family's money situation (tick one that best applies)?	[] No
	[] We are spending more money than we get	[] Yes → GO TO Q8
	[] We have just enough money to get us through to the next pay day	6. How many hours a week do you work in paid employment?
	[] There's some money left over each week but we just spend it	hours per week
	[] We can save a bit every now and again	

7.	7. In total, how many hours each week is (this child) usually in child care?				10. Below are statements about families and family relationships. For each one, circle the category (1-4) which best describes yo							
	Hours:per week						family.	4) WIII	CII DES	st describ	ies your	
	[] Is not in child care							Strongly		ъ.	Strongly	
	[] Not sure							Agree	Agree	Disagree	Disagre	
D.	About your well-being					a	Planning family activities is		0			
8.	Have any of the following even in your family during the past (tick all that apply)?						difficult because we misunderstand each other.	1	2	3	4	
Noi	e: The term 'close family member' means grandparent or relative living in the bo	-		chi	ld,	b.	In times of					
		NO)	Yl	ES		crisis we can turn to each	1	2	3	4	
a.	A close family member had a serious medical problem						other for support.					
	(illness or accident) and was in bospital	[]	[]	c.	We cannot talk to each other	1	0	0	4	
b .	A close family member was badly burt or sick (but was not in bospital)	ſ	1	1	1		about sadness we feel.	1	2	3	4	
c.	A close family member was arrested or in jail	[]	[]	d	Individuals (in the family) are accepted for	1	2	3	4	
d.	Our child or children were involved in or upset by family arguments	[]	[]	e.	what they are. We avoid discussing our	1	2	3	4	
e.	A parent/caregiver lost bis/ber job or was unemployed	[]	[]	f	fears and concerns. We express	1	~	Ü	1	
f.	A close family member had an alcohol or drug problem	[]	[]	J.	feelings to each other.	1	2	3	4	
_	Our family had serious financial problems	[]	[]	g.	There are lots of bad feelings in our family.	1	2	3	4	
b.	A close family member has a physical handicap	[]	[]	b	. We feel					
i.	A parent, brother or sister died	[]	[]		accepted for what we are.	1	2	3	4	
j.	Parents were separated or divorced	[]	[]	i.	Making decisions is a problem in our	1	2	3	4	
k.	We have been very crowded where we live	[]	[]		family.					
l.	Other, please specify:	[]	[]	j.	We are able to make decisions about how to solve problems.	1	2	3	4	
9.	Have you ever been treated for emotional or mental health pro		m?			k	. We don't get on well together	1	2	3	4	
	[] No					l.	We confide in	1	2	3	4	
	[] Yes						each other	=		-	=	

11		tatement below best des job? (tick one)	scribes your	F. About your education, health and parenting (to be asked of each
a.	[]	I am not in a job at the	e moment	caregiver)
b.	[]	My supervisor decides how I do it	what I do and	15. What was the highest level of school education obtained by you?
c.	[]	My supervisor decides		a. [] Did not go to school
		I can decide how I do		b. [] Primary school
d.	l .	I have some freedom in both what I do and ho		c. [] Year 8
e.	[]	I am my own boss so l	long as I stay	d. [] Year 9
within the general policies business/organisation/ dep				e. [] Year 10
				f. [] Year 11
Ε.	About	your neighbourhoo	od	g. [] Year 12
12		know any of your neigh to do any of the followi le):		16. What is the highest qualification obtained by you since leaving school?
а		nild minded for an hour	[]	a. [] No post school qualification
u.	in an em		l J	b. [] Trade/apprenticeship
b.	have a ch	nild minded regularly?	[]	c. [] Certificate from college, TAFE
c.	borrow \$ bank?	5 until you go to the	[]	d. [] Diploma (beyond Year 12)
d.		omething else?	[]	e. [] Bachelors degree
		garden for you if you	[]	f. [] Postgraduate diploma/higher degree
С.	are away		l j	g. [] Don't know
f.	feed you	pets if you are away?	[]	h. [] Other—Please specify:
g.		lk with you if you are	[]	
	feeling do		f 1	17. In general, how would you describe your health?
n.	get small are ill?	items of shopping if you	l l	a. [] Excellent
i.		eye on your home if you	[]	b. [] Very good
	go away?			c. [] Good
13		y of the members of thi victim of theft, assault		d. [] Fair
		or any other crime in t		
			COTO 015	e. [] Poor
	[] No		GOTO Q15	[CO TO NEVT DACE]
. ,			GOTO Q14	[GO TO NEXT PAGE]
14		crime happen in this urhood or community?		
	[] No			
	[] Yes			

Below are a series of items that refer to your parenting style during the past TWO MONTHS³. Please circle the one number between A and B that is nearest to what you do with (this child).

Statement A	Statement A Circle one number only		only	Statement B				
1. When my child misbehaves								
I do something right away	1	2	3	4	5	6	7	I do something about it later
2. Before I do something about a	probl	em						
I give my child several reminders or warnings	1	2	3	4	5	6	7	I use only one reminder or warning
3. When I'm upset or under stress	S							
I am picky and on my child's back	1	2	3	4	5	6	7	I am no more picky than usual
4. When I tell my child not to do	somet	hin	g					
I say very little	1	2	3	4	5	6	7	I say a lot
5. When my child pesters me								
I can ignore the pestering	1	2	3	4	5	6	7	I can't ignore the pestering
6. When my child misbehaves								
I usually get into a long argument with my child	1	2	3	4	5	6	7	I don't get into an argument
7. I threaten to do things that								
I am sure I can carry out	1	2	3	4	5	6	7	I know I won't actually do
8. I am the kind of parent that								
sets limits on what my child is allowed to do	1	2	3	4	5	6	7	lets my child do whatever he or she wants
9. When my child misbehaves								
I give my child a long lecture	1	2	3	4	5	6	7	I keep my talks short and to the point
10. When my child misbehaves								
I raise my voice or yell	1	2	3	4	5	6	7	I speak to my child calmly
11. If saying no doesn't work righ	ıt awa	y						
I take some other kind of action	1	2	3	4	5	6	7	I keep talking and trying to get through to my child
12. When I want my child to stop	doing	g soı	metł	ning	•••			
I firmly tell my child to stop	1	2	3	4	5	6	7	I coax or beg my child to stop
13. When my child is out of my si	ght							
I often don't know what my child is doing	1	2	3	4	5	6	7	I always have a good idea of my child is doing
14. After there's been a problem v	with n	ny c	hild	•••				
I often hold a grudge	1	2	3	4	5	6	7	things get back to normal quickly
15. When we're not at home								
I handle my child the same way I do at home	1	2	3	4	5	6	7	I let my child get away with a lot more
16. When my child does somethin	ıg I de	on't	like	•••				
I do something about it every time it happens	1	2	3	4	5	6	7	I often let it go

³ From Arnold et al, 1993 (63).

Statement A	Circ	cle	one	nu	ımb	er	only	Statement B			
17. When there's a problem with	my cł	ıild.									
things build up and I do things I don't mean to do	1	2	3	4	5	6	7	things don't get out of hand			
18. When my child misbehaves, I spank, slap, grab, or hit my child											
never or rarely	1	2	3	4	5	6	7	most of the time			
19. When my child doesn't do wh	at I as	sk									
I often let it go or end up doing it myself	1	2	3	4	5	6	7	I take some other action			
20. When I give a fair threat or wa	arninş	g									
I often don't carry it out	1	2	3	4	5	6	7	I always do what I said			
21. If saying no doesn't work											
I take some other kind of action	1	2	3	4	5	6	7	I offer my child something nice so he/she will behave			
22. When my child misbehaves											
I handle it without getting upset	1	2	3	4	5	6	7	I get so frustrated or angry that my child can see I'm upset			
23. When my child misbehaves											
I make my child tell me why he/she did it	1	2	3	4	5	6	7	I say 'No' or take some other action			
24. If my child misbehaves and th	en ac	ts so	orry.	•••							
I handle the problem like I usually would	1	2	3	4	5	6	7	I let it go that time			
25. When my child misbehaves											
I rarely use bad language or curse	1	2	3	4	5	6	7	I almost always use bad language			
26. When I say my child can't do	somet	hin	g								
I let my child do it anyway	1	2	3	4	5	6	7	I stick to what I said			
27. When I have to handle a prob	lem										
I tell my child I am sorry about it.	1	2	3	4	5	6	7	I don't say I'm sorry			
28. When a child does something I d	on't li	ke. I	insu	ılt m	ıy ch	ild,	say me	ean things, or call my child names			
never or rarely	1	2	3	4	5	6	7	most of the time			
29. If my child talks back or comp	plains	wh	en I	han	dle	a pr	oblem				
I ignore the complaining and stick to what I said	1	2	3	4	5	6	7	I give my child a talk about not complaining			
30. If my child gets upset when I	say 'N	o'									
I back down and give into my child	1	2	3	4	5	6	7	I stick to what I said			

[NO MORE QUESTIONS]

6: CONCLUSION AND RECOMMENDATIONS

It is recommended that...whatever conceptual framework is developed to explicate child well-being, that it be an ecological framework, and that it associate child well-being with family and community quality of life and resiliency (1).

The 1999 National Workshop on Indicators of Social and Family Functioning reached a broad consensus on the rationale for and framework of indicators presented in this document. The main conclusions were:

- Within government and research there is a need to analyse the link between serious outcomes in child health and well-being on one hand and indicators of social and family functioning on the other, and to do this across different populations within Australia.
- At present the analysis of the link between serious outcomes in child health/well-being and indicators of social and family functioning is not possible. This is because either indicator data are not collected or are collected in non-standard ways. This prohibits comparing and/or combining data sources and thus impedes progress.
- The rationale for selecting indicators of social and family functioning should be based on the principle of causal pathways. Such a rationale identifies opportunities for risk modification and intervention.

Where to from here?

The immediate next steps to implement indicators of social and family functioning will require:

- refining individual items of the proposed core indicators for use in a variety of data collection formats (eg. face-to-face surveys, interviews, paper and pencil questionnaires) and from a variety of informants (eg. different caregivers, young people, teachers);
- bringing together what is known about psychometric and sociometric properties of Australian populations (eg. reliabilities, validities, and correlates);
- publishing the indicators and their properties in paper and electronic formats; and
- promoting their use in government and research settings.

In reaching a consensus, participants at the national workshop recognised that to implement a standard set of indicators would require sustained direction and leadership. A technical advisory group drawn from the key agencies (ABS, AIHW and AIFS) along with leading scientists and information managers could progress this work in a timely fashion.

Conclusion

Great attention is paid to the rise and fall of national indicators of economic productivity and to patterns of investment for the future. And yet, the key resource on which so much of this is based, the Australian family, remains remarkably unknown and rarely charted. Many of the current outcomes of concern to families, communities and governments are outcomes that have developed over long periods of time. Family breakdown, drug abuse, juvenile offending and poor school retention represent outcomes that substantially reflect fundamental changes in the matrix of family resources described in this report.

The time span to improve most of these outcomes is long and extends over the terms of governments. Neither families nor governments alone can achieve improvements in these outcomes. Just as a variety of partnerships are needed in the lives of children and families to achieve good health and well-being, so too are partnerships needed within and between governments, communities and individuals to achieve these same goals.

Developing measures of how well families are doing and the impact of changes in the social, economic and cultural environments in which families live has been the focus of this report. Regular reporting of indicators of social and family functioning is needed. Many of the basic indicators are either already available in current national collections or, with relatively modest investment, could be collected in national collections of data or at local levels.

Such data would provide a solid foundation for policy development and programs of intervention.

Recommendations

It is recommended that

- a set of indicators of social and family functioning be selected on the basis of their capacity to measure risk exposures known to be on the causal pathways of poor health, educational, social and criminological outcomes. These indicators should be included in the regular social and health survey publications of key government agencies on children, young people and their families. Population health researchers should also be encouraged to incorporate these indicators into research designs.
- 2. the set of indicators of social and family functioning developed by the national workshop be accepted. They cover five key resource domains for social and family functioning relevant to child health and well-being outcomes:
 - time
 - income

- · human capital
- psychological capital
- · social capital.
- 3. 'The Indicators of Social and Family Functioning Reference Instrument' (ISAFF-RI) (*see Chapter 5*) be used as an indicative measure to assess the acceptability and usefulness of such indicators.
- 4. a technical advisory group be established, drawn from key agencies—the ABS, AIHW and the AIFS—together with leading scientists and information managers, to trial, review and refine instruments capable of describing populations and large sample trends and characteristics for use in government and research settings.
- 5. once appropriately developed, these indicators be considered for inclusion in the current National Health and Medical Research Council (NHMRC) review of the national surveillance and screening of children and young people.

REFERENCES

- 1. Asher BA & Wintersberger H. (1997) Eurosocial Report 62/1997. *Monitoring The State Of Children—Beyond Survival*. International Workshop Jerusalem, Israel 22–25 January 1996. European Centre for Social Welfare Policy Research, Vienna.
- 2. Keating DP & Hertzman C. (1999) Developmental Health and the Wealth of Nations. Guilford Press, New York.
- 3. Vimpani G & Zubrick SR. (1998) *The Collaborative Development Of Indicators Of Social And Family Functioning: Project Proposal*. Commonwealth Department Of Family Services.
- 4. Australian Institute of Health & Welfare. (1998) National Child Health Information Framework: Workshop Proceedings. AIHW, Canberra.
- 5. Warwick Smith. Address to Business Partnerships Round Table, February, 1998.
- 6. Green LW & Kreuter MW. (1999) *Health Promotion Planning: An Educational and Ecological Approach*. Mayfield Publishing Company, Mountain View, CA.
- 7. Putnam RD. (1995) Bowling Alone: America's Declining Social Capital. *Journal Of Democracy*, 1: 65–78.
- 8. Cox E. (1995) *A Truly Civil Society: 1995 Boyer Lectures.* Australian Broadcasting Commission, Sydney.
- 9. Commonwealth Department of Health, Housing and Community Services. (1992) *Health Goals and Targets for Australian Children and Youth Project Report.* Commonwealth Department of Health, Housing and Community Services, Canberra.
- 10. Commonwealth Department Of Human Services And Health. (1995) *The Health Of Young Australians: A National Policy For Children And Young People*. Commonwealth Department Of Health And Human Services, Canberra.
- 11. Commonwealth Department Of Human Services And Health. (1996) *The National Health Plan For Young Australians: A National Policy For Children And Young People*. Commonwealth Department Of Health And Family Services, Canberra.
- 12. Garbarino J. (1997) Social Indicators: Searching For A Public Policy Grail. In C Mcclintock (Ed). *Making Social Indicators Useful For Policy And Program Management In New York State.* http://www.human.cornell.edu/faculty/summrpt_s97.html (Accessed 16 February 1999).
- 13. Moon L, Rahman N, & Bhatia K. (1998) *Australia's Children: Their Health And Well-Being* 1998. AIHW, Canberra (AIHW Cat.No PHE 7).

- 14. Australian Bureau of Statistics. (1999) *Children, Australia: A Social Report.*Australian Bureau of Statistics, Canberra.
- 15. Zubrick SR, Silburn SR, Gurrin L, Teoh H, Shepherd C, Carlton J & Lawrence D. (1997) *The Western Australian Child Health Survey: Education, Health and Competence*. Australian Bureau of Statistics and the Institute for Child Health Research, Perth, WA.
- 16. Zubrick SR, Silburn SR, Garton A, Burton P, Dalby R, Carlton J, Shepherd C & Lawrence D. (1995) *The Western Australian Child Health Survey: Developing Health and Well-being in the Nineties*. Australian Bureau of Statistics and the Institute for Child Health Research, Perth, WA.
- 17. Silburn SR, Zubrick SR, Garton A, Gurrin L, Burton P, Dalby R, Carlton J, Shepherd C & Lawrence D. (1996) *The Western Australian Child Health Survey: Family and Community Health*. Australian Bureau of Statistics and the Institute for Child Health Research, Perth, WA.
- 18. Farrington DP, Loeber R, & Van Kammen WB. (1990) Long Term Criminal Outcomes Of Hyperactivity—Impulsivity, Attention Deficit And Conduct Disorders In Childhood. In L N Robins & M Rutter (Eds) *Straight And Devious Pathways From Childhood To Adulthood*. Cambridge University Press, Cambridge. (pp. 62–81).
- 19. Mrazek PJ & Haggerty RJ. (1994) Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research. National Academy Press, Washington, D.C.
- 20. Resnick MD, Bearman PS, Blum RW, Bauman KE, Harris KM, Jones J, Tabor J, Beuhring T, Sieving RE, Shew M, Ireland M, Bearinger LH & Udry JR. (1997) Protecting Adolescents From Harm: Findings From The National Longitudinal Study On Adolescent Health. *Journal American Medical Assocation*, 278:823–832.
- 21. Rutter M. (1995) Relationships Between Mental Disorders In Childhood And Adulthood. *Acta Pædiatrica Scandinavica* 91:73–85.
- 22. Rutter M & Smith DJ. (1995) *Psychosocial Disorders In Young People: Time Trends And Their Causes.* John Wiley & Sons, New York.
- 23. Samaroff AJ, Baydar N & Brooks-Gunn J. (1991) Effects Of Maternal Employment And Child-Care Arrangements In Infancy On Preschoolers' Cognitive And Behavioural Outcomes. Evidence From The Children Of The NLSY. *Developmental Psychology* 27(6):932–945.
- 24. Brooks-Gunn J. (1995) Children In Families In Communities: Risk And Intervention In The Bronfenbrenner Tradition. In: Moen P, Elder GH, & Lüscher K (Eds) *Examining Lives In Context: Perspectives On The Ecology Of Human Development* American Psychological Association, Washington, D.C. (Pp 467–519).

- 25. Haverman R & Wolfe B. (1991) Childhood Events And Circumstances Influencing High School Completion. *Demography*, 28, 133–157.
- 26. Haverman R & Wolfe B. (1994) Succeeding Generations: On The Effects Of Investments In Children. Russell Sage Foundation, New York.
- 27. Pollard J, Catalano R, Hawkins JD & Arthur M. (1998) Communities That Care Youth Survey. Development Of A School-Based Survey Measuring Risk And Protective Factors Predictive Of Substance Abuse, Delinquency And Other Problem Behaviours In Adolescent Populations. Developmental Research Programs, Inc. Seattle WA.
- 28. Greenwood PW, Model K, Hydell CP & Chiesa J. (1998) *Diverting Children From A Life Of Crime*. Rand. USA.
- 29. Simeonsson RJ. (Ed.) (1994) Risk, Resilience And Prevention Promoting The Well-Being Of All Children. Paul H. Brookes. USA.
- 30. National Crime Prevention. (1999) *Pathways To Prevention; Developmental And Early Intervention Approaches To Crime In Australia*. Attorney-General's Department, Canberra.
- 31. Carnegie Council On Adolescent Development. (1995) *Great Transitions: Preparing Adolescents For A New Century*, Carnegie Corporation, New York.
- 32. Lazarus W & Gonzalez M. (1989) *California: The State Of Our Children Where We Stand And Where We Go From Here.* Report Card & Briefing Book. Children Now, Los Angeles.
- 33. O' Hara K. (1998) *Comparative Family Policy: Eight Countries' Stories* Canadian Policy Networks, Ottawa.
- 34. Wilkinson R & Marmot M. (1998) *Social Determinants Of Health: The Solid Facts*. World Health Organisation, Europe.
- 35. Jehl J. (1998) *The Measure Of Success. What Are The Policy Implications Of The New National Indicators Of Child Wellbeing?* Special Report #11, The Policy Exchange. The Institute For Educational Leadership. Washington, D.C.
- 36. Zubrick SR, Silburn SR, Vimpani G & Williams A. (1999) *Emergent Demand For Measurement Indicators Of Social And Family Functioning*. Paper Presented At A Workshop Convened By The Commonwealth Department Of Family And Community Services. Canberra, 25 March 1999.
- 37. Moore KA. (1995) Eurosocial Report 56. New Social Indicators Of Child Wellbeing.: European Centre For Social Welfare Policy & Research, Washington, D.C.
- 38. Edgar D. (1998) The New Marriage: Changing Rules For Changing Times. *Threshold*, 22:9.

- 39. Ben-Arieh A. (1996) Eurosocial Report 62/199 Monitoring and measuring The State Of Children—Beyond Survival European Centre For Social Welfare Policy & Research, Vienna.
- 40. Canadian Council On Social Development. (1996) *Measuring Well-being:* Proceedings From A Symposium On Social Indicators, November 1996. Canadian Council On Social Development, Ottawa.
- 41. Statistics Canada. (1997) Canadian Children In The 1990's: Selected Findings Of The Longitudinal Survey Of Children And Youth. Canadian Social Trends—Spring 1997. Statistics Canada, Ottawa.
- 42. Federal Interagency Program On Child And Family Statistics. (1998) *America's Children: Key National Indicators Of Well-Being*. US Government Printing Office, Washington, D.C.
- 43. Hauser RM, Brown BV & Prosser WR. (1997) *Indicators Of Children's Well-Being*. Russell Sage Foundation, New York.
- 44. Webster A. *ABS Statistics On Children And Child Indicators*. Paper Presented To Australian Population Association Conference, Brisbane, October 1998.
- 45. Dunlop B & Pearson V. (1999) *Measuring Social And Family Functioning: ABS Role, Activities And Directions*. Paper Presented To The National Workshop On Indicators Of Social And Family Functioning, Canberra, April 1999.
- 46. Murray CJL & Lopez AD. (1996) The Global Burden Of Disease: A Comprehensive Assessment Of Mortality And Disability, Injuries And Risk Factors In 1990 And Projected To 2020. WHO, Cambridge, Mass.
- 47. Australian Bureau Of Statistics. (1998) *Mental Health And Well-Being Profile Of Adults—Australia*. Australian Bureau Of Statistics, Canberra. Publication No.4326.
- 48. Mccain M & Mustard FJ. *The Early Years Study—Reversing The Real Brain Drain*. Report From The Canadian Institute For Advanced Research To The Ontario Government, April, 1999.
- 49. Doll R. (1996) Weak Associations In Epidemiology: Importance, Detection, And Interpretation. *Journal Of Epidemiology*, S11–S20.
- 50. Acheson D. (1998) *Independent Inquiry Into Inequalities In Health Report*: The Stationery Office. UK.
- 51. Zubrick SR, Silburn SR, Burton P & Blair E. (In Press). Mental Health Disorders In Children And Adolescents: Scope, Cause And Prevention. *Royal Australian & New Zealand Journal Of Psychiatry*.
- 52. Susser E & Susser M. (1989) Familiar Aggregation Studies: A Note On Their Epidemiologic Properties. *American Journal Of Epidemiology*, 129: 302–3.
- 53. Coleman, JS. (1988) Social Capital In The Creation Of Human Capital. American Journal Of Sociology, 94, 95–120.

- 54. Sameroff AJ & Chandler MJ. (1975) Reproductive Risk And The Continuum Of Caretaking Casualty. In FD Horowitz, Mhetherington, Scarr-Salapatek & G Slegal (Eds) *Review Of Child Development Research* (Vol.4). University Of Chicago Press, Chicago.
- 55. Commonwealth Department Of Family And Community Services. (1999) Report Of A National Workshop On Indicators Of Social And Family Functioning, 12-13 April. Commonwealth Of Australia: Canberra.
- 56. Ross DP & Roberts P. (1999) *Income And Child Well-Being: A New Perspective On The Poverty Debate*. Canadian Council On Social Development, Ottawa.
- 57. Duncan GJ & Petersen E. (1997) *The Long And Short Of Asking Questions About Income, Wealth And Labor Supply On Surveys*. http://famchild.wsu.edu/publications/howto.htm. Accessed 18 January 1999.
- 58. Parcel T & Menaghan. (1994) Early Parental Work, Family Social Capital and Early Childhood Outcomes. *American Journal of Sociology*, 99; 972–1009.
- 59. Wolcott I & Glezer H. (1995) *Work and Family Life: Achieving Integration*. Australian Institute of Family Studies, Melbourne.
- 60. Barber BK & Thomas DL. (1986) Multiple Discussions Of Parental Supportive Behaviour. The Case Of Physical Affection. *Journal Of Marriage And The Family*, 48, 783–794.
- 61. Lempers J D, Clark-Lempers D, & Simons RL. (1989) Economic Hardship, Parenting, And Distress In Adolescence. *Child Development*, 60, 25–39.
- 62. Sanders MR & Markie-Dadds C. (1992) Toward A Technology Of Prevention Of Disruptive Behaviour Disorders: The Role Of Behavioural Family Intervention. *Behaviour Change*, 9:186–200.
- 63. Sanders MR, Connell S, & Markie-Dadds C. (1994) *Triple P Goes Bush: An Evaluation Of A Self Directed Program For Parents Of Oppositional Preschoolers In A Rural Setting*. Paper Presented At The Social Learning And The Family Meeting, San Diego.
- 64. Sanders MR & Markie-Dadds CL. (1996) Triple P: A Multilevel Family Intervention Program For Children With Disruptive Behaviour Disorders. In P Cotton & H Jackson (Eds) *Early Intervention And Prevention In Mental Health Applications Of Clinical Psychology*. Australian Psychological Society, Melbourne (Pp.59–87).
- 65. Arnold DS, O'Leary SG, Wolff LS & Acker MM. (1993) The Parenting Scale: A Measure Of Dysfunctional Parenting In Discipline Situations. *Psychological Assessment*, 5(2), 137–144.
- 66. Brooks-Gunn J, Brown B, Duncan G, And Moore KA. (1995) *Child Development In The Context Of Family And Community Resources: An Agenda For National Data Collection*. Washington, DC: National Academy Press.

- 67. Syme SL. (1996) To Prevent Disease: The Need For A New Approach. In D Blane, E Brunner & RG Wilkinson (Eds) *Health And Social Organisation*. Routledge, London.
- 68. Kohn M. (1995) Social Structure And Personality Through Time And Space. In GH Elder & K Luscher (Eds) *Examining Lives In Context: Perspectives On The Ecology Of Human Development*. American Psychological Association, Washington, D.C.
- 69. Wood L. (1999) *Healthy Communities: A Review Of Relevant Projects And Feasibility For Healthway.* Unpublished Report To Healthway, Perth WA.
- 70. Coleman J. (1990) *Foundations Of Social Theory*. Harvard University Press, Cambridge, Mass.
- 71. Kreuter M, Lezin N & Koplan A. (1997) *National Level Assessment Of Community Health Promotion Using Indicators Of Social Capital*. WHO/EURO Working Group On Evaluating Health Promotion Approaches And Division Of Adult & Community Health National Centers For Disease Control & Prevention, Atlanta.
- 72. Weatherburn D & Lind B. (1999) *The Developmental Antecedents Of Crime-Prone Neighbourhoods*. New South Wales Bureau Of Crime Statistics & Research, Sydney, NSW.
- 73. Onyx, J & Bullen, P. (1997) *Measuring Social Capital In Five Communities*. An Analysis CACOM Working Paper Series No 41, UTS, Sydney.
- 74. Bullen, P & Onyx, J. (1998) *Measuring Social Capital In Five Communities Practitioners Guide*. Management Alternatives, Sydney.
- 75. Baum F. (1999) *Social Capital And Health: Implication For Health In Rural Australia*. Paper Presented At The 5th National Rural Health Conference: Leaping The Boundary Fence. Using Evidence And Collaboration To Build Healthier Rural Communities, 14–17 March 1999, Adelaide.
- 76. Epstein NB, Baldwin LM & Bishop DS. (1993) The Mcmaster Family Assessment Device. *Journal Of Marital And Family Therapy*, 9, 171-180.
- 77. Byles J, Byrne C, Boyle MH & Offord DR. (1998) Ontario Child Health Study: Reliability And Validity Of The General Functioning Subscale Of The Mcmaster Family Assessment Device. *Family Process*, 27 (March), 97-104.
- 78. Marmot MG, Smith G, Stansfeld S, Patel C, North F, Head J, White L, Brunner E, AND Feeney A.(1991) Health Inequalities Among British Civil Servants: The Whitehall 11 Study. *Lancet*, 337, 1387-1393.
- 79. Converse JM And Presser S. (1986) Survey Questions: Handcrafting The Standardized Questionnaire. Sage Publications: Beverly Hills.

APPENDICES

Appendix A: A summary of international and national activity relevant to the development of indicators

Table 4: Key words/sites used in the web search

Healthy communities	Risk Factors
Communities that care	Marital conflict
Caring communities	Child well-being
Who.dk.healthy cities	Psychosocial risk factors
Measuring social capital	Protective factors
Oregon option	Measuring self efficacy
Oregon option indicators	Resiliency
Social indicators	Family assessment
Social reporting	Adolescent health
Attachment/connectedness	Alienation
Long term outcomes/early childhood	Child development database
Social I	ndicators
Social Functioning	Family Structure
Indicators of Well-being	Family Functioning
Social Indicators and Social Reporting: The International Experience	Evaluating the National Outcomes: Parent/Family- Parents; Understand
European Centre Publications: Eurosocial Reports	Evaluating the National Outcomes: Parent/Family-Parents; Motivate Measures
Symposium on Social Indicators—Final Report	Family Assessment Bibliography
Social Indicators Site	Evaluating the National Outcomes: Community- Policy Development; Introduction
State Profiles of Child Well-Being	Evaluating the National Outcomes: National Outcome Work Groups
CCSD Press Release: The Progress of Canada's Children 1998	Income and Child Well-being: A new perspective on the poverty debate
Measuring Key Family Processes/Kindness- Support/distance regulation/supervision	Long-Term Outcomes of Early Childhood Programs
Measuring Key Family Processes/Definition	Home Visitor Programs
Carnegie Corporation of New York—Starting Points	Assessing Quality in Child Care Settings
The National Longitudinal Study of Adolescent Health	Summary List of Indicators

OMH-RC Database Record: Kids Count Data Book	School-Based Violence Prevention in Canada: Results of a National Survey of Policies and Programs
National Survey of Child and Adolescent Well-being	Assessment/Measurement/Indicators
NCAVAC Publications Reports	Canadian Policy Research Network-CPRN
California: The State of Our Children Conducting An Adolescent Health Survey	Evaluating National Outcomes
National Youth Development Information Center (NYDIC) Database	Teens, Crime, and the Community National Outcomes Study on Social Responsibility
NNCC Child Development Database	Teens, Crime, and the Community National Outcomes Study on Social Responsibility
Evaluating the National Outcomes: Children	NNCC Child Care Evaluation and Assessment Tools
Evaluating the National Outcomes: Youth	Research Tools Child Development

APPENDIX B: A summary of international and national activity relevant to the development of indicators

EUROPE

WEBSITE	TITLE
http://www.euro.centre.org/causa/ec/ec_1.htm	* Asher BA and Wintersberger H. (1997) Eurosocial Report 62/1997. Monitoring The State Of Children-Beyond Survival. International Workshop Jerusalem, Israel 22-25 January 1996. Vienna: European Centre For Social Welfare Policy Research.
	* Moore KA. (1995) <i>New Social Indicators of Child Well-Being</i> . Washington: European Centre for Social Welfare Policy and Research. Eurosocial Report 56.
	Heilio P-L, Lauronen E and Bardy M. (1993) Eurosocial Report 45. Politics of Childhood and Children at Risk. Provision-Protection-Participation. Kellokski, Finland: European Centre for Social Welfare Policy Research.
	Qverortup, J. (1990) <i>Childhood as a Social Phenomenon - An Introduction to a Series of National Reports.</i> Vienna, Austria: European Centre for Social Welfare Policy and Research. European Report 36. 36/1: Norway: 36/2 Italy: 36/3 Denmark: 36/4 USA: 36/5 Israel: 36/6 Canada: 36/7 Finland: 36/8 Ireland: 36/9 Scotland: 36/10 Federal Republic Of Germany: 36/11 Switzerland: 36/12 Greece: 36/13 Yugoslavia: 36/14 Czechoslovakia: 36/15 Sweden: 36/16 England and Wales: 36/17 Do Children Count? A Statistical Compendium.
http://www.un.org/depts/unsd/statcom/docs/xgrp2.htm	United Nations Economic and Social Council. Working Group on International Statistical Programmes and Coordination. Social Statistics: Follow up to the World Summit for Social Development.
http://ecdgroup.harvard.net/assessme.html	UNICEF Current Trends in Measuring Early Childhood Development. Sheldon Shaeffer, Regional Education Adviser East Asia And Pacific Regional Office. UNICEF Presentation made at the workshop 01/23/98.
http://www.unesco.org/educprog/ecf/html/base/base.htm	UNESCO Early Childhood Databases
http://www.unesco.org/education/educprog/ecf/html/chart/pcistat.htm	UNESCO Early Childhood Care and Education: Basic Indicators on Young Children
http:ecdgroup.harvard.net/researh.html	UNESCO Early Childhood Research: Research Relevant to Early Childhood Care and Development

WEBSITE TITLE Social Indicators Site Canadian Council on Social Development. (1996) Measuring Wellbeing: Proceedings From a http://ccsd.ca Symposium on Social Indicators. Final Report. Ottawa: Canadian Council on Social Development. Order@statcan.ca Human Resources Development Canada. (1996) Growing up in Canada: National Longitudinal Survey of Children and Adolescents. Ottawa: Human Resources Development Canada. http://ccsd.ca/pcc98/pcc98hle.htm. * Statistics Canada. (1997) Canadian Children in the 1990's: Selected findings of the Longitudinal Survey of Children and Youth Canadian Social Trends - Spring 1997. Ottawa: Statistics Canada. http://ccsd.ca/pcc98/pcc98hle.htm Canadian Council on Social Development. The Progress of Canada's Children 1998 Highlights. Developmental Research Programs. (1993) Communities that Care. Risk and Protective Factor-Focused Prevention Using the Social Development Strategy. An Approach to Reducing Adolescent Problem Behaviours. Seattle: Developmental Research Programs, Inc. http://www.drp.org/survey.html Pollard J, Catalano R, Hawkins J D Arthur M. (1998). Communities That Care: Youth Survey. Development of a school based survey measuring risk and protective factors predictive of substance abuse, delinquency and other problem behaviours in adolescent populations.

USA

CANADA

WEBSITE	TITLE
http://childstats.gov	* Federal Interagency Program on Child and Family Statistics. (1998) <i>America's Children: Key National Indicators of Well-being</i> . Washington DC: US Government Printing Office.
http://www.aecf.org/kc1997/summary.htm	1997 Kids Count: Summary and findings.
http://www.omhrc.gov/mhr2/docs/95D2364.htm	Kids Count Data Book: State Profiles of Child Well-Being.
http://www.policyexchange.iel.org	* Jehl J. (1998) <i>The Measure of Success. What are the Policy Implications of the New National Indicators of Child Well-being?</i> Washington, DC: The Policy Exchange. The Institute for Educational Leadership. Special Report #11.
http://famchild.wsu.edu/index.htm	Discussion. Family and Child Well-Being Research Network.

WEBSITE	ТПТЕ
http://famchild.wsu.edu/publications/howto/htm	The Long and Short of Asking Questions About Income, Wealth and Labour Supplies. Family and Child Well-Being Research Network.
http://famchild.wsu.edu/publications/airlie101.htm	Getting Context Right in Quantitative Studies of Child Development. Family and Child Well-Being Research Network.
http://famchild.wsu.edu/research/htdefine.html	Research Handbook/Measuring Key Family Processes Definition of 'Family Processes.' Family and Child Well-Being Research Network.
http://famchild.wsu.edu/research/kindness.html	Research Handbook/Measuring Key Family Processes: Kindness/Support. Family and Child Well-Being Research Network.
http://www.reeusda.gov/new/4h/cyfar/nowg/	Evaluating National Outcomes: Child/Youth/Parent/Family/Community.
http://talltoad.cpc.unc.edu/projects/addhealth/home.html	Resnick MD, Bearman PS, Blum RW, Bauman KE, Harris KM, Jones J, Tabor J, Beuhring T, Sieving RE, Shew M, Ireland M, Bearinger LH and Udry JR. (1997) Protecting Adolescents From Harm: Findings From The National Longitudinal Study On Adolescent Health. <i>JAMA</i> 278:823-832.
http://www.census.gov/population/www/documentation/twps0023.html	Fields JM and Smith KE. (1998) <i>Poverty, Family Structure and Child Well-being: Indicators from the SIPP</i> . Washington DC: Population Division, US Bureau of the Census. 23.
	* Lazarus W and Gonzalez M. (1989) California: The State of Our Children Where We Stand and Where We Go From Here. Report Card & Briefing Book. Los Angeles: Children Now.
	* Sugland BW, Zaslow M, Smith JR, Brooks-Gunn J, Coates D, Blumenthal C, Moore KA, Griffin T, and Bradley R. (1995) The Early Childhood HOME Inventory and HOME-Short Form In Differing Racial/Ethnic Groups: Are There Differences In Underlying Structure, Internal Consistency Of Subscales, And Patterns Of Prediction? <i>Journal of Family Issues</i> , 16, 632-663.
	Oregon Progress Board. (1992) Oregon Benchmarks: Standards For Measuring Statewide Progress And Government Performance. Oregon: Corvelis.
http://www.human.cornell.edu/faculty/summrpt_s97.html	New York State College Human Ecology. Policy Perspectives. Making Social Indicators Useful for Policy and Program Management in New York State. Summary Report. Spring 1997.
	* Hauser RM, Brown BV and Prosser WR (1997). <i>Indicators of Children's Well-being</i> . New York: Russell Sage Foundation.

WEBSITE	TITLE
	* Brooks-Gunn J, Brown B, Duncan G, And Moore KA. (1995) <i>Child Development In The Context Of Family And Community Resources: An Agenda For National Data Collection</i> . Washington, DC: National Academy Press.
http://rprogress.org	Redefining Progress - Community Indicators Handbook.
http://www.subjectmatters.com/indicators	Indicators Of Sustainability/Community Capital.
http://www.cdc.gov/ncswwww/products/catalogs/sujects/mihs/1fnmihs.html	Kogan, M (1991) 1991 Longitudinal Follow Up To The 1988 National Maternal And Infant Health Survey Public - Use Data Files. Hyattsville, Md: Reproductive Statistics Branch, Division Of Vital Statistics, National Center For Health Statistics, Center For Disease Control And Prevention.

NEW ZEALAND

WEBSITE	TITLE
htpp://www.moh.govt.nz	Hodges I, Maskill C, Coulson J, Christie S, and Quigley R. (1998) Our Children's Health. Key Findings On The Health Of New Zealand Children. Wellington: Ministry of Health.
	Silva PA. and Stanton WR. (1996) From Child to Adult. The Dunedin Multidisciplinary Health and Development Study. Auckland: Oxford University Press.
	Fergusson DM, Horwood LJ, Shannon FT and Lawton JM. (1989) The Christchurch Child Development Study: A Review Of Epidemiological Findings. <i>Paediatric And Perinatal Epidemiology</i> 3:302-305.
	Fergusson DM, Horwood JL, and M Lynskey. (1994) The Childhood's of Multiple Problem Adolescents: A 15-Year Longitudinal Study. <i>Journal of Child Psychology and Psychiatry</i> 35:1123-1140.

AUSTRALIA

WEBSITE	TITLE
	Eckersley R. (1998) <i>Measuring Progress. Is Life Getting Better?</i> Collingwood, Victoria: CSIRO Australia.
	Bor W, Najman JM, Andersen M, Morrison J, and Williams G. (1993) Socioeconomic Disadvantage And Child Morbidity: An Australian Longitudinal Study. <i>Social Science And Medicine</i> . 36:1053-1061.
	Australian Bureau Of Statistics. (1999) <i>Children, Australia: A Social Report.</i> Canberra: Australian Bureau Of Statistics.
	* Webster A. (1998) ABS Statistics On Children and Child Indicators In <i>Changing Families</i> , <i>Challenging Futures</i> , <i>Australian Institute Of Family Studies Conference</i> . Melbourne: Australian Bureau Of Statistics.
	* Wood L. (1999) Healthy Communities: <i>A Review Of Relevant Projects and Feasibility For Healthway</i> . Perth WA: Unpublished Report To Healthway.
	Onyx J and Bullen P. (1997) <i>Measuring Social Capital in Five Communities in NSW: An Analysis</i> . Sydney: Centre for Community Organisations and Management.
	Zubrick SR, Silburn SR, Garton A, Burton P, Dalby R Carlton, J, Shepherd C, and Lawrence D. (1995) Western Australian Child Health Survey: Developing Health and Well-being in the Nineties. Perth (WA): Australian Bureau of Statistics and the Institute for Child Health Research. ABS Catalogue No. 4303.5.
	Silburn SR, Zubrick SR, Garton AF, Burton P, Dalby R, Carlton J, Shepherd C, and Lawrence D. (1996) Western Australian Child Health Survey: Family and Community Health. Perth: Australian Bureau of Statistics and the TVW Telethon Institute for Child Health Research. ABS Catalogue No. 4304.5.
	Zubrick SR, Silburn SR, Gurrin L, Teoh H, Shepherd C, Carlton J, and Lawrence D. (1997) Western Australian Child Health Survey: Education, Health and Competence. Perth: Australian Bureau of Statistics and the TVW Telethon Institute for Child Health Research. ABS Catalogue No. 4305.5.

NB. If there is difficulty accessing these websites through the URL provided, use northernlight.com search engine to gain access to the website via a key word search, entering the key word/s in the title.

^{*} Asterisk indicates key paper distributed to workshop participants prior to workshop.

APPENDIX C

Participants at the National Workshop on Indicators of Social and Family Functioning

April 12-13, 1999, Australian National University

State	Name	Address
NSW	Dr Garth Alperstein	Area Community Paediatrician Central Sydney Community Health Service Level 6 Queen Mary Building Grose Street CAMPERDOWN 2050
NSW	Mr Paul Bullen	Managing Director, Management Alternatives Pty Ltd PO Box 181 COOGEE 2034
ACT	Ms Jenny Dean	Assistant Director, Family & Community Statistics Australian Bureau of Statistics PO Box 10 BELCONNEN 2616
ACT	Ms Barbara Dunlop	First Assistant Statistician, Australian Bureau of Statistics PO Box 10 BELCONNEN 26167
ACT	Mr Richard Eckersley	Visiting Fellow, NECPH Australian National University CANBERRA 0200
NSW	Ms Judi Geggie	Assistant Director Family Action Centre University of Newcastle University Drive CALLAGHAN 2308
ACT	Ms Jacki Grau	Graduate Administrative Assistant Australian Institute Health & Welfare GPO Box 570 CANBERRA 2601
ACT	Mr Tony Greville	Head, Population Health Unit Australian Institute Health & Welfare GPO Box 570 CANBERRA 2601
SA	Dr Diana Hetzel	Principal Policy Adviser (Medical) Strategy Planning & Policy Division Department of Human Services PO Box 65 RUNDLE MALL 5000
ACT	Mr Mike Langan	Assistant Director, Health Section Australian Bureau of Statistics PO Box 10 BELCONNEN 2616
ACT	Ms Marion McEwin	Assistant Statistician, Social Branch Australian Bureau of Statistics PO Box 10 BELCONNEN 2616

ACT	Mr Paul Meyer	Senior Analyst, Australian Institute Health & Welfare GPO Box 570 CANBERRA 2601
VIC	Ms Penny Mitchell	Research Fellow attached to National Youth Suicide Prevention Communication Project Australian Institute of Family Studies 300 Queen Street MELBOURNE 3000
ACT	Ms Lynelle Moon	Senior Analyst, Australian Institute Health & Welfare GPO Box 570 CANBERRA 2601
ACT	Ms Helen Moyle	Head, Child & Family Services Unit Australian Institute of Health and Welfare GPO Box 570 CANBERRA CITY 2601
QLD	Professor Jake Najman	Head, Dept Anthropology & Sociology University of QUEENSLAND 4072
NSW	Dr Victor Nossar	Service Director Department Community Paediatrics PMBag 17 LIVERPOOL 2170
QLD	Professor Brian Oldenburg	Head of School of Public Health Queensland University of Technology Victoria Park Road, KELVIN GROVE 4059
NSW	Ms Mary Osborn	Project Officer, NSW Women's Health Policy NSW Health, Locked Bag 961 NORTH SYDNEY 2059
ACT	Ms Valerie Pearson	Research Officer, Family & community Statistics, Australian Bureau of Statistics PO Box 10 BELCONNEN 2616
ACT	Ms Judy Putt	Project Officer, National Crime Prevention Attorney General's Dept Robert Garran Offices National Circuit, CANBERRA 2600
ACT	Dr Bryan Rogers	Fellow, Psychiatric Epidemiology Research Centre Australian National University, CANBERRA 0200
WA	Dr Ian Rouse (Workshop Facilitator)	31 Saw Drive DARLINGTON 6070
NSW	Mr Peter Sainsbury	Director, Division Population Health Central Sydney Area Health Service Level 6 Queen Mary Building Grose Street CAMPERDOWN 2050
VIC	Professor Peter Saunders	Research Manager, Australian Institute of Family Studies 300 Queen Street MELBOURNE 3000
ACT	Ms Suzy Saw	Department of Health & Aged Care GPO Box 9848 (MDP 19) CANBERRA 2601

SA	Assoc Prof Michael Sawyer	Director, Research & Evaluation Unit Women's & Children's Hospital 72 King William Rd NTH ADELAIDE 5006
WA	Mr Sven Silburn	Senior Clinical Lecturer Division Psychosocial Research TVW Telethon Institute for Child Health Research PO Box 855 WEST PERTH 6872
ACT	Ms Alison Stanford	Director, Child Abuse Prevention & Family Support Family Relationships Branch Department of Family & Community Services MDP 69 GPO Box 9848, CANBERRA 2601
VIC	Dr John Toumbourou	Senior Lecturer, Centre for Adolescent Health William Buckland House 2 Gatehouse Rd, PARKVILLE 3052
NSW	Professor Graham Vimpani	Area Director, Child Adolescent & Family Health Services University of Newcastle Locked Bag 1014 WALLSEND 2287
NSW	Dr Don Weatherburn	Director Bureau of Crime Statistics & Research Level 8, 111 Elizabeth Street SYDNEY 2000
NSW	Ms Barbara Wellesley	National Director 'Good Beginnings' National Parenting Project Suite 32 8-24 Kippax St SURREY HILLS 2010
QLD	Dr Neil Wigg	Director Community Child Health Service 184 St Paul's Terrace FORTITUDE VALLEY 4006
VIC	Ms Sarah Wise	Research Fellow, Australian Institute of Family Studies 300 Queen Street MELBOURNE 3000
WA	Ms Anwen Williams	Senior Research Officer Division Psychosocial Research TVW Telethon Institute for Child Health Research PO Box 855 WEST PERTH 6872
ACT	Ms Elvie Yates	Director Family & Community Statistics Australian Bureau of Statistics PO Box 10 BELCONNEN 2616
NSW	Dr Lis Young	Child Health Medical Officer SouthWestern Sydney Health Service Suite 9, 67 Jacaranda Avenue BRADBURY 2560
WA	Assoc Prof Stephen Zubrick	Head Division Psychosocial Research TVW Telethon Institute for Child Health Research PO Box 855 WEST PERTH 6872