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**Australian Institute of  
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*Authoritative information and statistics  
to promote better health and wellbeing*

# **Social and emotional wellbeing**

## **Development of a Children's Headline Indicator**

### **Information paper**

Australian Institute of Health and Welfare  
Canberra

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# Abbreviations

ACER	Australian Council for Educational Research
AEDI	Australian Early Development Index
AHMC	Australian Health Ministers' Conference
AIHW	Australian Institute of Health and Welfare
BITSEA	Brief Infant-Toddler Social and Emotional Assessment
CDSMC	Community and Disability Services Ministers' Conference
COAG	Council of Australian Governments
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
GSHS	Global School-based Student Health Survey
HBSC	Health Behaviour in School-aged Children survey
LSAC	Growing up in Australia: the Longitudinal Study of Australian Children
LSIC	Footprints in Time: the Longitudinal Study of Indigenous Children
NA	National Agreement
NPA	National Partnership Agreement
OECD	Organisation for Economic Co-operation and Development
PEDS	Parents' Evaluation of Development Status
PedsQL	Pediatric Quality of Life Inventory
PWI-PS	Personal Wellbeing Index – Pre-School
PWI-SC	Personal Wellbeing Index – School Children
SDQ	Strengths and Difficulties Questionnaire
SEW	Social and emotional wellbeing
SiCs	Self-evaluation Instrument for Care Settings
WHO	World Health Organization

# Summary

The Children's Headline Indicators are a set of measures designed to focus policy attention and to help guide and evaluate policy development on key issues for children's health, development and wellbeing in 19 priority areas. They were endorsed by health, community and disability services ministers and education systems officials in 2006. Headline Indicators were defined for 16 of these priority areas. However, more work was needed on the remaining three—*family social network*, *social and emotional wellbeing* and *shelter*—to conceptualise and identify the most important aspects of these areas for children's health, development and wellbeing.

This information paper outlines the process of developing a Headline Indicator for the *social and emotional wellbeing* priority area.

## Identifying and defining a Headline Indicator

Developing a Headline Indicator for *social and emotional wellbeing* involved:

- conceptualising social and emotional wellbeing—defining its scope, theoretical basis, and main elements
- reviewing the literature on social and emotional wellbeing and children's outcomes
- identifying possible indicators by reviewing indicator frameworks and reports
- consulting key experts and stakeholders.

Based on this research and consultation, the Strengths and Difficulties Questionnaire (SDQ) was strongly supported as the most appropriate tool for measuring social and emotional wellbeing in children. This instrument has been extensively validated, and is used widely as a population measure, both internationally and in Australia. Modified versions have also been developed for Indigenous children. It is recommended that a Children's Headline Indicator for *social and emotional wellbeing*, based on the SDQ, be defined as *the proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire*.

## Next steps

There is currently no national data source in Australia suitable for reporting on the recommended Headline Indicator for *social and emotional wellbeing*. Work is needed to determine the most appropriate data collection method and vehicle for this Headline Indicator. Consideration should be given to a large-scale national survey, that:

- uses children as the counting unit
- captures demographic information
- allows disaggregation by state and territory for subpopulations of children (for example, Aboriginal and Torres Strait Islander children).

Alternatively, the SDQ could be incorporated in a standardised manner into state/territory-based population health surveys; however, survey methods would need to be considered to ensure comparable data.



# 1 Introduction

This information paper outlines the scope and conceptual basis used to develop a Headline Indicator for *social and emotional wellbeing*. It reviews the research evidence for associations between aspects of *social and emotional wellbeing* and children's health, development and wellbeing outcomes. It identifies and defines the recommended Headline Indicator for *social and emotional wellbeing*, describes the rationale for this recommendation, and provides information about potential data sources.

## 1.1 Background

In 2005, the Australian Health Ministers' Conference (AHMC) and the Community and Disability Services Ministers' Conference (CDSMC) approved a project to develop a set of national, jurisdictionally agreed, Headline Indicators for children aged 0–12. The purpose of the project is to help with policy and planning by measuring progress on a set of indicators that could be changed over time by prevention or early intervention.

In 2006, the project report *Headline Indicators for children's health, development and wellbeing* (DHS Vic 2008) mapped out 19 priority areas for children's health, development and wellbeing. These were endorsed by the AHMC, the CDSMC and the then Australian Education Systems Officials Committee of the then Ministerial Council for Education, Employment, Training and Youth Affairs.

Headline Indicators were initially defined for 16 of the 19 priority areas (see Appendix D). Data for 10 of these areas with defined Headline Indicators and available data were published for the first time in the Australian Institute of Health and Welfare (AIHW) report *A picture of Australia's children 2009* (AIHW 2009). Six priority areas with defined Headline Indicators could not be reported on initially, due to a lack of available data. For three priority areas—*family social network*, *shelter* and *social and emotional wellbeing*—further work was required to conceptualise and define Headline Indicators.

In 2009, the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) provided funding to the AIHW to progress indicator development for these three remaining priority areas.

The AIHW's role involved:

- setting up an expert working group to provide strategic advice and input into developing the indicators
- conceptualising each of the three priority areas: *family social network*, *shelter* and *social and emotional wellbeing*<sup>1</sup>; that is, defining the scope, theoretical basis and main conceptual elements
- reviewing the literature for each priority area to determine its relationship with children's health, development and wellbeing
- proposing indicators for each priority area

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<sup>1</sup> Conceptualisation of the *social and emotional wellbeing* priority area built on a report by Hamilton and Redmond (2010) commissioned by the AIHW and the Australian Research Alliance for Children and Youth.

- undertaking a data mapping exercise and identifying data gaps in each priority area
- organising workshops to consider proposed indicators for each priority area
- producing information papers that describe, for each priority area, the development process and the recommended indicators.

This information paper outlines the process of identifying and defining a Headline Indicator for the priority area *social and emotional wellbeing*.

## 1.2 Process of identifying a Headline Indicator

The objective of the Children's Headline Indicators project is to form a core set of high-level statistics for reporting on progress in the health, development and wellbeing of children aged 0–12 (DHS Vic 2008). Only one Headline Indicator is selected to reflect each policy priority area. *Social and emotional wellbeing* is a broad and multidimensional priority area. It is a holistic concept that is difficult to define, as it is inextricably linked with other aspects of children's health, development and wellbeing. It is therefore challenging to identify a single Headline Indicator that represents the most important aspect of *social and emotional wellbeing* for children's outcomes. It should be noted, however, that an indicator is not meant to describe or measure a whole phenomenon; it is intended to represent an aspect of a phenomenon that captures a representative truth about a trend, and how different groups compare (Hamilton & Redmond 2010).

A number of steps were followed to identify a suitable Headline Indicator for *social and emotional wellbeing* (Figure 1.1). These were:

- reviewing the literature to define and conceptualise *social and emotional wellbeing* and to identify associations between this priority area and children's overall health, development and wellbeing
- reviewing relevant national and international frameworks and indicator reports, as well as screening instruments relevant to *social and emotional wellbeing*, to identify potential indicators
- consulting key experts and stakeholders, supported by a discussion paper
- developing this information paper and its recommendations for a *social and emotional wellbeing* Headline Indicator.

More detail about each of these steps is provided at Appendix A. The University of New South Wales Social Policy Research Centre was contracted by the AIHW and the Australian Research Alliance for Children and Youth to prepare a research report, *Conceptualisation of social and emotional wellbeing for children and young people, and policy implications* (Hamilton & Redmond 2010). This report informed much of the work undertaken by the AIHW.

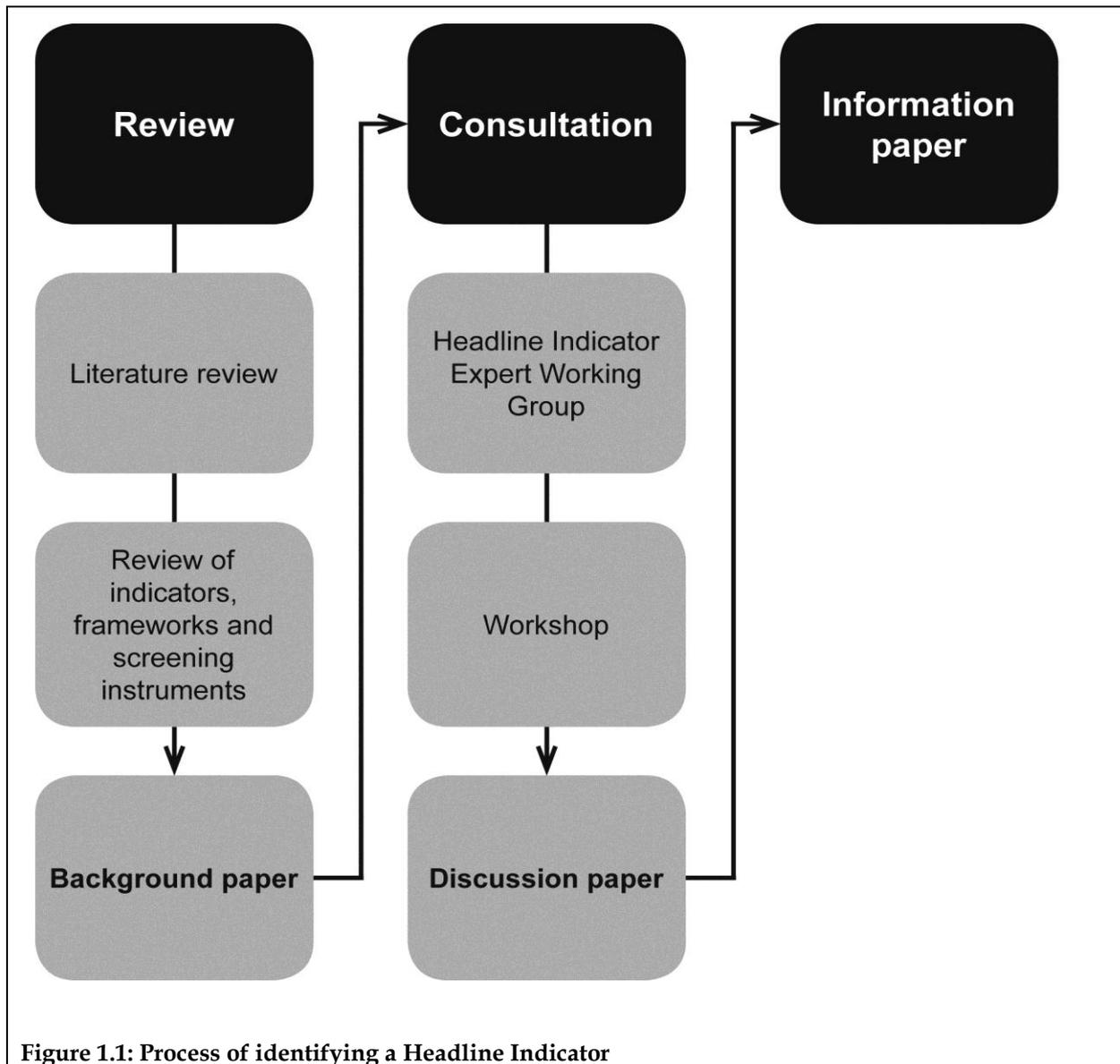


Figure 1.1: Process of identifying a Headline Indicator

### 1.3 Structure of this information paper

*Chapter 1* (this chapter) outlines the purpose of this information paper, the background, and the process followed to identify a Headline Indicator.

*Chapter 2* describes the policy context for children’s social and emotional wellbeing.

*Chapter 3* outlines the definition of *social and emotional wellbeing* used in this paper, and the conceptual approach taken to developing an indicator for this area.

*Chapter 4* presents a review of the evidence of associations between *social and emotional wellbeing* and children’s health, development and wellbeing.

*Chapter 5* provides information about potential indicators that were identified and considered, and short-lists those selected for further consideration.

*Chapter 6* looks in greater detail at six indicators, and provides the rationale for recommending the Headline Indicator for *social and emotional wellbeing*.

## 2 Policy context

The Headline Indicator priority areas for children's health, development and wellbeing were selected 'in relation to their relevance to government policy and their potential to be amenable to change through prevention and early intervention' (DHS Vic 2008). Investing in the health, education, development and care of children benefits children and their families, communities and the economy, and is critical to lifting workforce participation and delivering the Australian Government's productivity agenda (DEEWR 2010).

The concept of social and emotional wellbeing is often not explicitly referred to in government policy, and is even less common in reference to children. It features more frequently in policies and strategies related to Indigenous Australians for whom the holistic nature of social and emotional wellbeing aligns closely with their concept of health. Mainstream policy seeks to address issues that impact on children's social and emotional wellbeing, but has mostly engaged with these through strategies and programs targeting more discrete issues such as education, health, mental health, family and community, and housing. This reflects the complexity of developing policy that needs to be both multidimensional and multi-sectoral to capture the many factors that influence children's social and emotional wellbeing.

Increasingly, however, governments are incorporating a more holistic approach to policy development. The reform agenda of the Council of Australian Governments (COAG), together with its implementation framework of National Agreements (NAs) and National Partnership Agreements (NPAs), has become the main driver for much current Commonwealth and jurisdictional policy. It represents a whole-of-government approach to addressing the key social and economic issues facing Australia today, and places greater emphasis on the collective impact of these issues on individuals, families and communities.

One of these issues, social inclusion, is an important determinant of children's social and emotional wellbeing, and a recurrent theme in the reform agenda. The Australian Government's National Statement on Social Inclusion – *A Stronger Fairer Australia* – sets out an action plan for reducing disadvantage and increasing national prosperity. The plan has a strong focus on prevention and early intervention, recognising that children who experience multiple disadvantages affecting their home environment, schooling experiences, health, and family and social networks are particularly at risk of social exclusion and reduced future prospects in life (DPMC 2009).

The information presented in this chapter outlines some of the national policies and strategies that directly or indirectly seek to have an impact on children's social and emotional wellbeing. They include:

- Early Childhood Reform Agenda
- National Agreements and National Partnership Agreements
- National Framework for Protecting Australia's Children 2009–2020
- Family Support Program.

## 2.1 COAG reform agenda

### Early Childhood Reform Agenda

In July 2009, COAG agreed to the *Investing in the Early Years – A National Early Childhood Development Strategy* (the strategy). The strategy recognises that a child's early years are critical to their future health, learning, and social and cultural outcomes. The *Early Childhood Development Outcomes Framework* in the strategy reflects the early childhood reform priorities agreed by COAG in early 2008. It focuses on what Australia needs to achieve to fulfil the vision that 'by 2020 all children have the best start in life to create a better future for themselves and for the nation'. A number of policy objectives relate to this vision, including greater social inclusion; improved outcomes for the majority of children, especially Indigenous children and the most disadvantaged; and increased productivity and international competitiveness (COAG 2009a).

Seven outcomes are identified in the strategy where support for children is needed to realise the vision. These outcomes fall into two groups. The first group focuses on the child and broadly describes a young child's developmental pathway, beginning in the antenatal period. The five outcomes for this group are:

- children are born and remain healthy
- children's environments are nurturing, culturally appropriate and safe
- children have the knowledge and skills for life and learning
- children benefit from better social inclusion and reduced disadvantage, especially Indigenous children
- children are engaged in and benefiting from educational opportunities.

The second group recognises the primary importance of the family. The strategy seeks outcomes for families related to parenting relationships and workforce participation that underpin the five outcomes above:

- families are confident and have the capabilities to support their children's development
- quality early childhood development services that support the workforce participation choices of families (COAG 2009a).

A number of these outcomes have a strong relationship with children's social and emotional wellbeing.

The AIHW has developed a reporting framework for early childhood development which establishes a recommended high-level set of indicators to measure progress against the Early Childhood Development Outcomes Framework in the strategy (AIHW 2011).

### National Agreements and National Partnership Agreements

Several NPAs under the COAG reform agenda are particularly relevant to children's social and emotional wellbeing.

The *NPA on Early Childhood Education* focuses on early childhood services. Its overarching aim is to deliver universal access to quality early childhood education in the year before full-time schooling.

The *NPA on Indigenous Early Childhood Development*, along with related agreements such as the *National Indigenous Reform Agreement* and the *NPA on Closing the Gap in Indigenous Health*

*Outcomes*, focuses on the vulnerability of Indigenous children and the disparity in outcomes (including both health and education outcomes) between Indigenous and non-Indigenous children. One initiative of this agreement is the establishment of Children and Family Centres in priority locations around Australia, including in Indigenous communities. The centres will co-locate a range of services including those for maternal and child health, parenting, child care, and early learning and development.

The *NPA on Preventive Health* supplements the National Healthcare Agreement and addresses the rising prevalence of lifestyle-related chronic diseases. It has a strong focus on children and the delivery of health promotion and early intervention programs. These programs cover physical activity and healthy eating in a range of settings (such as in child care, preschool and school settings), and a diversity of interventions such as family-based interventions, breastfeeding support interventions, and environmental strategies in and around schools.

In addition, many of the other COAG agreements not described further here are directly or indirectly relevant to children's social and emotional wellbeing. These include the *Smarter Schools National Partnerships* (Improving Teacher Quality, Literacy and Numeracy and Low Socio-Economic Status School Communities), and the NAs on Housing, Homelessness and Workforce (COAG 2010).

## **National framework for protecting Australia's children 2009–2020**

Under this national framework, government and non-government sectors have agreed to work together to achieve the outcome: *Australia's children and young people are safe and well*. The framework aims to achieve a 'substantial and sustained reduction in child abuse and neglect in Australia over time' (COAG 2009b).

The framework consists of high-level and supporting outcomes, strategies to be delivered through a series of 3-year action plans, and indicators of change that can be used to monitor the success of the framework. A public health model of care and protection underpins the framework. This model seeks to reduce the occurrence of child abuse and neglect, with priority placed on having universal preventative supports for all families, such as health and education services. This differs from the current system where resources are largely directed at the tertiary intervention point; that is, to child protection services (COAG 2009b).

## **2.2 Family Support Program**

The Family Support Program brings together a number of existing family, children and parenting services that share a common interest in supporting Australian families, parents and children (FaHCSIA 2012). It is an umbrella program with two core service streams:

- Family and children's services – to provide services to families, particularly those who are vulnerable or living in disadvantaged communities, to improve family functioning, safety and child wellbeing and development.
- Family law services – to help families manage the process and impact of separation in the best interests of children.

## 2.3 Other Commonwealth initiatives

The Australian Government's paid parental leave initiative has been introduced to enable primary carers to be at home with children in their early months of life. This initiative recognises that this is a crucial time for children's emotional, cognitive and physical development (Macklin 2009).

National programs addressing the mental health of children are being piloted and implemented through the *KidsMatter Early Childhood* and the *KidsMatter Primary* programs. These programs aim to identify and address mental health issues early in life and help children and families build resilience to mental health stressors (DoHA 2010a, 2010b).

A revised National Safe Schools Framework was launched in early 2011. The framework provides schools with a vision and a set of guiding principles that assist school communities to develop effective student safety and wellbeing policies. This vision includes creating learning environments that are free from bullying, harassment, aggression and violence (DEEWR 2011).

The Northern Territory Emergency Response was introduced to protect children in response to high rates of child abuse and neglect in Indigenous communities. Features of this intervention include income management policies to assist families to spend more of their income on food and other necessities for children, alcohol management policies, and the provision of additional housing and police services (FaHCSIA 2010).

## 3 Definition and conceptualisation

This chapter describes the definition and conceptualisation of *social and emotional wellbeing* that guided the development of a Headline Indicator for this priority area. The report *Headline indicators for children's health, development and wellbeing* (DHS Vic 2008) laid the groundwork for implementing the Headline Indicators and mapped out the priority areas to be covered.

In developing the priority areas, it was seen as necessary to include mental health. *Social and emotional wellbeing* was selected as the priority area due to the emphasis on mental wellbeing rather than on mental ill health or pathology (DHS Vic 2008). This emphasis is consistent with the definition of health in the World Health Organization (WHO) constitution: 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. The WHO further states that:

Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual well-being and the effective functioning of a community (WHO 2010).

The concepts in this definition are considered integral to social and emotional wellbeing.

### 3.1 Defining social and emotional wellbeing

The study of social and emotional wellbeing in childhood, as a holistic concept, is still in its early stages. However, many of the more narrowly defined concepts under the broader banner of 'social and emotional wellbeing' have been studied for decades. The absence of mental health disorders is one feature of children's social and emotional wellbeing; however, it encompasses much more than this.

Broadly, social and emotional wellbeing refers to the way a person thinks and feels about themselves and others. It includes being able to adapt and deal with daily challenges (resilience and coping skills) while leading a fulfilling life. Hence, there is an emphasis on the behavioural and emotional strengths of children, as well as how they respond to adversity. Many of the characteristics or attributes of social and emotional wellbeing follow a developmental pathway, and age-appropriateness is therefore a key factor in measurement (Denham et al. 2009; Humphrey et al. 2010). Cultural background is also an important consideration in measurement, due to differences in social norms and values between cultural groups (Hamilton & Redmond 2010).

Social and emotional wellbeing incorporates both the individual characteristics of the child, and those of environments such as families, schools and communities. The literature examining children's social and emotional wellbeing therefore considers multiple characteristics and there is a wide range of terminology used by researchers to identify factors that help children thrive and prosper (Humphrey et al. 2010; Weare & Gray 2003). These terms include social and emotional 'competence', 'intelligence', 'development', 'learning' or 'literacy'. This information paper draws on research using many of these terms.

## 3.2 Conceptualising social and emotional wellbeing

As a starting point for the conceptualisation of social and emotional wellbeing, Hamilton and Redmond (2010) considered the relationship between concepts of social and emotional wellbeing and wider concepts of wellbeing. They used both a philosophical and an applied approach.

A *philosophical approach* to social and emotional wellbeing is abstract and difficult to apply in practice, but can be used to derive ideas about wellbeing in the broadest sense and about the kind of society in which we wish to live. This approach inherently embeds social and emotional wellbeing within wellbeing more broadly, as any one dimension of wellbeing cannot be viewed in isolation. Philosophical theories of wellbeing highlight the inter-relatedness of different dimensions of wellbeing, and emphasise that wellbeing is situated in a social context. This interrelatedness of different dimensions of wellbeing is consistent with a 'whole of child' or holistic approach to wellbeing. This therefore links social and emotional wellbeing with other dimensions of wellbeing such as material wellbeing, physical health, agency, and the capacity to be reflexive and critical.

*Applied approaches* to social and emotional wellbeing are empirical and take a narrower view of wellbeing. It is from this perspective, however, that measurements of social and emotional wellbeing are likely to come. Applied approaches tend to have a negative focus on socially problematic behaviours (for example, disruptive behaviour, drug use, hyperactivity, anxiety and depression). However, there has been a move with positive psychology towards a focus on personal strengths, such as positive peer interaction.

Hamilton & Redmond (2010) propose a conceptualisation of social and emotional wellbeing in applied research as two interdependent domains:

- individual dimension – consisting of internal (intrapersonal) and relational (social/interpersonal) characteristics
- environmental dimension – consisting of influences from three spheres: family/home, early education settings/school, and community. The extent and nature of the effect of these spheres changes according to the age of the child.

In conceptualising social and emotional wellbeing, this information paper thus draws on research that encompasses a broad range of individual internal and relational characteristics, and environmental influences. This approach is consistent with Bronfenbrenner's ecological approach to human development in that it takes into account both the child and its environment (Bronfenbrenner 1979).

An ecological model of social and emotional wellbeing is based on interactions between multiple environments such as the home, school and community, as well as the individual and relational characteristics of the child. This conceptualisation is used as the basis for the development of a Children's Headline Indicator for *social and emotional wellbeing*.

### An ecological approach

One of the principles on which priority areas were selected in the project report *Headline indicators for children's health, development and wellbeing* (DHS Vic 2008) was that they should 'recognise issues at the individual, family and community level, and hence be based on an ecological approach'.

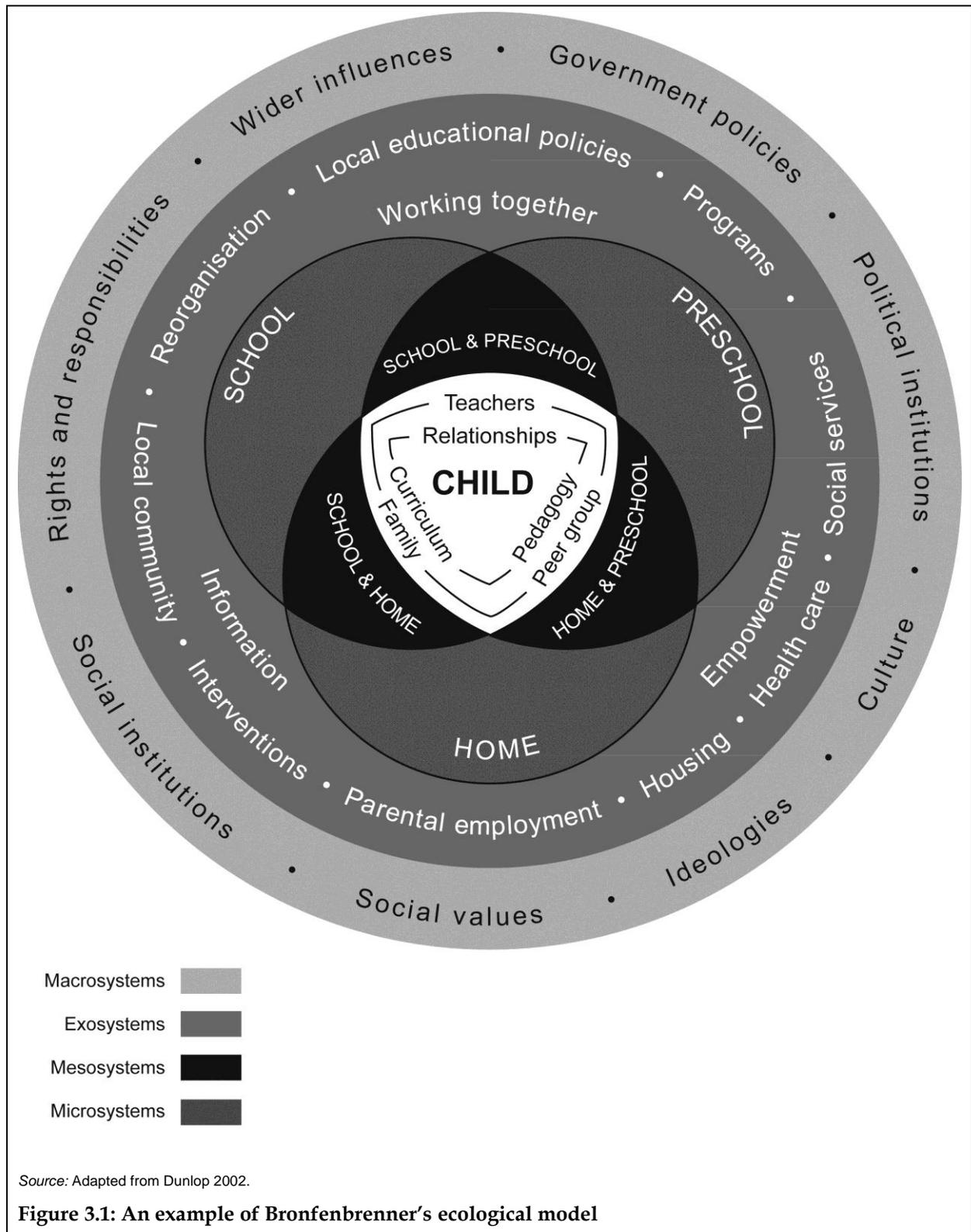
It was the ecological theory of Bronfenbrenner (1979, 1995) that first conveyed the importance of interrelationships within and across the social environments or systems surrounding a child (Figure 3.1). According to this model, children develop through interactions with their immediate environments and through the relationships between their immediate environments and wider social environments (Wise 2003).

The ecological model typically depicts a child's development occurring within concentric circles of influence; the innermost circles represent the most immediate influences, and outer circles represent broader social influences. Even though children might not interact with their wider social environments directly, their wellbeing can be affected indirectly through the influence on more immediate environments such as the family. The ecological model therefore provides a basis for understanding how a child's social and emotional wellbeing is influenced through both proximal and distal environments.

Bronfenbrenner originally identified four main elements of the ecological model, comprising:

- settings in which children actively participate through personal, face-to-face interactions, such as with immediate family, peers, the family doctor and neighbours; and in child care and educational settings (such a setting is described as a 'microsystem')
- interrelationships between children's immediate settings (two or more microsystems); for example, the interaction between home and school, and the extent to which these settings have similar styles, expectations or values (described as a 'mesosystem')
- settings in which the child does not actively participate but that may influence the child indirectly, such as the parental workplace (described as an 'exosystem')
- broader social contexts (described as a 'macrosystem') such as a culture, political systems and social values (Wise 2003).

Bronfenbrenner later added a fifth element to the ecological model: the dimension of time as it relates to a child's environments (described as a 'chronosystem'). This encompasses changes over time not only in the characteristics of the individual, but also in the external environment. This might include, for example, parental divorce or changes in the broader social environment, as well as changes in how children interact with their environments as they grow older (Paquette & Ryan 2001).



From an ecological perspective, healthy social and emotional development requires productive and complementary interactions between multiple environments (such as the home, school and community), as well as the individual characteristics of the child (both internal and relational). These five interrelated aspects link intrapersonal, interpersonal and

group constructs, all of which are fundamental to how people function in social and familial relationships. Different theories link different attributes to children's social and emotional wellbeing. Figure 3.2 applies an ecological model to children's social and emotional wellbeing incorporating characteristics of children's social and emotional wellbeing from multiple theoretical perspectives.

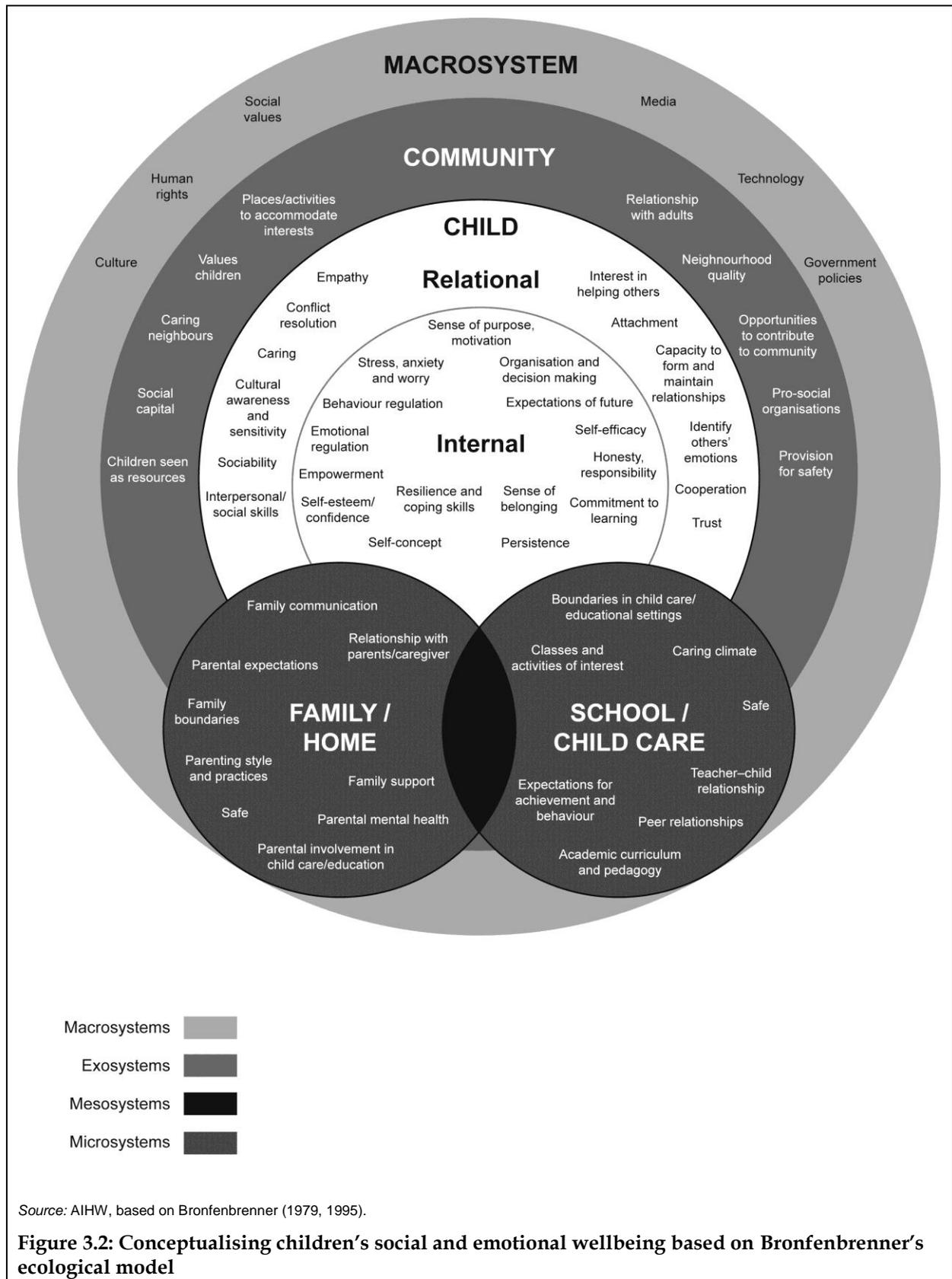
The child is at the centre of the model, surrounded by individual internal characteristics of social and emotional wellbeing related to their temperament, attitudes and values (intrapersonal characteristics). These characteristics include emotional regulation (that is, the ability to experience, manage and express emotion), behavioural regulation, resilience and coping skills, self-esteem and confidence, and persistence in learning. Individual characteristics involving relations with others (that is, social/interpersonal characteristics of the child) include the ability to identify emotions in others, the capacity to form and maintain relationships, and the development of social skills including empathy, trust, cooperation and conflict resolution. It should be noted that the level to which a child displays these characteristics will depend on their developmental stage/age, as well as on a number of other factors such as temperament, genetics and biology, and the presence/absence of disability or health conditions.

The child is surrounded by interacting environments of influence. A safe and caring climate across all environments – home, early education settings/school and the wider community – is important for children's social and emotional wellbeing. Within the family/home environment, family communication, parental expectations and the quality of the relationship with parents all influence children's social and emotional wellbeing, as does parental engagement with school and early education settings. A positive relationship with teachers, a quality curriculum, and activities of interest in educational settings encourage the engagement of children. These factors also influence children's individual internal characteristics of social and emotional wellbeing such as self-esteem, commitment to learning and their sense of belongingness at school.

Characteristics of the wider community's influence on children's social and emotional wellbeing include a caring neighbourhood where children are valued and seen as resources, as well as social capital and networks (see also AIHW 2010a).

Beyond this, broader societal influences also affect children's environments, and ultimately their social and emotional wellbeing. These influences include culture, social values, human rights, technology and media, and government policies, such as those for social inclusion.

The extent of influence of the various environmental spheres on children's social and emotional wellbeing changes as children develop. At young ages, the home and family environment have the greatest influence, but as children grow older they interact to a greater extent with the school and community environments. Hence, the influence of these spheres increases.



## 4 Social and emotional wellbeing and children's outcomes

This chapter reviews research around children's social and emotional wellbeing to inform discussion of possible indicators to measure the concept. The chapter draws on a range of evidence-based literature; however, readers wanting a more comprehensive assessment of the factors affecting children's social and emotional wellbeing are referred to Hamilton and Redmond (2010). The chapter draws on this source and others in order to highlight some key associations between selected aspects of social and emotional wellbeing and children's health, development and wellbeing outcomes.

This chapter describes how individual and environmental characteristics impact on children's social and emotional wellbeing, and the implications for health, development and wellbeing outcomes. It is broadly structured around two interdependent domains:

- individual dimension – consisting of internal (intrapersonal) and relational (social/interpersonal) characteristics
- environmental dimension – consisting of influences from three spheres: family/home, early education settings/school, and community.

### 4.1 Individual internal and relational characteristics

Children's social and emotional development does not occur independently of their environment. Parenting practices and the family environment play a significant role, as can other environments. It is important to keep in mind that individual internal and relational characteristics or attributes can be modified by these contexts/environments in which children develop, and vice versa. Environments are discussed further in Section 4.2.

The individual internal and relational characteristics have been grouped into four dimensions based on those identified by Denham et al. (2009):

- social and emotional competence
- attachment
- self-perceived competence
- temperament.

The dimensions have some overlap and cover both intrapersonal or internal characteristics (for example, self-perceived competence and temperament) and interpersonal or relational characteristics (for example, social competence).

Both on their own and in combination, these dimensions are predictive of many positive outcomes from infancy through young adulthood (Denham et al. 2009). Age-appropriate development in each of these dimensions, particularly social and emotional competence, is therefore important for children's social and emotional wellbeing.

#### Social and emotional competence

Social and emotional competence can hinder or assist children in navigating their way through life, depending on the degree to which it develops. Social competence and

emotional competence are distinct attributes; however, they are strongly interrelated (Denham et al. 2009; Squires 2003). For example, children able to understand emotion in others tend to be regarded as more socially competent.

Socially and emotionally competent children are confident, have good relationships, can communicate well, do better at school, take on and persist with challenging tasks, have a sense of mastery and self-worth and develop the peer and adult relationships necessary to succeed in life (National Research Council and Institutes of Medicine 2000 cited in Pahl & Barrett 2007; Squires 2003). Such competencies may provide resilience against stressors and help to prevent behavioural and emotional difficulties developing later in life (Garmezy 1992 cited in Pahl & Barrett 2007).

### **Social competence**

Social competence refers to effectiveness in developmentally appropriate social interaction. It is defined by personal attributes such as cooperative and pro-social behaviour, helpfulness, the ability to initiate and maintain positive relationships and the ability to resolve conflict (Denham et al. 2009; Humphrey et al. 2010; Squires 2003).

Some of the factors that affect how children form and maintain social relationships with their families, peers and teachers include attachment, conflict resolution skills, sociability and interpersonal skills (Cullen et al. 2010; Dunn & Herrera 1997; Pahl & Barrett 2007). Some children may face more difficulties in their social relationships than others; their ability to deal with these can depend on a combination of their personal attributes and the social supports they experience.

Socially competent children are able to develop the peer and adult relationships that are needed to succeed in both academic and non-academic environments (Mendez et al. 2002 cited in Pahl & Barrett 2007) (see also *Peer and teacher relationships* in Section 4.2). Socially competent children also demonstrate more positive school behaviours and fewer mental health problems than children who lack social competence (Denham et al. 2009).

### **Emotional competence**

Emotional competence is the extent to which one is aware of, and able to act on, one's own and others' emotions, as well as the ability to regulate emotional experience within oneself (intrapersonal) and to be effective in interactions with others (interpersonal) (Saarni 1999, 2000 cited in Humphrey et al. 2010; Squires 2003).

Emotional regulation is the monitoring, evaluation and modification of emotional reactions (both positive and negative) in a socially appropriate manner (Gullone et al. 2010). Its development is particularly important as it can influence other personal attributes and affect how children think about and interact with their world (Eisenberg et al. 2004).

Infancy and early childhood are important periods for the development of emotional regulation. During this time, temperamental, maturational and social factors combine in laying the foundation for some individual differences in social and emotional wellbeing observed later in life (Eisenberg et al. 2004; Gullone et al. 2010). As children age, their ability to analyse emotional situations increases, as does their appreciation of the consequences of different ways of expressing emotions (Gullone et al. 2010).

In healthy psychological development, children learn how to manage their emotions in socially appropriate and adaptive ways (Gullone et al. 2010); however, early emotional and behavioural problems may interfere with age-appropriate development and place children at

risk of future problems (Pahl & Barrett 2007). Early emotional expressiveness and regulation are associated with adolescent social skills, pro-social behaviour and popularity. Conversely, when emotional regulation processes are delayed, disruptive behaviour and aggression may occur in later childhood (Denham et al. 2009).

Conflict in interactions with others is an unavoidable part of life from time to time. How children adjust to or deal with conflict, and the extent to which they are affected by or able to cope effectively with daily problems, are determined partly by their emotional security and regulation (Davies & Cummings 1994) and partly by the level of social support they have.

## **Attachment**

Attachment refers to the emotional relationships that develop between humans. It begins with a secure relationship formed between an infant and their primary caregiver. This relationship founds the ability to form close relationships with others throughout life (Denham et al. 2009).

In most cases, attachment behaviour develops in the first 9 months of life. In healthy development, it subsides somewhat around the end of 3 years as autonomy develops (Bowlby 1977). Parenting style and practices are the most significant influences and are discussed in more detail in Section 4.2.

Secure attachments in infancy and childhood are related to positive social and emotional competence (including emotional regulation), cognitive development and physical and mental health. There is also a link between secure attachment and later positive outcomes in areas such as adolescent peer and romantic relationships, school competence and psychological adjustment (Denham et al. 2009). In particular, many forms of psychological disturbance may be attributable to deviations in the development of attachment behaviour or, more rarely, its failure to develop (Bowlby 1977).

## **Self-perceived competence**

Self-perceived competence is defined as a child's evaluation of their own abilities, including cognitive, physical and social abilities, particularly compared with those of other children (Denham et al. 2009). Evaluations by others, such as peers and teachers, contribute to this self-evaluation.

How children perceive their competence becomes more complex and specific as they age (Cole et al. 2001). Self-perceived competence in a particular area (for example, cognitive, physical, social and emotional) affects motivation and performance in that area. Self-perceived competence is quite generalised among young children and based on the ability to do things that they were previously unable to do. It becomes less generalised and develops in specific domains as children reach middle childhood, and judge their competence compared with others by objective and subjective means (Cole et al. 2001).

Children who develop a sense of self-perceived competence in various domains emerge from middle childhood with a sense of self-efficacy; those who do not are at risk of low self-esteem and depression. In older children, developmental changes in self-perceived competence have been linked to academic performance (and anxiety in relation to this), as well as to symptoms of depression (Denham et al. 2009). In fact, the perception of incompetence is strongly related to most cognitive models of depression (Cole et al. 2001).

## Temperament

Temperament is biologically based. It refers to the tendency to express particular emotions with a certain intensity that is unique to each individual child (Fox 1998). Emotional reactivity and regulation are central elements of temperament, and there is therefore considerable overlap between the domains of temperament and emotional competence (Denham et al. 2009).

Although temperament is biologically based, the environments in which children develop can modify both positive and negative temperamental predispositions (Fox 1998). Parenting practices and other environmental exposures during development are particularly important from infancy through to adolescence, and may cause temperamental characteristics to increase, decrease or cease altogether. This occurs through learning, social comparison and environmental processes (Denham et al. 2009; Fox 1998).

Through these processes, aspects of temperament come to resemble individual characteristics related to adult dimensions of personality. This includes the 'big five' personality traits in adulthood: extroversion, agreeableness, conscientiousness, neuroticism and openness to experience or intellect (Denham et al. 2009). These personality dimensions are associated with academic attainment, work competence, rule-abiding versus antisocial conduct, and the formation and maintenance of peer and romantic relationships (Denham et al. 2009).

## 4.2 Environments in which children develop

As has been discussed, children's social and emotional development does not occur independently of their environment. Rather, the individual and environmental dimensions influence each other through ongoing interaction. For example, research suggests that rising levels of emotional stress and behavioural disturbance appear to coincide with increasing problems in family, peer group and school settings (Cooper & Cefai 2009). In turn, a child's resilience and ability to cope with these problems are affected by their personal attributes.

These interrelationships between the environment and children's individual internal and relational characteristics are discussed in this chapter in the context of three of the primary environments for children:

- family and home
- school and child care
- community.

### Family and home environment

A number of family factors have been consistently found to be related to child adjustment. These include family cohesion and support, conflict, sibling relationships, parenting style and discipline methods, and parental mental health (Deater-Deckard and Dunn 1999 cited in Wise 2003).

The family and home environment is therefore considered here in terms of broader family relationships; that is, in terms of marital and sibling relationships (including conflict), as well as the specific relationship between parent and child, which is influenced by parenting styles and practices. Parental mental health is also discussed.

## **Family relationships**

The quality of family relationships is an important environmental factor influencing children's social and emotional wellbeing. Young people who live in families that get along well together report higher levels of overall wellbeing than those living in families that do not (Rees et al. 2010).

Family conflict can contribute significantly to emotional instability among children, with a wide range of adjustment problems predicted by marital conflict. Greater experience of marital conflict predicts negative emotions and more behavioural reactivity in children's responses to conflict, such as aggression and non-compliance (Davies & Cummings 1994). Marital conflict induces stress in children, threatens emotional and even physical wellbeing, and can reduce the availability or sensitivity of parents. Disputes over child-related issues are particularly stressful for children. Physical aggression carries the greatest risk, however. It is associated with a range of behavioural and emotional problems and can impair social skills. Therefore, the type of conflict and the degree to which it escalates are important, as is the way in which conflict ends, with resolved conflicts causing less distress (Davies & Cummings 1994).

With family dissolution or the re-partnering of parents, children need to adjust to new relationships. They may have difficulty adjusting to consequent changes in parenting styles and disruption to family cohesion. This may lead to increased stress for children (Deater-Deckard & Dunn 1999 cited in Wise 2003), or place them at increased risk of poor mental health and overall wellbeing (Sawyer et al. 2000; Silburn et al. 1996; Vimpani et al. 2002). Children from non-intact families, particularly one-parent families, may experience adverse developmental outcomes, such as lower educational attainment, and an increased likelihood of engaging in antisocial behaviour and substance misuse in adulthood (De Vaus 2004; DeLeire & Kalil 2002). However, changes in family structures do not always have negative outcomes for children. There are many intervening factors, such as the quality of parent-child relationships, parenting style and supervision and levels of family discord, that have an impact on children's vulnerability or resilience to the effects of change.

The quality of sibling relationships also affects children's social and emotional development. Most children spend more time interacting with their siblings than with their parents, and siblings can be a source of support and skill development. The amount of time siblings spend together in constructive activities is associated with self-esteem and social competence with peers (Tucker et al. 2008), and sibling relationships can help to build competence in self-regulation and emotional understanding. However, sibling relationships that involve antisocial behaviour, substance use and extreme conflict can place children at risk for negative outcomes. Broader family relationship features, particularly parenting practices and family discord, also contribute to the quality of sibling relationships and children's social and emotional wellbeing (Stormshak et al. 2009).

## **Parent-child relationship and parenting styles**

Parent-child relationships and parenting styles are strongly related to children's social and emotional development (Denham et al. 2009; Wise 2003).

Authoritative parenting practices, characterised by effective, supportive and warm parenting, have been found to be associated with more positive outcomes for children in the areas of social and emotional competence, behaviour and academic performance (Denham et al. 2009; Wise 2003). Conversely, lax parental supervision and discipline can be associated with children's aggression, non-compliance, delinquency and criminality. Harsh, strict

discipline is also associated with these poorer outcomes, together with detrimental effects on social and emotional competence and academic achievement (Davies & Cummings 1994; Denham et al. 2009; Wise 2003).

The fit between a child's temperament and the parenting they receive is important in behavioural regulation, and can affect a child's ability to form and maintain relationships with peers, teachers and other adults. For example, negative reactive temperaments in infants and children can increase their risk of behaviour problems and their success at school (Denham et al. 2009). Negative reactivity refers to high-intensity negative reactions such as irritability, whining and whingeing which, when combined with a parenting style that is highly punishing or controlling, can lead to behavioural problems (Bandon et al. 2010; Hemphill & Sanson 2001). However, where parenting styles are authoritative and warm, a child's temperament may be moderated so they experience fewer periods of negative reactivity (Hemphill & Sanson 2001).

Parental involvement is also associated with positive outcomes in child development in terms of engagement (that is, time that a parent directly engages with the child in activities such as reading or playing) and accessibility (that is, time that the parent is available to the child) (Wise 2003).

Parenting practices associated with higher levels of social and emotional wellbeing among Australian school-aged children included parents who accepted their children for whom they were, provided activities that took account of their interests, were engaged in their education and made time to listen to them. These parents also engaged in supportive conversations about matters such as making friends and solving problems; the importance of confidence, persistence and organisation for success at school; and social values. The most significant contributor to children's social and emotional wellbeing, however, was having parents who talked with their children about feelings and how to cope with them. In contrast, children with lower levels of social and emotional wellbeing reported that their parents less often engaged in positive parenting practices (Bernard et al. 2007).

### **Parental mental health**

Parental mental health can set the 'emotional' climate for the family and is strongly associated with social and emotional wellbeing outcomes for children. The mental health of parents is thought to impact on children through a number of means. These include genetic factors, the interaction of genetic and environmental influences, direct exposure to parents' symptoms, the influence of associated factors (for example, marital discord) and disruptions to parenting (Smith 2004). The impact of parental mental health on parenting practices exerts considerable influence on children's outcomes, and may explain the different impacts of maternal and paternal mental health problems (Leinonen et al. 2003; Smith 2004). The most significant effect of parental mental health problems on child outcomes is parenting practices characterised by parental negativity and harsh or ineffective discipline (Berg-Neilsen et al. 2002).

Paternal mental health problems tend to have less of an impact (sometimes none at all) on children's outcomes than maternal health problems. This may be because mothers are most often the primary caregiver, and the effects of maternal health problems on parenting is likely to have a greater impact on the child (Smith 2004). Much of the research therefore focuses on the mental health of mothers and on the effects of maternal depression in particular.

Mothers with depression are less likely to engage in preventive parenting practices (such as car seat use and daily reading to children) and children of depressed mothers are at increased risk of developmental delay, behavioural and emotional problems and depression (Kahn et al. 2004; McLennan & Kotelchuck 2000; Smith 2004). Emotional security and regulation are undermined when children cannot be confident of their parents' availability and predictability (Davies & Cummings 1994). The adverse effects of a mother with poor mental health on a child's behavioural and emotional problems can be mediated by the presence of a father with good mental health and high-quality marital interaction and parenting (Kahn et al. 2004; Leinonen et al. 2003). However, when both the father and mother have poor mental health, the influence on a child's behavioural problems can be strong, particularly for boys (Kahn et al. 2004).

## **School and child care environment**

School and child care environments can impact significantly on children's social and emotional wellbeing. When children attend responsive, high-quality child care settings and schools and develop relationships with positive adult role models, their social and emotional wellbeing within these contexts can be enhanced.

### **Child care**

For many children, child care is their first experience of regular contact with children and adults outside the family home. Child care often occurs in an environment involving larger groups of people from diverse backgrounds. It therefore provides both challenges and opportunities for children in developing social and emotional competencies. The quality of both adult-child and peer relationships in child care is important. Teachers and carers can act as attachment figures and therefore influence children's feelings about trust and security. Children's social interactions with their peers in the early years are guided by their caregivers. Their later social and emotional competence can be affected by the quality and consistency of the relationships they experience in child care (Howes & Hamilton 1993). Children who experience high-quality child care do better on a number of child development measures compared to those who experience low-quality child care (Howes et al. 1992).

### **School environment**

Research suggests that the school environment is one of the most important determinants of children's social and emotional wellbeing (Weare & Gray 2003). An Australian scoping study describes seven pathways to overall wellbeing for students at school, and a number of these are strongly related to social and emotional aspects (ACU National & Erebus International 2008). The pathways are physical and emotional safety; pro-social values; a supportive and caring school community; social and emotional learning; a strengths-based approach; a sense of meaning and purpose; and a healthy lifestyle. A supportive and caring school community is characterised by a sense of connectedness and belonging among students, positive classroom climates, good relationships with teachers and peers, and parental involvement with the school. Mechanisms that enhance student wellbeing can indirectly improve academic performance by increasing motivation, engagement and attendance (and hence school completion) and by decreasing problem behaviour and levels of suspension and exclusion (ACU National & Erebus International 2008).

Increasingly, schools are recognising how a lack of social and emotional competence can adversely affect wellbeing. Recognising the effectiveness of the school setting for interventions that increase social and emotional skills, coping skills and resilience, a number

of schools offer social and emotional skills programs (Pahl & Barrett 2007). Such interventions aim to reduce antisocial behaviour, prevent poor mental health and promote positive emotional and social outcomes for students. Incorporating quality social-emotional-motivational programs alongside academic programs can help to raise the achievement of young people, especially when they include opportunities for students with reading/learning difficulties and those who underachieve to learn 'positive' habits (Bernard 2006).

### **Peer and teacher relationships**

Peer relationships are important in children's development of social and emotional competence, particularly in the school environment. Experiencing positive peer relationships helps children to develop positive expectations of others and to feel secure in the company of others. It also increases confidence to explore further peer relationships and to develop social skills and competencies that result in peer acceptance and popularity (Fox 1998). Friendships provide social support, as well as opportunities to practise and refine social skills, discuss moral dilemmas and develop empathy (ACU National & Erebus International 2008). As children mature, peer groups help children learn about managing conflict and are an important source of support during times of stress. Learning how to handle the needs and emotions of other children gives children a chance to learn and practise self-regulatory strategies.

Problematic peer relationships and conflict within the school context can undermine a child's social and emotional wellbeing. Dealing with consistently high levels of peer conflict may lead to problematic behaviours in some children, and children who do not learn how to manage conflict appropriately risk becoming isolated and rejected by their peer group. Bullying is significantly associated with lower social and emotional wellbeing and its effects can last into adulthood. In particular, there is a link between bullying others and later violent, antisocial and criminal behaviour; being a victim of bullying is linked with mental health issues such as anxiety and depression, as well as with loneliness and low self-esteem (ACU National & Erebus International 2008).

Teachers play an important role in the social and emotional wellbeing of students because they shape the formal learning context and the social and emotional climate of the school. In general, a school environment that enhances social and emotional competence and wellbeing is one where teachers foster warm relationships; encourage participation and cooperation; develop student autonomy; design lessons to build on student strengths; provide clarity about boundaries, rules and positive expectations; and act as role models for respectful and pro-social behaviour (Jennings & Greenberg 2009; Weare & Gray 2003). These factors promote positive developmental outcomes for children and create an environment that is more conducive to learning (Jennings & Greenberg 2009). Students benefit from good relationships with teachers and from the motivation they provide and the discussions teachers lead (in class or individually), particularly in relation to learning how to manage feelings when coping with stress (Bernard et al. 2007).

### **Community**

Social and emotional wellbeing can be influenced by a number of factors at the neighbourhood and community level. Children can benefit in both the short and longer term from access to a variety of social supports and networks outside the family and school environments.

Social capital, including support networks, can enhance social and emotional wellbeing by providing information or emotional, practical or financial support to families. Families with rich social networks are more likely to have friends and neighbours who can assist in managing their daily lives and problems. For children, the benefits of social capital include positive mental health and behavioural outcomes in childhood and later life, reduced school drop-out rates and an increased likelihood of gaining meaningful employment later in life (Ferguson 2006). Community networks can provide children with a sense of belonging and positive role models, and this has been shown to improve school performance, development of pro-social behaviour and wellbeing (Solomon et al. 2000; Wilkenfeld et al. 2007). Children in neighbourhoods where adults report positive social ties have also been found to have fewer behavioural problems (Wilkenfeld et al. 2007).

Community factors, such as living in poor-quality neighbourhoods where socioeconomic disadvantage is widespread and where there is a lack of access to support services, can lower children's social and emotional wellbeing. Experiencing isolation or high levels of social or cultural discrimination can negatively affect children's wellbeing, as can natural disasters and poor housing conditions. Protective factors that can reduce the impact of some risk factors include access to support services, strong cultural identity to buffer the negative effects of discrimination and increase resilience, and community norms against violence and other antisocial behaviour (Walker et al. 2004).

## 5 Potential indicators for social and emotional wellbeing

The objective of the Children's Headline Indicators project is to identify and define a single Headline Indicator for each of the priority areas. This is a challenging task for *social and emotional wellbeing* due to its broad and multidimensional nature.

This chapter assesses potential indicators for a Children's Headline Indicator of *social and emotional wellbeing* in terms of their conceptual basis (as defined in Chapter 3) and against a set of criteria and indicator properties.

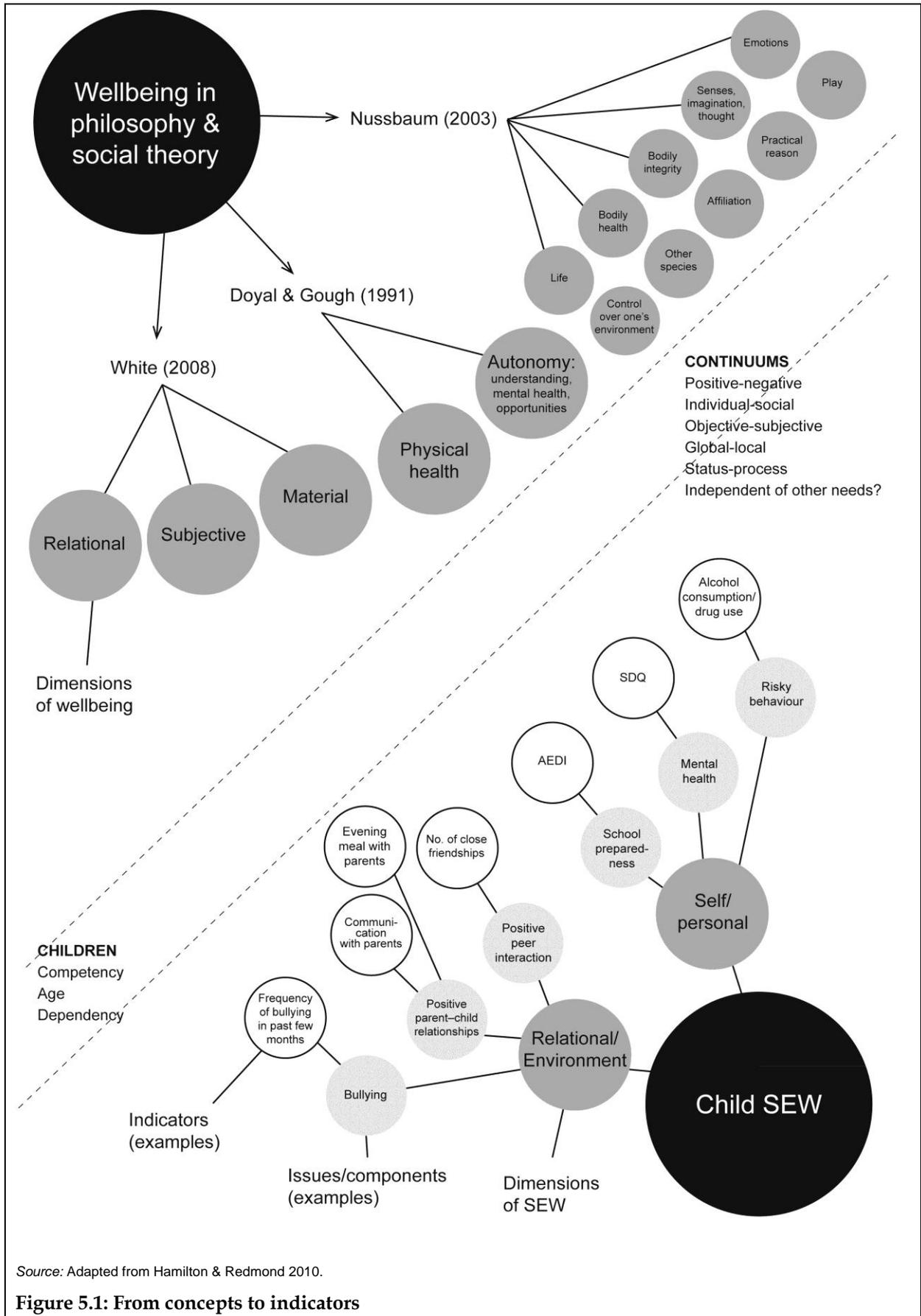
### 5.1 From concepts to indicators

Moving from concepts of social and emotional wellbeing to indicators is particularly challenging because it requires a multidimensional construct. Hamilton and Redmond (2010) developed a framework to depict the links between philosophical and applied approaches to social and emotional wellbeing as a number of properties that follow a continuum (Figure 5.1). This provides a useful starting point for considering potential indicators for children's *social and emotional wellbeing*. The continuums include:

- **Positive-negative** – whether indicators are positive or negative. Positive indicators emphasise capabilities such as resilience and confidence, whereas negative indicators tend to emphasise mental ill health or problem behaviours such as depression and anxiety.
- **Internal-relational** – whether indicators capture individual aspects of social and emotional wellbeing related to internal characteristics (concerned with individual characteristics such as self-esteem and behaviour regulation) and/or relational characteristics (such as identifying emotions in others and interpersonal skills) (Figure 3.2). Note that indicators based on individual aspects are more direct measures of social and emotional wellbeing; those based on environmental aspects (for example, the family, school and community environments) are more indirect measures.
- **Objective-subjective** – whether indicators of social and emotional wellbeing are based on objective or subjective measures. In the clearest sense, an example of an objective measure is the youth suicide rate, while an example of a subjective measure is self-reported happiness. However, the interpretation of 'objective' and 'subjective' can vary in applied research. For example, a parent's report on their child's social and emotional wellbeing could be considered to be either objective or subjective. More distal measures that capture instances of behaviour (for example, relating to specific activities in the past month), or 'risk' and 'protective' factors, may be more objective. But objective measures are also further removed from core aspects of social and emotional wellbeing, such as adjustment, self-regulation, life satisfaction and sociability. These aspects are arguably difficult to measure without an element of subjectivity.
- **Global-local** – whether it is possible to develop universal (global) measures of social and emotional wellbeing (across or within countries) or whether they need to be country and/or culturally specific. Cross-national and cross-cultural interpretation of measurement instruments can be a challenge. A number of instruments have been

translated and adapted for international use, such as the Personal Wellbeing Index (PWI), the SDQ and the Pediatric Quality of Life Inventory (PedsQL). Within Australia, there are many examples of instruments that have been modified for use among Indigenous children. These include the Australian Early Development Index (AEDI) Indigenous Adaptation Study; Footprints in Time: the Longitudinal Study of Indigenous Children; and the modified version of the SDQ used in the Western Australian Aboriginal Child Health Survey.

- **Status-process** – whether wellbeing is measured as a state or as a dynamic process. Wellbeing is considered to be an active state that is constantly being constructed through dynamic relationships. Measuring a dynamic process is difficult, in both conceptual and practical terms, and applied research therefore tends to measure states rather than processes.



**Figure 5.1: From concepts to indicators**

## 5.2 Selecting a single indicator

The purpose of the Children's Headline Indicators is to focus the policy attention of governments on a subset of priority issues, and to assist in guiding and evaluating policy development on children's health, development and wellbeing.

In deciding on the most suitable Headline Indicator for the *social and emotional wellbeing* priority area, the following 10 criteria were considered. The indicator should:

- have a clear conceptual basis
- have a clear and accepted normative interpretation
- be transparent and understandable to non-experts
- be robust and statistically validated
- be responsive to effective policy interventions
- be supported by timely and good-quality data
- be internationally comparable
- be possible to disaggregate to reveal differences across subgroups including:
  - Aboriginal and Torres Strait Islander children
  - children from culturally and linguistically diverse backgrounds
  - children from socioeconomically disadvantaged backgrounds
  - geographically defined groups (that is, rural and remote areas)
- be cost-effective to collect
- be appropriate to a specific age group (children aged 0–12 for the Children's Headline Indicators project).

These criteria were proposed by Hamilton and Redmond (2010), based on an amalgamated list of selection criteria from various indicator frameworks. These criteria are consistent with those outlined in the project report *Headline Indicators for children's health, development and wellbeing* (DHS Vic 2008) and, more recently, in the *Family social network* and *Shelter* indicator development projects (AIHW 2010a, 2010b). The selected Headline Indicator for *social and emotional wellbeing* should be considered to be the 'best fit' to these criteria, and not necessarily reflect an 'ideal' indicator that strictly meets all criteria, particularly in the area of data availability.

Further to these criteria, participants at the June 2010 Social and Emotional Wellbeing Workshop agreed that the selection of indicators should also consider the continuums identified by Hamilton and Redmond (2010) and discussed in Section 5.1.

### Age range of indicator

The measurement of social and emotional wellbeing among children varies depending on a child's age. As discussed in chapters 3 and 4, any measure of children's social and emotional wellbeing must be age appropriate, as children's level of development at a particular age will have a substantial impact on their social and emotional wellbeing at that time. Therefore, no single indicator can adequately capture social and emotional wellbeing across the entire 0–12 age range.

The consultation process showed support for a Headline Indicator relevant to children aged from around 8–12, as this would represent a culmination of experience from birth. Further investigation as to the most suitable age range for the indicator would need to be undertaken

after a measurement instrument is identified, in tandem with work to determine the most appropriate data collection method.

### **Child self-report**

The consultation process supported a measure of social and emotional wellbeing that allowed children to self-report. Because a child's ability to provide a valid self-report depends on their cognitive capacity to understand the question and communicate a response, the characteristics of the question and response format are important.

Although age is typically associated with particular stages of cognitive development, this varies from child to child and does not ensure a child's ability to provide a valid self-report.

An indicator that allows for children's self-report was therefore considered to be desirable. It was noted, though, that methodological issues around child self-report would require further investigation in any future development of a data collection.

## **5.3 Potential indicators and measurement tools**

Twenty-two potential indicators were identified for the *social and emotional wellbeing* priority area, including indicators proposed by Hamilton and Redmond (2010).

An indicator that measures a single aspect of social and emotional wellbeing (that is, based on a single question or data item) would be the most straightforward. But this is unlikely to be feasible due to the multidimensional nature of social and emotional wellbeing and the complexity of identifying and capturing the most important and predictive aspect.

The majority of potential *social and emotional wellbeing* indicators considered during the consultation process were based on indexes or screening instruments/tools that produce a summary score and capture multiple components.

Potential indicators or screening instruments proposed and their associated data sources are included in Table 5.1. They have been grouped into the following categories:

- administrative data
- self-report data (single and multiple data items)
- screening and other tools.

The respondent (for example, child, parent, teacher) and the applicable age range of the potential indicator is also considered. Many of the screening instruments have been developed for a specific age range; their applicability to other age ranges would need to be assessed. This information is summarised in Table 5.2, which builds on Table 1 in Hamilton and Redmond (2010).

**Table 5.1: Potential indicators and measurement tools for social and emotional wellbeing**

Potential indicators/measurement tools	Data source
<b>Administrative data</b>	
1. Suicide rate	AIHW National Mortality Database
2. Hospitalisation rate for mental disorders	AIHW National Hospital Morbidity Database
3. Mental health service use	Medicare Benefits Schedule Mental health-related emergency department data National Community Mental Health Care Database AIHW National Hospital Morbidity Database National Residential Mental Health Care Database Commonwealth State Territory Disability Agreement National Minimum Data Set Bettering the Evaluation and Care of Health Survey
<b>Self-report data</b>	
4. Headaches/stomach-aches	National data not available. International data available from the Health Behaviour in School-aged Children Survey (HBSC).
5. Alcohol and drug use	National data available for 12-year-olds only from the Australian Secondary Students' Alcohol and Drug Survey. International data available from the HBSC.
6. Close friends/attachment to peers	National data not available. International data available from the HBSC and the Global School-based Student Health Survey (GSHS).
7. Life satisfaction	National data not available. International data available from the HBSC.
8. Communication with parents	National data not available. International data available from the HBSC.
9. Feelings of loneliness	National data not available. International data available from the GSHS.
10. Loss of sleep due to worry	National data not available. International data available from the GSHS.
11. Suicide ideation and attempts	National data not available. International data available from the GSHS.
12. Australian Council for Educational Research (ACER) Social and Emotional Wellbeing (SEW) Survey	National data not available
13. Personal Wellbeing Index – School Children and Preschool (PWI-SC/PWI-PS)	National data not available
<b>Screening and other tools<sup>(a)</sup></b>	
14. AEDI (social competence and emotional security)	AEDI
15. SDQ (Goodman 1997)	National data not available. Population level data are available from the New South Wales Population Health Survey, the Victorian Child Health and Wellbeing Survey, the Western Australian Aboriginal Child Health Survey and the Tasmanian Child Health and Wellbeing Survey.
16. PedsQL (Varni & Limbers 2009)	Growing up in Australia: the Longitudinal Study of Australian Children (LSAC)

*(continued)*

**Table 5.1 (continued): Potential indicators and measurement tools for social and emotional wellbeing**

Potential indicators/measurement tools	Data source
<b>Screening and other tools<sup>(a)</sup> (cont.)</b>	
17. Social and emotional problems scale (derived from the PedsQL)	LSAC
18. Brief Infant Toddler Social Emotional Assessment (BITSEA) (Briggs-Gowan et al. 2004)	LSAC
19. Parents' Evaluation of Developmental Status (PEDS) (Glascoe 2010)	LSAC
20. Child Behaviour Checklist (Achenbach 1991; Achenbach & Rescorla 2001)	National data not available
21. Marsh Self-Description Questionnaire I (Marsh et al. 1984)	National data not available
22. Self-evaluation Instrument for Care Settings (SiCs) (wellbeing scale) (Laevers et al. 2005)	National data not available

(a) There is some overlap between Self-report data and Screening and other tools—some screening tools may also be based on self-report.

**Table 5.2: Assessment of potential indicators for social and emotional wellbeing against selection criteria and indicator continuums**

	Suicide rate	Hospitalisation rate (mental disorders)	Mental health service use	Headaches/ stomach-aches	Alcohol and drug use	Close friends/ attachment to peers
<b>Indicator characteristics</b>						
Clear conceptual basis	No	No	No	No	No	No
Accepted normative interpretation	Yes	No	No	Yes	Yes	Yes
Transparent to non-experts	Yes	No	No	Yes	Yes	Yes
Robust and statistically validated	Yes	Yes	Yes	Yes	Yes	Yes
Responsive to policy intervention	Yes	Yes	Yes	Not directly	Potentially	Not directly
Timely and good-quality data	Yes	Yes	Yes	Potentially	Potentially	Potentially
Can be disaggregated	Yes	Yes	Yes	Yes	Yes	Yes
Internationally comparable	Yes	Potentially	No	Yes	Yes	Yes
Cost-effective data collection	Yes	Yes	Yes	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>
<b>Child/young person characteristics</b>						
Specific age group (years)	15+	All ages	All ages	11–15	11–15	11–15
Respondent/source	Administrative	Administrative	Administrative	Young person	Young person	Young person
<b>Indicator continuums</b>						
Direct–indirect	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect
Global–local	Global	Local	Local	Global	Global	Global
Positive–negative	Negative	Negative	Negative	Negative	Negative	Negative
Objective–subjective	Objective	Objective	Objective	Objective	Objective	Objective
Internal–relational	Internal	Internal	Internal	Internal	Internal	Relational
Static–dynamic	Static	Static	Static	Static	Static	Static

*(continued)*

**Table 5.2 (continued): Assessment of potential indicators for social and emotional wellbeing against selection criteria and indicator continuums**

	Life satisfaction	Communication with parents	Feelings of loneliness	Loss of sleep due to worry	Suicide ideation and attempts	ACER SEW Survey
<b>Indicator characteristics</b>						
Clear conceptual basis	No	Yes	Yes	Yes	No	Yes
Accepted normative interpretation	No	Yes	Yes	Yes	Yes	Yes
Transparent to non-experts	Yes	Yes	Yes	Yes	Yes	No
Robust and statistically validated	Yes	Yes	Yes	Yes	Yes	Yes
Responsive to policy intervention	Not directly	Potentially	Not directly	Not directly	Yes	Potentially
Timely and good-quality data	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially
Can be disaggregated	Yes	Yes	Yes	Yes	Yes	Yes
Internationally comparable	Yes	Yes	Yes	Yes	Yes	No
Cost-effective data collection	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>				
<b>Child/young person characteristics</b>						
Specific age group (years)	11–15	11–15	13–15	13–15	13–15	3–18
Respondent/source	Young person	Child, teacher				
<b>Indicator continuums</b>						
Direct–indirect	Indirect	Indirect	Direct	Direct	Direct	Direct
Global–local	Global	Global	Global	Global	Global	Local
Positive–negative	Positive	Positive	Negative	Negative	Negative	Both
Objective–subjective	Subjective	Subjective	Subjective	Subjective	Subjective	Subjective
Internal–relational	Internal	Relational	Internal	Internal	Internal	Both
Static–dynamic	Static	Static	Static	Static	Static	Static

(continued)

**Table 5.2 (continued): Assessment of potential indicators for social and emotional wellbeing against selection criteria and indicator continuums**

	PWI-SC/PWI-PS	AEDI (social competence and emotional security)	SDQ	PedsQL	Social and emotional problems scale	BITSEA
<b>Indicator characteristics</b>						
Clear conceptual basis	No	Yes	Yes	No	No	Yes
Accepted normative interpretation	Yes	Yes	Yes	Yes	Yes	Yes
Transparent to non-experts	Yes	No	Reasonably	Reasonably	Reasonably	Reasonably
Robust and statistically validated	Yes	Yes	Yes	Yes	Yes	Yes
Responsive to policy intervention	Not directly	Yes	Potentially	Potentially	Potentially	Potentially
Timely and good-quality data	Potentially	Yes	Potentially	Potentially	Potentially	Potentially
Can be disaggregated	Yes	Yes	Yes	Yes	Yes	Yes
Internationally comparable	Yes	Potentially	Yes	Yes	Yes	Not currently
Cost-effective data collection	Potentially <sup>(a)</sup>	Yes (already collected)	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>
<b>Child/young person characteristics</b>						
Specific age group (years unless otherwise stated)	School/preschool (not further defined)	4–5	3–16	2–18	2–18	12–35 months
Respondent/source	Young person	Teacher	Parent, teacher, young person	Parent (for children 2–18), child (5–18)	Child	Parent, child care provider
<b>Indicator continuums</b>						
Direct–indirect	Direct	Direct	Direct	Direct	Direct	Direct
Global–local	Global	Local	Global	Global	Global	Global
Positive–negative	Positive	Both	Both	Negative	Negative	Both
Objective–subjective	Subjective	Subjective	Subjective	Subjective	Subjective	Subjective
Internal–relational	Internal	Both	Both	Both	Internal	Both
Static–dynamic	Static	Static	Static	Static	Static	Static

(continued)

**Table 5.2 (continued): Assessment of potential indicators for social and emotional wellbeing against selection criteria and indicator continuums**

	<b>PEDS</b>	<b>Child Behaviour Checklist</b>	<b>Marsh Self-Description Questionnaire I</b>	<b>SiCs (wellbeing scale)</b>
<b>Indicator characteristics</b>				
Clear conceptual basis	No	Yes	No	No
Accepted normative interpretation	Yes	Yes	Yes	Yes
Transparent to non-experts	Yes	Reasonably	Yes	Yes
Robust and statistically validated	Yes	Yes	Yes	No
Responsive to policy intervention	Potentially	Potentially	Not directly	Not directly
Timely and good-quality data	Potentially	Potentially	Potentially	Potentially
Can be disaggregated	Yes	Yes	Yes	Yes
Internationally comparable	Yes	Not currently	Not currently	Not currently
Cost- effective data collection	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>	Potentially <sup>(a)</sup>
<b>Child/young person characteristics</b>				
Specific age group (years)	Birth–8	6–18	8–12	0–3
Respondent/source	Parent	Parent	Child	Child care provider
<b>Indicator continuums</b>				
Direct–indirect	Direct	Direct	Direct	Direct
Global–local	Global	Global	Global	Local (Belgium)
Positive–negative	Negative	Negative	Both	Both
Objective–subjective	Subjective	Subjective	Subjective	Subjective
Internal–relational	Internal	Mostly internal	Both	Internal
Static–dynamic	Static	Static	Static	Static

(a) The cost-effectiveness of the data collection depends on a range of factors, including the type of data collection vehicle, whether a new data collection vehicle is implemented or an existing one is expanded, and the scope in terms of both content and reach. It is therefore not possible at this stage to estimate the cost-effectiveness of the potential indicators for which data are not currently collected.

## Administrative data

Three potential indicators based on administrative data were identified:

- Suicide rate
- Hospitalisation for mental disorders
- Mental health service use.

Indicators such as these have a strong focus on mental illness, whereas social and emotional wellbeing is a broader concept. It is about positively thriving, rather than simply avoiding illness or negative outcomes. These indicators are therefore too narrowly defined for an indicator of social and emotional wellbeing, based on the concepts outlined in Chapter 3.

An indicator based on **suicide rate** is not appropriate for children. There are issues with regard to the ability of children to form intent. Consequently, some jurisdictions do not classify suicide among children aged less than 15 (AIHW: Eldridge 2008).

**Hospitalisation for mental disorders** lacks a normative interpretation. For example, if the hospitalisation rate increases, it is not readily known whether this is due to an increase in available hospital beds, a change in hospital admission practices or a change in the underlying need or prevalence of children with mental disorders requiring hospitalisation.

An indicator of **mental health service use** also lacks a normative interpretation and is not easily understood in isolation from additional information, such as unmet demand for mental health services and barriers to access. The majority of data sources collecting information on mental health service use are administrative; for example, Medicare Benefits Schedule Database, National Community Mental Health Care Database and the AIHW National Hospital Morbidity Database. Some information is available from the Bettering the Evaluation and Care of Health survey and the Australian Bureau of Statistics National Health Survey. These sources do not provide additional information relating to unmet demand or barriers to mental health service use. Hence, an increase or decrease in the rate of use of any of the mental health services captured by these data sources might be related to issues of access to, or availability of, mental health services rather than to a change in the underlying levels of social and emotional wellbeing among children.

Although the 2007 National Survey of Mental Health and Wellbeing collected information on health service use for mental health problems as well as perceived need (for example, whether people felt they got enough help in relation to mental health issues), this survey does not collect information for children aged under 16. A mental health service use indicator that captured some of these issues related to access and unmet demand may have a more normative interpretation; it may therefore be more useful for policy purposes than an indicator of straightforward mental health service use. However, the conceptual basis in terms of children's social and emotional wellbeing is still not clear.

For these reasons, neither the suicide rate, hospitalisation for mental disorders nor mental health service use are considered suitable for a *social and emotional wellbeing* Headline Indicator.

## Self-report data

### Single data items

Eight potential indicators based on self-reported, single data items were identified:

- Subjective health complaints (headaches/stomach-aches)
- Alcohol and drug use
- Life satisfaction
- Close friends/attachment to peers
- Communication with parents
- Feelings of loneliness
- Loss of sleep due to worry
- Suicide ideation and attempts.

These indicators can be derived from single items in either the HBSC or the GSHS. The HBSC is a cross-national survey of children aged 11, 13 and 15 in 41 countries throughout Europe and North America. The GSHS is also a cross-national survey, for children aged 13–15. It is currently implemented, or being implemented, in almost 100 countries throughout the Americas, South-East Asia, the Eastern Mediterranean and the African, European and Western Pacific regions. More information on both the HBSC and GSHS is available at Appendix E.

These indicators, in the context of the HBSC and the GSHS, have been designed principally for adolescents. Their applicability to children of younger ages has not been investigated or validated.

Subjective health complaints, alcohol and drug use, and life satisfaction are indirect measures of social and emotional wellbeing, and lack a clear conceptual basis according to the conceptualisation in Figure 3.2. Although these factors are related to social and emotional wellbeing, the relationships are not particularly clear.

**Subjective health complaints** include somatic symptoms (such as headaches or back aches) and psychological symptoms (such as nervousness or irritability) and are thought to be indicators of how adolescents are responding to stressful situations (Currie et al. 2008). The HBSC symptom checklist is therefore used to represent a non-clinical measure of mental health, reflecting psychological and somatic health (Haugland et al. 2001; Hetland et al. 2002 cited in Currie et al. 2008).

**Alcohol and drug use** are associated with negative social and emotional wellbeing outcomes, such as disruptive behaviour, anxiety and depression, poor family and peer relationships, and poor school performance (Currie et al. 2008). However, an indicator of alcohol and/or drug use is not considered to be appropriate to the Headline Indicator age range (0–12). The proportion of children consuming alcohol and participating in drug use increases with age throughout adolescence, and is expected to affect only a very small proportion of children aged under 12 in Australia. Information on alcohol and drug use is not collected for children aged under 12 in Australia, but among secondary school students aged 12–14, 2.6% had engaged in risky drinking in the week prior to the 2005 Australian Secondary Students' Alcohol and Drug Survey (AIHW 2009). Further, 15% of students aged 12–15 had used an illicit substance in their lifetime (7% had used an illicit substance other than cannabis) (White & Hayman 2006).

Self-reported **life satisfaction** is a broad measure that is more consistent with a philosophical approach to wellbeing, as it speaks to the society in which we wish to live, rather than more specifically to social and emotional wellbeing. It may also be difficult to interpret as an indicator from a policy perspective.

**Close friends/attachment to peers** and **communication with parents** are potential indicators derived from the HBSC (close friends can also be derived from the GSHS) that have clearer links with social and emotional wellbeing in terms of the conceptualisation presented in Figure 3.2. However, these are still indirect measures. They are discussed as potential indicators of children's social and emotional wellbeing in Chapter 6.

**Feelings of loneliness** and **loss of sleep due to worry** are potential indicators derived from the GSHS. They are direct measures related to the individual internal characteristics of social and emotional wellbeing and have a reasonable conceptual basis. They are discussed as potential indicators of children's social and emotional wellbeing in Chapter 6.

**Suicide ideation and attempts**, as with the suicide rate considered earlier, has a strong focus on mental illness and is therefore not considered appropriate as an indicator of children's social and emotional wellbeing.

### **Multiple data items**

Two potential indicators based on self-reported, multiple data items were identified:

- ACER SEW Survey
- PWI—School Children/Pre-School (PWI-SC and PWI-PS).

The **ACER SEW Survey** for students has a strong conceptual basis, and incorporates both positive and negative aspects of social and emotional wellbeing. The survey assesses both internal and relational aspects of social and emotional wellbeing (individual dimension of social and emotional wellbeing), and the secondary student version (used for students in Years 5 and upwards) includes perceptions of home, school and community (environmental dimension of social and emotional wellbeing). The survey is designed to be administered in educational settings (early education and schools), and has been used in Australian schools on a voluntary basis. Developmentally appropriate versions are available for early education settings (teacher-completed) and primary and secondary students (student-completed). An optional teacher-completed version is available for students in Years 2–12. The survey is not publicly available, and results are analysed by ACER and reported back to schools.

The survey is used to assess the social and emotional needs of students in order to assist with the development of school policies, to assess the effectiveness of intervention programs and to provide parents and communities with an independent assessment of the school's ability to provide for and enhance students' wellbeing. It is unclear how suitable this survey would be for use outside of the school/learning environment as it has been designed specifically for this context. The appropriateness of the survey for use as a population measure would therefore require further investigation.

The survey can be used to derive the percentage of students at low, medium and high levels of social and emotional wellbeing. It can also be used to measure levels of resilience; attitudes and coping skills; social skills and values; work management and engagement skills; and for Year 5 and upwards, perceptions of school life, home life and community. This survey is discussed in greater detail in Chapter 6 as a potential indicator of children's social and emotional wellbeing.

A **Personal Wellbeing Index** has been developed for completion by school children (PWI-SC), and for preschool children (PWI-PS). The PWI scale contains seven items of satisfaction, each corresponding to a quality of life domain: standard of living, health, life achievement, personal relationships, personal safety, community connectedness, and future security. The PWI scale is a subjective wellbeing measure which is far broader than the conceptualisation of social and emotional wellbeing considered in this information paper. It is therefore not considered suitable for a *social and emotional wellbeing* Headline Indicator. As with life satisfaction indicators, the PWI would also be difficult to act on from a policy perspective.

## Screening and other tools

Nine potential indicators based on screening and other tools<sup>2</sup> were identified:

- AEDI
- SDQ
- PedsQL
- Social emotional problems scale (used in LSAC) (derived from the emotional functioning scale of the PedsQL)
- BITSEA
- PEDS
- Marsh Self-Description Questionnaire
- Child Behaviour Checklist
- SiCs (wellbeing scale).

The **AEDI** is a population measure of children's development as they enter school. It was completed for the first time nationally in 2009. The Australian Government has committed to ongoing 3-yearly cycles of the AEDI, with the next collection taking place in 2012. The AEDI is an adapted version of the Canadian Early Development Instrument, developed in response to communities' increasing interest in knowing how their children were developing. The AEDI measures five areas of early childhood development from information collected through a teacher-completed checklist: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), and communication skills and general knowledge.

The social competence and emotional maturity domains of the AEDI are the most relevant for an indicator of social and emotional wellbeing. These domains have a clear conceptual basis. They encompass both individual internal and relational aspects of social and emotional wellbeing by measuring responsibility and respect, approaches to learning, readiness to explore new things, pro-social and helping behaviour, anxious and fearful behaviour, aggressive behaviour, and hyperactivity and inattention. The advantage of the

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<sup>2</sup> The Short Form 36, Kessler Psychological Distress Scale and the General Health Questionnaire are also screening tools used at the individual and population level. These are broad instruments used to assess general health (Short Form 36), identify psychological distress (Kessler Psychological Distress Scale) or minor psychiatric disorder (General Health Questionnaire). None of these measures are suitable for use with children. Hence, they have not been included in tables 5.1 or 5.2 and are not considered further in this report.

AEDI is that it is essentially a census, allowing exploration of community level data. However, the AEDI is limited to children aged 4–5, and predictive validity studies have not yet been completed. For these reasons, the AEDI is not considered further as a potential indicator of children’s social and emotional wellbeing.

The **SDQ** has a strong conceptual basis in terms of social and emotional wellbeing. It assesses both individual internal and relational aspects and incorporates positive and negative attributes through five scales: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behaviour. Each scale is highly relevant to the conceptualisation of social and emotional wellbeing presented in Figure 3.2. Scores can be reported for each scale, or a total difficulties score can be calculated. The SDQ is discussed in greater detail in Chapter 6 as a potential indicator of children’s social and emotional wellbeing.

The **PedsQL** is a widely validated and developmentally appropriate instrument, consisting of four multidimensional scales: physical functioning, emotional functioning, social functioning and school functioning. A total scale score can be reported. Alternatively, scores can be reported for individual scales or a Psychosocial Health Summary score can be calculated based on the emotional, social and school functioning scales. Further information on the PedsQL is available at Appendix E.

Although the PedsQL may appear to have a strong conceptual basis in terms of social and emotional wellbeing, the purpose of the instrument is to measure a construct called health-related quality of life. The measures of this construct are generally used from a medical perspective to assess how an illness or health condition (or its treatment) affects a person’s day-to-day life. This is a different construct to social and emotional wellbeing. Hence, the PedsQL is not considered suitable for use as an indicator of children’s social and emotional wellbeing.

The **LSAC social emotional problems scale** is the emotional functioning scale from the PedsQL. The LSAC asked children in the child cohort at Wave 2 (children aged 2–3), Wave 3 (aged 4–5) and Wave 4 (aged 6–7) about how often they feel happy, scared or worried, sad, and angry or mad. Although this scale focuses on emotional functioning, its original purpose is to measure health-related quality of life – a different construct to social and emotional wellbeing. Further, the scale assesses only internal aspects, and no relational aspects.

The **BITSEA** is designed for children aged 12–35 months and is intended to identify developmental problems or delays. The BITSEA has a strong conceptual basis in terms of social and emotional wellbeing and, like the SDQ, incorporates both positive and negative attributes through its competence and problems scales. However, this instrument is quite different from the others assessed, due to its young and narrow age range. It was noted that the BITSEA appears highly suitable for young children; however, it is not considered further for a Headline Indicator. This is due to the support for an indicator relevant to children aged 8 and over, representing a culmination of experience from birth (see Section 5.2).

**PEDS** is a screening tool for detecting and addressing developmental and behavioural problems in children, as identified by parents. It focuses on motor skills, and expressive and receptive language. It does not have a clear conceptual basis in terms of social and emotional wellbeing and is therefore not considered further in this report.

The **Marsh Self-Description Questionnaire I** reflects a child’s self-rating of self-concept across four scales of non-academic self-concept, three scales of academic self-concept, and a global perception of self scale. Self-concept is an aspect of social and emotional wellbeing;

however, it is considered too narrow to reflect social and emotional wellbeing more broadly and is not considered further in this report.

The **Child Behaviour Checklist (CBCL)** is a device by which parents or other individuals who know the child well rate a child's problem behaviours and competencies. The CBCL is developmentally appropriate and has a version for children aged 1½–5 and 6–18. It has a clear conceptual basis, measuring aggression, hyperactivity, bullying, conduct problems, defiance and violence; however, it is highly focused on negative attributes and largely captures only internal aspects of social and emotional wellbeing (only a few items measure relational aspects). For these reasons, the CBCL is not considered suitable for a Headline Indicator of *social and emotional wellbeing*.

The **SiCs** (wellbeing scale) is designed for use as an assessment tool of care settings in order to develop optimal conditions for social-emotional and cognitive development of children, rather than as an assessment tool for children themselves (see Appendix E). The instrument is therefore not considered further in relation to a Headline Indicator of *social and emotional wellbeing*.

## Conclusion

A summary of the assessment of all 22 potential indicators or screening tools is presented in Table 5.3. The shaded indicators/measurement tools are considered to have a strong conceptual basis for a Headline Indicator of *social and emotional wellbeing* and are discussed in more detail in Chapter 6.

The potential indicators and measurement tools with the strongest conceptual basis in terms of social and emotional wellbeing were those that included both individual internal and relational aspects.

A number of self-report indicators based on single survey items have clear links with social and emotional wellbeing. These will be considered further to determine whether they can be used validly to reflect social and emotional wellbeing more broadly. These indicators are close friends/attachment to peers, communication with parents, feelings of loneliness, and loss of sleep due to worry.

The ACER SEW Survey was considered to have a strong conceptual basis in terms of social and emotional wellbeing, and was identified as requiring further consideration.

Of the screening tools assessed, the SDQ emerged as having the strongest conceptual basis for an indicator of social and emotional wellbeing. The remaining screening tools were not considered to be appropriate due to either the lack of a clear conceptual basis, a focus on negative attributes, the unsuitability of the age range, or the fact that the instrument measures a different construct (for example, health-related quality of life).

**Table 5.3: Summary of assessment of potential indicators or screening tools**

Potential social and emotional wellbeing indicator	Assessment
Suicide rate	Not suitable—strong focus on mental illness, lacks clear conceptual basis in terms of SEW and not suitable to report for children aged under 15
Hospitalisation rate for mental disorders	Not suitable—strong focus on mental illness, lacks clear conceptual basis in terms of SEW and normative interpretation
Mental health service usage	Not suitable—strong focus on mental illness, lacks clear conceptual basis in terms of SEW and normative interpretation
Health complaints (headaches/stomach-aches)	Not suitable—indirect measure of SEW and lacks clear conceptual basis
Drug and alcohol use	Not suitable—indirect measure of SEW, lacks clear conceptual basis, and not appropriate for the 0–12-year age range
Close friends/attachment to peers	To be considered further
Life satisfaction	Not suitable—broad measure that is more consistent with a philosophical approach to wellbeing, indirect measure of SEW and lacks a clear conceptual basis
Communication with parents	To be considered further
Feelings of loneliness	To be considered further
Loss of sleep due to worry	To be considered further
Suicide ideation and attempts	Not suitable—strong focus on mental illness
ACER SEW Survey	To be considered further
PWI-SC/PWI-PS	Not suitable—broad measure that is more consistent with a philosophical approach to wellbeing, indirect measure of SEW and lacks a clear conceptual basis and not validated for use with children aged under 12
AEDI (social competence and emotional maturity domains)	Not suitable—limited to children aged 4–5, predictive validity work is not complete
SDQ	To be considered further
PedsQL	Not suitable—measure of health-related quality of life rather than SEW
Social and emotional problems scale (LSAC) (from PedsQL)	Not suitable—measure of health-related quality of life rather than SEW
BITSEA	Not suitable—young age range (12–35 months)
PEDS	Not suitable—does not have a clear conceptual basis in terms of SEW
Marsh Self-Description Questionnaire I	Not suitable—focus is on self-concept, too narrow to reflect SEW more broadly
Child Behaviour Checklist	Not suitable—focus is on negative attributes, captures individual aspects of SEW (only a few items measure relational aspects)
SiCs (wellbeing scale)	Not suitable—assesses care settings rather than children

*Note:* Shading indicates potential indicators or measurement tools identified for detailed consideration in Chapter 6.

# 6 Identifying and defining a Headline Indicator

This chapter provides further information on the six potential indicators or screening tools identified in Chapter 5 and on the availability of data. It then defines the recommended Headline Indicator of *social and emotional wellbeing*.

## 6.1 Self-report data items

Each of the self-report data items considered here are single data items. The advantage of a single data item is the ease with which it can be inserted into existing data collections, such as a survey. The disadvantage of a single data item is that, despite being conceptually related to social and emotional wellbeing, it measures only a single aspect of social and emotional wellbeing (although it may have indirect links with other aspects of social and emotional wellbeing).

Each of the data items identified here has been collected for children aged from either 11 or 13. The suitability of the data items for younger children would need to be assessed prior to collection (for example, if data were to be collected for children aged around 8, as proposed).

The self-report data items considered as potential indicators are:

- Close friends/attachment to peers
- Communication with parents
- Feelings of loneliness
- Loss of sleep due to worry.

### Close friends/attachment to peers

Friendship helps young people adjust to new situations and face stressful life experiences; it is predictive of success in future relationships and is associated with happiness (Schneider 2000 cited in Currie et al. 2008). The number of close friends a child has therefore provides an indication of the child's development of social skills and their ability to form and maintain relationships (relational components of social and emotional wellbeing). Perceived peer support is connected with higher self-esteem and good school adjustment, and with the absence of isolation or depression (Berndt 1996 cited in Currie et al. 2008). However, whether a single indicator measuring the number of close friends is suitable for use as a proxy to represent social and emotional wellbeing more broadly has not been ascertained.

### Data collection and availability

Information on close friends is collected for children aged 11, 13 and 15 in the HBSC survey, and for those aged 13–15 in the GSHS (see Appendix E for further information on these surveys). Neither of these cross-national surveys is currently implemented in Australia, and no other national Australian data source collects this information from children.

Both surveys ask children how many close friends they have, with response categories from 'none' to '3 or more'. The HBSC survey distinguishes between the number of friends of the same gender, and those of the opposite gender.

The Western Australian Health and Wellbeing Surveillance System asks respondents whether a child in the household (aged 5–15) has 'a special friend or a really close mate' and 'a group of friends to play with or hang around with' (Daly & Joyce 2010).

## **Communication with parents**

The benefits of positive relationships with parents are well documented, and include reduced levels of delinquent behaviour, health-risk behaviour, depression, and experiences of psychosomatic symptoms. Communication with parents is an indicator of social support from parents and family connectedness. These are important environmental factors for social and emotional wellbeing, related to positive family communication and relationships with a parent/caregiver. However, they are an indirect measure of the individual internal and relational components of social and emotional wellbeing. Further, communication with parents reflects a single aspect of social and emotional wellbeing. It has not been ascertained whether this is suitable for use as a proxy to represent social and emotional wellbeing more broadly.

### **Data collection and availability**

Information on communication with parents is collected for children aged 11, 13 and 15 in the HBSC survey (see Appendix E for further information on this survey). This cross-national survey is not currently implemented in Australia, and no other national Australian data source collects this information from children.

The HBSC asks children how easy it is for them to talk to their parents about 'things that really bother you'. Information is collected in relation to both mothers and fathers. Response categories range from 'very easy' to 'very difficult'.

## **Feelings of loneliness**

Satisfying social relationships are important for social and emotional wellbeing, and loneliness may be a marker of social relationship deficits. While many children experience short-term loneliness as a normal consequence of everyday social situations, for some children these feelings are chronic, affecting their academic performance and overall social and emotional wellbeing (Junttila & Vauras 2009). Loneliness can occur when a discrepancy exists between the social relationships one wishes to have and those that one perceives they have. As such, loneliness signals that personal relationships are in some way inadequate, and it is therefore a key marker of difficulties in establishing and maintaining satisfying relationships with others (Heinrich & Gullone 2006). Loneliness is not just a symptom of other problems such as depression, but also highlights the fundamental motivation of the human need to belong (Heinrich & Gullone 2006), both of which are aspects of social and emotional wellbeing.

The measurement of feelings of loneliness is negative, with links to individual internal and relational characteristics of social and emotional wellbeing. Although this is a single data item, it appears to reflect several aspects of social and emotional wellbeing, such as a sense of

belonging, and the capacity to form and maintain relationships. Whether this single item could represent social and emotional wellbeing broadly would need to be determined.

### **Data collection and availability**

Information on feelings of loneliness is collected for those aged 13–15 in the GSHS (see Appendix E for further information on this survey). This cross-national survey is not currently implemented in Australia, and no other national Australian data source collects this information from children.

The GSHS asks children how often they have felt lonely during the past 12 months, with response categories on a 5-point Likert scale, ranging from ‘never’ to ‘always’.

### **Loss of sleep due to worry**

Sleep disturbance during childhood is poorly studied, compared with equivalent studies for adults, and hence little is known about the processes associated with it (Alfano et al. 2009). However, there is some evidence of links between the regulation of sleep and emotion and behaviour in children, with many children who experience sleep problems also having elevated levels of emotional and behavioural problems (Alfano et al. 2009). Sleep disturbance commonly occurs concurrently with symptoms of anxiety and depression among children (Alfano et al. 2009; Gregory et al. 2010). Determining when children are experiencing sleep loss due to anxiety or depression rather than to normal developmental fears can be difficult. Loss of sleep due to worry is a negative measure of individual internal characteristics of social and emotional wellbeing, with links to mental ill health. It reflects a single aspect of social and emotional wellbeing, and whether this single item could represent social and emotional wellbeing more broadly would need to be determined.

### **Data collection and availability**

Information on loss of sleep due to worry is collected for those aged 13–15 in the GSHS (see Appendix E for further information on this survey). This cross-national survey is not currently implemented in Australia, and no other national Australian data source collects this information from children.

The GSHS asks children how often they have been so worried about something that they could not sleep at night during the past 12 months, with response categories on a 5-point Likert scale ranging from ‘never’ to ‘always’.

## **6.2 ACER Social and Emotional Wellbeing Survey**

The ACER SEW Survey for students is designed to be administered in educational settings (early education and schools) and is used in Australian schools on a voluntary basis. Developmentally appropriate versions are available for early education settings (teacher-completed) and primary and secondary students (student-completed). An optional teacher-completed version is available for students in Years 2–12. The instrument is not publicly available, and results are analysed by ACER and reported back to schools.

The survey is used to assess the social–emotional needs of students in order to assist with the development of school policies, assess the effectiveness of intervention programs, and provide parents and communities with an independent assessment of the school’s ability to provide for and enhance students’ wellbeing.

The survey results can be used to report the percentage of students at low, medium and high levels of social and emotional wellbeing. It can also measure students' levels of:

- resilience, attitudes and coping skills
- social skills and values
- work management and engagement skills
- perceptions of school life, home life and community (Year 5 and upwards).

The ACER SEW Survey has a strong conceptual basis, and incorporates both positive and negative aspects of social and emotional wellbeing. It assesses both internal and relational aspects of social and emotional wellbeing, and the secondary student version (used for students in Years 5 and upwards) also includes perceptions of home, school and community.

This survey was developed specifically for educational settings for the purpose of assisting schools to enhance student social and emotional wellbeing in the school context. It is not known how suitable it would be for use outside of the school/learning environment, nor the appropriateness of the survey for use as a population measure. It has been conducted only in Australia. Further information on the ACER SEW Survey is available from <http://www.acer.edu.au/tests/sew> or Bernard et al. (2007).

### **Data collection and availability**

Data based on a non-randomly selected, Australia-wide, cross-sectional sample of more than 10,000 students from 81 schools are reported in Bernard et al. (2007).

The survey takes approximately 30 minutes to administer. Students/teachers indicate agreement to statements on a 4-point Likert scale: 'strongly agree', 'agree', 'disagree', 'strongly disagree'. For the primary student survey, students respond on a 2-point Likert scale: 'agree'/'disagree'.

## **6.3 Strengths and Difficulties Questionnaire**

The SDQ is a brief behavioural screening questionnaire suitable for those aged 3–16 (parent and teacher report versions). There is also a self-report version suitable for young people aged around 11–16, depending on their level of comprehension and literacy.

The SDQ has been extensively validated as a measure of pro-social behaviour and psychopathology (Goodman 2001), and is used widely internationally (translated into more than 60 languages). It is used in clinical settings as a screening tool, and in large-scale epidemiological studies (for example, in the British Child and Adolescent Mental Health Survey and the National Health Interview Survey in the United States of America). The SDQ has also been used widely in Australia (see *Data availability* below). Normative data are available for six countries, including Australia.

As discussed in Chapter 5, the SDQ has a strong conceptual basis in terms of social and emotional wellbeing. It assesses both individual internal and relational aspects and incorporates positive and negative attributes through the five scales, each of which are highly relevant to the conceptualisation of social and emotional wellbeing in Figure 3.2.

### **Data collection and availability**

Australian data are available for the SDQ from Growing up in Australia: the Longitudinal Study of Australian children (LSAC). However, this study follows two cohorts of children:

one for children aged 0–1 (infant cohort) and the other for children aged 4–5 (child cohort). As such, this study cannot be used as a data source for population measures over time. The SDQ is also used in population health surveys in New South Wales, Victoria, Tasmania and the Northern Territory. A modified version of the SDQ was developed for use in the Western Australian Aboriginal Child Health Survey, as well as in Footprints in Time: the Longitudinal Study of Indigenous Children (LSIC) and in the Study of Environment on Aboriginal Resilience and Child Health.

The SDQ takes approximately 5 minutes to administer. Respondents are asked to answer ‘not true’, ‘certainly true’ or ‘somewhat true’ for 25 psychological attributes. There are five scales within these 25 psychological attributes: emotional symptoms scale, conduct problems scale, hyperactivity scale, peer problems scale, and the pro-social scale (Table 6.1). A total difficulties score is calculated by summing scores from all scales except the pro-social scale. SDQ scores can be used as continuous variables, or can be classified as ‘normal’, ‘borderline’ or ‘of concern’.

**Table 6.1 Psychological attributes of the SDQ**

<b>Emotional symptoms scale</b>	<b>Peer problems scale</b>
Often complains of headaches, stomach-aches or sickness	Rather solitary, prefers to play alone
Many worries or often seems worried	Has at least one good friend
Often unhappy, depressed or tearful	Generally liked by other children
Nervous or clingy in new situations, easily loses confidence	Picked on or bullied by other children
Many fears, easily scared	Gets along better with adults than with other children
<b>Conduct problems scale</b>	<b>Pro-social scale</b>
Often loses temper	Considerate of other people's feelings
Generally well behaved, usually does what adults request	Shares readily with other children (for example toys, treats, pencils)
Often fights with other children or bullies them	Helpful if someone is hurt, upset or feeling ill
Often lies or cheats	Kind to younger children
Steals from home, school or elsewhere	Often volunteers to help others (parents, teachers, other children)
<b>Hyperactivity scale</b>	
Restless, overactive, cannot stay still for long	
Constantly fidgeting or squirming	
Easily distracted, concentration wanders	
Thinks things out before acting	
Good attention span, sees chores or homework through to the end	

Further information is available from <http://www.sdqinfo.org/>.

## 6.4 Discussion and recommendations

This chapter has assessed six potential indicators or measurement tools for social and emotional wellbeing.

A number of self-report single items from the HBSC survey and the GSHS were considered. The advantage of these items is their ease of implementation into existing data collections, and their international comparability; however, neither the HBSC nor the GSHS are currently implemented in Australia. The suitability of items from these surveys for children under the age of 11 and 13, respectively, would need to be assessed if information were to be collected for younger children. The disadvantage of these single data items is that, despite being conceptually related to social and emotional wellbeing, they each measure only a single aspect of social and emotional wellbeing (although they may have indirect links with other aspects).

The ACER SEW Survey was assessed to have a strong conceptual basis for social and emotional wellbeing, capturing internal and relational factors, as well as home, community and school factors (Year 5 and upwards). However, this survey has been designed for use in educational settings for the purpose of assisting schools to enhance student social and emotional wellbeing – its appropriateness for application as a population measure in other settings and for a different purpose is unknown. Unlike the SDQ, the ACER SEW Survey has not been used internationally and takes substantially longer to administer (30 minutes compared with approximately 5 minutes for the SDQ). This would mean that it is not practical to incorporate it into a broader survey. It would be more likely to be administered as a stand-alone survey, which would require considerably more resources to implement.

The SDQ provides a direct assessment of the individual internal and relational qualities identified as reflecting social and emotional wellbeing among children. This instrument has been extensively validated, and is used widely internationally and in Australia as a population measure. Modified versions for Indigenous children have also been developed. The SDQ was also strongly supported through the consultation process as the most appropriate measurement tool for assessing the social and emotional wellbeing of children.

The main advantages of the SDQ are that it is developmentally appropriate; has been extensively validated; is used worldwide; has versions available for reporting by the parent, child and teacher; is a direct measure of social and emotional wellbeing; and incorporates both individual internal and relational factors of social and emotional wellbeing. The SDQ has also been used to some degree as a population measure in the Australian context and is able to be incorporated into broader surveys since it takes approximately 5 minutes to administer.

The SDQ has the additional advantage of assessing both positive and negative attributes (hence, strengths and difficulties), which was considered to be an important property of an indicator of social and emotional wellbeing at the June 2010 Social and Emotional Wellbeing Workshop. Further, the SDQ has a strong conceptual basis in terms of social and emotional wellbeing, allowing a summary score to be reported as well as scores on each scale.

It is therefore recommended that a Children's Headline Indicator for *social and emotional wellbeing* be based on the SDQ, and be broadly defined as the:

*Proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire.*

## 6.5 Data collection issues

There is currently no national data source in Australia suitable for reporting on the recommended Headline Indicator for *social and emotional wellbeing*.

A number of issues discussed in chapters 5 and 6 have implications for the collection of data for a Headline Indicator of *social and emotional wellbeing*. The main issues identified for data collection include:

- the counting unit should be children, with further investigation on the most suitable age range to occur with the development of data collection methods
- the collection of demographic information alongside any measure of social and emotional wellbeing is essential to report on population groups and identify differences between groups. Further, any measure must be suitable for use among different population groups (such as Aboriginal and Torres Strait Islander children and children from culturally and linguistically diverse backgrounds) or modified versions should be developed and tested.
- the preference is to obtain information about social and emotional wellbeing from multiple sources – the child themselves, and also the primary caregiver where possible.

Further work is therefore needed to determine the most appropriate data collection method and vehicle for this Headline Indicator. A large-scale national survey that uses children as the counting unit, captures demographic information and allows disaggregation by state and territory for subpopulations of children (for example, Aboriginal and Torres Strait Islander children) should be considered. An alternative is to incorporate the SDQ in a standardised manner into state/territory-based population health surveys; however, survey methods would need to be considered to ensure comparable data.

In the meantime, ongoing monitoring of data developments in relation to the SDQ, as well as monitoring of any new surveys and instruments that may emerge in relation to social and emotional wellbeing, is recommended.

# Appendix A: Process to identify a Headline Indicator

This appendix outlines the process followed to identify a Headline Indicator for *social and emotional wellbeing* (see also Figure 1.1 in Chapter 1 of this information paper).

## Literature review

A review of the literature was conducted to define and conceptualise social and emotional wellbeing, and to identify those aspects most strongly associated with children's health, development and wellbeing outcomes.

The literature review highlighted how complex it was to define and conceptualise a holistic concept such as social and emotional wellbeing. There is no widely agreed definition of social and emotional wellbeing; rather, there are characteristics or attributes that are thought to indicate levels of social and emotional wellbeing.

Taking an ecological approach, the literature review identified individual internal and relational characteristics of social and emotional wellbeing, which are influenced by proximal and distal environments. Proximal environments include the home, early childhood education and care settings and the school; distal environments include the wider community and society at large. These concepts are discussed in greater detail in Chapter 3, and the implications for children's outcomes are considered in Chapter 4.

## Review of relevant indicator frameworks, reports and screening tools

A number of relevant national and international indicator frameworks and reports were reviewed in order to identify indicators that had been developed and reported in the area of *social and emotional wellbeing*. A number of screening tools were also assessed for their relevance and ability to measure characteristics of social and emotional wellbeing.

This review of relevant indicator frameworks, reports and screening instruments – as well as previous work on conceptualising and defining *social and emotional wellbeing* – was brought together in a background paper for consultation with experts.

## Consultation with experts

### Headline Indicator Data Development Expert Working Group

The AIHW established a Headline Indicator Data Development Expert Working Group to provide strategic advice and input into the development of Headline Indicators for *family social network*, *social and emotional wellbeing* and *shelter*. The group included experts in child health, development and wellbeing; subject matter experts in each of the three priority areas; data experts and representatives from relevant government departments (see Appendix B for a list of members).

## **Social and Emotional Wellbeing Workshop**

The AIHW and Australian Research Alliance for Children and Youth conducted a workshop in June 2010 to consider the options for a *social and emotional wellbeing* Headline Indicator. The main purpose of the workshop was to obtain agreement on a Headline Indicator for this priority area. Participants were experts in the field of children's wellbeing from relevant government departments, research organisations and academic institutions (see Appendix C for a list of workshop participants).

The report by Hamilton and Redmond (2010) and the background paper by the AIHW canvassing potential indicators and data sources formed the basis of discussion at the workshop. Participants were asked to identify any major gaps in the papers, such as important research evidence or other indicators. They were also asked to consider the most salient aspect of *social and emotional wellbeing* for children's health, development and wellbeing and if any of the proposed indicators might be a suitable Headline Indicator for this area.

Workshop participants recognised the difficulty of identifying a single indicator to cover the area of *social and emotional wellbeing*.

A number of potential indicators were proposed at the workshop. Although several indicators measuring a single aspect of social and emotional wellbeing were discussed, the majority were based on screening instruments/tools with multiple items which produce a summary score. It was agreed that the AIHW, in consultation with key experts and stakeholders, would prepare a discussion paper to further assess those indicators and measurement tools considered to be the most suitable for reporting on social and emotional wellbeing.

### **Discussion paper**

The AIHW prepared a discussion paper to help with the process of identifying a Headline Indicator for *social and emotional wellbeing*.

The discussion paper presented a brief summary of the conceptualisation of social and emotional wellbeing, and provided a detailed assessment of the feasibility and suitability of potential indicators and measurement tools as discussed at the workshop.

The discussion paper was circulated among the Headline Indicator Expert Working Group and other workshop participants and, based on feedback received, has been finalised into this information paper.

# Appendix B: Headline Indicator Data Development Expert Working Group<sup>3</sup>

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<sup>3</sup> Membership and affiliation are listed as at December 2010.

# Appendix C: Social and Emotional Wellbeing Workshop participants

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# Appendix D: Headline Indicators for children’s health, development and wellbeing

**Table D.1: Headline Indicators for children’s health, development and wellbeing**

Priority area	Headline Indicator	Data source
Smoking in pregnancy	Proportion of women who smoked during the first 20 weeks of pregnancy	National Perinatal Data Collection (data expected to be available for reporting in 2013)
Infant mortality	Mortality rate for infants less than 1 year of age	AIHW National Mortality Database
Birthweight	Proportion of liveborn infants of low birthweight	National Perinatal Data Collection
Breastfeeding	Proportion of infants exclusively breastfed at 4 months of age	Australian National Infant Feeding Survey (data expected to be available in 2011 but will require assessment of suitability)
Immunisation	Proportion of children on the Australian Childhood Immunisation Register who are fully immunised at 2 years of age	Australian Childhood Immunisation Register
Overweight and obesity	Proportion of children whose body mass index (BMI) score is above the international cut-off points for 'overweight' and 'obese' for their age and sex	Australian Bureau of Statistics National Health Survey
Dental health	Mean number of decayed, missing or filled teeth (DMFT) among primary school children aged 12 years	Child Dental Health Survey
Social and emotional wellbeing	Proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire	No national data currently available
Injuries	Age-specific death rates from all injuries for children aged 0–14	AIHW National Mortality Database
Attending early childhood education programs	Proportion of children attending an early education program in the year before beginning primary school	National Early Childhood Education and Care Data Collection (data expected to be available in 2013)
Transition to primary school	Proportion of children developmentally vulnerable on one or more domains of the AEDI	AEDI
Attendance at primary school	Attendance rate of children at primary school	Australian Curriculum, Assessment and Reporting Authority National Report on Schooling in Australia (data not currently nationally comparable)
Literacy	Proportion of children in Year 5 achieving at or above the national minimum standards for reading	National Assessment Program—Literacy and Numeracy
Numeracy	Proportion of children in Year 5 achieving at or above the national minimum standards for numeracy	National Assessment Program—Literacy and Numeracy
Teenage births	Age-specific birth rate for 15 to 19 year old women	National Perinatal Data Collection
Family economic situation	Average real equivalised disposable household income for households with children in the 2nd and 3rd income deciles	Australian Bureau of Statistics Survey of Income and Housing
Shelter	Proportion of children aged 0–12 living in households experiencing at least one of the specified aspects of housing disadvantage: homelessness, overcrowding, housing stress, forced residential mobility	No national data currently available
Child abuse and neglect	Rate of children aged 0–12 who were the subject of child protection substantiation in a given year	AIHW Child Protection Data Collection
Family social network	Proportion of children aged 0–12 whose parent or guardian was usually able to get help when needed	No national data currently available

# Appendix E: Additional information on selected surveys and screening tools

## Health Behaviour in School-aged Children Survey

The HBSC is a cross-national study conducted in collaboration with the WHO Regional Office for Europe. The HBSC is a school-based survey with data collected through self-completion questionnaires administered in the classroom. All Organisation for Economic Co-operation and Development (OECD) countries which were members at the time of the most recent 2005–2006 survey participated in the HBSC, with the exception of Australia, Japan, Korea, Mexico and New Zealand.

The target population of the HBSC study is young people attending school, aged 11, 13 and 15. These age groups represent the onset of adolescence, the challenge of physical and emotional changes, and the middle years when important life and career decisions start to be made.

The survey is carried out on a nationally representative sample in each participating country, with a sample consisting of approximately 1,500 students in each age group (that is, a combined total sample of approximately 4,500 students from each participating country).

Each survey questionnaire contains a core set of questions that include the following:

- Background factors: demographics and maturation, social background (family structure, socioeconomic status)
- Individual and social resources: body image, family support, peers, school environment
- Health behaviours: physical activity, eating and dieting, smoking, alcohol use, cannabis use, sexual behaviour, violence and bullying, injuries
- Health outcomes: symptoms, life satisfaction, self-reported health, Body Mass Index.

Many countries also include additional items in their national questionnaire that are of particular interest.

Further information: Currie et al. 2008.

## Global School-based Student Health Survey

The GSHS is a cross-national study conducted in collaboration with the WHO and the US Centers for Disease Control and Prevention. The purpose of the GSHS is to help countries measure and assess behavioural risk factors and protective factors in 10 key areas that contribute to morbidity and mortality among children and adults. The GSHS can allow comparisons across countries, or establish trends by country, on the prevalence of health behaviours and protective factors.

The GSHS is a school-based survey conducted primarily among students aged 13–15. Each country can develop a unique questionnaire for their students by drawing on items from the core questionnaire modules, core-expanded questions and incorporating country-specific questions. Data is collected through self-completion questionnaires administered in the classroom. Each survey contains 10 core questionnaire modules that look at the student's health and the things students do that may affect their health. Refer to Table E.1 for the modules and measures included in the 2009 core questionnaire.

To date, 97 countries have participated in or are implementing the survey (23 in the African region, 28 in the Americas, 9 in South-East Asia, 3 in the European region, 18 in the Eastern Mediterranean, and 16 in the Western Pacific region); however, few of these countries are OECD members.

**Table E.1: GSHS Core Questionnaire Modules, 2009**

<b>Module</b>	<b>Measures</b>
Demographics	Age, gender, grade/section/level/form of the respondents
Alcohol use	Age at first alcohol use, current alcohol use, amount of alcohol use, how students get the alcohol they drink, episodes of heavy drinking, problems associated with alcohol use
Dietary behaviours	Self-reported height and weight, frequency of hunger, fruit and vegetable consumption, carbonated soft drink consumption, frequency of eating at fast food restaurants
Drug use	Lifetime drug use, age at first drug use, current drug use, source of drugs used
Hygiene	Tooth-cleaning, hand-washing, hand-washing with soap
Mental health	Feeling of loneliness, loss of sleep due to worry, sadness and hopelessness, suicide ideation and attempts, attachment to peers
Physical activity	Physical activity, travel to school, participation in physical education class, participation in sedentary leisure behaviour
Protective factors	School attendance, perceived social support at school, parental regulation and monitoring
Sexual behaviours	Lifetime sexual intercourse, age at first intercourse, number of sexual partners, condom use, birth control use
Tobacco use	Current cigarette use, age of initiation of cigarette smoking, current use of other tobacco products, attempted cessation of cigarette smoking, exposure to second-hand smoke, tobacco use by parents/guardians (i.e. role models)
Violence and unintentional injury	How often students have been physically attacked, how often they have participated in a physical fight, frequency of serious injuries, type and cause of most serious injury, frequency of bullying, type of bullying

Source: WHO 2012.

## Pediatric Quality of Life Inventory

The PedsQL is a modular approach to measuring health-related quality of life in healthy children and adolescents, as well as in those with acute and chronic health conditions. Hence, there are both generic core scales and disease-specific modules available.

Versions of the PedsQL have been developed for parent report for those aged 2–18, with versions for child report available for children aged 5 and over. The PedsQL is also used in the LSAC (Waves 1–3 for the child cohort, and Waves 2–3 for the infant cohort).

The 23-item PedsQL Generic Core Scales were designed to measure the core dimensions of health as delineated by the WHO, as well as role (school) functioning (Table E.2).

Respondents are asked to answer how much each of the items has been a problem in the past month according to the following categories: ‘never’, ‘almost never’, ‘sometimes’, ‘often’, or ‘almost always’. There are four scales: physical functioning, emotional functioning, social functioning and school functioning. Three summary scores can be produced from these scales:

- total scale score (all scales)
- physical health summary score (physical functioning scale)

- psychosocial health summary score (emotional, social and school functioning scales). The instrument takes approximately 4 minutes to administer.

**Table E.2: PedsQL Generic Core Scales**

<b>Physical functioning scale</b>	<b>Social functioning scale</b>
Walking more than one block	Getting along with other children
Running	Other kids not wanting to be his or her friend
Participating in sports activity or exercise	Getting teased by other children
Lifting something heavy	Not able to do things that other children his or her age can do
Taking a bath or shower by him/ herself	Keeping up when playing with other children
Doing chores around the house	
Having hurts or aches	
Low energy level	
<b>Emotional functioning scale</b>	<b>School functioning scale</b>
Feeling afraid or scared	Paying attention in class
Feeling sad or blue	Forgetting things
Feeling angry	Keeping up with schoolwork
Trouble sleeping	Missing school because of not feeling well
Worrying about what will happen to him or her	Missing school to go to the doctor or hospital

Source: Varni 2012.

## **Self-evaluation Instrument for Care Settings (wellbeing scale)**

The SiCs is designed to help child care settings become more aware of their strengths and weaknesses in relation to creating the best possible conditions for children to develop. The SiCs contains two scales – a wellbeing scale and an involvement scale.

The SiCs wellbeing scale is administered in a child care setting by a child care provider, and has a limited age range (children aged 0–3).

The assessment is based on a 2-minute observation of the child, which may or may not be indicative of the child’s usual behaviour either within or outside the care setting. A child’s wellbeing is rated on a 5-point scale from ‘extremely low’ to ‘extremely high’ (Table E.3).

**Table E.3: SiCs wellbeing scale**

<b>Level</b>	<b>Wellbeing</b>	<b>Signals</b>
1	Extremely low	The child clearly shows signals of discomfort: <ul style="list-style-type: none"><li>– whines, sobs, cries, screams</li><li>– looks dejected, sad or frightened, is in panic</li><li>– is angry or furious</li><li>– shows feet, wriggles, throws objects, hurts others</li><li>– sucks its thumb, rubs its eyes</li><li>– does not respond to the environment, avoids contact, withdraws</li><li>– hurts him/herself: bangs his/her head, throws him/herself on the floor.</li></ul>
2	Low	The posture, facial expression and actions indicate that the child does not feel at ease. However, the signals are less explicit than for Level 1 or the sense of discomfort is not expressed the whole time.
3	Moderate	The child has a neutral posture. Facial expression and posture show little or no emotion. There are no signals indicating sadness or pleasure, comfort or discomfort.
4	High	The child shows obvious signs of satisfaction (as listed for Level 5). However, these signals are not constantly present with the same intensity.
5	Extremely high	During the observation episode, the child enjoys, in fact it feels great: <ul style="list-style-type: none"><li>– looks happy and cheerful, smiles, beams, cries out of fun</li><li>– is spontaneous, expressive and is really him/herself</li><li>– talks to him/herself, plays with sounds, hums sings</li><li>– is relaxed, does not show any signs of stress or tension</li><li>– is open and accessible to the environment</li><li>– is lively, full of energy, radiates</li><li>– expresses self-confidence and self-assurance.</li></ul>

Source: Laevers et al. 2005.

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