Literature Review:
Parenting Information Project

Research conducted for FaCS by the Centre for Community Child Health, Royal Children's Hospital Melbourne
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ACKNOWLEDGMENTS

EXECUTIVE SUMMARY

The Parenting Information Project, funded under the National Agenda for Early Childhood, has been designed to identify best practice parenting programs and information for Australian families and the most appropriate service delivery mechanisms, and to develop products and/or programs. The Parenting Information Project has two phases. The Centre for Community Child Health (CCCH) has been engaged to undertake phase one of this project, and this literature review comprises part of phase one.

The review is in two parts. Part A, 'Parenting and the factors that influence it', was undertaken by the Victorian Parenting Centre, Melbourne. Part A summarises the current state of knowledge about the factors that impinge upon parenting, including characteristics of the parent and child, and the social, familial and environmental context. The purpose is to inform the development of parenting information, education and supports to assist parents of infants and young children. Part B, 'Approaches to supporting optimal parenting', was prepared by Jennifer Parrott of the Centre for Community Child Health, Royal Children's Hospital, Melbourne and Dr Frances Page Glascoe of Vanberbilt University, Nashville, Tennessee. Part B looks at the most effective ways to help families parent their children and acquire the parenting skills they need.

The second stage of the Parenting Information Project involves substantial consultation with key professionals, policy makers and parents in each Australian state and territory to identify what information and programs would better support parents and when and how this information is best provided. This consultation process is largely complete and will culminate with a national workshop in late April 2004 to build on key findings and identify directions for the possible development and testing of parenting products and/or programs for possible implementation during a third project stage. The findings of stage two will be documented in a separate report.

Part A: Parenting and the factors that influence it

Parenting is a socially constructed role that is influenced by a wide range of personal and contextual factors interacting in complex ways. Approaches to parenting information, education and support need to acknowledge this complexity, and the variation that occurs from family to family.

Some parents, because of social or personal circumstances, need more resourcing and education than others. As well as strategies to broaden the range of parenting skills available to these parents, what would be particularly useful is information and education that focuses on personal coping strategies, how to establish and maintain positive social supports, and how to work effectively with the service system. Effective intervention will address those things that are a barrier to parents learning through their own experience, such as anxiety or a lack of personal sense of efficacy. Importantly, parenting intervention should aim to enable parents to solve problems for themselves.

Parenting is not only adult-driven, but is actively shaped by children in their interactions with their parents. Sensitivity and responsiveness to the cues given by children is therefore critical

for effective parenting. Knowledge of child development may be important, particularly where parents have unrealistic expectations of, or incorrect attributions for, a child's behaviour; however, this knowledge alone may not be sufficient when other factors impinge upon parents' ability to put knowledge into practice.

There is no universal standard of 'good' or 'effective' parenting, and in considering the effectiveness of parenting, it is appropriate to examine the function of the parenting behaviour for the child rather than its form. Parenting practices that result in positive outcomes for children can take many forms and are influenced by many factors, such as the child's temperament, environmental circumstances, culture, social expectations, parents' gender, and parents' own experience of being parented.

Parenting is more likely to be effective when parents adapt their practices to meet their children's changing needs—when they are perceptive of these needs, responsive to them, and flexible in this responsiveness. Many factors can affect a parent's capacity to do this, creating vulnerability. What is helpful will vary according to the factors that lead to this circumstance. Where a child's behaviour is challenging and parents lack ideas on appropriate strategies to manage the situation, there is a need for training in parenting skills. Where personal or social adversity factors predominate, the emphasis may most appropriately be placed on addressing these factors. Where there are multiple risk or adversity factors, a multi-faceted approach is indicated.

The research into the needs of specific groups of parents has a number of implications for parenting interventions.

Parent characteristics
A proportionally higher level of resources should be invested in intervention and support for **first-time parents**, to lessen the greater risks associated with caring for the first baby and to establish positive patterns of care giving.

Families headed by **adolescent parents** are a high-risk group that warrants systematic early intervention and support. Group-based intervention has been shown to be both more supportive and more cost-effective than individual intervention. Intervention needs to take into account the parents' own developmental and social needs, and an important goal is to help adolescent mothers stay at school. Programs should incorporate other adults (for example, grandparents) living with the child. Dropout from parenting programs is high among adolescent parents and specific strategies are needed to engage and maintain their involvement (for example, home-based programs, programs in the school setting, multiple services from one contact point).

Fathers should be encouraged to build their parenting skills and involvement early in their child's life, as a normal part of family life. Organisational policies need to promote family friendliness in the workplace and actively support the father's role. Fathers may require assistance to establish parenting skills, especially in the face of family breakdown and shared custody. Mothers' views and support are influential in the roles fathers take, and these views need to be addressed in parenting programs. However, while it is clear that many fathers could benefit from parenting education, the effectiveness of programs that target fathers is yet to be determined.

Grandparents should be considered in any attempts to support families with parenting. Their influence varies greatly depending on the amount and type of contact they have with their grandchild, their perceived responsibility to influence the child's upbringing, and a range of other contributing factors. Grandparents acting as primary care givers have much greater need for help, especially where there is family breakdown and/or parental mental and physical health problems. Approaches might include support groups, access to service providers, and parent education programs to meet the specific needs of those raising grandchildren, including caring for one's own health, drug addiction of parent, current society issues such as

drugs, AIDS, sex education, and raising children who have experienced trauma or who have learning difficulties.

There is no evidence to suggest that **homosexual parents** need parenting interventions that are different from those available to all parents, although they may need information specific to the circumstances of families with gay and lesbian parents (for example, the challenges of divorce and single parenthood). Parents may benefit from assistance with particular issues facing homosexual parents, such as negative community attitudes and prejudice that children might face.

While there are strong links between parent and child **physical health**, the influence of parent health on general development seems to be indirect, mediated by the psychological sequelae of ill health. Stress, depression or tiredness associated with physical impairment may affect interaction between parent and child. At the same time, child physical health is linked to the socialisation practices of parents. The evidence clearly points to the need to support parents in shaping their children's health-related behaviours.

Where **parents have physical or sensory disabilities**, the challenge is to remove the barriers to parenting information and support, and ensure appropriate adaptations in content and mode of delivery for this socially disadvantaged group. Research, for example, has demonstrated that mothers' attachment and nurturing behaviours are strongly influenced by immediate contact with the baby following birth, breast-feeding, and recognition of infant sensory cues—all areas that people with physical or sensory disabilities may need additional support and assistance to establish.

Parents with learning difficulties are vulnerable, especially where there is also social and psychological adversity. Given the wide range in parenting capability and confidence across this group, agencies need to consider intervention and support needs on a case-by-case basis. Assessment needs to take a functional approach—what is the parent actually doing?— and intervention should take into account the parent's cognitive limitations, and be matched to the parent's learning style and needs. The most effective intervention strategies are home-based and skill-focused, and use competency-based teaching strategies. An ongoing program of strategically timed support is often needed, as these parents negotiate major developmental milestones and transitions in caring for their children.

The emotional and psychological wellbeing of parents has important implications for children, and children of **parents experiencing mental health problems** are at greater risk for a range of psychosocial and developmental problems, and are less likely to benefit from mainstream parenting education efforts. The actual quality of parenting has been found more important than the mother's diagnostic status. However, the evidence is clear—especially concerning depression and psychotic disorders—that early intervention is warranted. Interventions should target mothers with multiple risk factors (e.g. depression and economic disadvantage).

Strong evidence also supports intervention at the level of **daily parental stress**, including assistance for parents with young children, multiple children, or children with challenging temperaments or disabilities. Interventions need to help parents remove sources of stress (for example, by developing more effective routines or managing common childhood behaviour problems) and cope better with the stressful demands of parenting.

There is a clear relationship between **parental substance abuse** and child abuse in a significant subsection of drug-using families (although research does not rule out the possibility, or likelihood, that substance abuse and adequate parenting may co-exist in a large percentage of families with substance-abusing parents). Broad-based interventions are required pre-natally and throughout infancy, as post-natal environmental conditions (for example, parental conflict, continued substance abuse) may intensify effects related to pre-natal substance exposure. An initial step would be to trial existing well evaluated behavioural family interventions with this group. High-risk families—those with five or more risk factors (for

example, maternal depression, domestic violence, non-domestic violence, large family size, homelessness, incarceration, mental health impairment, absent male partner)—could be targeted for more intensive early intervention. Interventions may need to be tailored according to the type and nature of substance abuse, as substance-abusing parents differ in their behavioural and personality characteristics and treatment needs.

There is evidence that **people's experience of being parented** influences how they parent their own children. While the majority of parents who were abused as children do not go on to abuse their own children, extreme parental deprivation (for example, institutional care) can lead to severe parenting difficulties, and less extreme parenting problems may be transmitted across generations. Little research has looked at interventions designed to interrupt the cycle of violence, but mediating social and psychological factors have been identified that might be usefully explored in helping victims of abuse to become positive parents. These include: assistance to develop adequate support networks; stress management skills; helping parents develop realistic expectations about their children; promoting the development of strong and supportive interpersonal relationships; and encouraging affiliation with supportive groups. Effective strategies for at risk groups promote problem solving and conflict resolution without violence, and teach positive parenting strategies.

While research shows that intervention can increase a parent's **knowledge of child development** and lead to positive changes in parenting behaviour, there is no convincing evidence that increasing a parent's knowledge of child development alone (milestones, appropriate ages and stages) can change parenting behaviour or lead directly to benefits for children. Further research is needed to isolate the impact of increasing knowledge of child development from the other benefits of parent education such as skills training. Instead, it may be more appropriate to focus on helping at-risk parents develop greater sensitivity and greater reciprocity in their interactions with children.

Alternatively, the focus might be placed on countering distorted parental expectations that are based on a lack of understanding of children's developmental stage and capabilities. It is likely to be particularly important to help parents view the challenging behaviour of their children within a developmental context (for example, developmentally driven curiosity) rather than a moral context (for example, a deliberate act of choice). Information of this kind would include a focus on the limitations of young children's self-regulatory capacity, and the implications of motor and social development for day-to-day management of children (for example, safety issues that arise with the rapid development of climbing ability in young children). Providing parents with information about the enormous learning potential of young children may be an important way to encourage them to engage in care-giving behaviours that promote optimal development.

A focus is warranted, in parenting education programs, on **the way parents think**, particularly for programs aimed at preventing physical abuse of children. The most promising area is that of changing unhelpful attributional processes—that is, the way parents interpret their children's behaviour (for example, as intentional and controllable) and hence respond to it. Attribution is closely related to parents' core beliefs about parenting, and parents generally need to change aspects of these belief systems if they are to change the way they interpret their children's behaviour. Parental beliefs are a particularly important consideration when working with culturally diverse groups and culturally specific parenting practices. Psychosocial variables can also impair parenting by undermining parents' perceptions of their own competency—their own 'self-efficacy'. While more research is needed, it is clear that positive change can be achieved even when variables such as social circumstances or child characteristics (for example, temperament) cannot be changed. Any proposed parenting program should included a demonstrated capacity to alter parents' self-efficacy.

Child characteristics

Parenting responsibilities are greatest in **infancy** when the child is totally dependent on caregivers. This review suggests that the transition to parenting can be seen as an important time to promote realistic expectations about changes that will occur in families. Parenting programs should also incorporate information about children's development, in a way that is culturally sensitive and acknowledges other factors that may impact on the parenting role.

A range of variables appear to moderate the influence of **child gender** on parenting. These include parents' gender, their cultural background, the division of labour and childcare responsibilities in the family, economic opportunities, and religious beliefs and values. However, at present, in the absence of research confirming the extent to which gender-specific parenting practices affect outcomes for boys and girls, it may be more important for parenting strategies to focus on the strengths, interests, skills and personality of individual children rather than their gender.

Research relating to **child temperament** also has implications for potential parenting intervention. For example, there is some research that shows benefit in providing parents with information and strategies that focus on the child's temperament. However, it is important to note that for positive child outcomes many parents need such information provided in the context of intensive face-to-face support rather than the provision of written information alone.

Coping with the extra demands of **a child with special needs** is easier when family income is higher, both parents are present, their relationships are harmonious, and social support is available. Interventions may usefully target families where these protective factors are absent or compromised. Interventions should help parents to deal with stress and anxiety at critical times, such as at diagnosis or during hospitalisation, as well as with the ongoing burden of care. Parents can also be encouraged to recognise the potential for personal growth and sense of achievement that may arise through parenting a child with special needs. Specific and appropriate skills training can increase parents' sense of efficacy in the parenting role. Four categories of intervention for children with chronic illness have demonstrated promise: disease-specific interventions, individualised interventions for high stress times, problem-solving skills training, and educational–behavioural intervention.

There is substantial evidence for the effectiveness of parenting interventions for parents of **children with an intellectual disability**. Interventions have been delivered successfully to individual parents, and to parents in groups, using videotape, written parenting advice, and telephone support. Such interventions have been associated with positive changes to parental functioning and child behaviour.

Where there are associations between parenting and child behaviours, it is not a simple matter of **child behaviour** causing parent behaviour or vice versa. There is no single causal direction; the influence of parent and child behaviour goes both ways. Furthermore, the cyclical processes involved in parent–child interactions are affected by parent characteristics such as gender, age and mental health, child gender, age, and temperament, and contextual and socio-cultural factors. When unhelpful parent–child interaction cycles have developed, the critical issue is deciding at which point to intervene. Clearly in the case of young children, intervention should begin early with parenting strategies that interrupt escalating cycles and promote positive behaviours in both parents and their children.

Based on the material reviewed, the fact that the first-born and later-born children may be treated differently by their parents does not seem significantly to influence their development or their level of attachment. In fact, very little of the variance in child outcomes can be explained by **birth order**. The variation in parenting is possibly better explained by other factors such as experience with parenting, gender of parent, the age difference between siblings, the child's temperament and the family's socioeconomic status (SES) and cultural background. Therefore there does not seem to be any particular advantage in designing future parenting programs with birth order in mind.

Family factors

Research on the effects of **family structure** suggest that it is disruption caused by transition to new structures, rather than the type of family structure itself, that can be problematic. Further research is needed to determine the best ways to assist parents to cope and foster stable supportive environments for their children in these times of transition. For example, step-families have benefited from programs that help them to establish their lives, strengthen their marital relationship and develop a parenting partnership. Programs should address the particular challenges faced by different types of families (single-parent, step, and adoptive families) seeking assistance.

High levels of **marital conflict** have a negative impact on children. It affects parental involvement, discipline, and consistency, and is linked to behavioural difficulties in children. Conflict between parents needs to be acknowledged and addressed in parenting interventions, but research is equivocal about the best way of doing this, and it may require investigation at an individual family level.

A child's **physical environment** in the home needs to provide adequate shelter and conditions to support health, safety and child development. While parenting interventions cannot address the contextual issues of poverty, low socioeconomic status and low educational attainment, information and advice (for example, on safety in the home, or access to resources for play) may enable parents to make the best of the home environment that they are able to provide for their children. Guidelines for affordable, age-appropriate play materials and ideas for play interaction with their children could be helpful for many parents. What is important is the degree of parent involvement to help children access and use these resources, rather than the amount of money spent on them.

Most mothers and nearly all fathers in Australia are in some form of paid **employment**, with most fathers in the workforce working full-time. The demands and difficulties at work and home interact, and programs are needed to assist parents to achieve satisfaction both in work, at home, and in family functioning. Employers support a healthy balance between work and family when they provide flexible work policies that are responsive to parents' needs; however, such policies and practices are not universally available. Appropriate workplace policies and practices not only improve family functioning, but increase worker satisfaction and performance when parenting is working well at home. Hence, as well as extending the availability of flexible work practices to all parents, employers might be encouraged to resource or provide parenting programs for staff with children.

Cultural factors

Culture impinges upon parenting through parents' beliefs, values and actual parenting practices, although it is claimed that parents share the same broad goals for their family regardless of culture: their children's health, imparting of skills for economic survival, and encouragement of attributes valued by the culture. Information, education and support for parents should take into account the cultural background of families; however, assumptions should not be made solely on the basis of cultural difference. What is needed is an understanding of the role that particular cultural beliefs and practices have in individual families.

Parenting interventions for **Indigenous families** need to acknowledge and accommodate the role of extended family and kin. Family obligations may take priority over the interests of individuals, and decision-making about children is typically shared with extended family members. Grandparents, aunts and uncles play an active role in childcare, and grandparents play an important role in transmission of cultural knowledge and customs. Programs also need to cater for the relatively younger age of Indigenous mothers. Parenting support cannot be divorced from the context of health, housing, education, and other areas of disadvantage for Indigenous Australians.

Social and economic factors

Parenting programs should form part of a broader social development strategy to assist parents to improve their **social and economic circumstances**. Financial hardship has a negative influence and assistance to increase parents' financial resources and/or cope within their current resources may be helpful. Family education based on protective factors is particularly relevant when families are exposed to multiple risks, including low socioeconomic status. Improving education for mothers in low socioeconomic circumstances would seem to be important, given that maternal education is a reliable predictor of parenting practices and child outcomes. Recently proposed measures of social and family functioning cover five key resource domains: time, income, human capital, psychological capital, and social capital.

Families living in **poverty** vary widely and a similar range of approaches is needed to support parenting. All the factors that promote positive parenting across income groups—including social support, strong religious beliefs, educational attainment and maternal self-efficacy—are relevant to these families. The effects of poverty may be greatest for younger, so interventions should be as early as possible in the life of the child. Poverty is not easily defined, and families who do not fit within a rigid 'poverty' category may still experience a level of hardship that has a negative impact on parenting. Thus, it may be beneficial, rather than assessing 'poverty', to assess the extent to which families have access to sufficient resources, including parenting information, education and support, to facilitate their children's health and development.

While access to personal and institutional resources appears to be a protective factor for families in adverse circumstances, in practice it appears that the families most in need are least likely to live in **neighbourhoods** with good resources. Therefore, perhaps the challenge for these communities is to provide sufficient resources and create environments that assist families directly and support parents in their parenting roles.

Parents' beliefs and attitudes about parenting and their parenting behaviours are influenced by their **social relationships and networks**, and factors that influence the development of social supports and networks also affect parents' support-seeking activities. Parents need information, education and support available to them in a way that is acceptable, accessible and timely. Practitioners in local services who have regular contact with families may be well placed to assist parents to identify the supports available to them and advise on additional sources of help. Given the widespread use of informal supports, there would be advantage in interventions that equip parents to work successfully with their social networks and supports, particularly for families who experience difficulties in this regard, although the best way to do this is not yet clear.

Part B: Approaches to supporting optimal parenting

Part B presents a review of the methodology and effectiveness of the diverse range of intervention strategies that are utilised in the field of parenting education. The review was based on the body of available knowledge, research, and what is known from clinical practice. No one strategy stands out as being more effective than the others, as many contextual factors are involved and the interventions range from brief and highly specific to prolonged and intensive.

It is possible, however, by identifying the characteristics of effective strategies used for particular target groups and in relevant contexts, to provide some guidance on features to incorporate in future programs. The sections that follow summarise the positive features of each effective parenting education strategy identified in the review, evidence-based outcomes and applications, and recommendations for implementation.

Verbal information

While the available research suggests that clear, standardised verbal suggestions are effective in delivering information, all the studies identified used specific and relatively simple content. To achieve profound behavioural change or for teaching complicated skill sequences, effectiveness research suggests that verbal information alone is insufficient. Thus for altering dangerous or detrimental parent–child behaviours, verbal suggestions are best accompanied by other education methods.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Easy to use • Most commonly sought method of communication used by parents	• Effective for increasing parental knowledge • Effective, when combined with supportive counselling, for decreasing parental anxiety	• Present clear, specific, standardised verbal advice • Advice is best delivered by a professional • Encourage active learning and participation, when using structured presentations • Combine specific verbal suggestions with other methods e.g. counselling

Telephone information, advice and support

Telephone-based services can be delivered cheaply and are generally viewed favourably by parents, including those targeting parents of children with specific conditions. Advantages for parents include savings of time and money on appointments, and easy access for rural families. Limitations include lack of longitudinal contact with a professional, dependence on a telephone (limiting access for poorer families), limited use by lower-income and less-educated families, and difficulties likely to be experienced by non-English speaking families.

Telephone information alone has not been shown to have an impact on parenting skills and child functioning; however, it can be a useful part of a multi-media parent training package, combined with other strategies such as written material. The delivery of standardised instructions appears more effective than ad hoc information.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• High satisfaction among parents using telephone triage by professionals such as doctors and nurses • Reduces time and cost of	• Effective for behaviour management (e.g. school bullying) for parents of primary-aged children • Effective for parents of	• Standardised instructions are more effective than ad hoc information

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
hospital appointments • Reduces travel time and cost for rural families • Increases access to quality care for families (often on 24 hour basis) • Cheap to deliver	younger children (0–5 years) • Limited uptake by low-income families	• Telephone services are best used to complement and support other strategies, e.g. written self-help material

Email

Very little research is available on the use of email communication for delivering parenting information. While it appears that it may have advantages for administrative staff in reducing telephone contact time with families, there are medico-legal and privacy issues to be considered.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Reduces telephone contact time for administrative staff during busy periods, e.g. doctors' clinics • Provides electronic record of information sought by and provided to parent	• Not yet demonstrated	• Clarification of medico-legal aspects relating to the Privacy Act needed before further implementation

Written information

Informational handouts can be effective educational tools, particularly when they are accompanied by a personalised approach and advice. A personalised approach generally substantially increases people's recall of the material presented, and its effectiveness in achieving its desired outcomes. In particular, it helps to engage parents' interest and motivation, an essential step if handouts are to be effective teaching tools.

Written material needs to be readable and readily understood. A functionally illiterate person is defined as reading below the 8th grade level (average 13-year-old), the level of most newspapers and digest-type magazines. Informational literature should be written at or below this level, but most is above this level. The text should be simple, direct and focused.

An understanding of cultural differences, particularly as they relate to parenting and early childhood, is critical to providing effective services in a multicultural society. Information and educational interventions generally tend to be based on mainstream culture. Differences in family expectations, communication and learning styles need to be identified and understood, and assessments, instructions and information adapted in culturally appropriate ways. Further research is needed to ascertain the most effective ways to achieve culturally sensitive family interventions.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Improves recall and knowledge • Used to reinforce verbal information • Increases understanding, decreases anxiety and encourages compliance and self-management ***Age-paced newsletters:*** • Common parental concerns addressed in relation to the child's age, with emphasis on knowledge of development, parenting, health care, and emotional wellbeing • Increases knowledge about development and parent–child relationships • Increases parental self-confidence	• Effective for complex topics or teaching skills involving multiple steps, e.g. in behaviour management programs	• A personalised approach in disseminating information improves effectiveness, rather than giving the written information by itself; e.g. discuss handouts during an appointment, rather than being given without further instruction • Important material should be presented first verbally and reinforced by written material • Strategies such as a self-monitoring calendar and telephone reminders increase effectiveness • Also effective if informational handouts are sent by mail in conjunction with a media campaign to raise parents' interest in the intervention ***Readability / literacy levels:*** • Resources need to be relevant and easily readable, written at 8th grade level (average 13-year-old). Some research recommends lower (5th grade, average 10-year-old). Standard readability formulas are in most word-processing programs • Replace medical and technical jargon with everyday language where possible. Use short sentences, avoid prepositional phrases and passive tense • Write for the desired health behaviour rather than for high-level knowledge • Determine key points to achieve behavioural objectives. Limit the number of concepts • Personalise the information by using 'you' ***For CALD families*** • Clarify differences in family expectations, communication and learning styles • Adapt assessments, instructions and information in culturally appropriate ways

World Wide Web resource material

Given the wealth of information available via the World Wide Web and the relative easy accessibility to families it can be an effective resource, provided families have the skills and

resources to identify reputable websites and accurate information. The main concern is for those families who are functionally illiterate or are marginal readers and are unable to differentiate or understand the content of the information accessed.

There is an urgent need for the government to develop or fund an effective consumer guideline filter to ensure that what parents access is quality information that is readable and trustworthy.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Provides access to large amounts of information on many topics relating to parenting	• Not yet demonstrated	• Improve accessibility of parent education materials, e.g. rapid and easy downloading of audio and visual clips • Develop/disseminate guidelines to assist parents to distinguish credible, current and accurate advice from an authoritative source • Develop an effective consumer guideline filter to ensure that what parents access is quality information that is readable and trustworthy

Parent-held records

While parents express high levels of satisfaction with parent-held health records, research is limited to studies of satisfaction and deployment rates. It is not yet clear whether the record's content relevant to developmental promotion is effective in guiding parenting skills and preventing or intervening with problematic child behaviours and development.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Popular with parents—high user satisfaction rates • Provides anticipatory information on a range of developmental and behavioural topics	• Not yet demonstrated beyond satisfaction studies	• Research is needed on the efficacy of parent-held records in preventing or intervening with developmental and behavioural difficulties

Videotape

Instructional videotapes have been effective in producing short-term increases in patient knowledge when shown on specific topics in situations such as clinic waiting rooms. However, whether this increase is maintained over time is not known, as studies have focused on immediacy of information recall.

Deep learning entails a parent being able to derive personal meaning from knowledge gained, and to be intrinsically motivated to alter their way of interacting with their child and the world. A combination of video series and verbal discussion groups appears to be most effective in achieving such learning. For effective use with people of different cultural sensitivities it is important to seek advice on settings and cultural practices from those to whom it is intended and to use real-life situations and people.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can convey information in a consistent, interesting way particularly for complex topics • Can form an effective part of a multi-media approach, with written information and/or verbal discussion groups • Can circumvent reading/literacy problems • Readily dubbed in various languages	• Highly effective in improving parents' knowledge of various child health issues • Effective for improving relatively mild parent–child problems • Can be effective in waiting rooms (with other distractions eliminated) for improving short-term parent knowledge on specific child health issues • Longer or more intensive videos (e.g. an hour or more, or a series over several weeks) are effective in producing behavioural changes in problem parent–child interactions • Effective for deep learning for parents who are strongly motivated to alter their way of interacting with their child and others, and can derive personal meaning from the knowledge gained	• Best used in combination with other strategies, e.g. videos plus short-term group education for self-education; or as part of multi-media parent training program • Effective for teaching parenting skills if videos are used to model vignettes of desirable parent–child interactions, and are accompanied by facilitator-led discussions ***Culturally sensitive videotapes*** • Seek advice on settings and cultural practices from those for whom the video is intended, and use real-life situations and people • Use culturally sensitive role models to demonstrate optimal behaviour. Imitation of modelled behaviour produces immediate learning if the model is seen as significant to the learner and the behaviour perceived as desirable with positive personal significance

Mass media

The use of mass media remains a controversial area due to a number of factors. These include justifying the costs of large campaigns given the difficulty in measuring effectiveness of the mass media impact on the population, in terms of increased knowledge and behavioural changes. Most campaigns appear to be effective in achieving a significant increase in knowledge regarding health education issues, but the retention of this knowledge following cessation of the intervention is variable or often not known in the long term. Behavioural changes are much more difficult to achieve and measure, although are more likely to be achieved through sustained mass media campaigns involving several strategies. These could include television programs and additional support systems such as telephone help lines, resource centres and support groups.

Cost benefits of programs are also difficult to determine. Many studies do not even attempt to include this aspect in their analyses, although several of them reported negative costs associated with dramatic increases in utilisation of existing health services attributed to unexpected outcomes from the campaign or from unplanned interventions.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can raise knowledge and awareness about important health issues and research findings • Can quickly distribute messages to diverse audiences • Can set agendas for individual and societal discourse • Can influence behaviour • Can reach large numbers of people quickly • Can be entertaining as well as informative e.g. television programs	• Effective for increasing parental knowledge of child health issues • Highly effective if used for screening campaigns • Can result in significant changes in health service utilisation and associated costs • Effective in producing short-term knowledge and behaviour changes • Effective for parenting and child-related behaviour problems under optimal programming conditions • Effective if use television programs based on real-life situations and role models that public are able to strongly identify with	• Repetition of campaign message important in aiding knowledge recall • Television programs an effective medium in achieving change in short-term behaviour especially when combined with another strategy e.g. telephone help line • Use real-life case studies and culturally sensitive role models in television programs • Combine television with additional strategies such as telephone helplines, support groups and parent resource centres • Need for study design to incorporate appropriate measures of behavioural outcomes as well as knowledge • Further research needed on evaluation of optimal dose, intensity and length of campaign and population characteristics • Sustained efforts over longer periods are more likely to produce desired behavioural impact in preference to shorter more intensive campaigns • Ascertain the level of awareness in target group to proposed campaign message prior to intervention in order to avoid a 'ceiling effect'

CD-ROMs

The few studies to date that have contrasted technology-based education with traditional methods have tended to focus on students in higher education courses rather than parent education and have shown it to have similar outcomes to traditional methods (Jeffries, Woolf & Linde 2003). Of those studies that have involved parents, very few were long-term or contrasted various methods of instruction. Additional research is needed before conclusions can be drawn on the efficacy of CD-ROMs.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can be individualised, since parents can seek information as needed • Allows flexibility of learning, providing instruction at any time or place where a computer is available • High levels of parental satisfaction on common child	• Effective in improving parents' knowledge and perceptions but not in changing parenting behaviour	• More research needed into effectiveness with regard to parent education

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
health issues such as management of nocturnal enuresis • As effective as traditional teaching		

Role playing and modelling

Role playing and modelling are effective methods for imparting to parents not only knowledge about child-rearing, but also useful skills. By modelling desirable behaviours, people can form an idea of how new behaviours are performed and code this information as a guide for future action. When visual imagery is accompanied by verbal instructions and/or opportunities for discussion such as role-play, it helps parents to learn and construct their own knowledge base, and this is consolidated through trial and error, mutual feedback, and identifying opportunities for practice in their daily routines. This practice appears to be particularly important in the area of promoting effective mother–child interaction, but has also seen to be a useful component of parent training behaviour management programs.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Increases parental imitation of appropriate behaviours • More powerful than verbal or written information in changing parental behaviours • Shows parents how to incorporate good practices into daily routines	• Modelling has been shown to improve parent–child communication and interpersonal skills • Effective for imparting child-rearing knowledge and skills	• Effectiveness of modelling governed by the degree the parent accurately perceives significant features of the modelled behaviour, and the degree of engaging attributes possessed by the model • Program effectiveness can be increased by adding a role-playing component, as in the Systematic Training for Effective Parenting (STEP) • Actively involve parents and provide rapid feedback (verbal/non-verbal) to affirm the parent's competency and prevent misinformation being embedded • Effective if activities are modelled by an instructor and accompanied by verbal instructions and/or opportunities for discussion such as role-play. This assists parents to construct their own knowledge base • Identify naturally occurring opportunities for practice in parents' daily routines, to gain competence and confidence

Group parent and child visits and social networking

Group parent and child visits have tremendous potential as a mechanism for assisting parents in child-rearing, triaging families with special prevention and intervention needs to more intense services, and offering culturally sensitive and relevant care to minority groups. One of the ways in which group visits, and indeed many other methods of parent education, prevention and intervention, appear to work is by engendering networks among families who,

in turn, provide each other with ongoing support and guidance. Implementation logistics are critical and demand careful planning and specialised assistance for professionals to ensure that group visits and meetings can be effective.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Allows group discussion of common parenting issues • Provides opportunities for parents to develop a peer group and to share ideas and information • Encourages parents to consider a variety of interpretations for a problem • An effective use of sometimes scarce professional resources • Valuable for distinct groups, e.g. new mothers follow-up • Improves coordination of care that is often more culturally sensitive as it is more community-oriented	• Effective in improving parental confidence and competence • Effective in building supportive social networks • Effective in reducing dependence upon professional services	• Groups require careful planning to be effective • Encourage social support networking amongst parent peer groups and informal discussions • Programs might target these social networks rather than individual parents • Reduce barriers to knowledge exchange amongst parents in the group by focusing on positive parent–child interactions that have occurred previously, rather than a problem-based approach

Home visiting

Routine home visiting by health professionals is an effective way of delivering non-medical aspects of care. Home visiting for more substantive family and child problems can also be effective and, importantly, can minimise attrition with families most in need of intervention. Minimising attrition is critical, given the link between the intensity of services and parent engagement, and improved outcomes for the child. Professional training of home visitors, and setting defined goals, are associated with improved outcomes for children across a range of important developmental and social areas, including enhanced language and behavioural development, and decreased child maltreatment and mortality.

Appendix C (p. 121) contains reviews of the major home visiting programs that have defined processes and have been subjected to empirical evaluation with positive results.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Overcomes some of the barriers to families accessing primary care services • Provides opportunities for therapeutic relationships to develop between home visitors and parents • Allows home visitor to see and observe the family circumstances directly	• Effective in reducing negative parental effect and improving emotional responsiveness and nurturing behaviours in mothers • Effective in promoting enhanced language and behavioural development in children • Effective in increasing parental knowledge of developmentally appropriate skills and self-efficacy • Effective in reducing child maltreatment and mental health problems in children • Effective for at-risk families since the program comes to the family rather than vice versa, resulting in higher participation rates • Effective for CALD families, using community advocates together with nurses, to offer a culturally sensitive	• Create an unthreatening environment • Quality of the 'helping relationship' is important in determining the program's success or failure. Strength of relationship is related to intensity and duration of visits • Develop a personal relationship between home visitor and parent, to facilitate experiential learning • For new mothers: Home visitors with specialist child knowledge appear to be most effective • For high-risk pregnant women: Use nurses who begin during pregnancy and

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
	home program (see next column). • Effective for high-risk pregnant women, promoting positive health-related behaviours and qualities of infant care giving • Parent-to-parent home-visiting is highly effective—but mostly for very targeted goals.	follow the family at least through the second year of the child's life • For CALD families: Train teams of community residents to act as advocates to offer a culturally sensitive home program and understanding of the local social context; to work together with nurses providing health knowledge. Ensure the advocates conduct the majority of the program • Monitor intensity/frequency of home visits to achieve positive outcomes but minimise attrition rates • Focus on families at greater need for the service

Parent training

Parent training and parenting classes embrace both prevention as well as intervention with developmental, behavioural, and family problems, and can be highly effective. While success rates vary across programs and program evaluation is sometimes less than rigorous, parent training appears more likely than the previously discussed training methods to effect long-term changes in parental skills and child and family outcome, with parent training classes for the most part showing a high degree of effectiveness in both intervention and prevention. There is a need for effective programs focusing on foster parenting, extended families, and particularly step- and de facto fathers, who are more likely than other parents to lack critical parenting skills. Tailoring programs to specific needs and issues is most effective, and is essential. Such programs need to be timely, able to address immediate and specific needs, and make use of peer role models whenever possible.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can produce lasting improvements in parents' management skills and in children's functioning • Allows direct focus on parenting skills and provision of developmentally appropriate activities for children • Ensures at least short-term cooperation with recommended strategies	• Parent Management Training (PMT), which uses the parent as the change agent for their child's behaviour, has been shown to be effective in several studies using videotape modelling vignettes and discussion groups • Existing parenting curricula have been successfully adapted to the needs of families with children who have mental health issues, e.g. Parent–child Interaction Therapy • The Triple P program developed in Australia has been adapted for children with early onset conduct problems and/or ADHD, and for families	• CALD families: Program effectiveness depends upon addressing the particular needs of parents with limited English and literacy • Assess effectiveness by staff observation, client self-report, readmission rates and community outcomes • Focus of training with fathers should be on improving disciplinary style by reducing over-reactivity, laxity, and ineffectiveness towards their child's behaviour • Extended families need programs designed to help facilitate children's development and behaviour

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
	experiencing marital conflict. The program includes versions for families with varying levels of challenges in child-rearing, and child age-groups including teenagers • Expectant mothers: Behavioural training plus information on promoting self-sufficient sleep patterns in infants led to better infant sleeping patterns and less parental stress and anxiety • Parents as Teachers curricula (PAT) have been reworked to be more sensitive to the limited resources of low-income families	• Foster-parents need for parenting programs that focus on therapeutic care techniques and communication and conflict resolution skills • Tailoring programs to specific and immediate needs and issues is effective and essential. These programs should make use of peer role models whenever possible • More research needed on how to provide effective parent training to foster parents, extended families, and step- and de facto fathers

Future directions

This two part review has highlighted that parenting information, education and support needs to respond in a timely and flexible fashion and address the immediate problems facing the family. Approaches must address the child's developmental needs, remove barriers to parenting effectively, and match parents' particular learning needs. The diversity in family life, relating to both personal and contextual influences needs to be acknowledged, and parents need to be assisted to achieve goals for themselves and their families that are consistent with their values. Importantly, interventions need to encourage parents to build on their areas of strength.

A number of highly effective and well-validated models exist, offering a continuum of assistance to address the needs of families across the child-rearing years, from infancy and toddlerhood, through early and middle childhood, and into adolescence. Professional training is also needed across a continuum, to ensure that expertise is available to engage parents, assist them effectively, and allocate families to the most appropriate level of service.

Almost every professional–parent encounter within the typical settings in which parents and professionals engage each other—including maternal and child health, childcare, preschool and primary school and associated social services—should include efforts to engage parents in a dialogue about their role as parents and their parenting needs and to identify those parents who require further assistance.

For parents to be motivated to enhance their parenting skills, parenting programs must be able to demonstrate their benefits for both parents and child. This report has contributed to that process. There are many promising approaches to support parents in the difficult and demanding job of parenting, and this review provides the basis for decision-making by government on the most promising and effective approaches to support parents and work towards the wellbeing of future generations.

INTRODUCTION

In May 2003 the Prime Minister announced a commitment of $10 million from the Stronger Families and Community Strategy to early childhood prevention and intervention initiatives, including $8.8 million for initiatives under the National Agenda for Early Childhood (NAEC). Parenting is a major focus, with $3.2 million of these monies allocated to projects to find out what parenting information and programs are currently available, what parents want, at what transition points and how best to get it to them.

The Parenting Information Project is one of these initiatives, and this literature review comprises stage one of the Parenting Information Project. The project involves research to identify best practice parenting programs and information for Australian families, the most appropriate service delivery mechanisms and the possible development of products and/or programs. The Department of Family and Community Services (FaCS) engaged the Centre for Community Child Health (CCCH) to undertake stages one and two.

The literature review looks at best practice parenting programs and information, focusing on the messages parents need to know and how the messages are best delivered; and it identifies current parenting programs and information in Australia, and gaps in information provision.

The second stage of the Parenting Information Project involves substantial consultation with key professionals, policy-makers and parents in each Australian state and territory to identify what information and programs would better support parents and when and how this information is best provided. This consultation process is largely complete and will culminate with a national workshop in late April 2004 to build on key findings and identify directions for the possible development and testing of parenting products and/or programs for possible implementation during a third project stage. The findings of stage two will be documented in a separate report.

This research will support the development and testing of parenting products and/or programs for possible implementation during a third project stage.

The literature review is presented in two sections.

Part A, 'Parenting and the factors that influence it', was undertaken by the Victorian Parenting Centre. It summarises the current state of knowledge about the factors that impinge upon parenting, including characteristics of the parent and child, and the social, familial and environmental context. The purpose is to present key findings that can inform the development of appropriate information, education and supports to assist parents of infants and young children to fulfil this important role. It provides a number of implications for practice throughout.

Part B, 'Approaches to supporting optimal parenting', was prepared by Jennifer Parrott of the Centre for Community Child Health, Royal Children's Hospital, Melbourne and Dr Frances Page Glascoe of Vanberbilt University, Nashville, Tennessee. It looks at the most effective ways to help families parent their children and acquire the parenting skills they need; the settings where such assistance can best be delivered, and the techniques that work best; and for each type of intervention, it provides summary tables of positive features, evidence-based outcomes and best practice applications, and recommendations for effective implementation. More detailed information on established parenting programs and resources is presented in the appendices.

PART A: PARENTING AND THE FACTORS THAT INFLUENCE IT

INTRODUCTION TO PART A

Parents play an important role in the health, development, safety and wellbeing of children. This is particularly so in the early years of a child's life. However, parenting does not occur in a vacuum (Kolar & Soriano 2000), and it is affected by a number of complex and often interrelated factors. Part A of this literature review presents a summary of the current state of knowledge about the factors that impinge upon parenting, including characteristics of the parent and child, and the social, familial and environmental context. The purpose is to present key findings that can inform the development of appropriate information, education and supports to assist parents of infants and young children to fulfil this important role.

Search strategy

Databases consulted were: PsychInfo, ERI, Medline, Science Direct, Expanded Academic ASAp, Proquest, Uncover Igenta, and Current Contents. The search was limited to peer reviewed sources and recent reviews, meta-analyses, and well-designed studies with large sample sizes, with particular attention to the Australian context where this information was available. Material was also obtained from recent books authored by respected authorities, and government and other publicly available reports on reputable websites.

Where the writer believed that the evidence for the influence of a particular factor was lacking, this is identified in the relevant section.

What do children need?

There are a number of ways to describe what children need to function well.

The US Task Force on the Family (American Academy of Pediatrics 2003) listed food, clothing, shelter, a safe and clean environment, adequate supervision and access to health care and education (p. 1546), all of which families are well placed to provide. The Task Force also stated that children need unconditional love and adequate time from their parents, and they do well when the type of parenting they receive matches their temperament, personality and needs.

Children's needs can be considered in relation to their stage of development. Infants from birth to three years require that their basic needs for food, shelter, stimulation and interaction be met. They need to have established patterns of sleep and feeding, and the opportunity to take independent action (Barnard & Solchany 2002). Parental responsibilities are therefore to provide consistency and predictability as well as food, safety, stimulation and security. Other important parental responsibilities during infancy are responding appropriately to the child's distress, and being emotionally available.

Pre-schoolers need to develop some autonomous actions, increase their decision-making, and spend periods of time away from their primary caregivers (Barnard & Solchany 2002). Examples of parents' tasks for this age group are: to set well-defined and consistent limits, establish routines, demonstrate and encourage expressions of feelings, and provide opportunities for independent actions appropriate to the age of the child.

There is little doubt that parents contribute to the socialisation and development of their children, directly and indirectly. However, despite extensive investigation over many years, there is currently no 'grand unifying theory' of parenting that explains how parents influence children's psychological development. Theories that have the strongest scientific support focus on particular facets of parenting and particular child outcomes (O'Connor 2002). For example, children's wellbeing has been found to be affected by parents' degree of

warmth/support, sensitivity/responsiveness, conflict or hostility/rejection, and the way in which parents monitor their children's behaviour (O'Connor 2002).

What is parenting?

The word 'parent' can refer to the biological relationship of an adult to a child, or, when used as a verb, to the care and protection that the adult provides (Smith 1999). According to Kendziora and O'Leary (1993), parenting is 'anything the parent does, or fails to do, that may affect the child' (p. 177), and includes 'playing, disciplining, teaching, caring for physical needs, and establishing a pleasant emotional environment' (p. 176). These actions may or may not be performed by the child's biological parent.

Lerner, Rothbaum, Boulas and Castellini (2002) assert that parenting is a complex process:

> Parenting involves bidirectional relationships between members of two or more generations, that can extend through the respective lifespans of these groups, may engage all the institutions within a culture …..and is embedded in the history of a people (p. 315–316)

From the child's perspective, the person who is their parent is determined by the social rather than genetic relationship (Golombok 2000). To the young child, their parents are those adults who are most emotionally invested and consistently available to them.

Factors that influence parenting: the structure of the review

No single factor accounts for the variation in the parenting that children receive, across ages, and between and within families. Parenting is affected by multiple factors that are usually interrelated. Parental influence is also bidirectional: parenting has an effect on child behaviour and a child's behaviour can affect the way the caregiver parents him or her.

Holden and Miller (1999) report research that demonstrates empirically the influence of more than 30 variables on parenting, which fall into three categories: parent characteristics, child characteristics, and contextual variables, as described by Belsky (1984). The factors investigated for this review are grouped according to these categories.

After a discussion of what constitutes competent parenting, the review considers salient characteristics of the parent. Broad parent characteristics are discussed, including parenting experience, age, gender and sexuality, as well as grandparenting. Separate sections are then devoted to parenting in personal adversity, and the psychological factors that influence parenting.

The section following this considers child characteristics, including age and developmental stage, gender, temperament, special needs, behaviour and birth order.

Further contextual variables are considered under three headings: family factors, social and economic factors, and cultural factors.

These sections correspond with the model of ecology of parenting presented by Kotchick and Forehand (2002). Implications for practice are considered throughout.

WHAT IS COMPETENT PARENTING?

The primary task of parenting, regardless of class or culture, is to raise children to be healthy, independent, well-adjusted, and contributing adult participants in their social group—in other words, socialisation. Put simply, parenting that results in effective socialisation can be considered competent.

Defining parenting competence in terms of function (its effects), rather than its form (what it looks like), recognises the inherent relativity of what constitutes good parenting. The parenting role and parenting practices are socially constructed and are not universal across societies and cultures (Azar 2002). Parental goals and the behaviours parents value in their children are in large part a function of the cultural, physical and social environment in which they live, and for which they are preparing their children to live as independent adults.

Essentially, it is not possible to describe detailed, universally applicable best practice parenting guidelines. Parenting practices that work well and produce good outcomes for families in one context may not do so in others. What is required is a good match between parenting behaviours, the needs of the child, and the context in which the family lives. There may be many ways to achieve this.

Can anything, then, be said about what kind of parenting is associated with good outcomes for children, given its strong relationship to context? The answer appears to be a qualified yes; but only in fairly general terms, and only after noting that since most of the research addressing this question has been conducted in Western countries, the conclusions cannot be automatically applied to other cultures.

Based on a comprehensive review of the research on parenting competence, Teti and Candelaria (2002) noted areas of agreement in the scientific literature about the successful socialisation of children:

- Parental warmth, sensitivity, and acceptance of children's basic needs are core features of parenting associated with positive outcomes in children irrespective of developmental stage.

- Harsh, coercive parenting is regarded as detrimental to children, although the extent of negative impact depends on the age and temperament of the child.

- Parental involvement appears to be better than no involvement at all, although involvement by itself is not a good indicator of parenting competence.

- Parental control in the context of high parental warmth and sensitivity produces better adjusted children than circumstances in which parental control is not accompanied by warmth.

- The most successful disciplinary strategies enable children to internalise the message behind the discipline attempt. Excessive control can raise a child's arousal to the point where greater attention is paid to the parent's emotion than the message he or she is wishes to convey.

Teti and Candelaria (2002) placed considerable emphasis on the importance of a sound beginning to the parent–infant relationship:

> Indeed, we would argue that the establishment of a mutually reciprocal, positive parent–child relationship as early as infancy is perhaps the first and foremost goal of early socialisation because of its impact on the quality of the child's orientation to the parent and the subsequent ease with which that child can be socialised. (p. 172)

Other reviewers have emphasised the risks of overly harsh and controlling parenting. Kendziora and O'Leary (1993), for example, noted that children exposed to harsh and

explosive discipline have been found to be at greater risk of developing disruptive behavioural problems. Frequent use of physical punishment with toddlers was associated with more child non-compliance and less self control compared with children whose mothers were less physically punitive. On the other hand, when behaviour problems were already evident, children were shown to benefit when their parents were taught positive management techniques, such as attending to appropriate behaviour, not attending to misbehaviour, issuing instructions to children more effectively, and alternatives to physical punishment (for example, time-out and response cost).

However, while there appears to be ample evidence to suggest that child outcomes are linked to parenting constructs such as 'warmth', and 'sensitivity', and to extreme disciplinary methods described as 'harsh' and 'inconsistent', it would be a gross oversimplification to assume that all parenting practices can be characterised as either positive or negative.

Defining a standard of competent parenting at the level of specific parenting responses and action is fraught with difficulties. Some parenting behaviour can be characterised readily as either good or bad; few would disagree, for example, that physically injuring a child is bad parenting practice, or that displaying affection is good parenting behaviour. With respect to child outcomes, behaviour on the extreme ends of the parenting continuum is not difficult to classify. The reality, however, is that an enormous grey area exists on the continuum of parenting behaviour. In this area of normal variation, a diverse array of parenting behaviours are consistent with good developmental outcomes, and are unlikely to 'represent a significant risk to children's development' (Thompson, Raynor, Cornah, Stevenson & Sonuga-Barke 2002, p.149).

Then there is the problem of definition. What exact parenting behaviours constitute warmth for example? Warmth can be demonstrated in many ways. In fact, appropriate expressions of warmth are likely to vary according to the response of the child, the age of the child, cultural practices including the meaning given to the behaviour, family norms and so on. Like warmth, many parenting behaviours associated with effective socialisation of children would differ in form but have a similar function.

Therefore, it is more important to consider the function rather than the form of a specific parenting practice (see Azar, Lauretti & Loding 1998). This means that the appropriateness of any single parenting practice is best defined in terms of its effects on a specific child in a particular context (Teti & Candelaria 2002). Given the contextual influences on parenting practices, and the many and varied challenges that parents can face in raising their children, it may be more productive to take a broader perspective when thinking about how best to support parents, rather than focusing on identification of the 'correct' parenting strategies.

According to Azar (2002), competent parenting is about adaptability. Parents need to be flexible enough to adapt positively to the changing requirements and circumstance of their children. Furthermore, parents can be adaptable when they have a capacity for problem solving and accurate perception of their child's capabilities. An implication for any consideration of how to support parents, therefore, is to consider ways to facilitate parental adaptability.

At least three themes have emerged from this review of the literature that relate to the idea of adaptability: the reviewers have termed these 'perceptiveness', 'responsiveness' and 'flexibility'.

Perceptiveness

Perceptiveness refers to the acuteness of a parent's awareness of their child, what is happening around the child, and the effects of the parent's behaviour on the situation.

This aspect of successful parenting reflects the reciprocal nature of positive parent–child interaction, and the active role that children take in shaping their environment and influencing the way adult carers respond to them. Parents' sensitivity and awareness of the child and situation heavily influences the degree of child-orientation achieved by the parent. For example, being tuned into the cues provided by a baby during play or other forms of interaction allows parents to adjust their behaviour and responses to optimise the positives in the interaction. Careful observation, and knowing what a child can or cannot do, allows parents to create experiences that fall within the 'zone of proximal development' (see p. 36); that is, to provide opportunities for learning and development through activities and interaction that are challenging but still comfortable for the child (see Rogoff, Malkin & Gilbride 1984). When they are sensitive to the changes in a child's level of skill on a task, parents are able to provide the right level of support through task structuring or prompting (referred to as scaffolding) to ensure that children continue to learn and gradually take more responsibility for the task (Rogoff et al. 1984).

Perceptiveness also plays an important role in parent learning and self-regulation. Being observant of their own emotional and behavioural reactions, and being aware of the external triggers and consequences of their own behaviour, allows parents to identify better when progress towards goals is being made and when their behaviour is not working. Such awareness can trigger problem solving and change in behaviour when needed.

Many factors can impede parental perceptiveness. Chief among these are psychological factors that cloud awareness, that prevent a parent focusing on the moment (such as sadness, anger, anxiety or worry). A parent preoccupied with managing negative emotions cannot sustain the attention or invest the energy required to pick up the cues that would otherwise guide appropriate and sensitive responses to their chid.

Problems in perceptiveness most often arise in the context of significant personal adversity (for example, emotional problems and drug abuse). Interventions designed to enhance parental perceptiveness need to identify and counter the specific barriers to perceptiveness that the parent is experiencing.

Responsiveness

Responsiveness is the term used here to describe the extent to which parents connect with their children. It refers to the ability of a parent to be sensitive to the child, to express warmth, respond with affection, and adjust his or her behaviour based on the child's reactions and needs. Responsive parenting is accepting of the child as a child (that is, expects the child to behave as a child), and is guided by child-focused goals (for example, what does my child need now?) rather than parent-focused goals (for example, what can I do to stop this noise!). In regard to discipline, responsive parenting aims to teach children new skills rather than simply eliminate negative behaviour. The extent to which parents are responsive is highly related to their level of perceptiveness.

The ability of a parent to be responsive can be compromised by many factors, including personal and social stressors. It is clearly more difficult to attend to the needs of your child when you are also battling social or psychological adversity, and focused on meeting your own needs. Strategies that alleviate personal and social stressors (see p. 26) are likely to create conditions more conducive to parental responsiveness.

Major barriers to responsiveness can also be found in the ways parents think. Unhelpful beliefs, inaccurate expectations, and negative attribution (see p.27) can lead to viewing the child in a negative light, and compromise the development of a positive relationship between parent and child.

Interventions to build responsiveness may have skill development components (for example, how to talk or play with your child). However, where profound difficulties are encountered in

parental responsiveness, there will usually be a need to identify and counter cognitive factors that are acting as barriers to more meaningful and positive connection with the child (see Azar 2002; and Peterson, Gable, Doyle & Ewigman 1997, for more on this).

Flexibility

The final theme related to adaptability that emerged from this review is flexibility. The term is used here to refer to the ability of a parent to respond in different ways according to the needs or demands of specific situations. Problems arise when parents lack alternative ways of responding, or get stuck in an ineffective pattern of responding and are unable to alter it.

Lack of flexibility can occur when there is a general deficit in what might be considered personal foundation skills (such as basic relationship skills, self-regulation skills, problem solving skills). It can also occur when specific parenting skills are lacking. For example, a parent has little choice but to continue the use of smacking as their major disciplinary technique while they lack viable alternatives.

There would appear to be at least three major ways that parental flexibility can be enhanced.

(1) Develop problem-solving skills: parents face novel, and challenging child-rearing problems daily. The ability to analyse problems, identify potential solutions, implement and monitor solutions, and evaluate outcomes, is crucial. It is better to help parents develop their problem-solving ability than to teach them highly tailored solutions to specific problems, as the former strategy is a more reliable pathway to greater independence and self-sufficiency in the parent.

(2) Increase the repertoire of parenting responses: this means providing parents with a wider range of parenting tools that they can use generally, or choose from when they encounter challenging situations. Parenting skill information and programs play an important role in achieving this.

Also, given that the behavioural repertoire of the individual can become significantly restricted in the presence of extreme emotions—stress, anger, fear—parenting skills development programs frequently need to be augmented by strategies that will help parents manage their responses in situations they find emotionally aversive and upsetting. In addition to help with coping, parents can be supported in using new behaviours and skills by providing additional sources of social support and assistance.

It is a basic requirement that assistance for parents with these matters should be informed by an understanding of the contextual factors that impinge upon child rearing such as social, cultural, personal and environmental circumstances.

(3) Enhance parental self-efficacy: self-efficacy is emerging strongly as an important mediating variable in parenting behaviour (see p. 42). A sense of efficacy in the parenting role enables parents to apply their parenting strategies routinely and confidently. Initiatives designed to support parent adaptability need to consider how they will effectively enhance parental self-belief and confidence. This involves attending to matters such as how parents are engaged in the helping process, how goals are defined, how ideas and skills are introduced and taught, and how practitioners encourage parents to see change as a result of their personal efforts rather than the practitioner's.

PARENT CHARACTERISTICS

Parenting experience

The idea that parents learn on the job and gain knowledge and a sense of competence from their experience in the role of parenting is intuitively appealing. And, indeed, research supports the notion that experience is an important source of child-rearing knowledge and confidence.

In their review, Corter and Fleming (2002) point to research that suggests that mothers with previous experience raising children:

- experience lower rates of post-partum depression

- demonstrate greater and faster responsiveness to their infant

- have stronger attachments to children (measured by maternal report)

- have higher self-confidence and more frequent displays of affection to the child

- find infants' cries to be less aversive and are less aroused at infant hunger cries

- are more nurturing and caring in their responses to infant crying

- are more skilled in discriminating between hunger and pain cries.

Similarly, research suggests that fathers with greater parenting experience show less negative attitudes towards care giving, and that fathers who live with their child display more sensitive interactions than non-cohabiting fathers (Corter & Fleming 2002). On the other hand, research has also shown (for example, Fox, Bruce & Coombs-Orme 2000) that new parents experienced similar concerns to parents who already had children.

Parents with prior experience have had opportunities to learn optimal ways of interacting with their child that are likely to lead to lower levels of anxiety and fewer feelings of inadequacy. Mothers with prior experience have been found to have less anxiety about the parenting role because they have experienced it before and feel more competent than first-time mothers (Corter & Fleming 2002). They have a greater repertoire of skills and responses to use in difficult times. The underlying mechanism may be that prior experience can buffer the effect of adverse situations. With experience, parents may develop a range of coping strategies to help them deal effectively with difficulties.

Implications
While not extensive, research of this nature adds weight to the argument that a proportionally higher level of resources should be invested in intervention and support for first-time parents. This is necessary not only to ameliorate the greater risks associated with caring for the first baby, but also because it makes sense to intervene before negative patterns of care giving become entrenched in family relationships.

Parent age

Surprisingly, there is little research on the effects of parents' age on their parenting style and behaviour. This section first provides a brief overview of the research related to later parenting, and then describes the research on adolescent parenting.

Later parenting
Generally, researchers acknowledge that there are both advantages and disadvantages to children of later parenthood (for example, Garrison, Blalock, Zarski & Merritt 1997; Heuvel

1988; Rappaport 2000). Research by Rappaport (2000) suggested that children of older parents (30 plus) are happier and closer to their parents, and have fewer behaviour problems, lower tension and higher academic achievement; and their parents rate themselves more positively. However, children of older parents were also found to have fewer interactions and be less popular with peers.

In a review of the literature, Garrison and colleagues (1997) concluded that there was no conclusive evidence that parental age predicts adaptation to parenting. While Rappaport found that older parents were more lenient in assigning responsibility to their child, less demanding, and less strict in their discipline, these effects were mediated by the ordinal position of the child, and age spacing between siblings. Finley (1998) found no relationship between age of mother and perceived affective quality of mothering by the child. However, there was a significant finding for fathers: children of men who became fathers between the ages of 30 and 39 rated the affective quality of fathering significantly higher than children of younger and older fathers. Heuvel (1988) found no significant direct effects of parental age on children's perceptions of affection from their parents. Any significant findings were mediated by two factors: number of siblings and parental marital happiness. Thus, if there were problems with the marital relationships (divorce, separation, and friction) the relationship between parent and child suffered.

It appears that having older parents confers some advantages and some disadvantages to children. However, at this stage research appears to implicate other family structure factors as being more important than parent age per se, and has not been able to isolate how an adult's approach to parenting is shaped by older age.

Adolescent parenting

Despite the decline in the trend for teenage pregnancy, and a lower prevalence in Australia than other Western countries, significant numbers of Australian adolescents are becoming pregnant and choosing to keep and raise their child. In 1998, 9.5 out of every 1000 15–17 year old Australian girls gave birth. There is variability across the nation in the prevalence of teenage pregnancy: Northern Territory, for instance, returned figures as high as 54.5 per 1000, with 80 per cent of this attributed to Indigenous confinements (Australian Bureau of Statistics 2000a). By way of comparison, approximately 55 out of 1000 women aged 15–19 give birth in the United States (Coren, Barlow & Stewart-Brown 2003). Adolescent parents from advantaged backgrounds are more likely to terminate or select adoption (Coren et al. 2003; Pinkard-Prater 1995).

Moore and Brooks-Gunn (2002) identified a number of methodological problems that lower the level of confidence we can have in drawing conclusions about the effects of adolescent parenting on children. These include a rarity of longitudinal studies, measurement issues, and small sample sizes. However, following their review of the literature, they concluded the following:

- No differences have been found in cognitive or social development of children in the first two years of life. There is, however, some research that suggests that children of adolescents are more likely to experience health complications, for example, low birth weight, prematurity, illness (see Cooley & Unger 1991; Pinkard-Prater 1995).

- Small but consistent differences in cognitive development and psychosocial functioning emerged during the preschool to early school years.

- Children of adolescent parents experienced lower school achievement, more misbehaviour, conduct disorder and school problems (also see Coren et al. 2003; Pinkard-Prater 1995; Wakschlag & Hans 2000).

- Children of adolescent parents were more likely to become teenage parents themselves.

- As adults, the offspring of adolescent parents perform lower than children of older parents on measures of education, mental health, financial independence, deviant behaviour, and substance use.

- Negative outcomes for children of adolescents are not inevitable. Two longitudinal studies of African–American adolescent parents (Brooks-Gunn & Furstenberg 1986; Horwitz, Klerman, Kuo & Jekl 1991, as cited in Moore & Brooks-Gunn 2002) found that the following factors predicted positive long-term outcomes for the children of adolescents:

    o being at grade level at time of pregnancy

    o having a high level of education

    o attending schools that have a program for pregnant girls

    o holding aspirations for further education during pregnancy

    o finishing high school

    o having fewer children

    o growing up without welfare assistance.

Research has also examined parenting knowledge, style and behaviour of adolescent mothers. A number of useful reviews are available (Fonagy 1998; Moore & Brooks-Gunn 2002; Whiteside-Mansell, Pope & Bradley 1996). In summary, adolescent parents have been found to:

- be less knowledgeable about child development (also see Brooks-Gunn & Furstenberg 1986; Coren et al. 2003; Osofsky, Hann & Peebles 1993; Pinkard-Prater 1995; Vukelick & Kliman 1985)

- be more likely to rely on less reliable sources of parenting information, such as family and friends, rather than books and training programs (also see Vukelick & Kliman 1985)

- have a greater number of passive face-to-face interactions with their children

- stimulate their infants less through interaction and provide less stimulating environments

- smile and talk to their infants less (also see Osofsky et al. 1993)

- be less responsive and have fewer positive physical and eye contacts (also see Pinkard-Prater 1995)

- perceive their infants to be more difficult, and hold unrealistic expectations for their development (see also Field, Widmayer, Stringer & Ignatoff 1980; Osofsky et al. 1992; Corter & Fleming 2002; Haskett, Johnson & Miller 1994; Vukelick & Kliman 1985). Adolescent parents have been found both to underestimate and overestimate the age at which children will reach particular developmental milestones (see Tamis-Lemonda, Shannon & Spellmann 2002)

- be more disengaged, restrictive, physically intrusive and punitive

- engage in fewer elaborative and descriptive responses to their infants

- be less committed and satisfied with the parenting role

- be more likely to maltreat and neglect children (also see Bucholz & Korn-Bursztyn 1993, cited in Coren et al. 2003; Wakschlag & Hans 2000).

Adolescent parents have also been found to lack knowledge of child development. The majority of adolescent pregnancies are unplanned (Moore & Brooks-Gunn 2002). Therefore, in addition to minimal prior experience with children, the typical adolescent parent possesses limited knowledge of child development and behaviour, and does minimal research or

preparation for the child. Thus, it may be that the parenting deficits seen among adolescents can be attributed in part to lack of experience.

Less than optimal parenting and higher levels of developmental and psychosocial problems in the children of adolescents cannot, however, be put down to the effect of parental age alone. The social conditions in which many adolescent parents live are in themselves significant risk factors. Teenage mothers are more likely to be less well educated, live in poverty, have less earning potential, receive welfare, have larger families, live in more crowded homes, experience physical health problems during pregnancy and childbirth, and have limited social support (Coren et al. 2003; Moore & Brooks-Gunn 2002; Pinkard-Prater 1995; Whiteside-Mansell et al. 1996).

Psychological and emotional problems associated with teen parenting—low self-esteem, stress depression, and substance abuse—are also likely to exert direct affects on children's development (Moore & Brooks-Gunn 2002; Pinkard-Prater 1995). The higher rates of depression in adolescent mothers may be associated with, among other things, the cumulative stresses associated with becoming a mother, being an adolescent, adjusting to change, and living in financial difficulty (Coren et al. 2003; Moore & Brooks-Gunn 2002; Pinkard-Prater 1995). It is difficult to separate the effects of these contextual and psychological variables from the impact on children of their parents' age.

Implications

While the direct effects of parent age and other contextual variables are yet to be disentangled, the evidence clearly supports the contention that families headed by adolescent parents are a high-risk group, with complex needs, that warrants systematic early intervention and support efforts. Many of the observations made in this review about the focus and content of general parenting programs are true for adolescent parents. However, interventions for this group also have to take into account the parent's own developmental and social needs, and not lose sight of the fact that these young parents still have their own significant needs for parenting of themselves.

Therefore attention must also be given to the scope of intervention and the manner in which it is delivered. In a systematic review of parenting programs for teenage mothers, Coren et al. (2003) identified the following characteristics of programs that led to improved outcomes for children.

- Group-based intervention appears to be more supportive than individual intervention.

- Brief interventions (one to two sessions or weekly sessions for 12–16 weeks) appear to lead to outcomes as good as more intensive, longer interventions.

- Cost-effectiveness is better for group programs.

Interventions also need to address the contextual variables that contribute to poor outcomes for adolescent parents and their children. Providing social support to adolescent mothers is associated with less distress in the mother, increased responsiveness and attention to the child, and increased interest in child development and educational activities (Cooley & Unger 1991; Pinkard-Prater 1995). An important goal of intervention should be to help adolescent mothers stay at school. Young mothers who live at home with parents are more likely to finish school than those who live with a partner, and new mothers who stay at school are more likely to finish school than new mothers who leave school before or just after giving birth (Moore & Brooks-Gunn 2002). Supporting the family unit and ensuring childcare assistance can help young parents remain at school.

The benefits of remaining in the family home while pregnant and following childbirth extend to greater childcare availability, and emotional and economic support. However, it is important to consider any potential negative consequences of co-residence following childbirth: modelling

of harsh or punitive disciplinary styles, increased stress, and inability of the teenager to develop independence. Thus, any parenting programs targeted at co-residing adolescent parents should incorporate other adults living with the child, and should address the concerns they are likely to face regarding childcare, stress, discipline, and the need for autonomy.

Due to the high incidence of dropout among this population, particular attention needs to be paid to strategies for engaging and maintaining the involvement of adolescent parents in programs. Pinkard-Prater (1995) recommends the use of home-based services, when individual programs are being provided, to avoid difficulties with transportation and child minding that may contribute to dropout. Otherwise, adolescent parents are likely to benefit if they can access multiple services from one contact point, or are able to participate in programs offered within the school setting. Without this, a large proportion of adolescent mothers 'will not finish high school; and it is their children who are likely to become teenage parents themselves in another 14 or 15 years' (Pinkard-Prater 1995, p. 318). Parenting programs may also need to make use of innovative strategies to attract and retain adolescent parents. By including support people from within the adolescent's social circle (for example, the grandparents of the child), service providers may create avenues for information about child development to filter through to the adolescent.

Gender

There is much less research on fathers than mothers, and what is known about what influences mothering cannot automatically be applied to an understanding of fathering. While mothers are primarily responsible for childcare (Craig 2002), father involvement has been found to have benefit for children's cognitive and social development (Lamb 2002).

Father involvement has been defined and measured in various ways (Palkovitz 1997), however, a generally accepted definition includes three constructs: accessibility, engagement and responsibility (Lamb, Pleck & Levine 1987). Accessibility refers to time availability, engagement is actual father–child interaction, and responsibility refers to the managerial tasks of parenting that include such activities as planning, organising and scheduling. Regardless of parental employment status, fathers have been found to be less involved in all three aspects than are mothers (Aldous, Mulligan & Bjarnason 1998; Bittman 1998; Craig 2002). However, over the past two decades, fathers have been shown to interact more with their children and spend more time with them than in previous generations (Bittman 1998; Yeung, Sandberg, Davis-Kean & Hofferth 2001; Zick & Bryant 1996). It has been shown that responsibility is the area in which fathers are least involved (Beitel & Parke 1998; Russell et al. 1999).

An analysis of time use data of Australian families (Craig 2002) showed that only 7 per cent of fathers' time with their children is spent alone with them, while 74 per cent of their time with children was spent with their spouse present. The implications of this are important. It is suggested that time spent alone with children provides an opportunity for fathers to develop skills and confidence in their parenting ability, builds a closer father–child relationship not mediated by the mother, and allows the child to see the father as a parent in his own right, rather than as mother's helper (Coltrane 1990; Russell 1983).

Not surprisingly, mothers have been found, in general, to be more knowledgeable about their children's daily lives than fathers (Crouter, MacDermid, McHale & Perry-Jenkins 1990). This is knowledge related to the child's whereabouts and activities rather than development.

There has been research on a range of factors to attempt to explain fathers' lesser degree of involvement with their children compared to mothers. These factors include maternal employment, fathers' work hours, gender role beliefs, own experience of being fathered, individual characteristics of fathers, marital satisfaction, child characteristics, and socioeconomic and demographic factors. No clear picture has emerged. Studies have

inconsistent findings or show only weak relationships between the areas investigated, although the majority of studies do find that fathers are more involved with sons than with daughters.

For example, an expectation of a link between maternal employment and paternal involvement in child rearing was supported in some but not all studies. Some have found increases in aspects of childcare such as caring for children alone, and general or selected responsibility tasks when mothers are in paid employment (Bailey 1991; Beitel & Parke 1998; Peterson & Gerson 1992; Sanderson & Thompson 2002). However, results of other studies show that maternal employment had little effect on fathers' involvement (Bittman & Pixley 1997; Marsiglio 1991; McBride & Rane 1997).

Although there is little consistency in the findings of studies on the effect of the age of the child on father involvement, there is some evidence to suggest that fathers are most involved with younger children beyond the infancy stage, between 2 and 7 years (Brayfield 1995; McKeering & Pakenham 2000; De Luccie 1996b). It is proposed that greater involvement with children in this age group may result from children eliciting more interaction with their fathers than infants do, and requiring more supervision than older children (Brayfield 1995).

The effect of child temperament on involvement of fathers may vary according to gender and developmental stage of the child. Although a large US study found that infant temperament was not associated with fathers' care-giving responsibilities (NICHD 2000), another study found that fathers were thought by mothers to be more available to temperamentally easy than temperamentally difficult infant sons, but equally available to infant daughters, regardless of their temperament (Manlove & Vernon-Feagans 2002). A contrasting finding was reported by McBride, Schoppe, and Rane (2002) regarding children aged between 3 and 5 years, where less sociable daughters, but not sons, had less involved fathers.

Barriers to father involvement have been proposed and investigated. Among these are career or workplace demands, lack of social support, poor role models, lack of confidence and skills, and the mother as 'gatekeeper'. Some of these factors are discussed below.

Men's employment in the paid workforce has generally been perceived as the greatest obstacle to involved fathering. However, conclusions from research findings on this aspect are complex; for example, interpreting the effect of hours worked is not straightforward. Whether work is full-time or part-time has been found to have little effect on father involvement (Craig 2002), and unemployed fathers were no more involved in childcare than working fathers (Marsiglio 1991). Nevertheless, many studies found that fathers who worked longer hours were less involved (Aldous et al. 1998; NICHD 2000; Beitel & Parke 1998; Bonney, Kelley & Levant 1999, Eggebeen & Knoester 2001), although sometimes the effect was only noted in activities with children of a particular age, or in certain types of parent–child contact. The timing of hours of work (for example, related to after-school availability) and the flexibility of the work schedule were also significant (Brayfield 1995; Coltrane 1990).

Apart from hours of work, other work-related factors have been found to impinge on fathering. These include psychological investment in career (Glezer & Wolcott 1997; Pleck 1985), and organisational policies, culture, and work practices that do not support fathers in their parenting role (Haas & Hwang 1995; Harker 1996; Lewis & Lewis 1996). Another work-related barrier is stress or perceived lack of energy at the end of a working day (Glezer 1991; Parke & Stearns 1993); however, few Australian fathers reported this as a factor that prevented them from caring for their children (Russell et al. 1999).

Most of the research on social support for fathering has examined the support provided by mothers, but not other sources (Doherty, Kouneski & Erikson 1998). Studies of highly involved fathers, in role-reversed families, or where the father is the sole parent, have reported fathers' experience of loneliness, isolation, disapproval and even hostility (Greif

1995; Holland 1993; Pruett 1987; Russell 1983). This suggests that, beyond the support that mothers provided, there were few social supports for fathers in their fathering role.

Greater maternal support for fathering has been found to predict higher levels of involvement (Bouchard & Lee 2000; De Luccie 1996a; Strauss 2001). Furthermore, it is suggested that maternal support positively influences the quality of father involvement (Simons, Lorenz, Conger & Wu 1992). Contributions to a conceptualisation of maternal support have been made by Lee and Duxbury (1998), who distinguished emotional from practical support, and by Bouchard and Lee (2000), who described three specific ways a mother might support her partner. These were: encouragement of autonomy in parenting, conveying a sense of confidence in the father's competence, and availability to assist. The factor that appeared to make the most significant contribution to father involvement was the degree of maternal confidence in the fathers' parenting efforts. However, a recent Australian study of fathers did not find an association between father' level of involvement and the amount of maternal support they thought their partners gave them (Wilson 2003).

Fathers' cognitions have been another focus of study. Self-perceptions of competence are reported to be a significant predictor of involvement (Minton & Pasley 1996; Sanderson & Thompson 2002; Wilson 2003), and fathers' perceptions about how their spouse rates their competence are also important (Maurer, Pleck & Rane 2001; Pasley, Futris & Skinner 2002). In addition, fathers' views about the importance of the father's role (Palkovitz 1984) and the degree to which fatherhood is a seen as a self-enriching experience predicts care giving and play with infants (Levy-Shiff & Israelishvili 1988). On the other hand, it was found that active participation in parenting reinforced fathers' beliefs that they were capable and important (Bonney et al. 1999).

Mothers' role as 'gatekeeper' or controller of involvement has been described as another inhibiting influence on fathers' active participation in parenting (Allen & Hawkins 1999). The phenomenon of gate-keeping, that is, beliefs and behaviours that limit opportunities for father involvement, has been investigated in two-parent and non-intact families (Backett 1987; Holland 1993; Ihinger-Tallman, Pasley & Buehler 1993; Pasley & Minton 1997). These studies reported that some mothers were reluctant to relinquish control of the care giving, or perceived high levels of father involvement as a threat to their personal identity as a mother. However, little support for the notion of gate-keeping was found in an Australian study (Langdon & Russell 1993), and other authors have claimed that previous research has overemphasised its influence (Bonney et al. 1999). When gate-keeping occurs, the direction of influence is not clear (Parke 1996). It may be that mothers facilitate the involvement of partners if they view them as competent, while mothers who have realistic concerns about the parenting competence of their partners restrict their involvement with the children.

There are a number of other factors that have been shown to relate to fathers' participation in the lives of their children.

- What motivated fathers to maintain or increase their involvement with their children was the pleasure they derived from the contact (Pruett 1987; Russell 1983). The degree of pleasure gained from children increased with time (Stewart 1990).

- Father behaviour varies by culture (Hofferth 2003), and has been shown to vary cross-culturally more than mothering does (Bozett & Hanson 1991).

- For non-resident fathers, higher levels of involvement were associated with geographic proximity, financial resources, employment, education, and whether the father has additional children (Magnuson & Duncan 2002).

- There was a significant association between father involvement and 'parenting alliance', that is, shared parenting goals and values (McBride & Rane 1998).

Implications

There are a number of implications for parent support that stem from the research reviewed above and from studies of parent education for fathers.

- Fathers should be encouraged to build up their parenting skills and involvement early in their child's life, so their contribution is seen as a normal part of family life.

- There is a need for organisational policies to promote family friendliness in the workplace (Levine & Pittinsky 1997), and for such policies actively to support the father's role.

- Fathers may require assistance to establish parenting skills, especially in circumstances of family breakdown, where there may be shared custody arrangements.

- Because mothers' views and support are important in facilitating or discouraging father involvement, mothers' beliefs and practices regarding the participation of fathers needs to be addressed in parenting education programs.

- Although it is clear that many fathers could benefit from parenting education, the utility of programs specifically targeted at fathers is yet to be determined and requires more investigation. Research on Australian fathers by Russell and colleagues (1999) revealed that, although fathers showed an interest in obtaining information about parenting, few were interested in specialist counselling services for fathers, or fathers' parenting groups. Moreover, parenting skills classes designed to meet fathers' needs have had disappointingly low attendance rates by fathers (Hawkins, Roberts, Christiansen & Marshall 1994).

- Research on fathering has been criticised for taking a 'deficit' perspective, that is, establishing how fathers 'measure up' to mothers (Dollahite, Hawkins & Brotherson 1997). What is required is more attention to the strengths of fathers as parents. Insights from continuing research into fathering may increase the relevance of parenting education for fathers.

Grandparenting

Due to increases in life expectancy, health status, and financial independence of older Australians (Australian Bureau of Statistics 1999b; Kemp 2003), grandparents are increasingly more available to look after their grandchildren. Now, grandparenthood does not usually overlap with active parenting, and declining birth rates mean that grandparents have fewer grandchildren and so are able to expend more energy and time with the ones they have (Kemp 2003).

Recent Australian census data showed that grandparents provided care in 70 per cent of households who received informal care for a child under 11 years (Australian Bureau of Statistics 1999a 2003b). Across all adults over 65 years, the average time spent on childcare was half an hour per week, though 5 per cent of older people spent a considerably greater amount of time (an average of 11 hours per week) on childcare activities (Australian Bureau of Statistics 1999b). Grandmothers were the main informal care providers in 44 per cent of couple families and 34 per cent of single parent families (Australian Bureau of Statistics 2003b). In 1997, around 12 000 children between the ages of 0 and 14 years were living with their grandparents and not their parents.

Grandparents can have an influence on parenting practices directly and indirectly. Indirect influence is exerted through emotional support to parents as well as the intergenerational transmission of attitudes and behaviours (Smith & Drew 2002). Direct influence can be via financial support, companionship, as a caregiver, or as a surrogate parent. According to Dellmann-Jenkins, Blankemeyer and Olesh (2002), traditionally, the grandparent's role has involved pleasure without responsibility. Changes in life expectancy and societal values mean that today this detached grandparent role is becoming less common.

The following sections present information from currently available population statistics and research in Australia and overseas about the indirect influence of grandparents, their direct influence, and their role as surrogate parents.

The indirect influence of grandparents

Grandparents are the most common visitors to stay with couples with young children and the third most common visitors to stay with one-parent families and children (Australian Bureau of Statistics 2002a). Therefore, their potential for influence is greater than that of other adults who might visit the family.

Most parents and visiting grandparents expected that grandparenting would be non-intrusive and that grandparents would take a non-parental role (Johnson 1983 as cited by Smith & Drew 2002; Thomas, Sperry & Yarbrough 2000). However, a great variation in levels of contact and satisfaction in parent-grandparent relationships has been reported, with relationships adversely affected when conflict arose over child-rearing values or abuse of children (Smith & Drew 2002). Problems have also been found if the grandparents tried to 'take over' the house or their grandchildren (Townsend 1989, as cited by Millward 1996).

After having children, mothers tended to have less conflict with their own mother but more with their mother-in-law (Fischer 1986 as cited by Millward 1996).

The level of involvement of grandparents correlated with grandparent gender and their relationship to the child (Thomas et al. 2000). In most studies, level of involvement was found to be highest for the maternal grandmother, then about equal for the maternal grandfather and paternal grandmother and lowest for the paternal grandfather (Millward 1996; Smith & Drew 2002).

Gender also had an impact on the type of advice grandparents liked to give. A study by Somary and Stricker (1998) found grandfathers reported more confidence at giving child-rearing advice to parents. Hagaestad (1985 as cited by Thomas et al. 2000) found grandparents attempted to influence children more when the child was the same gender as themselves.

Grandparent involvement with grandchildren can vary according to cultural background (Thomas et al. 2000). In China, for instance, many grandparents lived in three-generation households and family ties were very close (Shu 1999 as cited by Smith & Drew 2002). In African-American groups, the generation gap tended to be shorter, resulting in younger grandparents who were often more involved with their grandchildren (Hill-Lubin 1991 as cited by Smith & Drew 2002). In an Australian study, Indigenous parents acknowledged the role that grandparents were expected to play in the transmission of cultural practices and knowledge (Kolar & Soriano 2000).

The age of grandparents was a factor related to their readiness to offer child-rearing advice. Younger grandparents expressed greater readiness to offer advice than older grandparents (Thomas et al. 2000). This factor could be related to the amount of involvement they had with their grandchildren. Older grandparents tended to have older grandchildren, who did not need as much care and therefore had less contact with (Millward 1996).

An increase in the influence of grandparents has been found to occur when parents divorce. Provided that the grandparents had a harmonious relationship with the custodial parents, they were likely to give more financial, emotional and childcare assistance than before the parents' separation (Smith & Drew 2002).

It is thought that grandparents have an indirect influence on parenting through 'intergenerational transmission' of parenting. Many temperament and behaviour characteristics of parents and grandparents are highly similar through either genetic or

environmental connection. According to Smith and Drew (2002) studies show that 65 per cent of grandmother–mother–infant triads had compatible attachment classifications.

In families in which both the parent and grandparent were depressed, there was a high risk of anxiety or some other form of psychological disturbance in the grandchild (Warner, Weissman, Mufson & Wickramatne 1999). In addition, several studies have shown that the use of physical aggression and punishment in one generation predicts the use of similar techniques in the generation to follow (Smith & Drew 2002).

Grandparents as child carers

With most fathers and a significant proportion of mothers in paid employment, grandparents are increasingly being called upon to perform childcare duties. Some of these grandparents are themselves employed outside the home (Kemp 2003). Grandmothers have been reported to find the dual roles stressful when involved in extended babysitting while still in the workforce (Bergquist, Greenberg & Klaum 1993 as cited by Millward 1996).

A study of Australian grandparents found that they see themselves as providing stability, continuity of care, routine and consistency when compared with the role of staff in childcare centres (COTA 2003). This finding is consistent with a National Institute of Child Health and Human Development study in the United States (1996 as cited by COTA 2003) that found grandparents displayed more positive care giving than unrelated providers of childcare.

Despite the amount of time some children are spending being cared for by their grandparents there is little research to evaluate the effects of extended periods of grandparent childcare or on the needs of these grandparents or children.

Grandparents as surrogate parents

In a study of Australian grandparents raising grandchildren, 63 per cent were couples and 68 per cent were 55 years or older (COTA 2003).

Throughout history, grandparents have taken on the role of raising their grandchildren when the parents are unable to. However, it is reported that the percentage of grandparents acting as parents has increased recently, chiefly due to a rise in drug and alcohol abuse (COTA 2003; Jendrek 2003). Another reason for grandparents to take on the parenting role is the occurrence of emotional or mental health problems in the child's parent (Dellman-Jenkins et al. 2002).

In these circumstances, children often come to their grandparents traumatised and stressed by their experiences. These children frequently have behavioural and emotional problems beyond those of the average child and require additional psychological, health, and other services (Dubowitz & Sawyer 1994).

In Australia, as in most developed countries, grandparents raising their grandchildren struggle with legal, personal, and financial issues, with the responsibility of raising their grandchildren eating into their retirement funds, plans and wellbeing (COTA 2003; Kelley 1993 as cited by Thomas et al. 2000). In addition, consistency of parenting is often disrupted by the parent's repeated attempts to access the child and resume parenting. Many grandparents report being exhausted, stressed, anxious and depressed by the responsibility of raising their grandchildren and having little time to themselves (COTA 2003; Dellmann-Jenkins et al. 2002; Jendrik 2003; Thomas et al. 2000). This increased physical and psychological distress in grandparents can itself interfere with optimal parenting and family functioning (Crnic & Greenberg 1990).

However, not all grandparents experience health problems, with a US study showing that 65 per cent of grandparent care givers had good to excellent health and many report enhanced feelings of self-worth, competence and achievement (Dellmann-Jenkins et al. 2002;

Sands & Goldberg-Glen 1998). For these grandparent–grandchild families, often no detriment to parenting function is seen.

Implications

It is not possible to describe a universal effect of grandparents on parenting function. The influence of grandparents varies greatly depending on the amount and type of contact they have with their grandchild as well as the perceived responsibility they feel they have to influence their child's upbringing. Many factors contribute to the role the grandparent assumes, including age, health, gender, and cultural background of parents and grandparents, as well as relationship and physical distance between parents and grandparents.

Nevertheless, it is clear that grandparents play an important role in child-rearing and should be considered in any attempts to support families with parenting. The level of intervention required will vary depending on the extent of the grandparents' involvement in the care of the child. Grandparents acting as primary care givers have much greater need for help, especially in circumstances of family breakdown and parental mental and physical health problems.

The report by COTA (2003) on grandparents in Australia recommended a range of funded options for assistance to grandparents, including support groups, access to service providers, and parent education programs to meet the specific needs of those raising grandchildren. Among the recommendations for structured sessions were information on caring for one's own physical and health needs, drug addiction of parent, current society issues such as drugs, AIDS, sex education, and raising children with learning difficulties or who have experienced physical or psychological trauma (COTA 2003; Dellman-Jenkins et al. 2002).

Sexuality

Diversity in family life includes a large and growing number of children being raised by one or two homosexual parents (Equal Opportunity Commission of South Australia 2003; Patterson 2002; Rickard 2002). The exact number of Australian families in which this is the case is unknown, particularly with families with gay men. However, Australian census data for 1996 indicated that there were 8304 female same-sex couples and 18 per cent of these had children (Mikhailovich, Martin & Lawton 2001). The Equal Opportunity Commission of South Australia (2003) estimates that up to 20 per cent of same-sex couples are families with children.

The published research on parenting by homosexual men and women has a number of methodological limitations and therefore the findings described below must be viewed with caution. Examples of methodological problems that have been mentioned are: small sample sizes, few longitudinal studies, poor response rates, comparison groups not always equivalent, research based primarily on mothers' reports, and the narrow range of socioeconomic, educational, and cultural backgrounds of participants (Hunfeld, Fauser, de Beaufort & Passchier 2002; Patterson 2002; Rickard 2002; Stacey & Biblarz 2001). There is no published Australian research into the effects of parental sexuality on families, and very little is known about parenting by gay men.

With currently available studies, no evidence is reported of damaging impact of parents' homosexuality on the welfare of the child (Allen & Burrell 1996; Equal Opportunity Commission of South Australia 2003, Hunfeld et al. 2002; Patterson 2002; Rickard 2002). A common concern is that the children's own sexuality will be affected. However, research to date has found no difference in the gender identity of children of homosexual parents compared with children of heterosexual parents (Green 1978, as cited in Patterson 2002; Hoeffer 1981, as cited in Stacey 2001). Having a homosexual parent has not been found to predispose children to be homosexual themselves (Allen & Burrell 1996; Golombok & Tasker

1996; Patterson 2002; Rickard 2002; Stacey & Biblarz 2001; Tasker & Golombok 1997). However, children of lesbian mothers were significantly more likely to consider homosexuality as an option, and had more same-sex experiences, despite not identifying themselves as homosexual (Golombok & Tasker 1996; Tasker & Golombok 1997). In their review of the area, Stacey and Biblarz (2001) found that children of lesbians tended to behave in ways that departed from traditional sex-typed norms, particularly in dress and play.

Studies comparing children of homosexual and heterosexual parents have generally found no differences in a range of internalising and externalising behaviour problems, emotional difficulties, self-concept, depression and anxiety, cognitive functioning or social relationships (Allen & Burrell 1996; Chan, Raboy & Patterson 1998; Hunfeld et al. 2002; Golombok, Perry, Burston et al. 2003; Patterson 2002; Rickard 2002; Stacey & Biblarz 2001; Tasker & Golombok 1997). Where significant differences existed, they favoured the psychological wellbeing of children of lesbian parents (Stacey & Biblarz 2001).

Few differences have been found in the characteristics of heterosexual and homosexual parents. For example, there were no differences between lesbian and heterosexual mothers on measures of self-concept, happiness, adjustment, and psychiatric status (Patterson 2002; Rand, Graham & Rawlings 1982, as cited in Stacey & Biblarz 2001). There were comparable findings for these two groups of mothers on parenting style (Allen & Burrell 1996), warmth to child, emotional involvement, and response to child behaviour (Golombok et al. 1983, cited in Hunfeld et al. 2002; Stacey & Biblarz 2001).

Implications
There is nothing in the evidence to date to suggest that homosexual parents need parenting interventions that are different from those available to all parents. Children of homosexual parents fared best when their mothers were psychologically well, when their parents shared childcare tasks, and when their families lived in supportive environments (Tasker & Golombok 1997; Patterson 2002). That is, children parented by homosexual adults benefited from the same factors as children of heterosexual adults.

However, there may be need to provide information specific to the circumstances of families with gay and lesbian parents. For example, information may be required, when relevant, on the challenges provided by divorce and single parenthood. Further, parents may benefit from assistance with particular issues facing homosexual parents, such as negative community attitudes and prejudice that children might face because of their family situation.

PARENTING IN PERSONAL ADVERSITY

Physical health

The physical health of parents is linked to the physical health of children. For example, parents with infectious diseases or hereditary conditions can pass those onto their children. Also, as families typically share the same environment, children can experience the same health problems as their parents (for example, the effects of exposure to tobacco smoke or asbestos exposure) (Campbell 2003). The health of the mother during pregnancy has a clear and direct influence on the child's health and later functioning, a conclusion that is widely supported by research into intrauterine exposure to nutritional deficits, health problems, medications, social drugs, radiation, pollutants and chemotherapy (Tarin 2000).

It is not difficult to account for similarities in the health status of parents and children. In addition to the genetic transmission of illness or vulnerability, family members tend to share environmental space, behaviours and choices regarding health (Campbell 2003). For example, families tend to eat the same sorts of foods, have similar intakes of cholesterol, salt, fat, calories, and breathe the same air.

Parental health-related behaviour is likely to influence children via observational learning and reinforcement (Tinsley, Markey, Erickson, Ortiz & Kwasman 2002). The parent who demonstrates healthy behaviour (such as eating healthy foods, exercising, avoiding substance abuse) models this to their child, just as unhealthy behaviours by the parent are also observed and learned by the child (Fisher & Chalder 2003). This phenomenon has been shown to be occurring in research on parental smoking (Carvajal, Wiatrek, Evans, Knee & Nash 2000; Richter & Richter 2001), use of seat belts (Stromsoe, Magnaes & Nakstad 2000), eating (Birch & Fisher 1998; Davison, Markey & Birch 2000), exercise (Sallis, Patrick, Frank, Pratt, Wechsler & Galuska 2000), chronic pain (Mikail & von Baeyer 1990), and alcohol use (Abbey, Pilgrim, Hendrickson & Buresh 2000; Richter & Richter 2001).

There has also been a suggestion that parents who view themselves as unwell tend to be more protective of their children and more restrictive of their children's activities, leading to less healthy physical activity (see Tinsley et al. 2002).

Little research has been done on the effect of parental ill health on broader areas of child development, or on parenting practices. Studies tend to look at a single medical condition (for example, pain, chronic fatigue, HIV), rather than discussing physical health in general. However, parents themselves have identified that their health status affects their parenting practices. In a survey and focus-group study of parents with arthritis, Barlow, Cullen, Foster, Harrison & Wade (1999) found that parents believed that the pain, fatigue and restrictions associated with their arthritic condition interfered with their parenting role. Reisine, Goodenow and Grady (1987) found that mothers with arthritis were unhappy with the care they provided for their child. Mok and Cooper (1997) concluded that children of mothers with HIV have special needs (for example, educational and support needs) related to their mother's illness.

However, parental ill health may have implications for a child's development through its impact on a parent's psychological state and parenting behaviour. For example, rates of depression are higher among mothers with chronic health problems (Taskforce on the Family 2003). Depression may act as a mediator between physical health of the parent and problems in parent–child interaction. Stress may be another psychological by-product of physical illness that may have a negative impact on parenting. For example, inability to engage in parenting activities due to physical impairments has led to feelings of guilt, frustration and anger in parents (Barlow et al. 1999), and a relationship has been found between migraine-related disability and the extent to which mothers report inappropriate expectations of their children (Fagan 2003).

It is possible that the mechanism by which physical health affects parenting interactions is via parental tiredness. Health problems that cause fatigue in the parent may limit the energy and time that a parent has to devote to child-focused activities. Also, maternal tiredness is related to negative mood and health problems in the mother, to problems in maternal behaviour, and to contextual circumstances (such as lack of social support) (Corter & Fleming 2002). It is difficult to identify the mechanism by which tiredness affects parenting, as the factors of mood, health, tiredness and context are interrelated.

There is still much that is unknown about the psychobiology of parenting, and the role of parental hormones, and the interactions of these biological processes with social factors (Corter & Fleming 2002). By way of example, Corter and Fleming point out that hormonal causes of post-natal depression have been theorised, but as yet, no clear linear relationship between hormones and depression has emerged. Factors such as prior experience with children, having a supportive partner during labour and having positive interactions with birth attendants have been linked to less depression, more responsiveness to the newborn, and increased pleasure in seeing the child after the birth. Nevertheless, these researchers propose a general theory that hormonal states (for example, high cortisol) paired with background and situational factors (health, social support, experience with children, input from the infant) influence parental mood, which in turn influences parental behaviour.

Implications

While there are strong links between parent and child physical health, the influence of parent health on general development does not seem to be direct, but rather is mediated by the psychological sequelae of ill health. Stress, depression or tiredness associated with physical impairment affects the interaction between parent and child. However, there is also evidence linking child physical health to the socialisation practices of parents. Clearly, the evidence points to the need to support parents in their important role in shaping their children's health-related behaviours.

Physical and sensory disabilities

In 1998, 14 per cent of Australian children aged 0 to 4 years lived with a parent who had a disability (this includes physical, intellectual, sensory, mental or behavioural disabilities) (Australian Bureau of Statistics 1999a). In this section, research related only to parents with physical and sensory disabilities will be discussed; parents with intellectual disabilities will be discussed in the following section.

Physical and sensory disabilities provide additional challenges to the task of parenting. For example, parents with physical or sensory disabilities, or health problems that restrict movement may have difficulty participating in children's activities (Barlow et al. 1999), a parental behaviour that is often associated with responsive and child-centred parenting. Inability to perform such tasks can lead to feelings of guilt and frustration in parents (for example, Barlow et al. 1999).

Parents with physical disabilities can also experience restricted access to information and services because of barriers that are environmental (that is, information in inaccessible formats) and social (that is, stigmatisation). Thus, they do not always have the same opportunities available to able-bodied people to acquire knowledge of child development and parenting. The potential effect of limited knowledge of child development on parenting practices has been discussed in other sections of this review.

However, the claim that physical and sensory disability inevitably results in poorer parenting and negative child outcomes is not supported by research evidence. Reviews suggest that, while parents with physical and sensory disabilities seemed to parent differently, this affected children in minimal ways (Kelley & Sikka 1997). Conley-Jung and Olkin (2001), in their review

of the literature, concluded that visual impairment did not change the fundamentals of parenting (nurturing, loving, decision-making and guidance). Parents who were visually impaired used alternative but effective modes of communication to interact with their infant. Also, children appeared to adapt to the different care-taking practices of their physically disabled parents. Livingston (1998), for example, found no differences in attachment or interpersonal relationships of adult children of deaf or hearing parents.

Some research (see review by Kelley & Sikka 1997) has noted that older children evaluated their parent's disability negatively and experienced social stressors (for example, difficulties in home-school relationships) associated with their parent's disability. Given that people with disabilities are often unemployed, live in poverty, and are less likely to marry (Meadows-Orlans 2002), they also suffer from the negative effects of social disadvantage in addition to stigma and restricted access. Such co-existing risk factors in most cases make it difficult to isolate the impact of the disability on parenting and child outcomes. Child reactions, such as anxiety or feelings of loss, have been found to be linked more to economic deprivation and disrupted living conditions that result from parental disability per se.

Implications
The main challenge for policy makers and service providers is to remove the barriers to parenting information and support often experienced by parents with physical and sensory disabilities, and ensure that appropriate adaptations in content and mode of delivery are made for this socially disadvantaged group.

For example, research has demonstrated the importance of immediate contact with the baby following birth, breast-feeding, and recognition of infant sensory cues, on attachment and the nurturing behaviour of mothers. These are all areas that people with physical or sensory disabilities may need additional support and assistance in the short term to establish (Corter & Fleming 2002).

Learning difficulties

Research on parents with learning difficulties has been plagued by the lack of universally accepted terminology and a shared definition of what is meant by learning difficulty. This part of the review will focus on what is known about parents who have either met the criteria for intellectual disability (according to the standard classification system set by the American Association for Mental Retardation), or have reported attendance at a special education school, or have been identified by a service organisation as having cognitive limitations.

There are no exact figures on the number of families with a parent—or parents—with learning difficulties. Mildon, Matthews and Gavidia-Payne (2003) estimated that, based on figures from the Australian Bureau of Statistics, 1 to 2 per cent of families with children aged between 0–17 years include at least one parent an with intellectual disability.

Research on the children of parents with learning difficulties has found higher rates of developmental delay, learning difficulties and problem behaviour (Feldman & Walton-Allen 1997; Feldman, Case, Towns & Betel 1985; Keltner, Wise & Taylor 1999). Although primarily focusing on the deficiencies and difficulties displayed by the children as group, it is also important to note that there are substantial variations in developmental outcomes for the children of parents with learning difficulties.

There are significant limitations in research on parenting with a learning difficulties. It is highly likely that the findings of much of this research do not represent all parents with learning difficulties, as almost all studies involve mothers who have already been identified as requiring assistance by child welfare and family support services. Parents with cognitive limitations who are not experiencing the kinds of problems that draw the attention of welfare

agencies are not included in this research, biasing research samples to those with the most impaired functioning.

Research on families that have come to the attention of services has, not surprisingly, found marked difficulties in parenting. For example, Feldman (2002), in a summary of the research on parenting practices of parents with learning difficulties prior to intervention, reported skill deficiencies in basic child-care, such as handling a newborn, bathing, diapering, feeding and nutrition, first aid and safety. Difficulties in parent–child interaction skills associated with warmth, sensitivity, responsiveness and reinforcement were also reported. However, Feldman highlighted considerable intra-group variability in parenting skills, suggesting that it is inaccurate to assume that parents with learning difficulties form a homogeneous group.

Australian research has shown that parents with learning difficulties are disproportionately represented in the child protection system (McConnell, Llewellyn & Ferronato 2000). This is despite the fact that learning difficulties in a parent do not inevitably result in child neglect or abuse (Feldman 1994; Tymchuk 1992). In fact, there is no clear relationship between parental competence and intelligence (Booth & Booth 1993; Haavik & Menninger 1981; Schilling, Schinke, Blythe & Barth 1982).

There is a range of factors, in addition to learning difficulties, that are likely to contribute to families with a parent who has a learning difficulty coming to the attention of the service system. Many families headed by a parent with learning difficulties live in circumstances made chaotic by poverty, unemployment and substandard housing. Typically, they also have insufficient social support, depression, poor self-esteem and high stress levels. Many parents with learning difficulties also have a personal history of maltreatment and limited exposure to day-to-day family life in their childhood (Booth & Booth 1993; Feldman 2002).

The beliefs, perceptions and expectations of others are also likely to lead to a greater reliance on statutory intervention with parents who have learning difficulties. It is often automatically assumed that these parents are not able to provide the physical, social and emotional stimulation that children need to develop 'normally'. An Australian study (McConnell et al. 2000) found that welfare practitioners often held negative views and stereotypic assumptions about parents with learning difficulties (for example, beliefs that they are unable to learn and only able to do simple repetitive tasks).

Finally, the high representation of parents with learning difficulties in the child protection system may not primarily reflect deficits in families, but rather indicate a failure of the system to ensure that existing support services adequately meet the needs of this group (Mildon et al. 2003). Booth (2000) has outlined key features of the service system that potentially weaken parents' sense of efficacy in their parenting role. These included a presumption of incompetence or belief that the parents' limitations make them unfit to be parents, lack of continuity of service delivery, failure to involve parents in decisions that affect them and their family, and the fact that current practice does not reflect best practice in terms of teaching parents the skills they need for effective parenting (Booth 2000; Mildon et al. 2003).

In addition to these contextual factors, current attempts to support parents do not reflect best practice in parenting skill development. There is often an over reliance on verbally based strategies (for example, discussion) and limited modelling (that is, modelling without subsequent practice and feedback from the practitioner) (Feldman, Case, Rincover, Towns & Betel 1989). Research has shown that when teaching methods are matched to their learning needs, parents with learning difficulties can learn, retain, and generalise parenting skills (for example, Llewellyn, McConnell, Honey, Mayes & Russo 2003).

Implications
There is enough evidence to support the conclusion that parents with learning difficulties are vulnerable, especially when the picture is complicated by additional social and psychological

adversity. However, in light of the heterogeneity of this group in terms of parenting capability and confidence, agencies providing services to parents with learning difficulties need to consider intervention and support needs on a case-by-case basis.

Psychometric measures (for example, IQ) have poor predictive validity when it comes to assessing the parenting of an individual parent in a specific context; rather, a functional approach to assessment—focusing on identifying actual parenting behaviour—is recommended (i.e. how is this particular person parenting this particular child in this particular environment; see Azar, Lauretti & Loding 1998).

Intervention strategies should take into account the parent's cognitive limitations, and be matched to the parent's learning style and needs. Research has shown that the most effective intervention strategies are home-based, skill-focused, and use competency-based teaching strategies (that is, skills are broken down into component steps, modelled, rehearsed, shaped and reinforced). In many cases, parents with learning difficulties may require an ongoing program of strategically timed support as they negotiate major developmental milestones and transitions in the process of caring for their children.

Mental health problems and disorders

The emotional and psychological wellbeing of parents has important implications for children. Mental health problems in adults can be temporary or lifelong. Children of parents who are experiencing mental health problems are at greater risk for a range of psychosocial and developmental problems, and are less likely to benefit from mainstream parenting education efforts.

Results from the National Health Survey, conducted by the Australian Bureau of Statistics in 2001, show that approximately one in five (18 per cent) Australian adults had a mental health problem at some time during the 12 months prior to the survey (Australian Bureau of Statistics 2002c). A finding with significant implications for mothers is that from the age of 35, women were more likely to have mental health problems then men. The number of children who have a parent with a mental health problem in Australia is unknown. Australian studies found that between 29 per cent and 35 per cent of the adult clients of mental health service had dependent children under the age of 18 (Cowling 1999; Farrell, Handley, Joseph, Hazelton, Hanke 1999; Hearle, Plant, Jenner, Barkla & McGrath 1999). Seventy percent of these children were living with their mother. Data from American research show prevalence rates of mental illness ranging from 8 to 12 per cent in mothers of young children (see Lovejoy, Graczyk, O'Hare & Neuman 2000).

Impairments in parental mental health have consistently been found to be a major risk factor for child development; the more severe and chronic the parent's disorder, the more likely there is to be a negative impact on parenting behaviours and therefore, infant development (Fonagy 1998). According to a review by Zahn-Waxler, Duggal & Gruber (2002):

- The most consistent finding of research has been the inverse relationship between socioeconomic status and prevalence of a variety of types of mental health impairments (eating disorders are the only mental health problems associated with economic affluence).

- Many families with parents who have a mental health impairment have the added struggle of low socioeconomic status, difficulty receiving appropriate care and limited social support.

- The severity and persistence of the mother's illness (particularly those with schizophrenia and/or depression), across diagnostic groups, has been found to be negatively related to indices of the quality of maternal care.

Again, there are some serious limitations to the available research on the effect of mental illness on parenting. As a rule, the research literature identifies negative aspects of parenting in caregivers with mental health problems; few studies have set out to identify positive aspects of parenting in this group. Typically, the assessment of parental mental health problems and child-related outcomes is based on interview or questionnaire data from only one parent, generally the mother who is affected by the illness. Reliance on parental report in this context is concerning, as serious questions remain about the validity of reports by mothers who are currently emotionally distressed (Zahn-Waxler et al. 2002). Finally, research has generally not adopted a fine-grained approach: it is possible, for example, that the timing, severity, and duration of maternal symptoms may have different implications depending on the child's age and stage of development, or that mental health problems may have an impact on aspects of parenting that are especially central to particular points of development in children.

To say anything more specific about the effect of mental health problems on parenting, it is necessary to look at the nature of particular problems and disorders. The remaining part of this section will briefly look at stress, depression, anxiety, psychotic disorders and personality disorders.

Stress

Stress can be broadly defined as a response to situational demands that exceed an individual's capacity to adapt. This conceptual approach acknowledges that stresses can occur because of either negative or positive events; it may be stressful to care for a child who has a serious cold; but it may be equally stressful to plan a happy event such as a child's birthday party (Abidin, Jenkins & McGaughey 1992). The stress response includes physical (for example, tension), cognitive (for example, rumination and worry) and behavioural (for example, avoidance) components.

Examining the issue of stress is useful as a way of exploring the effects of non-clinical, day-to-day levels of emotional distress on parenting. Research in this area has consistently documented the detrimental effects of parental stress on parenting and children (Zahn-Waxler et al. 2002).

A number of factors have been found to contribute to elevated stress levels in parents. These include:

- a high frequency of care-giving hassles such as feeding problems, sleeping problems, infections (Ostberg & Hagekull 2000)
- having a child with a difficult temperament (Zahn-Waxler et al. 2002)
- having a child with a disability (Hanson & Hanline 1990)
- low maternal self-esteem (Esdaile & Greenwood 1995)
- low socioeconomic status and parental education (Zahn-Waxler et al. 2002)
- having young children (Belle 1991)
- larger family size (although the opposite has been found in research with families of children who have a disability) (Belle 1991; Shaw, Owens, Giovannelli & Winslow 2001).

There is also convincing evidence that the biggest contributors to parenting stress are high frequency, low intensity daily challenges (hassles) associated with caring for children. Traumatic events, such as divorce or the death of a spouse, occur infrequently in a family lifecycle, and many parents never have to deal with stressful events of this nature. However, the vast majority of parents will experience some degree of stress. Empirical research on hassles confirms that the cumulative effect of hassles does have significance for individual adaptation.

There is general agreement that parental stress has a detrimental effect on children because it reduces the parents' ability to respond appropriately to their children's needs (Abidin et al. 1992). The quality of mother–child interaction deteriorates in families experiencing high levels of daily hassles (Crnic & Greenberg 1990). Stressed mothers are less likely to interact with their children, more likely to use negative maternal commands and more likely to engage in hostile interactions with their children (Shaw et al. 2001). Parenting stress might have an additional indirect influence on child adjustment by exacerbating other factors (for example, marital conflict) known to have an impact on parenting and children (Coplan, Bowker & Cooper 2003).

Some researchers have argued that strong negative emotions have a disruptive effect on parenting, through either narrowing the range of environmental cues to which parents are able to pay attention to, or interfering with parents' sensitivity to children's needs and perspectives (Corapci & Wachs 2002).

Depression
The central defining feature of depression involves prolonged sadness and/or an inability to experience pleasure. Depression is one of the most prevalent mental health problems in the community and occurs much more frequently in women than in men (Zahn-Waxler et al. 2002).

There is an extensive body of literature documenting the adverse effects of maternal depression on children's wellbeing, particularly infants and toddlers (for example, post-natal depression). The timing and severity of mental health impairment is important, with psychopathology in offspring predicted by the mother's age at first hospitalisation and by institutionalisation of the mother during the first five years of the child's life (Zahn-Waxler et al. 2002).

Depressed care givers are more likely than non-depressed care givers to manifest qualities of parenting known to be associated with problems in children's cognitive, social and emotional development. Recent reviews of the literature report a range of ways in which parenting is affected by depression (Lovejoy et al. 2000; Zahn-Waxler et al. 2002), with studies showing that mothers who are depressed are:

- less likely to model social skills and constructive coping

- less sensitive and nurturing, and more likely to behave in a way that is out of touch with the emotional state of their children or to be more intrusive in their interaction with children

- more likely to use harsh, hostile, and coercive parenting styles, sometimes alternating with lax under-control, and anxiety and guilt-induction

- more likely to think negatively about their children and their children's behaviour. They make more negative attributions about their children, as well as other critical, unsupportive statements to the child, and are more likely to report feeling disappointed by the child.

Responsive parenting in parents who are depressed is made even more difficult by the presence of stressful life circumstances—such as hospitalisations, removal of children, financial strain, social isolation and marital conflict (Lovejoy et al. 2000)—and comorbidity with other personal problems such as personality disorder (Zahn-Waxler et al. 2002).

Our knowledge of the effects of depression has been refined by a recent meta-analytic review conducted by Lovejoy et al. (2000) of 46 published observational studies. The findings of this review suggest that maternal depression appeared to be associated most strongly with irritability and hostility toward the child; to be associated to a somewhat lesser degree with disengagement from the child; and to have a relatively weak association with rates of play

and other active and pleasant social interactions. In fact, depression was not associated with lowered levels of positive parenting behaviours (for example, praise, affection, play time) unless the mothers were also dealing with economic stress.

Finally, it should be noted that maternal depression and marital discord are very highly correlated. Marital conflict is likely to be a major cause of depression, and may in fact mediate the effect of depression on children (Zahn-Waxler et al. 2002).

Anxiety

Anxiety is considered a disorder when it leads to significant restriction and dysfunction in a person's life. There is a variety of anxiety disorders including panic disorder, agoraphobia, specific phobia, social phobia, obsessive-compulsive disorder, generalised anxiety disorder, and post-traumatic stress disorder. Anxiety disorders are one of the most prevalent mental health impairments and, like depression, occur much more frequently in females then males.

Compared to depression, there is much less research on the effects of anxiety on parenting. The research that does exist focuses mainly on the effects of general anxiety (Zahn-Waxler et al. 2002). Parents suffering from anxiety have been observed to be highly critical, show less positive regard and affection, smile less, be more critical and more catastrophising during interactions with their children, and be less likely to encourage psychological autonomy, for example, by soliciting their child's opinion or tolerating differences of opinion (Turner, Beidel, Roberson-Nay & Tervo 2003).

Associations have been identified between trait anxiety (enduring anxiety that may not reach clinical levels) and maternal unresponsiveness, maternal intrusiveness, and restricted infant exploratory play. Maternal anxiety has been found to be associated with perceptual distortions, lower responsiveness, and more interfering behaviour with 9-month-old infants (Zahn-Waxler et al. 2002). A recent observational study found that anxious parents did not appear to restrict their children's activities directly. However, they were significantly more concerned about 'every day' events involving separation from parents (Turner et al. 2003).

Psychotic disorders

This is a group of disorders (for example, schizophrenia) that are characterised by marked distortions of thought, perception and communication, and significant restrictions in the range and intensity of emotional expression, fluency of speech and thought, and goal-directed behaviour. According to the review by Zahn-Waxler et al. (2002), mothers with schizophrenia during the first year of their infant's life tend to:

- show difficulties in fulfilling daily parenting roles

- show more negative and less positive affect

- be less responsive and less involved with their children

- provide less environmental stability and nurturance

- show less spontaneity and expressiveness

- provide less sensory and motor stimulation.

Zahn-Waxler et al. (2002) also point out that:

- Level of impairment correlates with the severity of symptoms. On admission, mothers with more positive symptoms (for example, thought distortions) have been found to have worse interactions with their infants, being more unresponsive, under-stimulating, showing little positive affect, and being more hostile and disorganised in their parenting.

- There is evidence that schizophrenia impairs parenting in a greater way than many other forms of mental illness.

- Acute risks are sometimes faced by children whose mothers are experiencing severe delusional symptoms, including neglect, abuse and infanticide.

Personality disorders

Individuals may be thought to have a personality disorder when they exhibit an enduring maladaptive pattern of perceiving, relating to, and thinking about the environment and themselves (Zahn-Waxler et al. 2002). There have been very few investigations of the parenting of people with personality disorders. Zahn-Waxler et al. (2002) in their discussion of personality disorder and parenting suggest that the dramatic, emotional, or erratic behaviours that characterise these individuals are likely to have a pronounced effect on parenting. For example, several characteristics of antisocial personality disorder (APD) are incompatible with responsive parenting (for example, inappropriate expressions of anger or violence). Individuals with APD have been found to be more likely to use harsh, inconsistent discipline, have little positive parental involvement with their child, and exhibit poor monitoring and supervision of the child's activities. Antisocial mothers have been found to be less understanding and more hostile and harsh in their parenting styles than mothers in the other groups of clinical and non-clinical controls. Borderline and narcissistic personality disorders have not received research attention in relation to parenting.

Implications

Again, the general rule that applies to the issue of mental illness in parents is that the quality of parenting has been found more important than the mother's diagnostic status in determining the children's intellectual and social functioning. However, the evidence is clear—especially concerning depression and psychotic disorders—that early intervention is warranted with this group. Specifically, interventions should be targeted at mothers presenting multiple risk factors, such as depression and economic disadvantage. The evidence base justifying intervention at the level of daily parental stress is also strong. Consideration needs to be given to providing effective assistance for parents who have young children, multiple children, or children with challenging temperaments or disabilities. Interventions are needed that help parents remove sources of stress (for example, by developing routines that are more effective, or managing common childhood behaviour problems) and cope better with the stressful demands of parenting.

Substance abuse

Substance abuse typically refers to the use of illicit drugs, and the misuse of alcohol and prescribed drugs. However, the term encompasses a large number of factors that may act either independently or interactively to influence parenting capability (Mayes & Truman 2002). Prevalence data on adults with dependent children who abuse substances are not routinely collected in Australia, leaving prevalence figures to a best guess estimate. Results from the National Health Survey estimated that the proportion of adults who had consumed alcohol at levels which would be harmful to their health was 11 per cent in 2001 (Australian Bureau of Statistics 2002c). Reliable estimates of the prevalence of illicit drug use are more difficult to obtain, and the data that are available are likely to be an underestimation of problematic drug use (Tomison 1996a)

Mayes and Truman (2002) point our that a restricted range of child outcomes has been studied in the substance-abuse parenting literature, with the outcomes most studied including the incidence of behaviour problems, such as conduct or oppositional disorders, teenage pregnancy, alcoholism or other substance abuse, criminal involvement, or early incarceration. Rarely have studies focused on adaptation or resiliency. Generally speaking, considerable variability has been found in developmental outcomes for children born to women who are

abusing substances, with much of this being put down to the presence or absence of multiple other risk factors often associated with substance abuse. In summary:

- Children of substance-abusing mothers are at greater risk for child abuse and neglect, and experiencing disruption in primary care giving (Nair, Schuler, Black, Kettinger & Harrington 2003).

- Parental alcohol and drug abuse, in general, has detrimental effects on child growth and development (Walsh, MacMillan & Jamieson 2003).

- Drug-exposed children raised in homes with ongoing parental drug use are more likely to display problems in cognitive development than drug-exposed children raised in a drug-free environment (Schuler, Nair & Black 2002).

- Substance abuse in one or more parents constitutes a significant risk for poor later adjustment, poor impulse control, and behavioural difficulties (Mayes & Truman 2002).

- Infants born to alcoholic mothers show an increased incidence of intellectual impairment, congenital anomalies, and low birth weight (Mayes & Truman 2002).

- Foetal drug exposure can affect infants' behaviour. The risk of neonatal withdrawal is greatest with narcotic drugs, but has been reported in neonates following exposure to alcohol, cocaine, nicotine, and amphetamines (Nair et al. 2003).

- Infants who are withdrawing from exposure to opiates tend to be irritable, sleep less, have problems feeding, and are in general more difficult to care for than healthy newborns (Nair et al. 2003).

- Infants exposed to cocaine had higher incidence of movement and tone abnormalities, jitteriness, and attention problems, and showed less enjoyment during face-to-face play with their mothers (Singer, Arendt, Minnes, Farkas & Salvator 2000).

Walsh et al. (2003) examined the relationship between child abuse and substance abuse in a Canadian community sample (n=8472). Rates of reported physical and sexual abuse were two times higher in families who reported concurrent substance abuse. This risk was significantly exacerbated when both parents, compared to only the father, had a substance abuse problem.

There is substantial research showing that substance abuse has the potential to impair parenting. However, some significant caveats need to be made about the extent and nature of this research. Mayes and Truman (2002) have noted three major methodological problems in this area:

- Only a small number of studies directly address the role of substance abuse on parenting—essentially, the methodology adopted by most studies cannot separate out the contribution of substance abuse to parenting difficulties from other factors known to impair parenting independent of substance abuse (for example, poverty).

- There is a lack of specificity in the research, with little yet known about the differential effects of the various substances that are abused, the amount and rate of use, and the duration of drug use on parenting dysfunction.

- Samples used in much of the research are biased towards:

  o those most impaired and overwhelmed by their drug use, meaning that the generalisation of findings to the entire population of drug and alcohol abusing parents might well be inappropriate, and/or

  o parents who have reported their addiction, or have been present at a health care facility and tested positive to urine drug screening, meaning that findings may relate only to a subset of people motivated to seek help or who have had the resources to do so.

Having noted these limitations, Mayes and Truman (2002) conclude from their review of the literature that parents who abuse substances have been found to:

- fail to seek prenatal care, and be in sufficiently poor health to compromise the growth and wellbeing of the foetus (for example, pre-term deliveries, intra-uterine growth retardation)

- have difficulty understanding their children's communications as expressions of needs, tending to interpret them as demanding and inappropriate

- lack understanding about basic child development issues and, because they grossly overestimated their children's ability, be far less likely to be concerned about their children's physical and mental development

- be more likely to report using harsh criticism and yelling when angered (occurring twice as often among opiate-addicted women compared to non-addicted women)

- be less emotionally involved and responsive with infants, withdrawing completely from interaction, or being persistently physically intrusive (also see Mayes, Feldman, Granger, Haynes, Bornstein & Schottenfeld 1997)

- have impoverished language in observed interactions with infants

- be more restrictive in allowing infant exploration, and more likely to see infant explorative behaviour as the infant 'getting into things'

- have a diminished responsiveness (reacting less often and less contingently) to their infants' bids for social interactions and have fewer and less positive interactions overall, being less likely to try to elicit or encourage communicative play with their infant

- exhibit less pleasure, enthusiasm, and enjoyment during play with their infants

- be more likely to use a threatening, commanding or provoking approach to discipline, and 'to reinforce a disruptive method of attention seeking' (in comparison, non-addicted mothers were found to rely more heavily on positive reinforcement).

However, as noted earlier, it is not possible to conclude that these effects on parenting are due to substance abuse per se. The risks to child outcomes and effective parenting are frequently compounded by the presence of other social and psychological risk factors. Mayes and Truman (2002) found that parental substance abuse is often associated with:

- other psychiatric disorders including depression and antisocial personality

- multigenerational transmission of both substance abuse patterns and psychiatric disorders

- a high incidence of violence both between adults and toward children

- an increased risk of abandonment and neglect

- a generally poor sense of competence as a parent and a poor understanding of the needs of children.

It appears that it is the accumulation of risk factors, rather than substance abuse alone, that appears to have the most significant impact on children and families.

To illustrate this, a longitudinal study by Nair et al. (2003) examined the relationship between cumulative environmental risks and early intervention, parenting attitudes, potential for child abuse and child development in substance-abusing mothers. Mothers with five or more risks reported parenting to be more stressful and indicated greater inclination towards abusive and neglectful parenting behaviour, compared to mothers with fewer than five risks. How these various associated factors (for example, substance abuse, mental health difficulties, high incidence of violence, poor understanding of the child's needs) combine to influence parent–child interaction, however, is a question that has not yet been studied systematically.

Like many other parenting characteristics discussed in this review, in addition to the direct effects of social disadvantage, it is believed that parental substance abuse affects children primarily through altering a parent's psychological and social environment (for example, feelings of worthlessness, poor self-esteem, anxiety, depression). For example, as a result of the cumulative effect of many risk factors that accompany substance abuse, substance-abusing parents demonstrate either withdrawn or excessively intrusive behaviours (Nair et al. 2003).

The special needs of infants born to substance-abusing mothers can also contribute to difficulties in parent–child interaction. A negative downward spiral can emerge when mothers, prone to lower levels of prosocial interaction through substance abuse, have children who are in the most need for maternal 'help' with self-regulation. As the infant's attention and arousal deficits manifest over the developmental course, they become more difficult and less rewarding to the parent, which, in turn, leads to further decrements in prosocial parental involvement with the child (Mayes & Truman 2002).

Implications
First, it should be recognised that research to date does not rule out the possibility, or indeed the likelihood, that substance abuse and adequate parenting may co-exist in a large percentage of families with substance-abusing parents. However, the clear relationship between substance abuse and child abuse in a significant subsection of drug-using families highlights the need to develop effective interventions. Early broadly based interventions are required both prenatally and throughout infancy, as the postnatal environmental conditions, such as parental conflict and continued substance abuse, may intensify the effects related to prenatal substance exposure. A call has been made to begin this work by trialling the well evaluated behavioural family interventions with this group (see Dawe, Harnett, Staiger & Dadds 2000).

As the number of stressors increases (for example, economic instability, poor social support, health problems, mental health impairment), an individual's ability to parent effectively decreases (Mayes & Truman 2002). In this context, substance abuse is no different from other stressors in that its effects on parenting are likely to be exacerbated or ameliorated by the presence or absence of other factors in the parent's life. High-risk families, classified as those with five or more risk factors (for example, maternal depression, domestic violence, non-domestic violence, large family size, homelessness, incarceration, mental health impairment, absent husband or boyfriend) could be targeted for more intensive forms of early intervention (Nair et al. 2003). Finally, there may be a need to tailor parenting interventions according to the type and nature of substance abuse, as there are differences in the behavioural and personality characteristics of substance-abusing adults, and differences in the kinds of treatment programs that have been found to be successful (Mayes & Truman 2002).

PSYCHOLOGICAL FACTORS IN PARENTING

History of being parented

There is evidence that people's experience of being parented influences how they parent their own children; at least the evidence is that extreme parental deprivation (for example, institutional care) can lead to severe parenting difficulties, and there is a suggestion that less extreme problems in parenting might be transmitted intergenerationally (see O'Connor 2002). Most researchers interested in the effects of parenting history on a person's own parenting have worked in the field of child abuse and neglect. Far less research has concerned itself with how experiences of positive parenting in a person's background influence their subsequent parenting practices (Simons, Beaman, Conger & Chao 1993). There have been a few exceptions. Van Izendoorn, Juffer & Duyvesteyn (1995) found that the quality of relationship a mother has with her own mother is related to the quality of relationship she has with her children; and Chen and Kaplan (2001), reporting on a longitudinal study of 2,338 subjects across two decades and thee generations, concluded that constructive parenting, like aspects of abusive parenting, is subject to intergenerational continuity.

Most studies have focused on high-risk samples. In their review of the determinants of parenting practices, Simons et al. (1993) concluded that history of abuse as a child, and grandparents' parenting practices, were significant influences on current parenting practices. Egeland and colleagues (Egeland 1979; Egeland, Jacobvitz & Sroufe 1988) found that first-time mothers who were abused in adolescence were nearly 13 times more likely to abuse their child than mothers who had emotionally supportive parents.

It should be noted, however, that the majority of parents who were abused as children do not go on to abuse their own children (Kaufman & Zigler 1993), and researchers who have completed more recent reviews of the literature have argued that the frequency of intergenerational transmission of abuse has been greatly overstated (Creighton 2002; Kaufman & Zigler 1993; Tomison 1996b). Kaufman and Zigler (1993) estimated that the rate of intergenerational transmission of abuse was approximately 30 per cent. However, there is considerable variation in estimates, ranging from 7 per cent to 70 per cent (Tomison 1996b). Hunter and Kilstrom (1979) found a rate of 18 per cent, a figure that might be considered more reliable as it is based on a prospective longitudinal study, though it is now rather old. More up-to-date research using similar methodology is required.

In a systematic review of the literature, Ertem, Leventhal and Dobbs (2000) found only one study on the intergenerational continuity of abuse that met rigorous methodological criteria (for example, including use of a nationally representative sample). Most of the research is based on retrospective reports of childhood experience, which are subject to recall bias. Tomison (1996b) has pointed out that retrospective studies have also tended to focus on parents who had come to the attention of authorities, and avoided people who were abused as children but who had not subsequently abused their own children. Prospective longitudinal studies are greatly needed to investigate the question of intergenerational transmission of child abuse and neglect.

A person's history of being parented is likely to influence his or her own parenting in multiple ways. Following their longitudinal study of 323 children, Miller-Loncar, Landry, Smith and Swank (1997) proposed a cognitive mechanism to explain the effect of personal history on parenting. They argued that the extent to which a parent adopts a child-centred (versus parent-centred) approach was related to their own childhood experiences. They also found that negative recollections of child-rearing history were associated with greater child-centeredness in parents, suggesting that a history of aggressive and rejecting parenting could

cause mothers to react by developing perspectives opposite those they experienced in childhood.

Simons, Whitbeck, Conger and Chyi-In (1991) and Simons et al. (1993) proposed a social-learning model to explain how harsh parenting might be transmitted across generations. According to this view, parents may use similar harsh or abusive discipline techniques as those modelled by their own parents. The model includes the idea that a person's beliefs about appropriate discipline are shaped in early experiences in the family.

A combination of genetic and psychosocial factors has also been proposed to explain intergenerational transmission of child abuse (see the review by Tomison 1996b). According to this perspective, child abuse can be seen as the result of an interaction between a genetically determined predisposition for aggression and various factors in a person's environment. Psychosocial factors associated with the transmission of parenting practices over generations include level of social support, stressful life events, expectations about the child, satisfaction with interpersonal relationships, a strong supportive religious affiliation and positive school experiences.

Implications

Not all parents who were abused as children abuse their own children. Some research has looked at the differences between repeaters and non-repeaters of abuse (see review by Langeland & Dijkstra 1995). In general, non-repeaters have been found to:

- be less likely to have been abused by both parents/carers

- be more likely to have had an emotionally supportive relationship with one parent

- have experienced less severe and less persistent abuse

- have rejected the attitude of their parents

- be more openly angry about their abuse

- have higher IQ and exceptional talents, have experienced success or accomplishment, and be physically attractive and poised

- have had less ambivalent feelings toward pregnancy and their baby

- be more responsive to their child and more flexible

- be more optimistic about problem-solving

- have greater hopefulness for the future

- have a supportive spouse

- have physically healthy children

- be more economically stable

- have good social supports, and/or a strong religious affiliation

- have fewer other stressful life events

- have had positive school experiences

- have received counselling.

While there has been scant research evaluating the effects of therapeutic interventions designed specifically to interrupt the cycle of violence, research has identified a range of mediating social and psychological factors that might be usefully explored in helping victims of abuse to become positive parents themselves, including: assistance to develop adequate support networks; stress management skills; helping parents develop realistic expectations about their children; promoting the development of strong and supportive interpersonal

relationships; and encouraging affiliation with supportive groups (see for example Egeland, Jacobvitz & Sroufe 1988; Egeland & Sroufe 1981; Leifer & Smith 1990).

However, caution should be exercised before using previous abuse as an indicator for secondary prevention efforts, as this is likely to lead to a high rate of false positives. It should also be remembered that abuse prevention and intervention research has identified approaches that can be effective in preventing the occurrence of abuse, and this research using samples of abusive parents has presumably included many parents who were abused themselves as children. Effective strategies for at risk groups promote problem solving and conflict resolution without violence, and teach positive parenting strategies. Finally, a better understanding of how positive aspects of parenting are transmitted from generation to generation could provide some clues as to how a society might best ensure that parenting knowledge and capacity is preserved into the future.

Knowledge of child development

There is evidence that knowledge of child development affects the way parents interact with their children, which in turn has an impact on children's social and cognitive development (Wacharasin, Barnard & Spieker 2003). Most research in this area has focused on parents' awareness of the ages at which children usually acquire skills and behaviours, and developmental milestones.

Research has demonstrated that knowledge of this kind is associated with the quality of child stimulation, home environment and parent–child interaction (Benasich & Brooks-Gunn 1996; MacPhee 1984; Damast, Tamis-LeMonda & Bornstein 1996; Stevens 1984). Mothers who had higher expectations for their child's cognitive and psychosocial development were more likely to implement specific child-rearing practices such as talking and reading to their baby from an early age (Williams, Soetjiningsih & Williams 2000). Studies have also shown that cognitive development in premature infants (Dichtelmiller, Meisels, Plunkett, Bozynski, Clarin & Mangelsdork 1992) and three-year-old children (Benasich & Brooks-Gunn 1996) was related to parental knowledge of child development (although the amount of variance in child outcomes accounted for by parents' knowledge of child development is typically small).

On the other hand, there are claims that parental knowledge of behavioural and developmental expectations is poor in abusive parents (Davoren 1975), and that lack of parental knowledge of appropriate child behaviour and development limits the ability of abusive parents to deal effectively with normal child behaviour (for example, Vukelich & Kliman 1985).

Knowledge of child development might be assumed to come with parenting experience, and there is research that indicates various advantages of experience in parenting (see p. 9.) Yet not all research supports the view that parental knowledge is related to prior parenting experience. For example, Vukelich and Kliman (1985) found that having had other children was unrelated to parent's expectations for physical, social and emotional development in children under three years.

Research suggests that, in addition to experience in parenting, the following factors are associated with the nature and extent of a parent's knowledge of child development:

- level of parent's education (Peters & Hoekelman 1973; Vukelich & Kliman 1985)

- culture: variations in parental beliefs and expectations can occur within countries and cultures (for example, Goodnow, Cashmore, Cotton & Knight 1984; Hopkins & Westra 1989; Pachter & Dworkin 1997; Ninio 1988)

- health of the infant: parents of children with health concerns—such as low birth weight, hospitalisation, and congenital abnormalities—are more likely to rate their child as slow developing, when in fact they are not (for example, McCormick, Shapiro & Starfield 1982).

One explanation for the link between parental understanding of child development and better outcomes for children is that such knowledge increases the range of effective responses and interactions available to a parent. Wacharasin et al. (2003) propose that parents who have greater child development knowledge and more realistic expectations of infant behaviour are better able to tailor their interactions and the home environment to promote positive child outcomes.

Another explanation is that knowledge of child development might have an impact on parent–child interaction primarily by influencing the kinds of expectations parents have of their children. Poor knowledge of child development may lead to inappropriate standards and expectations of children (Vukelich & Kliman 1985). A large body of research supports a link between unrealistic expectations and physical abuse or neglect (see Miller 1995 for a review). For example, Twentyman and Plotkin (1982) concluded that abusive incidents were directly related to inappropriately high expectations of children. Conversely, low expectations have been associated with insufficient stimulation of children (for example, Ninio 1979).

Alternatively, parental attribution may mediate the relationship between knowledge of child development and discipline practices. Mothers who had lower levels of child development knowledge were more likely to attribute intent and personal responsibility to children for their behaviour (Smith 2002). These mothers were also more likely to use assertive or authoritarian discipline than more knowledgeable mothers (Kenrick 1998; Smith 2002).

However, there is consensus that knowledge of child development—although necessary—is not sufficient for effective parenting. Put simply, knowing is not the same as doing, and a range of factors can operate to prevent parents from implementing their knowledge. For instance, a parent's negative emotional state (for example, maternal depression and stress) can interfere with the translation of knowledge into practice (Wacharasin et al. 2003). Errors of expectation, observed in abusive and neglectful families, may interact with other factors such as parental psychopathology, immaturity and self-centredness, in producing negative outcomes for children (Twentyman & Plotkin 1982).

There is also a question regarding the kind of information that best assists parents to promote the development of their child. As noted, most of the research reviewed above has concerned an intellectual understanding of child development (that is, demonstrated knowledge of normal milestones etc). However, it may be that situation specific information is more important than general information about development.

Using Vygotsky's concept of the 'zone of proximal development', Rogoff, Malkin and Gilbride (1984) described how children's skilful engagement with the environment combines with elements of parent–child interaction to produce development. Optimal developmental experiences are said to occur when the child has the opportunity to participate in an activity at a 'comfortable but slightly challenging level' (p. 33). Interaction in this zone of proximal development is facilitated by parents in the kinds of activities, materials and tasks they provide, and in the level of scaffolding (or support) they provide to assist their child to assume greater responsibility and independence in the task. Successful scaffolding involves the adult guiding the child by giving the minimally sufficient support necessary to keep the child actively engaged in the task and fully involved in problem solving.

It appears that parents primarily use child and situational cues to adjust the level of scaffolding they provide. Referring to interactions between adults and young infants (four to six months) Rogoff et al. (1984) state:

> …interactions focus on the maintenance of the baby's attention to the adult and the ongoing activity, through subtle negotiations. Both the baby and the adult contribute to the management of joint attention. The baby rewards the adult with eye contact, smiles, and cooperation when the adult successfully meshes the adult's agenda with the baby's interests and is sensitive to the baby's cues. The baby withdraws eye contact when the adult appears to be intrusive,

uninvolved, or oblivious to the baby's cues. If the adult continues to miss the baby's cues, the baby escalates—beginning with listlessness, then gaze aversion, then postural distancing, then turning the whole body away and hiding the face in the forearms. Vocal cues begin with whines, grunts, or whimpers, which can then become insistent fussing or cries and shrieks. The progression of actions by the baby and the progression of actions by the adult are tied together. (p. 36)

Thus, responsiveness to the child's capabilities and sensitivity to the cues given by the child appear to be particularly important in keeping parent–child interaction within the zone of proximal development. It is likely, then, that parental sensitivity, rather than a general knowledge of child development, is the critical factor in the parent's ability to provide experiences that will have high developmental yield.

Implications

Intervention research in this area is equivocal. On the one hand, the effectiveness of parenting programs in modifying patterns of parent–child interaction and disciplinary practices is well documented (see Lochman 2000, for a review). Similarly, research shows that intervention can increase a parent's knowledge of child development and lead to positive changes in parenting behaviour (for example, Fulton, Murphy & Anderson 1991; Guldan, Fan, Ma, Ni, Xiang & Tang 2000). However, there is no convincing evidence that increasing parent's knowledge of child development alone (milestones, appropriate ages and stages) can change parenting behaviour or lead directly to benefits for children. Further research is needed to isolate the impact of increasing knowledge of child development from the other benefits of parent education such as skills training.

Until such evidence is available, careful consideration should be given to how education in child development is incorporated into parenting programs. A simplistic approach to teaching developmental milestones may have little impact. Instead, it may be more appropriate to focus on helping at-risk parents develop greater sensitivity and greater reciprocity in their interactions with children (for example, see van Ijzendoorn, Juffer & Duyvesteyn 1995).

Or the focus might be placed on countering distorted parental expectations that are based on a lack of understanding of children's developmental stage and capabilities. It is likely to be particularly important to help parents view the challenging behaviour of their children within a developmental context (for example, developmentally driven curiosity) rather than a moral context (for example, a deliberate act of choice). Information of this kind would include a focus on the limitations of young children's self-regulatory capacity, and the implications of motor and social development for day-to-day management of children (for example, safety issues that arise with the rapid development of climbing ability in young children). Providing parents with information about the enormous learning potential of young children may be an important way to encourage them to engage in care-giving behaviours that promote optimal development.

Cognitive processes

In recent times there has been increasing interest in the link between parental cognitive processes (thinking) and behaviour. Researchers have looked at how parents' information processing and thinking patterns influence the way they respond to their children. As the evidence supporting an important link between parental cognitive processes and behaviour mounts, a focus on parents' cognitive processes is increasingly being incorporated into parenting interventions. This section will examine the role of a number of cognitive structures thought to be important in influencing parental behaviour: beliefs, attitudes, attribution and self-efficacy.

Beliefs

Beliefs are cognitive structures (rules or assumptions) that people hold about themselves or the world. What people believe influences the ways in which they perceive, interpret and respond to events. The kinds of beliefs thought to play the most significant role in determining behaviour are the fundamental things that people take for granted. People rarely question such beliefs and may not even be conscious of them. Cognitive behavioural therapy, a widely practised and evidence-based approach to individual psychotherapy, is based on the premise that helping people to alter the way they perceive themselves and the things that happen to them reduces negative feelings and leads to more adaptive behaviour (see Beck 1995).

Beliefs are likely to play an important role in influencing how people raise their children. Research has generally supported associations between parenting beliefs, socialisation practices, and various child outcomes. After reviewing the literature on parenting beliefs, Sigel & McGillicuddy-DeLisi (2002) conclude that the available evidence suggests the following:

- There is a relationship between parent beliefs, child beliefs, and child cognitive and academic outcomes. This finding is consistent across cultures. For example, parents' beliefs about the nature of reading (that is, fun or a skill to be taught and practiced) have been found to predict later literacy performance in children.

- Parental beliefs about the causes of childhood aggression and withdrawal (for example, biologically based or intentional) are associated with different child-rearing strategies.

- Change in beliefs regarding corporal punishment is associated with the desire to stop using corporal punishment.

Hastings and Grusec (1998) define three goals involved in parenting: parent-centred goals (focused on power assertion), relationship-centred goals (focused on warmth, negotiation, and cooperation), and child-centred goals (involving reasoning processes). Parent-centred goals during interactions with a child are associated with more negative parental affect and punitive behaviours than child-centred or relationship-centred goals. According to Sigel and McGillicuddy-DeLisi (2002), parent goals may function as 'mediators between beliefs and behaviours' (p. 491).

Australian research has reported findings consistent with the conclusions of the review cited above. For example, a comparative study conducted by the Australian Institute of Family Studies (Kolar & Soriano 2000) examined parental beliefs and behaviours in contemporary Australian parenting practices. Parents were from Anglo, Torres Strait Islander, and Vietnamese communities in Australia. Kolar and Soriano found that parental beliefs do have important implications for parenting behaviours. Not only were parental beliefs found to be reflected directly in parental behaviour, but they were also important indicators of how people intended to parent in the future (for example, education).

Sigel and McGillicuddy-DeLisi (2002) have pointed out that research on parenting beliefs stems from the hypothesis that assumptions and ideas about children and child rearing influence how parents behave. Presumably, parents' beliefs have their impact on children by influencing parenting behaviour and therefore the nature of parent–child interaction (that is, via expectation, encouragement, or interaction that creates particular learning environments for the child).

While there is support for a relationship between parental beliefs and behaviour, the nature of this relationship is correlational and, on the basis of current knowledge, causality cannot be determined. It is possible that child behaviour causes parents to develop certain beliefs, that parental beliefs and child behaviours exert a bi-directional influence on each other, or that a third yet unspecified factor causes both parenting beliefs and behaviours. Sigel and McGillicuddy-DeLisi (2002) point out further factors limiting our understanding of the relationship between parental beliefs and outcomes for children.

- The magnitude of findings is low.

- Statistical significance is a function of sample size.

- Measures used in the studies may have had high face validity, but lacked information about construct and content validity.

Attitudes

Attitudes can be thought of as a subset of beliefs. They are the positions that people take on issues (opinions), rather than the core assumptions that people make about the world or themselves (beliefs). Attitudes are believed to bias or predispose a person's reactions (favourably or unfavourably) to particular propositions, information, entities or objects (Holden & Buck 2002). Examples relating to parenting of young children include attitudes towards breast feeding, feeding, sleeping arrangements and smacking. It is common to hear practitioners speak of the need to assess and intervene at the level of parenting attitudes.

Holden and Buck (2002) have recently conducted a review of the literature on parenting attitudes. They point out that research in this area has frequently focused on comparisons between different groups of parents. Parental attitudes in relation to the behaviour of children and the parenting role differ as a function of culture and class. Parent perceptions about adequate finances, social and political orientations, and child characteristics valued by high/low SES groups, have been found to influence parents' attitudes.

However, Holden and Buck (2002) also observe that research into parenting attitudes, once very popular, has decreased since around 1980. This appears to be due to two main reasons:

(1) There has been little progress in understanding the link between child-rearing attitudes, actual behaviour of parents, and child outcomes. Not enough research has been done and the findings are inconsistent. There is a view in the field that child-rearing attitudes have failed to predict observed parent behaviour, or, in other words, there is little direct correspondence between what parents say and what they actually do.

(2) There are conceptual problems with the attitude construct. Other and newer social cognition constructs appear to be more promising, with more scope and relevance (for example, attribution, beliefs, expectations, knowledge). While a better understanding of the role of attitudes in relation to other social cognitions is needed, research into other social cognitions appears more promising.

Attribution

People respond differently to the same event based on how the event is construed. You can think of attribution as a kind of 'cognitive map' that helps parents to understand and predict the behaviour of their children, and determines their emotional and behavioural responses to care-giving events (Blunt Bugental & Happaney 2002). The importance of attribution in influencing the way parents respond increases in situations that are ambiguous (where the 'cause' is not clear and parents do not have a ready made 'reason' for why children behaved in the way they did). The way parents respond to children's behaviour also appears to be influenced by three important dimensions of attribution:

(1) locus—a judgement about who is in control of the behaviour, whether the causes are external or internal to the child

(2) stability—whether the behaviour is a result of modifiable or non-modifiable factors over time

(3) controllability—whether the person performing the behaviour is viewed as exercising choice (Miller 1995).

Two useful reviews of the parent attribution literature (Blunt Bugental & Happaney 2002; Miller 1995) have identified situational, child and parent factors that influence the kind of attributions that parents make. These are summarised in Table 1.

According to attributional theory, attributions about child behaviour will determine parental responses to that behaviour (Dix & Grusec 1985). It is believed that attributions begin playing an important role in shaping parental behaviour in the earliest part of parent–child relationships and probably even from before birth. Parents enter the parenting relationship with a well-established set of relevant beliefs (Blunt Bugental & Happaney 2002), and these early beliefs about children's cognitive abilities then continue to guide parents' later thinking and behaviour (Miller 1995). However, attributional processes also appear to be open to change and modification. Attributions appear to be strongly influenced by adults' own early history (within family and within culture) but are then updated as a result of later experience (Dix & Grusec 1985).

The extent to which parents believe that misbehaviour was intentional and under the control of the child who performed it influences the kind of disciplinary action they take (see Dix & Grusec 1985; Dix, Ruble, Grusec & Nixon 1986; Grusec & Walters 1991). Parents who interpret a child's misbehaviour as intentional and under the control of the child (that is, that the child had a choice not to do it) are much more likely to experience high levels of anger or frustration and to use punitive forms of discipline (Dix, Ruble & Zambarano 1989; Grusec & Walters 1991; Geller & Johnston 1995).

Related closely to this is the finding that parents feel more upset and more compelled to respond to misbehaviour that is seen to be dispositional in the child (that is, if the behaviour is seen as evidence of a stable unpleasant aspect of the child's character or genetic inheritance; see Miller 1995). A lack of perceived control by parents is also associated with less effective parenting. These parents are more likely to engage in harsh parenting practices, demonstrate lack of positive affect, demonstrate a coercive parenting style and have low self-efficacy (Blunt Bugental & Happaney 2002). Research on parental power and control suggests that optimal attributions are those in which parental power is seen as moderate rather than high or low (Blunt Bugental & Happaney 2002).

Table 1: Summary of factors that influence parental attribution

Factor	Example	Explanation
Situational factors	Outcome of the child's behaviour	Positive social behaviours are generally attributed to the child, but negative behaviours (of same children) attributed to the situation.
Child characteristics	Age of the child	The age of the child. Parents tend to be more upset by misbehaviour in older than younger children. Some research suggests that child age is associated with parental beliefs that actions are intentional/controllable. Therefore they are more likely to attribute negative intentions to misbehaviour in older children.
Parent factors	Parent's mood	Parents tend to assign more negative attributions to child behaviour when in an angry mood (Miller 1995). This is particularly true if the situation is ambiguous and the causes of the child's behaviour are not immediately apparent.
Child characteristics	Child's gender	Male misbehaviour is more likely than female misbehaviour to be attributed to dispositional factors (within child factors such as gender. that is, 'He's just being a boy'). This process reflects the complex influences of direct experience, personal history, and culture/cultural history on parental attributions.
	Special needs	Parents typically attribute the needs of children with disabilities to situational factors outside their or the child's control, and are less likely to engage in self-blame.

	Behaviour problems	Parents of children with behavioural and social problems tend to make more negative attributions about their children.
Social factors	Culture	It is thought that the way families are portrayed in the media, and common folklore passed down in families, is likely to shape how children's behaviour is interpreted. Yet to date there is limited evidence for an effect of culture or the wider macrosystem on attributions (see Grusec, Hastings & Mammone 1994).
	Maternal education	Mothers with higher education are less willing to judge infants' negative behaviours as intentional or to see them as able to carry out spiteful or mean acts: 'Parents with higher levels of education and exposure to contemporary parenting information are more likely to believe that positive care-giving outcomes follow from effortful activity, both on the part of parents and on the part of children' (Blunt Bugental & Happaney 2002, p. 521).

The strongest evidence for a link between negative attributional processes and harsh discipline practices has been found in child abuse research. Abusive mothers judge their own child's negative behaviours as more internal (under the child's control) and stable (unmodifiable) than other children; the reverse pattern is demonstrated for comparison mothers (Miller 1995). Abusive mothers also tend to perceive their own level of control as low compared to child control (Miller 1995). However, most studies of attributional biases and maltreatment of children have been correlational and, although the link is consistent, the direction of influence is currently not clear (Blunt Bugental & Happaney 2002). While it is theoretically plausible that attribution proceeds response, it is also possible that attribution follows a response, or is playing no significant causal role, but instead is an outcome of the same causal factors that produce the response.

A theoretical explanation of the causal role of attributions has been provided by Miller (1995) (See Figure 1). The model proposes an essentially linear mechanism involving four phases: (1) contextual factors (situation, behaviour of the child, mood of the parent, for example, a toddler is making a mess in a cupboard) give rise to (2) attributions about the meaning and causes of child behaviour (for example, the child knows not to do that, and is being deliberately disobedient), and these in turn are (3) associated with an emotional response (for example, anger) which, in turn, triggers (4) a behavioural response (for example, smacking).

Figure 1: Theoretical explanation of the causal role of attributions
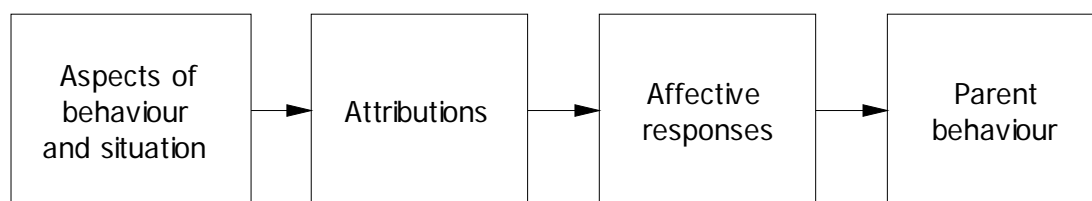
As we are talking about basic psychological processes, there is no reason to expect that research in the Australian context is likely to show up different findings. And this is the case. The findings of Australian research are consistent with the general literature on parent attributions. For example, Dadds, Mullins, McAlister & Atkinson (2003) assessed maternal attributions regarding child behaviour and how attributions predict reactions to child behaviour in a sample of parents at risk for child abuse as well as non-clinic parents. Abuse-risk mothers tended to attribute positive child behaviour to causes external to the child and attributed negative child behaviours to internal causes. Maternal attributions were also found to be predictive of parent responses (affective and behavioural) to a child's ambiguous or unfamiliar behaviour.

Esdaile and Greenwood (1995) investigated the relationship between stress and causal attributions in Australian mothers. In examining outcomes of negative interactions between mothers and toddlers, they found that mothers with children who had a difficult temperament reported less stress if responsibility for negative interaction outcomes was attributed to children. Mothers of children with an easy temperament reported more stress when responsibility was attributed to their children.

In interpreting the research findings on parent attribution, some cautions must be noted. Firstly, there is little research on parental attributions regarding children's positive behaviours; research has focused largely on parental responses to negative child behaviours (Miller 1995). Secondly, studies have reported clear results regarding attributions and abusive or harsh parenting but there is an absence of strong effects within normally functioning families (Grusec et al. 1994). Thirdly, most research has been conducted with mothers. While some research has been conducted with fathers, more is required; it remains to be seen whether mothers and fathers have similar beliefs about their children (Miller 1995). Fourthly, more attention needs to be paid to the role of mediating processes. For example, is the relationship between parental blame and use of punishment mediated by anger or some other factor? (Blunt Bugental & Happaney 2002). The attribution of negative child behaviours to internal, stable, global (unchangeable) factors is implicated here (Coleman & Karraker 1997). Finally, there is significant overlap throughout the literature between attributions and self-efficacy processes. For instance, attributional processes may influence parenting responses primarily through modifying parental self-efficacy (Grusec et al. 1994).

Self-efficacy

Self-efficacy is another cognitive structure thought to be influential in determining how people behave. Self-efficacy refers to the way people evaluate their ability to perform or to change (Bandura 1982). Self-efficacy judgements involve estimations of the difficulty of the circumstances and the personal knowledge, skills and resources that can be brought to bear on the situation. Sustained efforts at producing change are more likely when people have high self-efficacy. In relation to parenting, self-efficacy refers to parents' confidence in the task of parenting and their perceived ability effectively or positively to influence their children's behaviour and development (Coleman & Karraker 1997 2003; Grusec, Hastings & Mammone 1994).

Coleman and Karraker (1997) conducted a comprehensive review of the parenting self-efficacy literature. They also conducted a study examining the relationships between parenting self-efficacy beliefs, competence in parenting toddlers, and toddlers' behaviour and development. According to these authors, research over the past 15 years supports a number of conclusions about the role of self-efficacy in parenting:

- Parents' perceptions of their own competence correlates strongly with parenting behaviour thought to be important for children's emotional and intellectual growth.

- Confidence in future parenting abilities predicts maternal competence.

- Parenting self-efficacy beliefs are stable over time.

- High self-efficacy is associated with greater use of analytical thinking, setting realistic goals, and problem-focused coping (focus on management of the event or problem), whereas low self-efficacy is associated with a higher use of emotion-focused coping (focus on regulation of emotions evoked by the event or problem).

- Parents with high self-efficacy are more likely to interpret a child-related difficulty as a challenge rather than a threat.

- Parents who have maltreated their children have lower parenting self-efficacy than non-abusive parents.

- Parents with low self-efficacy are more likely to attribute child's negative behaviour to internal, stable, global factors.

- Parental self-efficacy is positively related to parent education efforts (for example, reading parenting books and attending parenting programs).

These reviewers note that the process by which parental self-efficacy beliefs influence parenting responses is complex. In addition to direct and independent effects on parenting behaviour, there is evidence that self-efficacy beliefs may be an important mediator of other psychosocial factors such as maternal depression, child temperament, social support, and poverty on children. This means that psychological risk for children is reduced when economically disadvantaged parents demonstrate or possess high levels of self-efficacy. For example, a belief in one's ability to carry out parenting tasks is likely to result in lower stress levels during demanding parent–child encounters, resulting in child management that is more constructive. Self-efficacy may also mediate the relationship between income, workload or childcare responsibilities and psychological wellbeing in women.

Coleman and Karraker (1997) argue that parental self-efficacy is related to:

- knowledge of appropriate childcare responses (for example, how to respond to infant distress)

- confidence in personal ability to carry out the tasks specified by the knowledge

- the belief that children will respond in predictable ways to changes in their environment (that is, that parents can influence the behaviour of their children)

- the belief that others around them (for example, other family members) will be supportive.

These authors report that accomplishments, personal experiences and feedback from parent–child interactions appear to have the strongest influence on parents' perceptions of their ability to deal effectively with the challenges of parenting, noting that success in parenting is more likely to enhance self-efficacy when performance is attributed to skill rather than external factors. However, there is also a possibility that attributions (or beliefs about the intentionality of children's behaviour—see previous section, p. 39) may affect parenting self-efficacy more than the early experience of parents (Grusec, Hastings & Mammone 1994), and the operating mechanism may overlap attribution and self-efficacy.

There is also evidence that the relationship between parenting knowledge and self-efficacy may be more complex than might at first be expected. Conrad et al. (1992, cited in Coleman & Karraker 1997) investigated components of maternal self-efficacy (maternal knowledge of child development and maternal self-confidence) and mother-toddler interactions. No significant main effects for knowledge of child development or self-confidence were found; however, a significant interaction was found; that is, increased knowledge was associated with more effective interaction only for more confident mothers.

Implications

Although the issue of causality is yet to be scientifically determined, the strength of evidence is sufficient to suggest that incorporating a focus on the way parents think into parenting education programs is warranted. This recommendation can be made even more strongly for programs aimed at preventing child physical abuse. The most promising direction appears to be in the area of interventions designed to alter unhelpful attributional processes, although core beliefs related to parenting are strongly associated with attributional style and it is unlikely that changes in the way parents interpret their children's behaviour will take place in the absence of changes to belief systems. Taking parental beliefs into account is also likely to be important when working with culturally diverse groups and dealing with culturally specific parenting practices. Again, the need to address parental beliefs directly may be greater with parents at risk of maltreating their children.

Azar and colleagues have described a four-stage process of understanding child physical abuse that incorporates an understanding of attributional processes (see Morton, Twentyman & Azar 1988, p. 90). Azar's model introduces the notion of accuracy in parental attributions and expectations. According to this model, an abusive event can be understood in the following stages:

Stage 1: Parent holds unrealistic expectations for the child. Typically, this involves overestimating the child's maturity and ability to self-regulate, and lack of knowledge about what can be expected of children at different stages in development (for example, the idea that a two-year-old should be able to follow rules).

Stage 2: Child's behaviour falls short of expectation. The parent feels disappointed and angry (for example, the two-year-old returns to the prohibited cupboard after being told not to).

Stage 3: Parent attributes a malevolent intention to child's failure. He or she concludes that the child is acting wilfully or intentionally (for example, the two-year-old is seen as being defiant or deliberately trying to upset the parent).

Stage 4: Parent overreacts and delivers severe punishment (for example, the parent smacks the child).

Generally speaking, while there is evidence pointing to the importance of these cognitive processes in parenting, useful clinical guidelines related to the use of cognitive-based strategies, and evidence for the effectiveness of parenting programs that incorporate cognitive components (for example, problem solving, stress management), empirical evidence is still lacking for the efficacy of parenting intervention based on cognitive strategies (see Stern & Azar 1998; Peterson, Gable, Doyle & Ewigman 1997). Research is underway, however, and data are emerging to support the incorporation of cognitive components into programs. For example, Bugental (1999; cited in Blunt Bugental & Happaney 2002) conducted a program with high-risk parents that focused on reducing parents' tendency to blame themselves or others for causing difficult care-giving events, and facilitated problem-focused 'orientation'. A reduction in physical child abuse was reported after completion of this program.

Finally, the concept of self-efficacy appears to offer a lot to those designing parenting support interventions. Program designers need to be aware that the relationships between parental self-efficacy, parent behaviours, and child outcomes are complex and possibly multi-directional. However, there is a strong suggestion that various psychosocial variables undermine parental competency perceptions, rather than impairing parental functioning directly. While more research is required to determine pathways and mechanisms by which parental self-efficacy influences parent behaviour and child outcomes, the clinical implication of this is that positive change can be effected even when variables such as the social circumstances of families or intra-child characteristics (for example, child temperament) cannot be modified (Coleman & Karraker 1997). Demonstrated capacity to alter parental self-efficacy would appear to be a justifiable requirement of any proposed parenting intervention.

CHILD CHARACTERISTICS

Age and developmental stage

Does parenting change with the child's increasing age? Despite large variability across and within families, and considerable gaps in knowledge derived from research, there is some evidence that parenting is affected by the child's age and stage of development. For example, parenting behaviours that increase with child age include: rates of information-laden speech, compared with affect-laden speech; more instruction giving; and more passive intervention strategies for sibling conflict (Demick 2002). Parenting behaviours that decrease as children get older include maternal 'care-giving' and 'verbalisation' (Holden & Miller 1999). There is also a reported decrease in expressed pleasure in parenting (Fagot & Kavanagh 1993).

Parents modify their behaviour in ways that are consistent with developmental changes in their children. As children's motor skills develop, for example, parents will structure the environment differently. As the child's information processing skills develop, parents will change the way they interact and communicate with their infants. Behaviour management strategies also change from methods such as distraction and physical guidance for younger children to verbal suggestions, reasoning, and negotiation with older children (Bornstein 2002).

Birth may be considered as a child developmental stage, and various factors affect the transition to parenting. Parental expectations that do not match outcomes, and parental pre-natal characteristics such as problem solving capability, anxiety, and warmth have been found to be associated with the degree to which parents are responsive to the infant and adjust to the parenting role (Demo & Cox 2000; Heinicke 2002).

Implications

Parenting responsibilities are greatest in infancy when the child is totally dependent on caregivers. Parents spend twice as long with infants as they do with children in middle childhood (Bornstein 2002).

Transition to parenting can therefore be seen as an important time to promote realistic expectations about changes that will occur in families. Parenting programs could also incorporate information about children's development, in a way that is culturally sensitive and acknowledges other factors that may impact on the parenting role.

Child gender

The research shows that in some important aspects parents interact with their sons and daughters differently. For example, in the 0 to 5 year age group there is evidence to suggest that parents discipline boys more than girls and, when children are toddlers, that parents demonstrate more verbal and physical affection towards girls than boys. Further, for this toddler age group, studies examining maternal behaviours have found that mothers encourage more gender-typed play in boys than in girls. A meta-analysis performed by Leaper, Anderson, and Sanders (1989) found significant differences between the speech/communication patterns of mothers towards boys and girls. Child gender has also been associated with ways in which parents interact with their children emotionally.

The direction of causality for these findings is not clear. Is it that parents behave differently towards their sons and daughters because of cultural stereotypes about gender? Or do parents react to different behaviours displayed by boys and girls; for example, the higher levels of temperamental irritability and negative affect that have been found in boys, and the greater verbal ability observed in girls?

Implications

Some variables appear moderate the influence of child gender on parenting. These include parents' gender, their cultural background, the division of labour and childcare responsibilities in the family, economic opportunities, and religious beliefs and values.

There remains the question of whether gender-neutral child rearing is advantageous to children. At present, the extent to which gender-specific parenting practices affect outcomes for boys and girls is not clear and further research is required (Crick & Zahn-Waxler 2003). It may be more important to recommend parenting strategies that focus on the strengths, interests, skills and personality of individual children rather than their gender.

Temperament

In an Australian study, children were rated as 'easy', 'difficult', 'slow to warm up', or 'intermediate' on the basis of scores on Approach, Cooperation and Irritability temperament scales. In the 0 to 6 years age group, the greatest percentage were rated 'intermediate' (42–45 per cent), followed by 'easy' (37–41 per cent), 'difficult' (12–14 per cent), and 'slow to warm up' (4–7 per cent) (Oberklaid, Sanson & Prior 1986; Oberklaid, Prior, Sanson, Sewell & Kyrios 1990). In the case of 'difficult' and 'slow to warm up' characteristics, the temperamental differences are thought to represent normal limits and do not imply that there is a problem within the child (Putnam, Sanson & Rothbart 2002). Not all infants with difficult temperament will have behaviour problems at a later stage, and not all children classified as 'easy' will be problem-free (Prior, Sanson, Smart & Oberklaid 2000).

Relationships between parenting and the child's temperament have generally been observed to be modest rather than strong, and moderated by a range of other factors such as child age and gender, parent gender, socioeconomic status, and cultural background. Where relationships exist between temperament and parenting, it seems that difficult child temperament can elicit emotions, behaviours, perceptions, and physical symptoms in the child that have a negative effect on the parents' behaviour (Chess & Thomas 1996; Putnam et al. 2002; Leve, Scaramella & Fagot 2001). This negative effect is thought to result from a poor match between the parents' expectations and management styles and their child's temperament (Putnam et al. 2002), which in turn has a negative influence on the child's behaviour. The Australian Temperament Project, for example, found that parental perceptions of their child's temperament as problematic predicted child behaviour problems that persisted over time, regardless of the child's actual temperament ratings. In terms of social competence, children rated with 'easy' temperaments, and who were perceived as such by their parents, had the best outcomes (Smart & Sanson 2001).

Implications

There are two perspectives on the direction of the relationship between parenting and child temperament. One point of view describes parents' differential susceptibility to child rearing, with the child's temperament moderating parenting. The other perspective is that parenting moderates the child's temperament, and if this is the case, parenting practices can be risk or protective factors for children with problematic temperaments. The causal pathway is yet to be determined. It is clear, however, that there are poor behavioural outcomes for children when problematic temperament and ineffective parenting practices occur together.

These findings have implications for parenting intervention. There is some research that shows benefit in providing parents with information and strategies that focus on the child's temperament (Chess & Thomas 1996). However, efforts in this regard need to proceed cautiously. Putnam and colleagues (2002) report research showing that the child outcomes when parents received written information only were worse than those of the control group.

For positive outcomes, it seems that parents may have required more intensive face-to-face support.

Special needs

Almost 4 per cent of children in Australia aged between 0 and 4 years were classified as having a disability that included intellectual or physical disability or chronic illness (Australian Bureau of Statistics 1999a). More than half of these children were found to have restrictions to their self-care, mobility and communication. The effects of a child's special needs on parenting can vary depending on the specific nature of the child's disability (Pelchat, Ricard, Bouchard et al. 1998). However, what is common among families with children with special needs is the greater challenges and higher levels of stress reported, particularly where children have behaviour problems (Baker, McIntyre, Crnic, Edelbrock & Low 2003). Intellectual disability and chronic illness are discussed below, as examples of children's special needs that have potential to affect parenting.

Intellectual disability
Hodapp's (2002) review of early studies of parenting of children with intellectual disability revealed that:

- Families with a child with an intellectual disability were less likely to be intact than families without a child with a disability.

- Families with both parents present have been found to cope better than single parents with the challenges associated with raising a child with a disability.

- Having a child with a disability was associated with higher likelihood of parental emotional disturbance, such as depression.

Although it has been proposed that parent–child interactions are different with children with an intellectual disability compared with those with typically developing children, the research has produced conflicting findings (Hodapp 2002). For example, there were some similarities, but also some differences seen in the language interactions of mothers of children with Down Syndrome compared with mothers of non-disabled children. The similarities were in the structure of language used; the differences were the more didactic, directive and intrusive style of the mothers of children with Down Syndrome. As well as differences in maternal behaviour of mothers of children with and without disabilities, studies reviewed by Hodapp (2002) have shown variation in maternal behaviours within groups of mothers who have children with disabilities.

Chronic illness
Chronic illness refers to a medically diagnosed ailment with a duration of six months or longer, which shows little change or slow progression (Sharpe & Rossiter 2002). It includes conditions such as diabetes, asthma, cancer, and juvenile arthritis. Parents of chronically ill children can experience a 'chronic burden of care' when involved in health care regimens that are time-consuming, unrelenting, emotionally distressing and financially draining (Melnyk, Feinstein, Moldenhouer & Small 2001). Stress for parents may be highest at the time of diagnosis and during any hospitalisation, but it is usually ongoing (Uzark & Jones 2003).

The constant vigilance that is required for children with unpredictable illnesses may mean that parents are unable to move through 'normal' stages of parenting if their children remain dependent on them for longer periods of time than would be typically expected (Ray 2002). Similarly, parental overprotection may result from their perceptions about the vulnerability of the child (Melnyk et al. 2001). For example, an observational study by Power, Dahlquist, Thompson and Warren (2003) found that mothers of children with severe arthritis

demonstrated more directive parenting behaviours than mothers with children who were healthy or had less serious arthritis. The authors speculated this was because parents were anxious about their child's performance on tasks, believed their child required motivation, or they overgeneralised a teaching style used in physical therapy with their child.

Australian researchers who reviewed the research on the effects on parents of having a technology-dependent chronically ill child found considerable negative impact, such as physical overburden, emotional turmoil, social isolation, financial burden and changes in the parenting role (Wang & Barnard 2004).

Despite the significant amount of evidence that points to increased distress in parents of children with disabilities, there is also research that documents positive aspects of care giving and successful adjustment to difficult circumstances. For example, Pelchat and colleagues note research that indicates that many families adapt fairly well to their child's disability (Pelchat et al. 1998). Furthermore, a review of the literature and research by Schwartz (2003) show that, although there are few studies focusing on care-giving gratification when parenting a child with a chronic disability, some parents have reported an increasing sense of pride and satisfaction in the way they have coped, a deepened sense of self-awareness, and increased strength, tolerance, sensitivity and assertiveness.

Implications

The impact of a child's disability on parenting is influenced by factors such as maternal coping skills, ethnicity, socioeconomic circumstances, and parents' gender (Emerson 2003). Coping with the extra demands of a child who has special needs is facilitated by higher levels of family income, both parents being present, harmonious parental relationships, and social support. Therefore, interventions may usefully be targeted for families where these protective factors are problematic or absent, and should take into account the contextual factors that affect particular families. As Pelchat and colleagues (1998) point out, there is great variability in the way parents adapt to their child's disability. What is required is a better understanding of the factors related to parent adaptation, and incorporation of this understanding into interventions.

Interventions for parents of children with special needs should assist parents to deal with stress and anxiety at critical times, such as at diagnosis or during hospitalisation, as well as with the ongoing burden of care. However, as well as efforts to reduce distress, it may be beneficial to include in parenting interventions encouragement for parents to recognise the potential for personal growth and sense of achievement that can occur with parenting a child with special needs (Schwartz 2003). An important role for practitioners would be to prompt parents to describe positive aspects of their care giving and provide positive feedback to parents on their successes. Skills training that extends the range of parenting strategies relevant to raising a child with special needs can also increase parents' sense of efficacy in the parenting role.

Interventions for parents of children with chronic illness have shown positive results, such as decreased parental anxiety, increased parental coping and problem solving, and improved family functioning (Melnyk et al. 2001). Interventions that showed promise were in four categories: disease-specific interventions, individualised interventions for high stress times, problem-solving skills training, and educational-behavioural intervention.

There is also a substantial amount of evidence for the effectiveness of parenting interventions for parents of children with an intellectual disability (for example, Breiner 1989; Huynen, Lutxker, Bigelow, Touchette & Campbell 1996; Kashima, Baker & Landen 1988; Lutzker & Campbell 1994; Lutzker & Steed 1998; Sanders & Plant 1989). Interventions have been delivered successfully to families in a variety of ways: to individual parents, to parents in groups, using videotape, written parenting advice, and telephone support (for example, Baker & Heifetz 1976; Baker & Brightman 1984; Baker 1989; Hudson et al. 2003). Such

interventions have been found to be associated with positive changes to parental functioning as well as child behaviour.

Child behaviour

Prevalence estimates for externalising child behaviour problems range from 13 per cent of Australian primary school children (Sawyer, Arney, Baghurst, et al. 2000) to 22.5 per cent of pre-schoolers in a New Zealand study (Pavuluri, Luk, Clarkson & McGee 1995). Such problems include, for example, non-compliance, aggressiveness, overactivity, poor impulse control, and tantrums. In addition, it is estimated that 13 per cent of Australian children aged 4 to 12 years have internalising problems such as shyness, withdrawal and anxiety (Sawyer et al. 2000). These two behavioural dimensions can overlap in young children.

The 1998 Australian National Survey of Child and Adolescent Mental Health found that the prevalence of 'mental health disorders' (p. 571) in children aged between 4 and 11 years was 16 to 20 per cent (Zubrick, Silburn, Burton & Blair 2000).

Research has examined the relationship between child externalising and internalising behaviour and how parents interact with children showing such behaviours. Children's aggressive behaviour was more likely to attract attention and parental intervention than withdrawn behaviour (Rubin & Burgess 2002). With externalising problems, a moderate level of association has been shown between certain aspects of child behaviour and parent reactions. As children became more compliant from 18 months to 4 years, 'aversive' parenting behaviours decreased. It has been shown that parents' use of corporal punishment increased with child aggressive behaviour and that parents were more likely to use physical punishment for aggression and threatening behaviour than for non-compliance (Gershoff 2002).

Children's aggressive behaviour is thought to evoke stress, anger, frustration and disappointment in their parents and thus may prompt parenting responses that are coercive rather than appropriate to the situation. This can set up an escalating cycle of child misbehaviour and parental coerciveness (Patterson, De Baryshe & Ramsey 1989) that is a clear demonstration of the bi-directional effect of parent and child behaviour. When parents' attempts to influence their children's behaviour fail, this can lead to feelings of inadequacy and they may stop trying to manage their child's behaviour.

Similarly, with internalising child behaviour there are associations between what the children do and their parents' reactions. For example, mothers of shy toddlers have been observed to use overly solicitous behaviour in situations that did not warrant it. As with externalising behaviour, parents' inadvertent strengthening of their children's behaviour can lead to a cycle of child helplessness and parent overprotection (Rubin & Burgess 2002).

Implications

Where there are associations between parenting and child behaviours, it is not a simple matter of child behaviour causing parent behaviour or vice versa. There is no single causal direction; the influence of parent and child behaviour goes both ways. Furthermore, the cyclical processes involved in parent–child interactions are affected by parent characteristics such as gender, age and mental health, child gender, age, and temperament, and contextual and socio-cultural factors.

When unhelpful parent–child interaction cycles have developed, the critical issue is deciding at which point to intervene. Clearly in the case of young children, intervention should begin early with parenting strategies that interrupt escalating cycles and promote positive behaviours in both parents and their children.

Birth order

Most Australian families (62.2 per cent) have more than one child. As reported by Trewin in 1999, 62.2 per cent of families had two or more children, and the national average number of children per family prior to 2001 was 1.5 (Australian Bureau of Statistics 2001).

Do parents behave differently towards their first-born child compared with children who are born later? This has been investigated in three ways: First, comparing parenting behaviours in different families; the second examining parents' behaviour before and after the birth of a subsequent child; and third, by investigating parents behaviour across different children in the same family. All three approaches have methodological limitations, however, most research has been conducted in the first way.

A review by Furman and Lanthier (2002) concluded that parents behaved differently towards a first-born child. Some findings were that parents gave first-born children more attention, responded to their children's affection more often, and had higher expectations for achievement and cognitive ability than they had for later-born children. However, with later born children, mothers were found to be more tolerant, consistent and supportive, and less demanding, controlling and intrusive.

Keller and Zach's (2002) review revealed that during infancy, first-born children were fed more frequently, had more playful interactions and received more time and stimulation from their parents. Unsurprisingly, parents interacted less with first-born children after the birth of their second child (Furman & Lanthier 2002).

Implications

That first-born and later-born children are treated differently by their parents does not seem significantly to influence their development or their level of attachment. In fact, very little of the variance in child outcomes can be explained by birth order. Furthermore, the variation in parenting is possibly better explained by other factors such as experience with parenting, gender of parent, the age difference between siblings, the child's temperament and the family's SES and cultural background. There seems, therefore, to be no particular advantage in designing parenting programs with birth order in mind.

FAMILY FACTORS

Family structure

The past twenty years has seen increasing diversity in the types of family structure in Australian society (Australian Bureau of Statistics 2003a). The proportion of one-parent families and childless couples has increased, and there are more divorced, one-parent, step and blended families. Statistics reported in 2001 show that 15.4 per cent of all families at that time were lone-parent families with predominantly mothers (83 per cent of lone parents). Most children in two-parent families (89 per cent) were with natural or adoptive parents, and 10 per cent were in blended or stepfamilies (Australian Bureau of Statistics 2002b 2003a). Thirty-three percent of all marriages were remarriages, and a third of those involved children from previous marriages (Australian Bureau of Statistics 2003d). Evidence suggests that a two-parent household is associated with, but does not guarantee, effective parenting and positive child outcomes (Task Force on the Family 2003).

Divorce
There are many changes associated with divorce and remarriage that require considerable adjustment by both parents and children, and can provide difficulties for parenting. Examples of these are custody arrangements, re-location, absence of one parent, lower income, and new responsibilities (Hetherington & Stanley-Hagan 2002; Lee & Gotlib 1991). The most severe disruption occurs in the first few years after marital transition, with re-establishment of role stability occurring gradually over time (Hetherington & Stanley-Hagan 2002; Wise 2003).

In families where the father was non-resident, there were two factors that seemed particularly beneficial for the children involved, according to the finding of a meta-analysis conducted by Amato and Gilbreth (1999). The first was the payment of child support; the second was the parenting style adopted by the father. There is some research to indicate that divorce weakened fathers' but not mothers' contact and involvement with children (Demo & Cox 2000). However, frequency of father contact was not associated with child outcomes, but the way in which the fathers interacted with their children was. Authoritative, rather than permissive, parenting was found to be associated with positive academic and socio-emotional child outcomes in these families (Hetherington & Stanley-Hagan 2002). This suggests that there may be benefit in interventions that encourage an authoritative parenting style in non-resident fathers.

Most investigations addressing the impact of divorce have concentrated on the effect on the children involved. Experience of parents' divorce has been found to be associated with risk of child behavioural and emotional problems, poorer academic performance and relationship difficulties with parents (Lee & Gotlib 1991; O'Connor, Dunn, Jenkins, Pickering & Rabash 2001; Task force on the Family 2003). The extent of impact of divorce on children was related to age and gender of the child, with younger children being less affected than older children, and more severe problems shown with boys than girls (Hetherington & Stanley-Hagan 2002; Krishnakumar & Beuhler 2000; Lee & Gotlib 1991).

However, these outcomes are not inevitable and factors other than the divorce are likely to be influential. For example, the degree and type of ongoing conflict between parents is critical in determining the effect of the divorce on the child (Lee & Gotlib 1991). In fact, the association between marital conflict and poor parenting has been found to be stronger in families where parents were married rather than divorced (Krishnakumar & Beuhler 2000). If divorce allows escape from conflict then it may provide opportunities for more stable and positive family relationships (Hetherington & Stanley-Hagen 2002).

The research findings on divorce and outcomes for children should be viewed with caution. Although findings are consistent and statistically significant, their practical significance may be low because the rates of problematic outcomes among children are fairly low, and most children from divorced families do well (Wise 2003). Furthermore, research on family structure, including research on divorce, points to the problems associated with disruption and transition rather than problems with the structure itself.

Step-families

Research has also examined family structure from the perspective of step families and single-parent families, with findings of increased risk of adjustment difficulties and behavioural problems in children. As with the research on divorce, there appears to be a range of factors that can explain these results other than family structure. For single-parent families, examples of such factors are economic difficulties, time pressures, whether the single parenthood was planned or a consequence of divorce or death of partner, and the number of partners that mothers had (Task Force on the Family 2003; Wise 2003).

Single-parent families

Differences in parenting of mothers and fathers in single-parented families have been reported in the literature. For fathers there was a focus on education and assigning household responsibilities to children and teaching skills, whereas mothers focused on emotional wellbeing and social relationships (Chase-Lansdale & Hetherington 1990, Downey 1994, both cited by Hetherington & Stanley-Hagan 2002). Single fathers reported less stress and fewer child behavioural problems that did single mothers. However, neither mothers or fathers have been found to be superior custodial parents (Hetherington & Stanley-Hagan 2002).

Adoptive families

Population statistics on adoptive families indicate that the number of annual adoptions in Australia is small relative to the overall birth rate (Australian Bureau of Statistics 2000a, 2000b, 2000c). About one third of adoptions were of Australian-born children by relatives, a third were by non-relatives, and the remaining third were overseas adoptions, with the number of inter-country adoptions increasing (Australian Bureau of Statistics 2000a; Brodzinsky & Pinderhughes 2002). Most of these children were under five years of age when adopted (Australian Bureau of Statistics 2000b). As with research on other aspects of family structure, there is more information about the effect of adoption on children, with a lack of research on the parenting practices of adoptive parents.

Children in adoptive families tended to do well, faring better than children in long-term foster care or institutional environments, and in most cases, adoption served as a protective factor for children who moved from an unstable home environment to one that was nurturing and stable (Brodzinsky & Pinderhughes 2002). However, if children were placed in adoption later than infancy, experienced multiple care-givers, or came from abusive or neglectful environments, there was heightened risk of child difficulties that included academic, attachment and externalising behaviour problems, perceptual impairment and emotional disturbance (Brodzinsky & Pinderhughes 2002). In such circumstances, it would be helpful to offer adoptive parents access to advice and support for implementing preventive strategies to reduce the level of risk resulting from their children's previous experiences.

Implications

The findings on family structure suggest that it is the disruption caused by transition to new structures, rather than the type of family structure itself, that is problematic. Research therefore needs to be conducted and programs developed to assist parents to cope and foster stable supportive environments for their children in these times of transition. For

example, step-families have benefited from programs that help them to establish their lives, strengthen their marital relationship and develop a parenting partnership (Hetherington & Stanley-Hagan 2002; Nicholson & Sanders 1999). Programs that provide information, education and support to families should address the particular challenges faced by different types of families (single-parent, step, and adoptive families) who are seeking this type of assistance.

Family relationships

The previous section dealt with structural elements such as divorce and step parenting, which are often associated with disruption to family relationships. This section deals with a specific aspect of relationships within families, that is, the impact of parental conflict on parenting and children.

High levels of marital conflict have a deleterious effect on children. Studies have shown a relationship between marital discord and negativity toward the child. Furthermore, such conflict, when poorly resolved or occurring in front of the child, has been shown to be related to a number of child behavioural difficulties, such as school problems, depression, anxiety, withdrawal, and externalising behaviours such as aggression and conduct problems (Cowan & Cowan 2002; Demo & Cox 2000, Grych & Fincham 1990; Wise 2003). Conflict does not have to be overt to be harmful. Marital relationships characterised by cold, distanced withdrawal can also place children at higher risk for problem behaviour (Cowan & Cowan 2002). However, not all conflict is harmful. When marital conflict is dealt with constructively it can have positive effects, with children learning how to handle interpersonal difficulties appropriately (Demo & Cox 2000; Grych & Fincham 1990).

Parental discord affects parenting behaviour in a number of ways. Three key parenting areas affected by conflict between parents are parental involvement, parental discipline, and parental consistency (Krishnakumar & Buehler 2000).

As parents deal with marital conflict they may become more self-focused and less emotionally available to their children, less attuned to their children's needs, and less tolerant of their demands. They may also provide inconsistent discipline and less structure in the home and other environments (Demo & Cox 2000; Lee & Gotlib 1991). A strong association has been found between marital hostility and high levels of harsh discipline, and lower levels of acceptance of children's behaviour (Krishnakumar & Buehler 2000).

Implications
Supplementing parenting programs with intervention that focuses on the parents' relationship with each other has been found to be beneficial (Webster-Stratton 1994). According to Cowan and Cowan (2002), a study that added marital therapy resulted in improvements in parents' communication, problem solving skills and satisfaction, as well as in children's prosocial knowledge. The incorporation of a partner support component in a behavioural family intervention program has had similarly positive effects with Australian families (Dadds, Sanders, Behrens & James 1987; Dadds, Schwartz & Sanders 1987). However, another Australian study found that a behavioural family intervention program was associated with improvements in the parental relationship, regardless of whether the parents had received supplementary intervention in partner support (Ireland, Sanders & Markie-Dadds 2003). The implication, therefore, is that relationship conflict between parents needs to be acknowledged and addressed in parenting interventions. However, the best way of doing this may require investigation at an individual family level.

Physical aspects of the home environment

Parents of young children are principally responsible for the physical environment they provide for their children at home. What is paramount is adequate shelter and conditions to support health, safety and development of the child. Housing standards in Australia have been reported to be generally good, with the majority of children living in houses that were owned or being purchased, and were considered to be in good condition by the occupants (Trewin 1999). In 1996, 28 per cent of families with children lived in rented dwellings; however, if the oldest child was an infant, the rate was higher. Home rental was also associated with low family income and can be associated with less stability for children (Trewin 1999). One-parent families were more likely than two-parent families to live in medium to high-density dwellings and in suburbs where there is a high concentration of public housing, unemployment and low-income households (Trewin 1999). Therefore, any conclusions about aspects of the home environment and parenting also need to take into account socioeconomic status and family structure.

Whether a particular home environment is adequate for safe and healthy child development is not easy to assess, and is subject to standards reflecting culture and class. However, there is evidence to suggest that some children are living in less-than-satisfactory physical environments. For example, data available on housing ten years ago indicated that 17 per cent of children lived in dwellings with 5 or more structural problems, with 7 per cent of children in housing that required urgent or essential repairs (1994 Australian Housing Survey, cited by Trewin 1999). The majority of accidents involving young children occur in the home (Kidsafe 2000; National Health and Safety Council 2002). Moreover, Australian Bureau of Statistics data indicated that more than half of Victorian and Queensland homes with pre-school children did not have smoke alarms fitted, and most households in Victoria did not have child-safe medicine cabinets and electrical safety switches (Trewin 1999).

Ways in which physical aspects of the home environment are related to parenting practices include supervision of and communication with children, and provision of stimulating materials and events. Research has found that parents' close supervision of children was more likely to occur when play areas were near the centre of the home and was less likely to occur in crowded households. Also, parents who lived in crowded houses were less verbally responsive and used less complex sentences with their children than did parents in uncrowded households (Bradley 2002). However, it is unlikely that the state of the house would be the only determinant of such communication difficulties, and it is likely that other factors such as parents' socioeconomic status, family history, and educational background would play a part.

That children require a stimulating environment for cognitive, motor and social development is well documented (Horowitz 2002, cited in Bradley 2002). However, more stimulation is not always better. For example, chronic noise has been associated with elevated blood pressure and poor cognitive development in children (World Health Organization 1980, cited in Bradley 2002; Wachs 1992).

Implications

While parenting interventions cannot address the contextual issues of poverty and low SES and educational attainment, there is information and advice that may enable parents to make the best of the home environment that they are able to provide for their children. One example is information about safety in the home. Another is children's access to resources for play. Although it is necessary for parents to supply sufficient activities, toys, and equipment to stimulate child development, it is the degree of parent involvement to facilitate access and use of these resources that is important, rather than the amount of money spent on them (Parks & Bradley 1991). Therefore, guidelines for affordable, age-appropriate play materials and ideas for play interaction with their children could be helpful for many parents. Parents

could also be advised that there are advantages in having play areas near main living areas, small activities centres that encourage different types of play, open areas to allow construction and gross motor activities, and outdoor space available for play (Johnson 1987, cited in Bradley 2002).

Employment and work/family balance

In Australian two-parent families, at the time of the last census, the proportion of parents in paid employment was 89.3 per cent for fathers and 60.3 per cent for mothers. In single-parent families the rate was 61.9 per cent for fathers and 44 per cent for mothers. Population statistics show that the amount of time spent in paid employment was associated with the age of the children in a family. In families where the youngest child was five years or below, 71 per cent of couples worked fewer than 60 hours a week compared with 53 per cent of couples with older children (Australian Bureau of Statistics 2003c). Mothers of young children in Australia typically balanced work and family by working part-time rather than full-time. However, the majority of fathers (83 per cent) continued to work full-time after having children (Australian Bureau of Statistics 2003c). Even when employed full-time, mothers tended to be primarily responsible for child rearing (Russell & Bowman 2000).

Decades of research on the impact of maternal employment on young children (for example, via maternal deprivation) have found very few negative effects (Gottfried, Gottfried & Bathurst 2002; Russell & Bowman 2000; Task Force on the Family 2003). More recent research has shifted to investigate the impact of work on mothers' and fathers' parenting (Parke 2004), showing positive as well as negative effects. For example, in some studies, maternal employment has been linked to more optimal parenting styles and better academic and social outcomes for children (Gottfried et al. 2002). In other studies, parental employment, particularly if there is fatigue, unhappiness and stress at work, has been shown to adversely affect parental health, energy and self-esteem (Task Force on the Family 2003).

Despite the rapid rise in mothers' labour force participation, mothers have reported that they spend the same amount of time with children as previously in history (Bianci 2000). In an attempt to balance paid work and child rearing, mothers said that they were prepared to work part time or leave the labour force for some years when their children were young. While working they reoriented their time commitments, spent less time in volunteer work, and had less sleep and less free leisure time (Bianchi 2000). An added challenge to work/family balance is the phenomenon of the 'sandwich generation'. This refers to an increasing number of parents of young children who, in addition to their own family responsibilities, devote time to the care of their ageing parents (Task Force on the Family 2003).

Stress resulting from difficulties in balancing work and family can cause parents emotional distress and marital or relationship difficulties. This disrupts parenting, particularly when it occurs early in family life (Task Force on the Family 2003). For example, mothers of preschoolers reported that they withdrew from parent–child interaction on days when their paid workload had been higher or more stressful (Repetti 1994). After controlling for occupational status and general wellbeing, employed mothers of infants have been shown to use less positive parenting and more negative parenting over time if they experienced a negative interpersonal atmosphere at work (Costigan, Cox & Cauce 2003).

Conversely, home to work 'spillover' has also been reported in the research literature, whereby events at home resulting in frustration, anger and disappointment lead to negative responses in the workplace, such as irritability, impatience and impaired attention span (Crouter 1984).

There is some evidence that values in the workplace are associated with parenting behaviours consistent with those values. For example, workers whose jobs allowed a degree of autonomy valued independence in their children and used inductive reasoning with them

rather than physical punishment. On the other hand, autocratic/coercive work environments were found to be associated with authoritarian parenting styles (Cooksey, Menaghan & Jekielek 1997; Task Force on the Family 2003). One problem in interpreting such research is the difficulty in determining what is 'cause' and what is 'effect'. Also, it may be that a third factor can explain these associations. For example, parents with certain characteristic ways of behaving may have a preferred parenting approach and also may seek jobs that accommodate similar ways of behaving at work.

Parents' role satisfaction (through work or home) has an impact on parent–child interactions, which in turn affect children's behaviour (Gottfried et al. 2002). Parents satisfied with their work and home commitments are likely to interact with their family in a positive way (Task Force on the Family 2003). Research on mothers in paid employment showed that they were more satisfied with their dual roles when their work was flexible and when they had fewer working hours, more parenting support and low conflict at home (Gottfried et al. 2002).

Changes to the nature of work often make it hard for parents to combine it with parenting. Both mothers and fathers have reported that employment demands, such as increased work hours and the increasing need to travel and be accessible at all hours for work-related tasks, have had a negative impact on their parenting role (Arendell 1997). According to currently available statistics, fathers are much less likely than mothers to work part-time, and less likely to work flexible hours and have work-at-home arrangements to enable them to care for their children (Australian Bureau of Statistics 2003c). Where 'family friendly' policies exist, gender bias in managers' perceptions and expectations have been reported to be an obstacle for fathers in their attempts to achieve a balance between work and family (Holland 1993; OECD 2002).

Implications

In contemporary Australia, most mothers and nearly all fathers are in some form of paid employment, with most fathers who are in paid employment working full-time. Thus, parenting information, advice and support needs to take into account that parents of young children are in the paid workforce, and that the demands of work and home interact.

The research on 'spillover' effects demonstrates the bidirectional influence of work and family difficulties and underlines the importance of programs designed to improve work conditions and satisfaction as well as programs to improve family functioning. This means that interventions to assist parents to achieve satisfaction in both areas of their lives are required. Employers facilitate work/family balance when they provide flexible work policies that are responsive to parents' needs. However, such policies and practices are not yet universally available. Successful strategies to encourage wider employer provision of appropriate policies and practices would be greatly beneficial for improved family functioning. Employers also benefit from increased worker satisfaction and enhanced performance when parenting is working well at home (Martin & Sanders 2003). Hence, as well as extending the availability of flexible work practices to all parents, employers might be encouraged to resource or provide parenting programs for their staff who have children.

CULTURAL FACTORS

Cultural influence

In the past 60 years more than 5.5 million people have immigrated to Australia from as many as 170 countries (Kolar & Soriano 2000). A significant number (23 per cent) are originally from non-English speaking countries. Currently, the Indigenous population comprises 2.4 per cent of Australians (Australian Indigenous Healthinfonet 2003). There are over 200 languages spoken in the community (Australian Bureau of Statistics 2003a) and the percentage of homes in which English only is spoken has decreased from 82.9 per cent in 1991 to 80 per cent in 2001 (Australian Bureau of Statistics 2002a). Such cultural diversity offers opportunities and challenges to those who provide families with support for and information on child rearing.

This section on cultural influence relates primarily to families from an immigrant background. Issues relating to Indigenous families are addressed more fully in the next section (p. 58).

Social-ecological models of parenting (for example, Bronfenbrenner 1979) acknowledge the importance of culture amongst other influential contextual factors. The major ways in which culture impinges upon parenting are via beliefs, values and actual parenting practices. However, it is claimed that parents share the same broad goals for their family regardless of culture: the health and survival of their children, the imparting of skills for economic survival, and the encouragement of attributes valued by the culture (Levine 1988 cited in Kolar & Soriano 2000).

As well as cross-cultural similarities, research has shown differences between cultures in the way parents rear their children. For example, in an American study, parenting practices that have been found to vary among cultures are baby soothing techniques, amount of physical affection shown, reported use of physical punishment, provision of learning and play materials, and frequency of reading to children There was no significant between-culture variation in other practices such as mother–child talk, creating a safe play environment, and restriction of preschooler behaviour (Bradley, Corwyn, McAdoo & Coll 2001).

In Western cultures, 'authoritative' parenting is thought to promote the best outcomes for children, compared with 'permissive' and 'authoritarian' parenting styles (Baumrind 1991). However, it cannot be automatically assumed that authoritative parenting is as acceptable or effective in other cultures. An illustration of this is research on American families by Deater-Deckard et al. (1996), cited in Kolar & Soriano (2000), which showed that physical punishment, a practice usually thought of as an authoritarian rather than authoritative parenting practice, was associated with negative child outcomes for European-American children but not for African-American children.

Australian cross-cultural research on parenting is limited and narrowly focused. Studies have typically included small numbers of participants and cultural groups, and have generally found similarities between cultural parenting behaviours as well as differences. An example is the study by Papps, Walker, Trimboli & Trimboli (1995) that produced some evidence for similarity in disciplinary practices of Anglo, Greek, Lebanese and Vietnamese parents, with a tendency by all groups to use power-assertive techniques such as yelling, threatening, and physical punishment. One discernible difference was that Vietnamese mothers reported that they used reasoning and explanation more than Anglo mothers.

Part of the Parenting 21 project, an exploratory study with 69 parents described by Kolar and Soriano (2000), makes a valuable contribution to our knowledge of parenting of children from infancy to middle childhood among three different Australian cultural groups (Anglo, Torres Strait Islander and Vietnamese). Parents' long-term goals for their children for tertiary

education, successful occupations and marriage were similar across the groups, and the values of self-respect, respect for others, honesty and caring for others were expressed in all groups. The importance of passing on to children the value of education was spontaneously mentioned by Vietnamese and Torres Strait Islander parents, but not by Anglo parents.

Opinions differed on physical punishment, with approval and application of strict discipline that included physical punishment more likely to be reported by Vietnamese and Torres Strait Islander parents than by Anglo parents. These findings, according to Kolar and Soriano (2000), indicated a difference in the way physical punishment was conceptualised by families who had differing views and practices.

All three groups of parents asserted that, for emotional support and practical assistance, they turned first to family and friends, utilising professional support only when general information or specific advice was needed. Vietnamese parents reported that access to professional support linked them to the wider community and to information about mainstream parenting practices. Torres Strait Islander parents, however, reported that they used formal supports only when informal support was exhausted.

While there is some evidence for variation in parenting between cultures, it is important to acknowledge the variation that occurs within cultures (Bradley et al. 2001). This aspect of within-culture disparity has largely been ignored. However, Kotchik and Forehand (2002) note some promising recent research in this area, and claim that the study of differences in parenting within cultures permits examination of the effectiveness and relevance of 'particular parenting behaviour in a specific cultural niche' (p. 261).

The issue raised earlier in this report regarding cultural differences in beliefs and practices about discipline, and the outcomes for children, illustrates the need for a deeper understanding of, and sensitivity to, cultural variations. Research has found that the purpose of discipline can vary between cultures, for example, from venting frustration to a deliberate behaviour management strategy. Where there are obvious cultural differences in parenting practices, this should be understood in terms of the function or meaning of the practice for the parents and children.

Implications
It is clear that information, education and support for parents should take into account the cultural background of families. However, it is also clear that we should not make assumptions about parenting solely on the basis of cultural difference. What is required is an understanding of the role that particular cultural beliefs and practices have in individual families.

Indigenous families

Indigenous families have a number of characteristics that vary from other Australian families and that could affect parenting in significant ways. Indigenous women have higher rates of fertility than other Australian women, give birth at a younger age, and have higher rates of hospitalisation for reasons associated with pregnancy and birth (Trewin & Madden 2003). Although infant mortality rates are generally low in Australia, the rate for Indigenous infants is 2 to 3 times higher than for other Australian infants (Trewin 1999). The child death rate in the 1 to 4 years age group is 4.5 times higher for Indigenous children (Trewin 1999).

Factors that affect the health and wellbeing of all Indigenous Australians are also likely to affect families and parenting behaviour. These factors are: lower life expectancy, income and educational attainment; higher rates of unemployment; lower rates of home ownership; and higher rates of overcrowded housing (Australian Indigenous HealthInfonet 2003).

Research on parenting in Indigenous families is lacking, however, there have been some general observations about family life that may have relevance for understanding parenting in this culture. For example, violence in Indigenous families is disproportionately high when compared with rates in the rest of the population. Dysfunctional behaviour observed in some Indigenous communities, resulting in reports of child abuse and neglect, have been thought to stem from generations of trauma, stress, unresolved grief and socioeconomic disadvantage (Stanley, Tomison & Pocock 2003). To non-Indigenous observers, contemporary Indigenous family life may appear 'chaotic, unstructured and even neglectful ...' (Ralph 1997, p. 47).

The National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families found that child separation policies that were in place until the 1970s negatively affected the parenting skills of the adults who had been involved as children. It was thought that early separation from parents had a damaging effect on attachment, which in turn created difficulties in parenting the next generation (Stanley, Tomison & Pocock 2003).

The research identified to date has been conducted with small samples of Indigenous participants. A qualitative study, with a sample of 5 respondents, identified values of Australian Indigenous (urban) parents about what was important in parenting. These values included: a focus on the day-to-day survival and safety of the children, the importance of social relationships, cultural identity, and children's learning needs (Nelson & Allison 2000).

An exploratory study investigating parenting in Torres Strait Islanders compared with Anglo and Vietnamese parents found that Torres Strait Islanders varied in the degree to which they had retained traditional values or adopted Western values (Kolar & Soriano 2000). There were differences in the three groups' perceptions of obstacles to parenting. For the Islanders, coping with a physical environment with limited resources was paramount, compared with time issues for Anglo parents, and cultural issues about discipline for Vietnamese parents. All three groups reported that they used disciplinary strategies with their children aged three years and older; however, the Torres Strait Islander parents talked more about using physical punishment as a disciplinary method than the Anglo parents did. There were no differences among the groups in their long-term goals for their children, and in all three cultures story telling and role modelling were used to teach children about values.

Implications

Because Indigenous households typically include extended family members to a greater extent than non-Indigenous families (Kolar & Soriano 2000; Trewin 1999), and because family and kinship are generally important within Aboriginal communities, the role of extended family and kin must be acknowledged and accommodated in parenting interventions. In particular, it should be recognised that family obligations may take priority over the interests of individuals, and that decision-making about children is typically shared with extended family members. Grandparents, aunts and uncles play an active role in childcare, and grandparents play an important role in transmission of cultural knowledge and customs.

Another implication for intervention relates to the relatively younger ages of Indigenous mothers. Parenting information, programs and support need to take this into account. Furthermore, support for parenting cannot be divorced from the context of health, housing, education, and other areas of disadvantage for Indigenous Australians.

SOCIAL AND ECONOMIC FACTORS

Socioeconomic status

Socioeconomic status (SES) has many facets and has been defined and measured in a number of different ways (Ensminger & Fothergill 2003; Hoff, Laursen & Tardif 2002), with studies using different criteria for levels of SES. This limits the extent to which firm conclusions can be made about the relationship between SES and parenting. The three most common indicators of SES, education, income and occupation, have been shown to have different effects on parenting and cannot be used interchangeably (Ensminger & Fothergill 2003). It is thought that education and occupation are more stable indicators than income (which can change within families over time), and research has found maternal education to be the strongest predictor of various aspects of parenting (Bradley & Corwyn 2002; Hoff et al. 2002).

A comprehensive review by Hoff and colleagues (2002) identified a number of ways in which SES is associated with different parenting practices, in the goals and expectations parents had for children, and in the nature of the emotional relationship between parents and children. In general, and across cultures, higher SES mothers expected their children to achieve developmental milestones earlier and gave higher estimates of their children's capacities than did lower SES mothers. Lower SES parents have been found to be more authoritarian and punitive, and more concerned about children's conformity to societal expectations. In contrast, the research reports that higher SES parent were more egalitarian, less physically punitive, and more concerned about their children developing initiative.

The review by Hoff and colleagues (2002) describes a number of other significant research findings about parenting and factors related to SES. For example, better-educated parents provided more appropriate play materials, greater variety of stimulation and a more organised environment that did less educated parents. Verbal interaction is also a well-documented aspect of SES-related differences in parenting behaviour, with higher SES mothers found to speak more to their children, provide more explicit information, and use a wider vocabulary, more complex syntax and more questions that elicit further conversation. Another important finding is the association between SES and parents' sense of self-efficacy, with higher SES parents reporting a stronger belief that they can influence their children's developmental outcomes.

With regard to SES and child outcomes, Bradley and Corwyn (2000) report a number of studies indicating that children from low SES families had less access to a wide variety of recreational and learning materials and experiences. In relation to early development, they were more likely to experience growth retardation and inadequate neurobehavioural development in utero, be born prematurely, be low birth weight and have various birth defects and chronic illnesses. These pre- and early post-natal outcomes were thought to result from poor prenatal care and nutrition, maternal substance abuse (including smoking) and residence in hazardous neighbourhoods. After birth there were a significant number of health problems more likely to occur with children from low SES families. However SES was not implicated in all childhood illness, and, excluding Australia's Indigenous population, the SES-health gradient is less steep in developed countries like Australia. (Issues specific to Indigenous families are discussed elsewhere in this paper, see p. 58.)

Persistent stresses associated with low SES are thought to have a negative effect on parenting. Research has found that families from low SES backgrounds tended to experience more threatening and uncontrollable life events, and were disproportionately exposed to environmental hazards, violence, unstable employment and ongoing economic hardship. It is proposed that the stress allied with these factors adversely affected self-esteem, self-care

and health promotion, and stressed parents tended to overuse negative control strategies with their children and were low in warmth and responsiveness (Bradley & Corwyn 2002)

Despite the predominantly more negative findings for parenting and child outcomes in low SES families, there is some evidence to suggest that certain family characteristics can act as protective factors in the presence of social adversity. These are cohesion, shared values, patience, conflict resolution, consistency of rules, orderliness, the presence of supportive adults, and the availability of external support systems (Bradley & Corwyn 2000). Moreover, some of the supposed 'negative' practices of low SES families may have an adaptive function. For example, the greater value placed on 'authoritarian' parenting by low SES parents may be because lower SES families need to be more restrictive in their practices to protect children from dangers present in their immediate social and physical environment (Kotchik & Forehand 2002).

Implications

A number of implications for parenting information, education and support can be derived from the research on SES. It is evident that parenting programs should form part of a broader social development strategy to assist parents to improve their social and economic circumstances. Evidence on the negative influence of financial hardship on parents suggests that assistance for parents to increase their financial resources and develop strategies to cope within their current resources may be helpful. Family education based on protective factors would appear to have particular relevance when families are exposed to multiple risks, including low SES. Further, a focus on improving education for mothers in low socioeconomic circumstances would seem to be important, given that maternal education is a reliable predictor of differing parenting practices and child outcomes.

In the Australian context, Zubrick, Williams, Silbern and Vimpani (2000) assert that due to a number of methodological difficulties, current ways of measuring population characteristics, using traditional SES measures, have not resulted in reliable indicators of social and family functioning. Therefore, instead of traditional SES measures, they recommend a measure such as the Indicators of Social and Family Functioning Reference Instrument (Zubrick et al. 2000), which includes five key resource domains: time, income, human capital, psychological capital, and social capital. Future investigations of family life and parenting using such an instrument have potential to produce findings that have increased relevance to program development and dissemination.

Poverty

Poverty is a multidimensional concept, and there is no clear consensus about its definition or how to measure it (Magnusson & Duncan 2002; Trigger 2003). It has typically been defined by comparing a household's income with a threshold level that varies with family size and inflation. However, this definition has limitations and ignores other factors, such as type of neighbourhood and availability of resources, that may have an impact on hardship in families. There is no definitive statement about the number of Australian families who live in poverty, due to debates about the way in which the concept is constructed (Australia Bureau of Statistics 2002d). With regard to the income factor alone, in 1996–97, 3 per cent of children aged 0–17 years lived in families in the lowest income quartile compared to 66 per cent who lived in families in the fourth and highest quintiles (Trewin 1999).

Magnusson and Duncan (2002) made a number of important points about poverty. First, it is not synonymous with unemployment: Families with parents in paid work may still be poor. Secondly, poverty is not a stable state: Family circumstances can push families into poverty or pull them out of it. Thirdly, while the likelihood of poor children becoming poor adults is higher than for children who are not raised in poverty, there is a high degree of

intergenerational economic mobility. Next, although family poverty is not necessarily related to neighbourhood poverty, poor parents face more challenges if they live in a poor neighbourhood.

According to the Task Force on the Family (2003), 'poverty is the dominant social factor associated with poor outcomes for parents and children' (p. 1547). Being poor affects nearly all aspects of children's lives, from the quality of the physical environment to the level of stimulation for learning and the degree to which parents are responsive to them and communicate with them effectively (Bradley, Corwyn, McAdoo & Coll 2001). Insufficient family income can be a barrier to obtaining appropriate health care, leading to poorer health status of parents and children than in more affluent families (Bradley & Corwyn 2002). Poor families experience a greater frequency of stressful life events such as inadequate housing, economic insecurity and job loss. Economic stress contributes to relationship breakdown and conflict. Families experiencing poverty are less likely to have high educational levels. The risk factors that are associated with economic deprivation interact, the effects are cumulative, and they can have an impact on child-rearing practices (Task Force on the Family 2003).

In parenting, poverty has been shown to be associated with less warmth and responsiveness, and more punitiveness and inconsistency (Bradley & Corwyn 2002; Magnusson & Duncan 2002). Nevertheless, low-income parents have been found to be just as emotionally invested in their children as are higher- income parents (Bradley & Corwyn 2002). Style of parenting in low-income families may be qualitatively different from that demonstrated in more affluent families. For example, Magnusson and Duncan (2002) reported several studies showing that high levels of parental warmth and affection that accompanied harsh or punitive parenting in poorer families may indicate concern for children despite the authoritarian style. It has been suggested that the mechanism associated with negative interactions between poor parents and their children is the psychological distress triggered by the struggle to make ends meet. An association has also been found between maternal poverty and greater risk of mothers being socially isolated and depressed (Magnusson & Duncan 2002).

Most of the research has been conducted in the USA, where almost one in five children lives in poverty, and in Australia, there is still much to be learned about the relationship between poverty and parenting. Furthermore, studies on the effect of poverty on parenting have taken a 'deficit' approach, with poor families being compared with what is considered the normative standard of more affluent families. Despite the general findings regarding disadvantage, there is great variability in parenting within income groups, and many poor parents provide responsive, stimulating environments for their children.

Implications
The comprehensive review of the research literature by Magnusson and Duncan (2002) provides a number of insights that can inform practice:

- Families living in poverty are a heterogeneous group, and a single approach to addressing parenting issues in this group is not appropriate.

- Factors that promote positive parenting, such as social support, strong religious beliefs, higher educational attainment and maternal self-efficacy, are relevant to families in poverty as well as in more affluent families.

- The effects of poverty may be greater for younger than older children, because young children have fewer opportunities to interact with others and learn outside the home. Thus, they may be more vulnerable to problems related to parents' psychological wellbeing that are exacerbated by poverty. Therefore, programs to address parenting in poor families should be as early as possible in the life of the child.

When considering the program implications of the effects of poverty on parenting and children, the difficulties in defining poverty should be taken into account. Families who do not

fit within a 'poverty' category may still be experiencing a level of hardship that has a negative impact on parenting, and programs that employ a 'poverty' criterion may not be available to them. Thus, rather than assessing the extent to which families meet the criterion of poverty, it may be more beneficial to assess the extent to which they have access to sufficient resources, including parenting information, education and support, to facilitate their children's health and development.

Neighbourhood characteristics

Some important points are made by Leventhal and Brooks-Gunn (2000) about how neighbourhood can be conceptualised. Neighbourhood can be defined administratively according to such sources as census information, city boundaries, and human services or educational regions. However, individuals who live within administratively specified areas may view the boundaries of their neighbourhood differently and more idiosyncratically. The concept of neighbourhood as an administrative entity is the one most frequently used in research, and incorporates factors such as income or SES, residential stability and cultural diversity. These structural elements do not directly address the social organisational aspects of neighbourhood. Research that defines neighbourhood in an administrative way shows findings that overlap considerably with research on SES and poverty.

In their review of studies on the impact of neighbourhood on US children and youth, Leventhal and Brooks-Gunn (2000) concluded that:

- Poor neighbourhoods were characterised by residential instability, high concentrations of ethnic and racial minorities, and higher proportions of low birth-rate infants, infant mortality and child physical abuse.

- Children from affluent neighbourhoods had higher levels of school readiness and educational achievement and less externalising problem behaviour than children from low SES neighbourhoods. Conversely, a small number of studies showed an association between residence in neighbourhoods with more socioeconomic resources and reported internalising problems in young children.

- Neighbourhood effects on children were small to moderate when family-level characteristics were controlled for. With very young children, the environment in the home may be more influential than neighbourhood, at least in the short term.

- Parenting behaviour may be the means by which neighbourhood affects children, although more research is required to draw firm conclusions about the pathways of influence.

Consistent with this last point, Garbarino and Kostelny (1993), in their chapter on neighbourhood and community influences on parenting, propose that the impact of stressful neighbourhoods on children is derived from their parents' experience of stress. These authors claim that children will cope under difficult circumstances as long as their parents are able to maintain 'reservoirs of resilience'. Living in violent communities can be especially problematic, however, if parents adapt to the inherent danger in dysfunctional ways, such as withdrawing emotionally. To avoid harm, parents in dangerous neighbourhoods may also use restrictive child-rearing practices. Such practices are likely to be functional in the context in which the family lives. This raises the issue about what is 'adequate parenting' in specific contexts. Azar (2002) argues that we should not assume that a certain set of parenting practices are 'best' for both high-risk and low-risk parenting environments. A clear implication for intervention is that practitioners should be aware of the functions that particular parenting practices have in different contexts, before recommending changes to those practices.

Implications

Access to personal and institutional resources appears to be a protective factor for families in adverse circumstances (Garbarino & Kostelny 1993). However, families most in need are least likely to live in neighbourhoods with good resources (Task Force on the Family 2003). Therefore, according to Garbarino and Kostelny (1993) the challenge to communities is to provide sufficient resources and create an environment that assists families directly and supports parents in their parenting roles.

Social support, social networks, and parent help-seeking

Social support and social networks

Parents' beliefs and attitudes about parenting and their parenting behaviours are influenced by their social relationships and networks, two related but different concepts. The Task Force on the Family (2003) defines social support as information that leads to one or more of three outcomes: the feeling of being cared for; the belief that one is loved, esteemed and valued; and the sense of belonging to a reciprocal social network. The concept of 'social network' distinguishes between the nuclear family and the broader social context. Social networks have been defined as specific linkages between distinct sets of people, that include people outside of the household, are dynamic rather than static, and overlap with the concept of neighbourhood (Cochran & Niego 2002). It is conceivable that social networks can provide social support.

In their comprehensive literature review on the subject of support for parenting, Cochran and Niego (2002) described three types of support that can have an impact on parents' child-rearing efforts: social, instrumental, and informational. Social support refers to expressions of empathy and encouragement; instrumental support refers to assistance that reduces the number of tasks or responsibilities that a parent must perform; and informational support refers to advice or information on childcare or parenting. There are thought to be a number of ways in which these types of support can benefit parenting. Instrumental and informational support has the potential to relieve or reduce stress. Social/emotional support has potential to bolster self-confidence in parenting skills. However, not all social contact is supportive, and social activities are not the same as social support (Keller & McDade 2000). In a consideration of the benefits of social support across a wide spectrum of health outcomes, Hogan, Linden and Najarian (2002) noted the harmful effects of what they termed 'negative support'. Attempts at social support that were perceived as hostile or critical, and that did not meet the needs of the person being supported, were associated with poorer health outcomes.

With regard to support for parenting, studies reviewed by Cochran and Niego (2002) revealed:

- The availability of childcare, parenting advice and emotional support was particularly helpful for young mothers, sole parents, and mothers with low income. Such support has also been found to be associated with improvement in the quality of mother–child interactions.

- There was an association between social support and infant attachment. Mothers of irritable babies who had more social support also had more securely attached infants.

- The number of people who can be 'turned to' for support was more important than the size and proximity of the personal network, or the frequency of contact with people in the network.

- Factors that impeded building of or access to social networks were: low SES and income, single parent status, lower educational levels, less prestigious occupations, and poorly resourced neighbourhoods.

Although membership of social networks was constrained or enhanced by social and cultural factors, it was also dependent on personal initiative. Higher education was seen as an advantage in this regard because it has been found to be associated with increased parental capacity and motivation to build more functional social relationships, and phase out those that bring more stress than support to the parenting role.

Fathers turned to people they knew well for child-rearing advice. This is confirmed by a study by Russell and colleagues (1999) on Australian fathers, who most commonly reported turning to their spouses for parenting support. The research also found that fathers might consult male friends outside work, but they rarely mentioned their own fathers, friends at work, or professionals as sources of support.

Australian research compared the views of parents from three different cultural backgrounds about the nature of social networks and supports (Kolar & Soriano 2000). For Torres Strait Islander parents, support for parenting by the extended family was reported to be part of their cultural tradition. Anglo and Vietnamese parents also emphasised the importance of family and friends but generally faced difficulties when they could not obtain this support. Regardless of the availability of informal support, parents from all three cultural backgrounds believed that access to formal supports was also important. However, for these parents, the type of support sought from professionals (that is, general information and specific advice) was different from that obtained from informal networks (that is, emotional and practical support).

With regard to professional support, a number of surveys have attempted to find out what information parents need. Fox, Bruce and Combs-Orme (2000) investigated the concerns that new parents had for the care of their child. Their structured interviews revealed that fathers were concerned about their ability to 'take good enough care' of their child (61 per cent), and to 'keep their child safe' (52 per cent). Mothers were concerned about child safety (31 per cent) and finding childcare (31 per cent). This research found that new parents experienced similar concerns to parents who already had children. A US survey of a stratified random sample, reported by Young, Davis, Schoen and Parker (1998), asked 2017 parents of infants aged from newborn to three years what areas of childcare they would like more information on. Fifty four percent requested information about encouraging learning, 42 per cent about discipline, and 41 per cent about toilet training.

With parents of all ages of children, Eborall and Garmeson (2002) found that parents in poor environments would like information on dealing with child behaviour problems (31 per cent of a sample of 832 parents with pre-school children), expectations for 'normal' child behaviour at different ages (30 per cent), education (24 per cent) and discipline (24 per cent).

In a UK study of parents and parenting problems (again, children under 18 years), Roberts, Cronin, Dodd, and Kelly (1995; cited in Eborall & Garmeson 2002) identified that 27 per cent of parents who had sought outside help were concerned about health-related issues, such as illness, disability, sleeping problems, and 18 per cent had concerns about child behaviour.

Parent help-seeking
Factors that impinge on the development of social supports and social networks also affect parents' support-seeking activities. A review by Redmond, Spoth and Trudeau (2002) found that the use of formal support mechanisms was reportedly low, whereas most parents had sought informal support at some time. Fathers were less likely to seek formal help than mothers, and formal support seeking was less likely in low SES families. Factors that were associated with a higher degree of formal support seeking were single parenthood and higher educational level. Factors reported to be barriers to accessing support services were unavailability of local services, particularly in rural regions, and having a larger number of children.

A large telephone survey of Australian parents of children under 12 years asked parents about their formal help-seeking (Sanders, Tully, Baade, et al. 1999). In the twelve months prior to the survey, only 12 per cent of parents had sought help from a professional about their child's behaviour. Parents were more likely to do this if they believed their child's behaviour was moderately or extremely difficult, and the professionals most likely to be consulted were doctors and teachers. Only 10 per cent of respondents said they had attended a parent education program.

Implications

What is relevant to parent help-seeking is the availability to parents of information, education and support in a way that is acceptable, accessible, and timely. Practitioners in local community services who have regular contact with families may be well placed to assist parents to identify the social, instrumental and informational supports that they currently have available to them, and to provide advice on additional sources of help should it be required.

Given the widespread use of informal supports, it is reasonable to suggest that there is advantage in interventions that equip parents to work successfully with their social networks and supports, particularly for families who experience difficulties in this regard. However, the best way to do this is not yet clear. In their broad ranging review of social support interventions, Hogan and colleagues (2002) found little dependable evidence on how and how well social support interventions worked, despite an enormous amount of evidence on the benefits of such support. An interesting conclusion from their review is that perceived support appeared to be more influential than enacted support. Therefore, they argue that interventions should focus on perceptions of support as well as the attainment of support. Furthermore, given the potential for 'negative support ', interventions should also be aimed at improving interpersonal relationships within the support network, or, at least, interrupting the 'negative support' that may be occurring.

CONCLUSION TO PART A

Part A of this review has demonstrated the socially constructed nature of the parenting role and the wide range of personal and contextual factors that influence parenting. The effects of these variables are closely interrelated and can be very difficult to isolate, and approaches to parenting information, education and support need to acknowledge this complexity as well as the variation that occurs from family to family.

Some parents, because of social or personal circumstances, need more resourcing and education than others. As well as strategies to broaden the range of parenting skills available to them, what would be particularly useful is information and education that focuses on personal coping strategies, how to establish and maintain positive social supports, and how to work effectively with the service system. Effective intervention will address those things that are a barrier to parents learning through their own experience, such as anxiety or a lack of personal sense of efficacy. Importantly, parenting intervention should aim to enable parents to solve problems for themselves.

Parenting is not only adult-driven, but is actively shaped by children in their interactions with their parents. It follows that sensitivity and responsiveness to the cues given by children is critical for effective parenting, and parental knowledge of child development affects this process. Knowledge of child development may be particularly important where parents have unrealistic expectations of, or incorrect attributions for, a child's behaviour; however, knowledge of child development alone may not be sufficient for 'good' parenting when other factors impinge upon parents' ability to put knowledge into practice.

There is no universal standard of 'good' or 'effective' parenting, and consideration of parenting effectiveness needs to examine the function of the parenting behaviour for the child, rather than its form. Parenting practices that result in positive child outcomes can take many forms, and are influenced by a range of factors such as child temperament, environmental circumstances, culture, social expectations, parents' gender, and personal history of being parented.

Parenting is more likely to be effective when parents adapt their practices to meet their children's changing needs. Many factors can affect a parent's capacity to do this, creating vulnerability. What is helpful will vary according to the factors that lead to this circumstance. Where a child's behaviour is challenging and parents lack ideas on appropriate strategies to manage the situation, there is a need for training in parenting skills. Where personal or social adversity factors predominate, the emphasis may most appropriately be placed on addressing these factors. Where there are multiple risk or adversity factors, a multi-faceted approach is indicated.

Parenting information, education and support needs to respond to needs in a timely and flexible fashion and address the immediate problems facing the family. Approaches must address the child's developmental needs, remove barriers to parenting effectively, and match parents' particular learning needs. The diversity in family life, relating to both personal and contextual influences. needs to be acknowledged, and parents need to be assisted to achieve goals for themselves and their families that are consistent with their values. Importantly, interventions need to encourage parents to build on their areas of strength.

Part B of this review considers that many different ways in which parenting interventions can be delivered, and the evidence for effectiveness of each.

PART B: APPROACHES TO SUPPORTING OPTIMAL PARENTING

INTRODUCTION

We are rarely trained in the most important task of our lives: raising our children. Licenses are not required (Carter 1996). Parents are a child's first teacher and parent–child interactions mould and integrate a child's emotional, social, cognitive and communicative development (Baird & Peterson 1997; Kelly & Barnard 1999; Mahoney, Boyce, Fewell, Spiker & Wheedon 1998; Dunst, Bruder, Trivette & Hamby 2001). It is not surprising, then, that most parents have concerns about their child's development and behaviour. Most mothers and fathers recognise the disparity between their parenting responsibilities and their parenting skills, and the majority embrace opportunities to learn how to raise their children well and promote optimal learning and development. Research has shown that children learn best when they are engaged in interactions that give them opportunities to practise skills, explore their environment, and learn and master new behaviours in a supportive environment (Dunst et al. 2001).

Parents' skills and needs vary widely. In preparing for parenting, most draw only on their own experiences as a child, which are a major influence on their own parenting style (Bowes 2000). Research confirms that 'what young children learn, how they react to the events and people around them, and what they expect from themselves and others, are deeply affected by their relationships with parents, the behaviour of parents, and the environment of the homes in which they live' (Shonkoff & Phillips 2000, p. 226). Even for parents who have had a highly nurturing childhood, what they have learned may be insufficient if they are isolated from family and support networks. Parents from impoverished, institutionalised or abusive backgrounds have a need for access to information and guidelines to establish positive parenting practices, different from those they experienced as a child. Yet efforts to change the course of development by strengthening parenting have met with mixed success (Shonkoff & Phillips 2000). It is often remarkably difficult to shift parental behaviour in ways that increase the likelihood of good outcomes for children.

This mismatch between the power of parenting and the difficulty of altering it in positive ways is one of the major dilemmas confronting developmental scientists and interventionists alike. Parents not only need to foster a secure attachment with their child, but they also require:

> the personal skills to interact constructively with their children, the organisational skills to manage their lives inside and outside the home, and the problem-solving skills to address the many challenges that children invariably present. Doing this well requires sensitivity to the child and an ability to read, interpret, and anticipate what the child needs and how the child is responding to the world. It also requires supports, like child care and social networks, and resources that come with economic security. (Shonkoff & Phillips 2000, pp.238–9)

There is, however, no single conceptual or theoretical framework that guides the development of parent education, and knowledge of the outcomes of educational programs is limited (First & Way 1995; McBride & Peterson 1997). Furthermore, while all parents can learn new and effective strategies for supporting their child's development, not every parent is ready or willing to learn new strategies at a particular point in time. Parents must choose to participate (Kaiser & Hancock 2003). If they are to be motivated to be involved, it is important that programs can demonstrate their benefits for both parents and child.

Part B of this literature review therefore addresses the following questions:

- What are the best and most effective ways to help families parent their children well and acquire needed parenting skills?

- In what settings can such assistance be delivered and what techniques work best given the constraints of a wide range of professionals' skills and time?

The remainder of this chapter briefly outlines definitions and types of parenting programs and the main target groups. The chapters that follow then review the evidence of effectiveness of the different methods of delivery. Each section provides a summary of positive features, evidence-based outcomes and best practice applications, and recommendations for effective implementation. Appendices A, B and C provide information on established parenting programs and resources.

Search strategy

These issues were addressed via a literature search of the following databases: Medline including Pubmed, PsychINFO, Cinahl, Australasian Medical Index, ERIC and Embase, Sociological Abstracts and Cochrane reviews from the Cochrane Library. This material was supplemented by hand searches and tracking of related citations and summaries of authoritative books. The search was broad as there are limited studies in the literature that are well-designed, with large sample sizes. Where research on developmental and behavioural issues was limited, relevant research was included that addressed other aspects of health promotion and disease prevention.

Some definitions

Parenting is defined by Shonkoff and Phillips (2000) as the 'focused and differentiated relationship that the young child has with the adult who is most emotionally invested in and consistently available to him or her'.

The nature and scope of parenting programs is diverse and encompasses:

- *Parent education:* the broad process of providing parents with specific knowledge and child-rearing skills. The term typically refers to activities implemented by professionals to assist parents in achieving specific goals with their children. Programs often focus on teaching parents strategies to strengthen their ability to assist their children in attaining developmental skills; to manage behaviour issues; and to enhance developmental learning opportunities by engaging their children in play and social interaction (Mahoney, Kaiser, Girolametto & MacDonald 1999; Dunst 1999). Parent education also encompasses knowledge of local health and social support systems.

- *Parent training:* a subset of parent education which is more specifically instructional and involves the direct teaching of skills including interaction guidance. The term is often (but not always) used to describe child behaviour modification programs where the parent participates in treatment. Parents are instructed in principles of reinforcement and learn to identify antecedents and consequences of their and their child's actions that result in and maintain specific behaviours (Nixon 2002).

- *Parent support:* usually referring to services designed to support and strengthen family functioning, such as childcare, playgroups, parent information and support groups, and respite care (Mahoney et al. 1999; Bowes 2000). Often the term refers to the emotional support that comes from another parent's reassurance rather than practical support of a specific service. Parent support thus differs from parent education in that while parent education may provide encouragement and support to the parent, this is secondary to the primary purpose of instructing the parent. Nevertheless, as Apps (1989) suggests, some of the most significant learning taking place in programs is not anticipated in goal objectives.

Types of parenting programs

Programs are often categorised as primary, secondary or tertiary:

- Primary programs are generally aimed at preventing parental and family dysfunction. Examples include parenting skill classes, antenatal and postnatal education and child health centres.

- Secondary programs involve the early treatment of identified problems and include community health centre programs, home visiting and early intervention programs.

- Tertiary programs attempt to minimise the long-term effects of a problem or disability. Examples include paediatric hospital-based services, specific therapy groups and residential family care services.

Which parents are targeted?

A large number of the studies of parenting programs have targeted particular groups of parents such as first time parents; single, low-income mothers; parents of a child with special needs (physical, intellectual or psychological); culturally and linguistically diverse (CALD) families; parents with a special need; and carers such as grandparents, foster parents etc. Carers are those people other than parents who play a significant role in providing care and nurturance for the child (Carter 1996). Part A of this review has provided an overview of these different parent and carer groups.

What is delivered?

The scope and nature of parent education programs is diverse and according to Shonkoff and Phillips (2000) 'does not constitute a coherent field or delimited set of strategies. They range from relatively brief to intensive interventions focused on highly specific objectives to multiyear initiatives that provide a range of services to families aimed at the broad goal of supporting family functioning' (Shonkoff & Phillips 2000, p.261).

The content of parent education programs is often considered in terms of three broad categories (Carter 1996):

- *Intervention* programs are based on the assumption that there is a need to 'fix' something within the family situation and tend to focus on finding a deficit and correcting it.

- *Preventative* programs aim to prevent problems before they start. They are based on the assumption that there are potential risk factors for negative outcomes, and they attempt to reduce or avoid these perceived problems from occurring.

- *Promotion* programs focus on the promotion of family strengths, and aim to maximise parents' capabilities and empower them to make changes.

There is no single framework or model used for teaching parents skills or strategies. This has been a controversial area of discussion in the early childhood intervention literature, where the emphasis has changed from a child-focused to a relationship focused approach (Mahoney & Wheeden 1997; Kelly, J & Barnard, K 1999).

Who delivers it?

Parent education is delivered by a wide range of people, from people health, social work and educational backgrounds through to trained volunteers. Professionals delivering information include nurses, doctors, social workers, therapists, psychologists and teachers and researchers. As well, staffing by 'paraprofessionals' or 'health visitors' is often referred to in United States studies. These are non-professional people (often parents) with no formal

academic qualifications, who are recruited and specifically trained to assist a particular program (Carter 1996). Economically, this often reduces program costs, but there are also advantages in using people with background knowledge of particular communities or cultural sensitivities to overcome barriers to participation, such as occurs in the Parents as Teachers Program (PAT) (Carter 1996; Wagner, Spiker & Linn 2002). Volunteers are also used in many programs and often receive training.

How is it delivered?

Parent education takes a variety of forms, including: a professional's verbal recommendations at a clinic visit or by telephone 'helpline'; written information ranging from pamphlets to self-instruction manuals; videotape viewings followed by face-to-face discussion groups; individual or group programs involving role-playing and modelling of skills; or a combination of several strategies (Glascoe 1998; Mahoney et al. 1999). The intensity and duration of programs also varies widely, ranging from brief informative interventions to increase parental knowledge of specific issues (for example, a pamphlet on child immunisation schedules), to early intervention or behaviour modification programs that aim to improve the quality of parent–child interactions and develop parental competency, with the practitioner working collaboratively with the parent over months or years to achieve predetermined goals (Mahoney et al. 1999).

Typically parenting programs are offered on an individual or group basis and can be home-based or centre-based, either in a community or institutional context (Carter 1996). For example, in Australia, programs for new mothers are often held in a local community context at purpose-built clinics staffed by Maternal and Child Health nurses. This reduces barriers such as transport, and enables links to be made with other local services such as toy libraries. Home-based programs are used extensively in an individual family approach, while group programs more commonly use a centre-based approach.

VERBAL INFORMATION

Verbal suggestions are an inherent part of brief encounters with families and are deployed routinely by health care professionals. In such settings, parents may have substantive difficulty with professional vocabulary (Gablehouse & Gitterman 1990). They are likely to arrive at appointments with preconceptions, distractions, and other worries that may interfere with recall of professional advice. Such traits and states are often characterised as anxiety, which is known to interfere with acquisition of new information and, as noted by Melnyk (1994), can inhibit parents from providing appropriate support for their child.

Indeed, in one study parents seeking paediatric care were divided into two groups: those with high versus low levels of anxiety (Richtsmeier & Hatcher 1994). Highly anxious parents had far more difficulty recalling information about their child's condition immediately following a paediatric office visit. Worries about children's behaviour, finances, day care, relationships, employment, past and future events were all deterrents to learning. Another study determining the incidence of stressors that serve as serious barriers to compliance, found that while parents' willingness to comply with treatment recommendations was strongly affected by their perceptions that their child's illness was serious and their understanding of the diagnosis, factors such as being a very young parent and lack of transport were also implicated (Scarfone, Joffe, Wiley, Loiselle & Cook 1996).

There is preliminary evidence that clear, specific, standardised verbal advice delivered by a professional can be effective in assisting parents to acquire new knowledge, particularly when the advice is accompanied by appropriate modelling. For example, a structured interview by nursing staff, advising parents in the post-partum period always to place their child in the preferred supine position, was accompanied by the nurses consistently modelling the advice in the hospital nursery (Colson & Joslin 2002). Before the intervention 42 per cent reported the nurse had advised them to place their infant in supine compared with 88 per cent after the intervention. At a clinic visit two weeks later 75 per cent of parents reported placing their infant in supine to sleep. The results should, however, be treated with caution as the study did not include a control group, used small samples of convenience and relied on parent self-reporting.

In another study, parents in the intervention group were given a structured 20-minute verbal presentation that encouraged active learning and participation (Casey, McMahon, McCormick, Pasquariello, Zavod & King 1984). The study looked at outcomes in parental knowledge and behaviour in the management of fever in their children. At four-month follow-up, knowledge increase was similar in both intervention and control groups, however an audit of parent diaries demonstrated changes in the pattern of management of fever in the intervention group, with fewer clinic visits, fewer telephone calls, and fewer incorrect dosages compared with the controls.

Concrete and specific verbal suggestions on behaviour management were found to be more effective than supportive counselling or no counselling in decreasing excessive infant crying (Wolke, Gray & Meyer 1994). However, other studies showed that specific verbal suggestions in combination with supportive counselling (meaning opportunities for parents to share other issues such as concerns about emotional wellbeing, and to receive encouragement and validation) can lead to even greater acquisition of knowledge and skills. For example, brief informative talks increased parents' knowledge of a specific topic, but a combination of informative talks and supportive counselling was more effective in improving knowledge and also in decreasing parental anxiety (Lewis, Hatton, Salas, Leake & Chiofalo 1991).

Summary: verbal information

While the available research suggests that clear, standardised verbal suggestions are effective in delivering information, all the studies identified used specific and relatively simple content. To achieve profound behavioural change or for teaching complicated skill sequences, effectiveness research suggests that verbal information alone is insufficient. Thus for altering dangerous or detrimental parent–child behaviours, verbal suggestions are best accompanied by other education methods.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Easy to use • Most commonly sought method of communication used by parents	• Effective for increasing parental knowledge • Effective, when combined with supportive counselling, for decreasing parental anxiety	• Present clear, specific, standardised verbal advice • Advice is best delivered by a professional • Encourage active learning and participation, when using structured presentations • Combine specific verbal suggestions with other methods e.g. counselling

TELEPHONE INFORMATION, ADVICE AND SUPPORT SERVICES

Telephone advice and information systems, another form of verbal communication, are able to deliver a high quality responsive service targeted at specific issues or problems (Akister 2002, Williams, Crouch & Dale 1995). There is only a small amount of research looking at the value of telephone information services and telephone support for families, although this is a burgeoning method for working with families and, for the most part, parents who access these services seem satisfied. A 1998 survey of potential users of the UK government's National Health Service Direct (NHS Direct) Helpline demonstrated that the idea was popular particularly with parents of children under five years of age, carers and those with long-term illnesses (Kennelly & Dale 1998, cited in Akister 2002, p.106).

Delivery models include:

- 'telephone triage' through tiers of service delivery, beginning with pre-recorded information on a specific topic, and/or computer assisted scripts often delivered by nurses attached to health care practices, and escalating to increased contact with professionals such as doctors, and/or

- telephone hotlines or help lines (for example, semi-crisis calls or single point of entry lines), which typically offer brief counselling and screening for an array of psychosocial, developmental and behavioural issues, and ultimately direct families to local resources and social services.

Hotlines or helplines are used in Australia, Great Britain and some states of the United States, to address parents' questions about their children. Some are staffed by nurses and devoted strictly to medical care while offering triage as a way to decide if intervention in acute problems is needed (for example, National Health Service Direct in the United Kingdom). Others are staffed by nonmedical professionals and offer parenting advice and/or triage into a range of parenting programs and social services. Still others are staffed by trained non-professionals (often parents) who often use scripts to assist them in giving quality information (for example, Barton Schmitt's Telephone Triage for Paediatric Care—see Appendix A, p. 113). The diversity of manifestations makes hotlines difficult to evaluate, although recent large-scale implementation such as in Los Angeles County, California, will eventually result in studies that measure impact.

A study in the UK surveyed potential users of 'Parentline', a new national parenting help line developed to offer advice to parents and refer people to local sources of help. Behaviour management was the area cited most frequently by parents of primary school-aged children, with the next most common being school bullying and drug and alcohol abuse. Parents of younger children were more likely than those with older children to seek support via the help line. The authors surmised this might reflect a lack of confidence in their underlying parenting skills rather than a more serious problem in families with younger children (Akister 2002).

Another study showed that only 1 in 4 low-income families was willing to seek telephone advice, with the availability of a telephone being critical (Keller & McDade 2000).

Telephone helplines have been used in Australia for some time (for example, Quitline for smokers, Parentline and Maternal and Child healthline), but evaluation is difficult due to a lack of control or comparison group, as callers are self-selected (Miller, Wakefield & Roberts 2003). In the limited surveys of user satisfaction of parenting information helplines, parents of children with specific conditions (for example, epilepsy) have favourably endorsed telephone advice focused on their child's needs. For many families it means a reduction in time and money spent attending traditional appointments (Spinty, Moate & Ferrie 2004). Rural parents who have great distances to travel and limited access to quality care are fairly enthusiastic

supporters of telephone advice lines for both medical and nonmedical care. (Cox, Amsters & Pershouse 2001).

Standardised advice delivered by paraprofessionals (trained non-professionals) has been shown in one study of telephone advice to be more effective than non-standardised advice in compliance with smoking cessation (Borland, Borland, Balmford, Segan, Livingston & Owen 2003).

Telephone support can be useful as part of a multi-media parent training package, combined with other strategies such as written material. An Australian study looked at the use of a written self-instruction manual supplemented by 10 weekly phone calls (average time of 20 minutes) (Connell, Sanders& Markie-Dadds 1997). The study involved 23 families living in a rural area, with 11 of the families serving as wait-list controls. All had children with conduct behaviour problems. Parents in the intervention group were given a workbook covering behaviour management strategies and the promotion of a positive environment and weekly phone calls. While the outcomes relied on parent self-reports of child behaviour, significant behaviour changes were seen in the intervention group and maintained at four- month follow-up.

Summary: telephone information, advice and support

Telephone-based services can be delivered cheaply and are generally viewed favourably by parents, including those targeting parents of children with specific conditions. Advantages for parents include savings of time and money on appointments, and easy access for rural families. Limitations include lack of longitudinal contact with a professional, dependence on a telephone (limiting access for poorer families), limited use by lower income and less educated families, and difficulties likely to be experienced by non-English speaking families.

Telephone information alone has not been shown to have an impact on parenting skills and child functioning; however, it can be a useful part of a multi-media parent training package, combined with other strategies such as written material. The delivery of standardised instructions appears more effective than ad hoc information.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• High satisfaction among parents using telephone triage by professionals such as doctors and nurses • Reduces time and cost of hospital appointments • Reduces travel time and cost for rural families • Increases access to quality care for families (often on 24 hour basis) • Cheap to deliver	• Effective for behaviour management (e.g. school bullying) for parents of primary aged children • Effective for parents of younger children (0–5 years) • Limited uptake by low-income families	• Standardised instructions are more effective than ad hoc information. • Telephone services are best used to complement and support other strategies, e.g. written self-help material

ELECTRONIC MAIL (EMAIL)

Access to electronic mail (email) has increased rapidly over the last 5 years and will continue to grow. Interest in its use to dispense advice and reduce telephone contact time is increasing; however, there has been little research on the use of email communication for delivering parenting information. Issues of written consent and ways of encrypting information so that responses can only be read by the individual concerned need to be considered (Gordon & Krimholtz 2003).

One survey looked at the degree of parent interest using email as a preferred method of communication with the doctor and found that, while the majority of parents favoured it, the doctors were much less inclined (Kleiner, Akers, Burke & Werner 2002). Although doctors were responsive to their office staff using email, issues in using it with parents included the time needed to answer the parents' email inquiries and confidentiality considerations.

Summary—email

Very little research is available on the use of email communication for delivering parenting information. While it appears that it may have advantages for administrative staff in reducing telephone contact time with families, there are medicolegal and privacy issues to be considered.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Reduces telephone contact time for administrative staff during busy periods e.g. doctors' clinics • Provides electronic record of information sought by and provided to parent	• Not yet demonstrated	• Clarification of medico-legal aspects relating to the Privacy Act needed before further implementation

WRITTEN INFORMATION

Verbal communication is often insufficient on its own and needs to be supported by written information (Paul 2001). This comes in many forms. Research relating to some of these is discussed in terms of the effects on parent knowledge and satisfaction, parent anxiety and recall, and adherence to an agreed regime or course of action.

Pamphlets, leaflets and handouts

The provision of written information for parents in the form of pamphlets, leaflets, single page handouts and the like is common practice in primary and secondary care settings. It is known to improve recall and knowledge and is often used to reinforce verbal information, increase understanding, decrease anxiety and encourage compliance and self-management. Provided it is user-friendly—easy to read and understand, and seen as relevant—it can be informative and effective (Paul 2001).

The research suggests, however, that written information in general is best accompanied by other strategies, to involve and motivate the recipients. A study in the United Kingdom found that patients rarely read or took home information handouts left in waiting areas, although they read and recalled short messages on waiting room bulletin boards (Wicke, Lorge, Coppin, Jones 1994). In a related study, informational handouts sent through the mail in conjunction with a media campaign (to reduce risk for skin cancer) were more effective than informational handouts mailed alone (Boldeman, Jansson & Holm 1991).

Parent knowledge and satisfaction
Patients usually appreciate written information and appear more satisfied when such information is made available. Researchers assessing 3500 patients in Great Britain showed that 97 per cent of patients read information handouts and 70 per cent retained them for more than 12 months. Those given handouts were more satisfied, acquired more knowledge of medication side-effects, and were less likely to report spurious side-effects. They had greater knowledge of their medication's purpose and dosing although they were not better able to recall its name (Gibbs, Waters & George 1990; 1989).

Parent anxiety and recall
Written material can form a useful strategy to support material presented verbally and counteract the effect of anxiety, which can be a barrier to learning and affect the retention of information during a clinical consultation. Researchers recommend that important material should be presented verbally first, and be reinforced by written material (Law 1997). A phone call reminding families about the decisions made during an appointment is another simple and effective technique for enhancing parental recall (Chande, Wyss & Exum 1994).

A personalised approach is more likely to be effective than providing the written information alone. Parents have been shown to learn and recall far more information when oral instruction was accompanied by written literature (First, Lauerman, Fenton, Herzog & Snyder 1992; Duke, Kellermann, Ellis, Arheart & Self 1991).

One study compared provision of written information about a specific medical procedure plus verbal discussion with a support team member with provision of verbal instruction alone. It found that written information plus verbal discussion decreased parental anxiety and increased satisfaction with care (Laine, Shulman, Bartholomew, Gardner, Reed & Cole 1989).

Adherence to agreed regimes

Information handouts were found to increase parents' adherence to child immunisation schedules when coupled with a visit to the doctor for other reasons (Cates 1990). Another study found that parents were more likely to follow treatment recommendations for ear infections when handouts were backed up by supplementary strategies, including a self-monitoring calendar and telephone reminders (Finney, Friman, Rapoff et al. 1985). Reminder letters and wallet-size cards with names and phone numbers of services were also found to improve the likelihood of parents following recommendations (Margolis, Lannon, Stevens et al. 1996).

Therapist directed versus self-directed written information

A study of efforts to discourage smoking in 2901 mothers of newborns looked at the effectiveness of information packets together with verbal instruction from a paediatrician, compared to written information without verbal instruction. The combined method produced higher quit rates and lower relapse rates (Wall, Severson, Andrews, Lichtenstein, Zoref 1995; Li, Coates, Spielberg et al. 1984). Similarly, smoking parents who received counselling from their child's paediatrician along with written information and test results were more likely to smoke outside their homes than were parents who received counselling only (McIntosh, Clark & Howatt 1994).

Information handouts are also helpful when the topic is complicated and involves teaching skills that have multiple steps such as in behaviour management programs. In this context, one study found a self-directed program to be as effective as a therapist-directed children's sleep management program (Seymour, Brock & Brock 1989). Both parent groups received the same written information; and in addition, one group received a one-hour consultation with a therapist to establish the program and daily supportive telephone calls, while the other had a short consultation and was self-guided. While initially, the therapist group achieved more rapid improvement, at four weeks follow-up, both groups were identical on outcome measures.

Age-paced newsletters

Informational handouts also appear useful in building parenting skills longitudinally. One form these handouts may take is an age-paced newsletter, which arrives at regular intervals and covers typical issues in child-development associated with a particular age group. In one study, age-paced handouts were sent periodically to parents whose children, at the beginning of the study, were newborns (Cudabak, Darden, Nelson, O'Brien, Pinsky & Wiggins,1985). The newsletters addressed concerns most commonly expressed by parents at each child age level, and emphasised knowledge about development, parenting, health care, and emotional well being. More than 800 parents were recruited for satisfaction and knowledge surveys and more than 70 per cent reported improvements in information about development, parent–child relationships and parental self-confidence.

Similarly, activity sheets, age-paced according to paediatricians' 'well-visit' schedule (for routine health and development checks and advice) and designed to help parents promote their child's developmental progress in language, motor, self-help and socialisation, were well liked by parents in a US study. Many parents reported that activity sheets increased their knowledge of development and their willingness to discuss developmental issues with professionals (Frankenburg & Thornton 1989).

Readability and literacy levels

Parent's preference for written information, and its widespread use and effectiveness in parent education, raises questions about literacy, language barriers, readability and

comprehension (Busey, Schum & Meurer 2002). Studies of paediatric patient education materials have found that the reading levels are consistently higher than recommended (D'Alessandro, Kingsley, Johnson-West 2001). In Australia, the United States and England, approximately 20 per cent of the adult population are considered functionally illiterate, which is defined as reading below the 8th grade level. This is the difficulty level of most newspapers and digest-type magazines.

A United States study found that mean reading skills among low-income elderly adults were at 5th grade level, equivalent to the average 10 year old child (Weiss, Reed, Kligman 1995). Another United States study found that younger adults read somewhat better, at an average grade level of 8.7 (13 to 14-year-old range), but still about 5 grade levels below their highest complete school grade (mean grade level 12.1, 17 to 18-year-old range) (Frederickson, Washington, Pham et al. 1995). An Australian study showed average reading performance clustered at the 8th grade level and that two-thirds of all information pamphlets were written above the 8th grade level (Sarma, Alpers, Prideaux & Kroemer 1995).

A United States study showed that only 25 per cent of materials produced by the American Academy of Pediatrics were written at less than a ninth grade level (Davis, Mayeaux, Fredrickson, Bocchini et al. 1994). A further study that assessed the readability and comprehension associated with an information pamphlet found that adult comprehension levels can lag 2–3 grades below their reading level (Davis, Bocchini, Fredrickson, Arnold et al. 1996). In an effort to overcome this disparity, a small United States study looked at parental knowledge recall using age-specific pictorial anticipatory guidance (PAG) sheets compared to the injury prevention program (TIPP) sheets developed by the American Academy of Pediatrics. No significant difference was found between the two groups, however the study used only small samples of convenience and the PAG sheets were not validated (Powell, Tanz, Uyeda, Gaffney & Sheehan 2000).

Researchers have concluded that informational handouts should be written at the 8th grade level (average 13 year old), with some calling for readability to be set closer to the 5th grade level (average 10 year old) (Weiss & Coyne 1997). The text should be simplified to improve comprehension by substituting sophisticated terminology with common synonyms, avoiding the passive tense, using short sentences and eliminating prepositional phrases. Checking the results with the standard readability formulas found in most word-processing programs is also suggested (Baker, Newton & Bergstresser 1988). Other recommendations included focusing on writing for the desired health behaviour rather than for high-level knowledge, as it was found even literate parents prefer easy-to-read material. In addition it is suggested that writers limit the number of concepts and determine key points to achieve behavioural objectives (Davis, Bocchini, Fredrickson et al. 1996)

Translated information for culturally and linguistically diverse (CALD) families

Families from CALD communities face not only the problems associated with limited English, but also the cultural differences that exist in parenting and child-rearing practices and values.

Information and educational interventions tend to be based on mainstream, middle class values and are not easily individualised for families from CALD backgrounds (Hwa-Froelich & Westby 2003). Differences in family expectations, communication and learning styles need to be identified and understood, and assessments, instructions and information adapted in culturally appropriate ways. Further research is needed to ascertain the most effective ways to achieve culturally sensitive family interventions (Kumpfer, Alvaredo, Smith & Bellamy 2002).

Limited English affects substantial numbers of families in Australia, the United Kingdom and the United States, and there is considerable overlap between those who do not speak English

and those with limited literacy. But neither language barriers nor illiteracy preclude an interest in information. Non-English speakers in one study expressed frustration with the lack of information written in their primary language (Madhok, Bhopal & Ramaiah 1992), while another demonstrated that almost all patients, whether English-speaking, literate or not, clearly wanted more information about a range of topics (Jensen, Madsen, Andersen & Rose 1995.) In many instances the problem is the dearth of material translated into other languages. A United States study, for example, reviewed newsletter information sent to English speaking and Southeast Asian parents attending the same early childhood centre, and found that where 91 topics were covered in the English language information, only 13 topics were translated (Hwa-Froelich &Westby 2003).

The challenge is thus to determine effective and efficient ways to provide patients of all backgrounds with the information they need.

Summary: written information

Informational handouts can be effective educational tools, particularly when they are accompanied by a personalised approach and advice. A personalised approach generally substantially increases people's recall of the material presented, and its effectiveness in achieving its desired outcomes. In particular, it helps to engage parents' interest and motivation, an essential step if handouts are to be effective teaching tools.

Written material needs to be readable and readily understood. A functionally illiterate person is defined as reading below the 8th grade level (average 13-year-old), the level of most newspapers and digest-type magazines. Informational literature should be written at or below this level, but most is above this level. The text should be simple, direct and focused.

An understanding of cultural differences, particularly as they relate to parenting and early childhood, is critical to providing effective services in a multicultural society. Information and educational interventions generally tend to be based on mainstream culture. Differences in family expectations, communication and learning styles need to be identified and understood, and assessments, instructions and information adapted in culturally appropriate ways. Further research is needed to ascertain the most effective ways to achieve culturally sensitive family interventions.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Improves recall and knowledge • Used to reinforce verbal information • Increases understanding, decreases anxiety and encourages compliance and self-management. ***Age-paced newsletters:*** • Common parental concerns addressed in relation to the child's age, with emphasis on knowledge of development, parenting, health care, and emotional wellbeing • Increases knowledge about development and parent–child relationships • Increases parental self-confidence	• Effective for complex topics or teaching skills involving multiple steps, e.g. in behaviour management programs	• A personalised approach in disseminating information improves effectiveness, rather than giving the written information by itself; eg., discuss handouts during an appointment, rather than give without further instruction. • Important material should be presented first verbally and reinforced by written material • Strategies such as a self-monitoring calendar and telephone reminders increase effectiveness. • Also effective if informational handouts are sent by mail in conjunction with a media campaign to raise parents' interest in the intervention. ***Readability / literacy levels:*** • Resources need to be relevant and easily readable, written at 8th grade level (average 13-year-old). Some research recommends lower (5th grade, average 10-year-old). Standard readability formulas are in most word-processing programs. • Replace medical & technical jargon with everyday language where possible. Use short sentences, avoid prepositional phrases and passive tense. • Write for the desired health behaviour rather than for high-level knowledge. • Determine key points to achieve behavioural objectives. Limit the number of concepts. • Personalise the information by using 'you'. ***For CALD families*** • Clarify differences in family expectations, communication and learning styles • Adapt assessments, instructions and information in culturally appropriate ways

WORLD WIDE WEB RESOURCE MATERIAL

While rapid growth of the use of computers has brought a plethora of information via the World Wide Web (WWW), including much that is aimed at parents, there is little evidence-based research into the effectiveness of web-based parent education. Several studies of parents' satisfaction with web-based delivery of information, however, reveal frustration with the technology, particularly the successful and quick downloading of video and audio clips (Cumbo et al. 2001; Cook, Rule & Mariger 2003).

There is also the issue of how to identify credible, current and accurate advice from an authoritative source (Monsivais & Reynolds 2003). A review of studies undertaken to date has highlighted the problem of misinformation, with no means of filtering out inadequate or misleading sites (Eysenbach, Powell, Kuss & Sa 2002). There is an urgent need to develop an effective consumer guideline filter to enable access to quality information that is readable and trustworthy.

Readability is also relevant to web-based materials. A study sourced 100 web documents from 100 different web sites on a wide spectrum of paediatric topics forming parent education material for the layperson. The readability level was determined by analysis using the Fry Formula (Fry 1986) and SMOG (Mc Laughlin 1969) methods (see Appendix A, p. 113). Materials were written at the 12th grade level with no author or institutional group using less than 10th grade (D'Alessandro, Kingsley & Johnson-West 2001). This is well above the 8th grade or lower literacy recommendation.

Summary: World Wide Web resource material

Given the wealth of information available via the World Wide Web and the relative easy accessibility to families it can be an effective resource, provided families have the skills and resources to identify reputable websites and accurate information. The main concern is for those families who are functionally illiterate or are marginal readers and are unable to differentiate or understand the content of the information accessed.

There is an urgent need for the government to develop or fund an effective consumer guideline filter to ensure that what parents access is quality information that is readable and trustworthy.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Provides access to large amounts of information on many topics relating to parenting	• Not yet demonstrated	• Improve accessibility of parent education materials, e.g. rapid and easy downloading of audio and visual clips. • Develop/disseminate guidelines to assist parents to distinguish credible, current and accurate advice from an authoritative source • Develop an effective consumer guideline filter to ensure that what parents access is quality information that is readable and trustworthy.

PARENT–HELD HEALTH RECORDS

Parent-held health records are given to parents in Australia following the birth of each child and contain information about nutrition, child development, immunisation schedules, physical growth and behaviour from birth until adolescence (Glascoe, Oberklaid, Dworkin & Trimm 1998). Parents are encouraged to use the book for support information on their child's development and to record information from visits to the maternal and child health centre, doctor and other related visits over a long period of time. Parent-held records are also used in Europe and are increasingly popular in the United States. High levels of parent and provider satisfaction are associated with the use of parent-held health records (Jeffs, Nossar, Bailey, Smith & Chey 1994; Campbell & Halleran 1993; Liaw 1993). Although most parents retain and use their records, this varies substantially according to whether parents received clear instructions to bring their child's record to each visit. Far more parents maintained and used records when instructed either verbally or in writing (Furmanski, Bahamonde, Cunningham et al. 1996). Recent research suggests that parent-held records are particularly helpful in Child Protective Services and for children with special needs (Knowles, Blackburn, Zahir, Russell, Carrier & Nevrkla 1999).

Despite the popularity of parent-held records and their ability to provide anticipatory information on a range of developmental and behavioural topics, their efficacy in preventing or intervening with developmental and behavioural difficulties has not been studied. Some cautions are gleaned from a study showing differences in how parents/patients versus providers perceived health records. Parents/patients tended to view them as a personal document for their own reference while physicians tended to view records as a communication and management tool (Liaw 1993). Even so, providers have had substantially lower levels of use and often fail to update records even when they are presented by parents, although some research shows improvement in acceptance and deployment by general practitioners (Volkmer, Gouldstone & Ninnes 1993). Helping parents advocate for their use appears to improve engagement by health care providers (Davies 1999).

Summary: parent-held records

While parents express high levels of satisfaction with parent-held health records, research is limited to studies of satisfaction and deployment rates. It is not yet clear whether the record's content relevant to developmental promotion is effective in guiding parenting skills and preventing or intervening with problematic child behaviours and development.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Popular with parents—high user satisfaction rates • Provides anticipatory information on a range of developmental and behavioural topics	• Not yet demonstrated beyond satisfaction studies	• Research is needed on the efficacy of parent-held records in preventing or intervening with developmental and behavioural difficulties

VIDEOTAPE

Videotapes combine both visual and verbal information and are frequently used in health and educational settings to convey information in a consistent, interesting way, particularly for complex topics (Oermann, Webb & Ashare 2003). They are often combined with written information or verbal discussion groups, to provide a multi-media approach. Research on their effectiveness as either a single session informational tool or as part of a lengthy educational program is discussed below, together with the importance of type of settings and speakers used, particularly in relation to cultural sensitivity.

Instructional videos

Parent knowledge
As with research on verbal suggestions, knowledge acquisition is a major theme in research on the use of videotaped instruction. Videotapes have been used to educate parents on complicated topics. They can circumvent reading literacy problems and can be readily dubbed in various languages. Paediatric waiting-room instructional videos have been shown to be highly effective in improving parents' knowledge of various child health issues (Cockington 1995; Oermann et al. 2003). In a study comparing the effectiveness of an educational video versus written information on the poliovirus vaccines, parents in the video group had significantly higher post test-knowledge scores across all socioeconomic and educational levels, regardless of ethnicity (Dunn, Shenouda, Martin & Schultz 1998).

Parenting skills
Available research suggests that videotapes are effective in building knowledge and parenting skills (Sharmer 2001; Shegog et al. 2001).

In a study investigating the influence of increased knowledge on the rate and duration of breastfeeding, both parents in the intervention group were shown a video on breastfeeding before the birth of their child, followed by open discussion and an explanatory leaflet. Mothers with the highest levels of knowledge were found to have a 6.5 times greater chance of exclusively breastfeeding at the end of the third month. In addition, the fathers with the highest knowledge scores were found to influence breastfeeding rates significantly, suggesting that the advice given in the prenatal period was effective in engaging them in the promotion of breastfeeding (Susin, Giugliani, Kummer, Maciel, Simon & da Silveira 1999).

An 8-hour video and year-long book course was found to improve knowledge of infant development substantially among at-risk parents, as measured at one year post-birth, compared with waiting list control groups (Brown, Yando & Rainforth 2000).

Videotaped series

Behavioural problems
Video instruction also appears to be helpful in modifying parents' perceptions of children's behaviour (Farooq 2000). Often the use of a videotaped series rather than single session videos of relatively short duration (under one hour) is needed to effect behavioural changes in problem parent–child interactions.

As with other parenting interventions, intensity and repetition may well be a critical factor in the effectiveness of video instruction. An Australian study of a 12-episode television series using the 'Triple P' (Positive Parenting Program) found substantive reductions in child defiance and disruptive behaviour and higher levels of perceived parenting competence. All

behavioural changes were maintained for at least 6 months post intervention (Sanders, Montgomery, Brechman-Toussaint 2000).

In the United States, a parent education program for abusive and high-risk-for-abuse parents, containing 13 episodes of common problem situations between parents and their pre-school children, encouraged parents to meet and discuss one episode per week (Golub, Espinosa, Damon & Card 1987). Each episode contained several ways to reach effective resolution of the particular situation. While dropout rates over the period were high, parents who completed the full program were better able to take a developmental perspective towards their child's behaviour and were able to propose more options of cooperative techniques that they could implement.

Deep learning entails a parent being able to derive personal meaning from knowledge gained, and to be intrinsically motivated to alter their way of interacting with their child and the world. A combination of video series and verbal discussion groups appears to be most effective in achieving such learning (Entwhistle 1998).

Webster-Stratton and colleagues, again in the United States, have used videotapes in which parenting skills are modelled through vignettes of parent–child interactions, accompanied by facilitator-led discussions. The programs are usually weekly 2-hour sessions and take place over several months. Their use with parents of young children with conduct problems has shown videotape modelling and group discussion of child management principles to be as effective as individual treatment and superior to waitlist control (Webster-Stratton 1984; Nixon 2002). Self-administered videotape modelling programs have also been shown to be effective in the short term, but not as effective in the longer-term as the combined group discussion video modelling group, where changes were maintained 3 years post-treatment (Webster-Stratton 1990, 1992; Webster-Stratton, Hollinsworth & Kolpacoff 1989). The outcome suggests that facilitated discussion may be the important ingredient for success.

Other studies also report much greater success with combination instruction (for example, videos plus short-term group education, Bradley et al. 2003), while others report better success when parents chose their preferred instructional media (Sanders, Montgomery Brechman-Toussaint 2000; Sanders, Markie-Dadds, Tully & Bor 2000). Even so, the videotape series shows some promise for improving relatively mild parent–child problems.

Culturally sensitive videos

The setting and speakers used in videotapes appear to be particularly important, at least for some groups of parents. Social Learning theorist Albert Bandura introduced the idea that imitation of modelled behaviour produces immediate learning provided the model is seen as significant to the learner and the behaviour perceived as desirable and as having personal positive significance (Bandura 1977; Burns 1995). It appears that the use of Social Learning theory may be particularly effective if culturally sensitive role models are used in the videos to demonstrate optimal behaviour.

Input from an advisory group of 6 adolescent Afro-American mothers was used to design a short 15-minute culturally sensitive videotape. It depicted them in real-life vignettes using best practice methods of infant developmental stimulation and feeding and was shown to other African-American low-income adolescent mothers similar to themselves. These young women had greater interaction and communication with their infants during feeding than the control group mothers, who were instructed verbally by white professionals (Black & Teti 1997).

Videos about AIDS prevention that used African-American women as speakers also increased willingness to seek HIV testing in a similar population (Kalichman, Kelly, Hunter, Murphy & Tyler 1995). Similarly, Latino and African-American women were more likely to receive pap smears after watching a culturally sensitive waiting room video as compared to a control group in waiting rooms without videotapes (Yancey, Tanjasiri, Klein & Tunder 1995).

Summary: videotape

Instructional videotapes have been effective in producing short-term increases in patient knowledge when shown on specific topics in situations such as clinic waiting rooms. However whether this increase is maintained over time is not known, as studies have focused on immediacy of information recall.

Deep learning entails a parent being able to derive personal meaning from knowledge gained, and to be intrinsically motivated to alter their way of interacting with their child and the world. A combination of video series and verbal discussion groups appears to be most effective in achieving such learning. For effective use with people of different cultural sensitivities it is important to seek advice on settings and cultural practices from those to whom it is intended and to use real-life situations and people.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can convey information in a consistent, interesting way particularly for complex topics • Can form an effective part of a multi-media approach, with written information and/or verbal discussion groups. • Can circumvent reading/literacy problems • Readily dubbed in various languages.	• Highly effective in improving parents' knowledge of various child health issues. • Effective for improving relatively mild parent–child problems. • Can be effective in waiting rooms (with other distractions eliminated) for improving short-term parent knowledge on specific child health issues. • Longer or more intensive videos (e.g. an hour or more, or a series over several weeks) are effective in producing behavioural changes in problem parent–child interactions. • Effective for deep learning for parents who are strongly motivated to alter their way of interacting with their child and others, and can derive personal meaning from the knowledge gained.	• Best used in combination with other strategies, e.g. videos plus short-term group education for self-education; or as part of multi-media parent training program • Effective for teaching parenting skills if videos are used to model vignettes of desirable parent–child interactions, and are accompanied by facilitator-led discussions. ***Culturally sensitive videotapes*** • Seek advice on settings and cultural practices from those for whom the video is intended, and use real-life situations and people. • Use culturally sensitive role models to demonstrate optimal behaviour. Imitation of modelled behaviour produces immediate learning if the model is seen as significant to the learner and the behaviour perceived as desirable with positive personal significance.

MASS MEDIA

Increasingly, mass media educational campaigns involving communication methods including radio, television (TV), the Internet, newspapers, magazines, leaflets and posters are used to heighten consumer awareness of research findings and promote information about important health issues (Grilli, Ramsay and Minozzi 2004). Usually targeted at the population level, they are often aimed at promoting lifestyle changes that may have an impact on the subsequent utilisation of health services.

The mass media has various important functions in society, which includes the provision of information, entertainment, and setting agendas for individual and societal discourse and influencing behaviour. It enables large numbers of people to be reached and for particular groups to be targeted and is able to quickly distribute messages to diverse audiences (Saunders & Goddard 2002).

However, the use of mass media remains a controversial area due to a number of factors including the best way to frame the messages communicated through a mass media campaign in order to achieve intended behavioural change (Grilli et al. 2004). Four roles within a campaign have been identified as promoting changes in health behaviour:

- an educator to introduce new ideas

- a supporter to reinforce old messages or maintain change

- a promoter to attract attention to existing programs

- a supplement to community based interventions

(Flora, Maibach & Macoby in 1989, cited in Owen, Bauman, Booth, Oldenburg & Magnus 1995, p. 248).

The 'dose' or amount and intensity of the intervention delivered are factors that are not easily evaluated, yet have a large impact on the effect size of any given campaign. Additionally, it is suggested that the length of the intervention period needs to be at least five years to effect complex behavioural changes at the individual and community level (Sorensen, Emmons, Hunt & Douglas 1998). Others argue that it is difficult to justify the costs of large campaigns given the difficulty in measuring effectiveness of the mass media impact on the population in terms of increased knowledge and behavioural changes (Rayner 1996, cited in Saunders and Goddard 2002).

The role of television

Planned interventions
Television in particular acts a primary source of mass media and has been shown to have the capacity to influence awareness and become a source of information for parenting and family issues (Sanders, Montgomery & Brechman-Toussaint 2000). Several Australian studies have used the television medium and well-focused campaigns to educate families and in particular, parents, with varying degrees of success. Due to the hot summer climate and the associated risks of skin cancer in Australia, the promotion of primary prevention campaigns such as the sun protection programs 'Slip! Slop! Slap!' from 1980 to 1988 and SunSmart from 1988 to the present have played a huge role in changing Australian society's approach to the sun and have resulted in marked reductions in sun exposure (Montague, Borland & Sinclair 2001). Both campaigns, which entailed taking steps to reduce exposure of the population to sunlight, are seen as an important aetiological factor in reducing the incidence of skin cancer. The use of television commercials was integral to the early success of the campaign along with radio, newspapers and magazines. Television advertising and publicity on skin cancer in particular

was shown to have a positive influence on people's sun protection habits and early detection behaviours (Sinclair & Baglot 1999). Results from the 1998 Anti-Cancer Council of Victoria study showed a decrease in non-melanocytic (common) skin cancers for persons less than 50 years of age suggesting that the campaigns were having a desired effect.

A related study delivered two educational campaigns over a two and a half year period aimed at increasing public awareness of early detection of melanoma in a tropical far north Queensland city and the promotion of 'SunSmart' behaviour (Del Mar, Green & Battistutta 1997). It was targeted at young adults and encouraged them to avoid sun exposure. The duration of the (mainly) television advertisements was five months and two months respectively. While the campaign had an effect on the early detection component by the increased number of people presenting to have potentially cancerous skin lesions examined and excised, it was unclear as to whether there was a change in relation to their SunSmart behaviour due to difficulties in measuring behavioural outcomes. A negative effect was the unexpected costs associated with the increase in unplanned additional skin excisions due to patient demand resulting from the campaign although no cost benefit analysis was detailed in the study.

A more recent study using television, radio and print media was conducted over three summers in New South Wales (1997–2000), with the aim of increasing the use of sun protection measures amongst children less than 12 years of age (Smith, Ferguson, McKenzie, Bauman & Vita 2002). A sample of 800 adults with at least one child under the age of 12 was included in a pre- and post-campaign survey to assess sun protection knowledge, attitudes and behaviours. The sample was weighted to include equal numbers of rural and city parents and equal numbers of children under and over the age of 5 years. The three campaigns were conducted with a different media mix for each, but a 30 second television commercial central to all three. As it was hoped that there would be a cumulative effect of increased sun protective knowledge and awareness over time in the target population, more media spots were purchased for campaign 1 than campaign 2 and 3. Survey results demonstrated that knowledge recall levels regarding the benefits of using sun protection measures were not altered significantly, as they were high at baseline. With regard to attitude, the importance parents place on the issue of child sun protection was the only one of four attitude factors to show significant improvement. In terms of sun smart behaviour changes, there were increases in the use of protective factors after each campaign, but the effect was not sustained and only reached statistical significance after campaign 3. The authors surmised that this indicates that while repetition was an important factor in aiding parent recall on a short-term basis, other strategies are potentially required to alter behaviour in the longer term.

Another prominent Australian campaign ' Every Child is Important' was launched in the state of Victoria in May 2000 as a primary prevention against child abuse and continued until the end of 2001 (Tucci, Goddard & Mitchell 2001). The campaign was aimed at encouraging all adults to engage positively with the principles of children's rights and appreciate the contribution of children to the cultural and emotional life of families and communities. Television commercials featured prominently in the campaign, which aimed to stimulate people to think about the importance of children and their value to society. Additionally, other strategies such as newspapers and radio advertisements, free information kits for parents and seminars and a website were utilised. While the original campaign relied on private funding through business and public donations, following additional funding support by the federal government, it was relaunched and extended nationally and will continue until the end of 2005.

Results from the first follow-up survey of 301 adults between May and October 2000, demonstrated that only 4 per cent of respondents were able to gauge the extent of child abuse in the community as measured by the estimation of reports of abuse received annually.

The majority of parents grossly underestimated the number of reports if able to even guess. However, eighty percent of respondents strongly supported the need for the educational campaign to raise community awareness. Despite the strength of the campaign, follow-up surveys have been disappointing as parents still rank child abuse below problems with the public transport system on the list of issues of most concern to them unless prompted. These findings by Tucci, Mitchell and Goddard have been consistent across each survey that they have undertaken in 2000, 2003 and 2004.

A Dutch campaign that aimed at enhancing the rate of disclosure of abuse in children aged 8–15 years old used television extensively in its comprehensive mass media campaign in 1991 (Hoefnagels & Mudde 2000). A 30-minute dramatised documentary for children based on real abuse reports was shown twice at the beginning of the campaign followed by 3 shorter, made-for-TV films, each assessing a different type of child abuse. These were shown regularly across all broadcasting companies along with the number of a telephone helpline 'Child Line'. In addition a well-known TV anchorman from a commercial broadcasting channel starred in a commercial telling adults to listen to children and report suspected child abuse. An adult documentary was also broadcast three times at the beginning of the campaign. Other long- term strategies included posters, educational booklets for children, stickers, newspaper and magazine articles.

The impact of the campaign on the calls to 'Child Line' was followed-up for 2-1/2 years following the intervention resulting in a sustained effort over a 4-year period. Results showed a high increase of disclosures of suspected child abuse via the telephone help line to five times the base rate level particularly following the screening of the Child Line information in conjunction with the TV programs. While this trend reverted once the intervention was removed other unplanned positive effects noted included an increase in knowledge amongst children in non-abusive situations, a change in the cultural attitude of workers in the field of child abuse and a cohesive bond between agencies involved in the long planning, initiating and follow up process. A final outcome was the government provision of funding for the long-term establishment of toll-free Child Line calls.

The National Heart Foundation of Australia conducted a serial campaign to promote physical activity during May of 1990 and 1991 (Owen, Bauman, Booth, Oldenburg and Magnus 1995). Motivational slogans were used and both campaigns were based on social learning models and emphasised walking as the main activity and aimed to initiate changes in behaviour. Paid television coverage was extensive with advertisements and the scripting of one episode of each of two nationally broadcast television drama series. Radio announcements, pamphlets, posters, stickers, T-shirts, publicity tours by health experts and magazine articles were some of the additional strategies utilised. Face- to- face home based interviews with 2,500 people were carried out 2 weeks before and 3–4 weeks after each campaign using random sampling of households. Results from 1990 demonstrated message awareness increased from 46 per cent pre-campaign to 71 per cent post campaign while in 1991, knowledge was already at 63 per cent and increased to only 74 per cent post campaign.

With regard to their intention to exercise more, respondents from the 1990 campaign, changed from a pre-intervention level of 4 per cent to 25 per cent following the mass media campaign. However, following the 1991 campaign, respondents were already at 26 per cent pre campaign and there was no change detected. Explanations for this outcome are open to conjecture given the difficulty in quantifying the reach of mass media campaigns. One possibility was that a ceiling effect might have occurred following the 1990 campaign and that the 1991 strategy only encouraged those who had already changed behaviour to maintain it (Owen, Bauman et al. 1995).

Similar results were seen from a campaign in Scotland involving a 40 second television advertisement and telephone helpline to promote walking as a form of exercise (Wimbush, MacGregor & Fraser, 1998). The level of knowledge awareness following the first month of

advertising rose to 70 per cent of the adult population falling to 54 per cent in the non advertising period however there was no evidence to support the campaign's impact on actual walking behaviour.

Apart from the use of mass media in the health promotion field it has also been used with some success in the area of family intervention. An Australian study in 2000 by Sanders, Montgomery and Toussaint, as mentioned in the videotaped series section (p.106), demonstrated a positive impact on parenting and related child behaviour problems following an intervention of a 12 weekly episode television series titled 'Families'. The behavioural changes were maintained for 6 months post intervention. However, this was not a commercially aired television program and the parent could view the video taped series under optimal conditions and with a tip sheet of written information to refer to. It remains to be seen whether a similar outcome would be likely as a normally broadcast program in less than optimal programming times to fit in with family lives. The authors concluded that although the program had successfully produced behavioural changes, the impact of the series could have been increased by additional support systems such as telephone help lines or parenting resource centres used to coincide with the TV program (Sanders et al. 2000).

A study in the United Kingdom investigated the impact of using a television drama as a vehicle to increase adult's knowledge of the potential of self poisoning and death through drug overdose (O' Connor, Deeks, Hawton, Simkin, Keen, Altman, Philo & Bulstrode 1999). An episode depicting a man suffering potentially fatal liver damage following an untreated paracetamol overdose was shown on the television drama Casualty, watched by 12.8 million viewers. Knowledge surveys at 1 week and 32 weeks post episode were sent to members of the BBC television Opinion Panel, which were a structured sampling group, representative of the adult UK population. Results indicated that knowledge increased by 40 per cent in the short term and was still maintained to a significant level at 32 weeks although a decline of 12 per cent was noted.

Unplanned interventions

The effect of televised fictional accounts of illness where the storyline is not planned by a health organization to deliver an actual message on national screening programs or other health issues is not well documented. However, a retrospective study was undertaken to assess the impact of a storyline in a long running popular soap opera Coronation Street after a central character developed cervical cancer and subsequently died within the following 6 weeks of episodes (Howe, Owen-Smith & Richardson 2002). The English program originating in Manchester was screened to over 13 million homes in 9 NHS health authority regions in the Greater Manchester zone and Lancashire 4 times a week. The story line of the character 'Alma' was required to have a repeat cervical smear following an initial 'mistake' at the local laboratory screened in April 2001. By the start of May, Alma had been diagnosed with cervical cancer and her condition deteriorated rapidly and by mid June she was dead. Subsequently, it was revealed that she had missed previous cervical screening appointments.

The study examined the cervical screening database for this region and compared the number of smear tests taken during a 6-month period that included the story line and compared it with those taken over the same period in the previous year. The women's results were categorised by age into 25–44 years or 45 years and over. The proportions of smears were further stratified into intervals of either 'unscheduled', 'on time', 'overdue' or 'no previous smear' and compared. Researchers found that the number of smear tests increased by nearly 14 000 or 21 per cent in the 19 weeks following the story line. While all categories demonstrated an increase the largest was in the 'on time' category, which increased by 26 per cent. Results from comparing Health Authorities varied between 11 per cent and 32 per cent and the proportional increase for 'unscheduled smears' was greatest in those aged 45 years and over (15 per cent) compared with the younger group. The results had a significant impact on health service utilisation resulting in a dramatic impact on operational

service costs estimated at £470,000 as a result of requiring extra staff and facilities to process and report on the extra number of tests.

This is one of the few entertainment type programs to provide evidence for the translation of knowledge into behavioural change. Whether this impact is sustained and will affect survival rates is not yet known (Howe, Owen-Smith & Richardson 2002).

The effectiveness of the campaign appeared to be similar to an Australian study which used a planned intervention and aimed to increase Pap smear screening in New South Wales through a mass media campaign in 1988 over a 2 month period (Shelley, Irwig, Simpson & Macaskill 1991). This intervention also resulted in a 21 per cent increase in screening and was based on a 30 second TV commercial which was screened 34 times and supported by pamphlets, posters and articles in a woman's magazine. However the reported increase could not be directly attributed to changes in knowledge and behaviour due to the success of the campaign as a majority of the women in the study sample were found to have adequate knowledge about Pap smears and held favourable attitudes towards its value, prior to the campaign's launch. Despite this finding, a third of the 416 women were unable to recall having seen any information on Pap smears following the campaign. This again raises questions about the study design and methods employed to measure behavioural outcomes as well as cost-benefits associated with the campaign.

Summary: Mass media

The use of mass media remains a controversial area due to a number of factors. These include justifying the costs of large campaigns given the difficulty in measuring effectiveness of the mass media impact on the population, in terms of increased knowledge and behavioural changes. Most campaigns appear to be effective in achieving a significant increase in knowledge regarding health education issues, but the retention of this knowledge following cessation of the intervention is variable or often not known in the long term. Behavioural changes are much more difficult to achieve and measure, although are more likely to be achieved through sustained mass media campaigns involving several strategies. These could include television programs and additional support systems such as telephone help lines, resource centres and support groups.

Cost benefits of programs are also difficult to determine and many studies do not even attempt to include this aspect in their analyses although several reported negative costs associated with dramatic increases in utilisation of existing health services attributed to unexpected outcomes from the campaign or from unplanned interventions.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can raise knowledge and awareness re important health issues and research findings • Can quickly distribute messages to diverse audiences • Can set agendas for individual and societal discourse • Can influence behaviour • Can reach large numbers of people quickly • Can be entertaining as well as informative e.g. television programs	• Effective for increasing parental knowledge of child health issues • Highly effective if used for screening campaigns • Can result in significant changes in health service utilisation and associated costs • Effective in producing short-term knowledge and behaviour changes • Effective for parenting and child-related behaviour problems under optimal programming conditions • Effective if use television programs based on real-life situations and role models that public are able to strongly identify with	• Repetition of campaign message important in aiding knowledge recall • Television programs an effective medium in achieving change in short-term behaviour especially when combined with another strategy e.g. telephone help line • Use real-life case studies and culturally sensitive role models in television programs • Combine television with additional strategies such as telephone helplines, support groups and parent resource centres • Need for study design to incorporate appropriate measures of behavioural outcomes as well as knowledge • Further research needed on evaluation of optimal dose, intensity and length of campaign and population characteristics • Sustained efforts over longer periods are more likely to produce desired behavioural impact in preference to shorter more intensive campaigns • Ascertain the level of awareness in target group to proposed campaign message prior to intervention in order to avoid a 'ceiling effect'

CD-ROMs

Interactive CD-ROMs offer another form of multi-media education requiring computer-based technology. They hold promise for greater individualisation since parents can seek information as needed, and they allow for flexibility of learning as educational instruction can be given at any time or place provided a computer is available (Jeffries, Woolf & Linde 2003). Perhaps because of their recency, research on the effectiveness of CD-ROMs as an instructional tool is limited. Studies of CD-ROM-based education show high levels of parental satisfaction on such topics as improving children's behaviour, management of nocturnal enuresis, and diabetes management (Munneke 2001; Redsell, Evans & Cawood, 2003; Piette 2002); but measures of parenting skills such as those based on clinical observation did not find CD-ROMs effective in generating changes in parenting behaviour, even though parents' knowledge and perceptions were improved.

Summary: CD-ROMs

The few studies to date that have contrasted technology-based education with traditional methods have tended to focus on students in higher education courses rather than parent education and have shown it to have similar outcomes to traditional methods (Jeffries et al. 2003). Of those studies that have involved parents, very few were long-term or contrasted various methods of instruction. Additional research is needed before conclusions can be drawn on the efficacy of CD-ROMS.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can be individualised, since parents can seek information as needed • Allows flexibility of learning, providing instruction at any time or place where a computer is available • High levels of parental satisfaction on common child health issues such as management of nocturnal enuresis • As effective as traditional teaching	• Effective in improving parents' knowledge and perceptions but not in changing parenting behaviour	• More research needed into effectiveness with regard to parent education

ROLE PLAYING AND MODELLING

Interactions between parent and child are the main social influence on the child's development (Mahoney et al. 1998). Most of a child's early learning experiences involve imitating behaviour modelled by parents, caregivers, siblings and peers (Dembo 1988). Modelling has been shown to improve parent–child communication and interpersonal skills, and its effectiveness in doing so is governed by the degree the child attends to and accurately perceives significant features of the modelled behaviour, together with the degree of engaging attributes possessed by the model (Bandura 1977). According to Bandura (p. 24), by modelling perceived desirable behaviours, people can form an approximate idea of how new behaviours are performed and, using symbolic representation, code this information as a guide for future action.

For successful modelling, parents need to perceive and retain modelled activities accurately, using visual imagery. When this is accompanied by verbal instructions and/or opportunities for discussion such as role-play, it helps parents to learn and construct their own knowledge base. Through trial and error and mutual feedback, parents gain competence and confidence, particularly if they are assisted to identify naturally occurring opportunities for practice in their daily routines (Bell, St-Cyr Tribble, Paul & Lang 1998; Dunst et al. 2001). This appears to be particularly important in promoting effective mother–child interaction, but it is also seen to be a useful component of parent training behaviour management programs.

Research on child development outcomes has demonstrated that higher intellectual quotient (IQ) scores are correlated with mothers who were more enthusiastic and involved, expressed a greater range of verbal and emotional tones and had a more positive affect when interacting with their child. Conversely, infants notice the degree to which their mothers respond to their initiatives and if there is no response due to inattentiveness or cue misreading, then the child withdraws and physically turns away from the mother. This is often the situation when the mother is suffering post-natal depression or schizophrenia (Goodman & Brumley 1990).

Another study viewed the effects of modelling by having parents observe professionals administering rating scales of development and behaviour to children (Widmayer & Field 1981). A second group of parents completed the scales on their own as a parent report tool. A control group did neither of the two. There were no differences between the group who completed rating scales on their own and the group who observed professionals. Both were far more interactive with their children after completing the measures, and 1 to 4 months later, their children had better fine motor skills than control group families. The researchers concluded that teaching mothers about the rapid developmental process followed by a newborn motivates and encourages parent–child interactions and imitation of appropriate behaviours. This in turn may contribute to early cognitive development.

Role-playing and other simulation activities have been shown to reduce aggressive behaviour, improve social skills and increase communication skills in adolescents, and to improve children's knowledge about traffic safety (Middleton & Cartledge 1995; Winett, Anderson, Moore et al. 1993; Renaud & Suissa 1989). Role playing was also found to be superior to written information in improving parents' ability to identify and report in an accurate and timely way on children's illness (Delgado & Lutzker 1988).

Both modelling and role-playing were effective in teaching a broad range of parenting skills (Cunningham, Davis, Bremner et al. 1993). Similarly, direct coaching has been shown to help children and parents learn pain management strategies or master such procedures as self-catheterisation (Manne, Bakeman, Jacobsen et al. 1994; Blount, Powers, Cotter et al. 1994; Gil, Perry & King 1988).

More recent studies of the effectiveness of role-playing and modelling focused on variations of the well established parenting curriculum, Systematic Training for Effective Parenting

(STEP) (Ring 2001; First & Way 1995). The focus in this type of program is on trying to change 'negative' parenting behaviours or promote specific 'positive' behaviours. A role-playing component was added to the usual STEP course and contrasted with STEP participation without role-playing. Parents in the role-playing group were better able to deploy the child-compliance technique of logical consequences than were parents in the conventional STEP. Even so, both groups reported a significant reduction in the frequency and severity of their child's behavioural problems.

Role playing and modelling are effective methods for imparting to parents not only knowledge about child-rearing, but also deployable skills. The meaning of the child's action within parent–child interaction should be explained and the parents encouraged to practise the skill with their child (Dinnebeil 1999). Active learner involvement is important and for maximum learning the parent should receive verbal and non-verbal feedback as soon as possible, both to affirm the parent's level of competency and to prevent misinformation becoming embedded in long-term memory (Williams & Calvillo 2002; Dinnebeil 1999).

Naturally occurring opportunities for practice, which occur at home, child-care or school, need to be identified in order for parents to learn and practise skills daily (Ketelaar, VermeeHelders & Hart 1998). By brainstorming a list of activity settings that are a source of everyday learning opportunities at home and assisting parents to identify the interactions they want to promote, individualised self-paced learning activities can be used to facilitate an increase in the number of interactions occurring daily (Dunst et al. 2001; Bolan 2003).

Summary: role playing and modelling

Role playing and modelling are effective methods for imparting to parents not only knowledge about child-rearing, but also useful skills. By modelling desirable behaviours, people can form an idea of how new behaviours are performed and code this information as a guide for future action. When visual imagery is accompanied by verbal instructions and/or opportunities for discussion such as role-play, it helps parents to learn and construct their own knowledge base, and this is consolidated through trial and error, mutual feedback, and identifying opportunities for practice in their daily routines. This practice appears to be particularly important in the area of promoting effective mother–child interaction, but has also seen to be a useful component of parent training behaviour management programs.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Increases parental imitation of appropriate behaviours • More powerful than verbal or written information in changing parental behaviours • Shows parents how to incorporate good practices into daily routines	• Modelling has been shown to improve parent–child communication and interpersonal skills. • Effective for imparting child-rearing knowledge and skills.	• Effectiveness of modelling governed by the degree the parent accurately perceives significant features of the modelled behaviour, and the degree of engaging attributes possessed by the model • Program effectiveness can be increased by adding a role-playing component, as in the Systematic Training for Effective Parenting (STEP) • Actively involve parents and provide rapid feedback (verbal/non-verbal) to affirm the parent's competency and prevent misinformation being embedded. • Effective if activities are

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
		modelled by an instructor and accompanied by verbal instructions and/or opportunities for discussion such as role-play. This assists parents to construct their own knowledge base.
		• Identify naturally occurring opportunities for practice in parents' daily routines, to gain competence and confidence

GROUP PARENT AND CHILD VISITS AND SOCIAL NETWORKING

Group visits

In the United States, some paediatric practices identify small cohorts of families who have children of the same age and conduct what is termed as 'group well-visits'. The visits usually last an hour and cover anticipatory guidance, developmental promotion, safety and prevention issues and psychosocial concerns. Physical examinations and vaccinations are provided separately. In Australia the equivalent type of visits are more likely to take place through the local community-based Maternal and Child Health Centre staffed by nurses with specialist training.

A United States study examined the use of well-child care groups conducted by paediatricians and family care practitioners, and their effectiveness in relation to psychosocial aspects of child health (Osborn & Wooley 1981). Families were assigned to either group or individual visits and, in comparing the two, the group was found to be effective in changing the content and process of discussion within the series of visits. The group mothers demonstrated more initiative, reassured each other, shared information of personal experiences, asked more open questions and used the health professional as a resource. In contrast, for those attending individual sessions with a health professional, there was more direct questioning and less reassuring explanations over sequential visits. Mothers attending group visits were also more likely to attend subsequent routine visits and were less likely to seek advice between visits.

Another United States study of a 10-week, practice-based group visiting program focused on parent training while engaging a cohort of two-year-olds and their parents (Gross, Fogg & Tucker 1995). When contrasted with a control group, substantial improvements were observed not only in child behaviour but also in parents' sense of self-efficacy, depression, stress, and parent–child interactions.

Lee, Parker and Townsend (2003) showed that parents preferred group visits with a health visitor to individual visits and not only felt reassured that other parents had similar problems with child-rearing but felt all benefited from hearing other parents discuss ways of coping. This concurs with Abercrombie, who described group discussion as 'that which does for thinking what testing on real objects does for seeing…we see a variety of interpretations of the same stimulus pattern and the usefulness of each must be tested in its own right' (Abercrombie 1960, cited in Maudsley 2000, p. 10). Although the amount of time physicians spent on group versus traditional well care was identical across conditions, parents participating in group visits received an hour of physician time while those in the traditional care received an average of 16 minutes. As several authors commented, group visits 'proved a more effective use of scarce professional resources' (Lee, Parker & Townsend 2003, p. 75).

Group visits seem particularly valuable for distinct groups (for example, mothers assigned to early postpartum discharge). Studies show that when compared with individual visits, group visits are implicated in better coordination of care, improved compliance with standards for optimal care, enhanced trust in medical providers, and in provision of care that is culturally sensitive and more community oriented (Clancy, Brown, Magruderb & Huang, 2003; Escobar et al. 2001).

Implementation logistics are critical and demand careful planning and specialised assistance for professionals to ensure that group visits and meetings can be effective (Wellington 2001; Masley, Sokoloff & Hawes 2000).

Social support

The opportunity for parents to develop a peer group and to share ideas and information is often a strong mediating factor in parent education. For example, a study of age-paced newsletters suggested that social sharing was the prime method by which new learning was reinforced (Walker & Riley 2001). The researchers concluded:

> the advice of parenting programs is not accepted or rejected in a vacuum, but often within the context of discussions within the participants' existing social networks. This suggests two practical considerations for program developers: (a) interventions might be more effective if they encouraged such social network processing of program advice; and (b) programs might even target social networks rather than individual parents as their clients. (Walker & Riley 2001, p. 186)

Even interventions aimed at family support, rather than social network support, show much promise. In one small but longitudinal study, coordinated medical and social services including day care resulted in sustained IQ gains in children when measured 10 years later, along with higher educational attainment for parents, smaller family size and reduced need for special education services (Seitz, Rosenbaum & Apfel 1985).

Aston (2002) analysed the process of empowerment in a new mothers group and noted there appeared to be conflict for many mothers if discussion groups and ensuing activities were structured purely on the mothers' knowledge of previous learning experiences. A focus on problems or learning needs appeared to highlight their lack of knowledge, and it created a barrier within the group that interfered with attempts by the educator to focus knowledge exchange primarily among the mothers. However, an alternative strategy that was effective involved focusing on the positive parent–child interactions that had occurred for each mother over the week (Aston 2002).

CALD parents

The issue of social support and social networks is especially critical in CALD families where intergenerational conflict is common and associated with negative mental health consequences for both parents and their offspring. Conflicts occur when the younger generation sheds parental values for those of their new culture.

One program addressed this with Chinese-American families by offering a group 8-week parenting program (Ying 1999). It aimed to prevent and reduce this conflict by helping parents to understand parenting responsibilities, behavioural control techniques, and sense of cultural coherence. The consequences were improved intergenerational relationships and improvements to children's self-esteem.

Summary: group parent and child visits and social networking

Group parent and child visits have tremendous potential as a mechanism for assisting parents in child-rearing, triaging families with special prevention and intervention needs to more intense services, and offering culturally sensitive and relevant care to minority groups. One of the ways in which group visits, and indeed many other methods of parent education, prevention and intervention, appear to work is by engendering networks among families who, in turn, provide each other with ongoing support and guidance. Implementation logistics are critical and demand careful planning and specialised assistance for professionals to ensure that group visits and meetings can be effective.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Allows group discussion of common parenting issues • Provides opportunities for parents to develop a peer group and to share ideas and information • Encourages parents to consider a variety of interpretations for a problem • An effective use of sometimes scarce professional resources • Valuable for distinct groups, e.g. new mothers follow-up • Improves coordination of care that is often more culturally sensitive as it is more community-oriented	• Effective in improving parental confidence and competence • Effective in building supportive social networks • Effective in reducing dependence upon professional services	• Groups require careful planning to be effective. • Encourage social support networking amongst parent peer groups and informal discussions • Programs might target these social networks rather than individual parents • Reduce barriers to knowledge exchange amongst parents in the group by focusing on positive parent–child interactions that have occurred previously, rather than a problem-based approach

HOME VISITING

At-risk families

Home visiting services are frequently used with at-risk families such as those with socially or financially disadvantaged children. These families often have limited access to health care due to various barriers, which can be financial, structural or personal (Millman 1993 cited in Margolis, Lannon, Stevens et al. 1996). A feasibility study in the United States used a home visiting program by public health nurses to give women in late pregnancy on low income, practice at setting and achieving pre- and postnatal health-related goals and to determine the effects on prenatal visits and access to health care and education (Margolis, Lannon, Stevens et al. 1996). The average number of home visits made by the nurses was 2 per month. High levels (92 per cent) of engagement between mothers and nurses were reported, with 100 per cent of mothers expressing positive responses to the home visiting intervention. In addition, 38 per cent of these mothers had a prenatal visit compared with 6 per cent in the control group.

In another study, drug abusing women who received home intervention from a nurse were more likely to report being drug free, to keep primary care appointments, to demonstrate more emotional responsiveness to their children, and to provide them opportunities for stimulation (Black, Nair, Kight et al. 1994). Weekly home visits by community health nurses during the first year of life to children with non-organic failure to thrive resulted in higher levels of receptive language and more child-oriented home environments, compared to children who attended clinics only (Black, Dubowitz, Hutcheson et al. 1995).

More recent research indicates that home visiting programs can reduce negative parental affect and improve nurturing behaviours, knowledge of developmentally appropriate skills, and self-efficacy (Peterson, Tremblay, Ewigman & Saldan 2003). In another study, home visitors who were also behavioural consultants offered 1–2 hours a week of visits to families matched with controls on such variables as parental stress, depression, social support, and existing parenting skills. Those receiving home visits were measured six months later and were found to have less parenting stress, children with fewer behavioural problems, and greater ability to teach children new behaviours that decreased problematic ones (Feldman & Werner 2002). Another study found fewer behaviour problems and far less child maltreatment in nurse-visited families followed for 13 years (Eckenrode et al. 2001).

Who delivers the home program?

Humanist theorist Carl Rogers believes that significant learning occurs when the learner (in this case the parent) is in an unthreatening environment and he believed the quality of the 'helping relationship' between the teacher and the learner to be an important factor in determining the success or failure of their interaction (Hallett 1997, p. 417). Rogers proposed that certain attitudinal qualities such as transparent realness, caring or prizing and empathic understanding need to exist in the personal relationship that develops between the facilitator and the learner, to create an environment that will facilitate experiential learning (Hallett 1997; Rogers 1983; Burns 1995).

This is supported by Iversen, Shimmel, Ciacera and Prabhakar's (2003) study of parental perceptions of physiotherapists and occupational therapists in a parenting program working with mothers of disabled infants. They found that the relationship between the therapist and the mother and their communication with each other had the greatest effect on the mother's perceptions of therapist's care-giving competencies, rather than the therapist's actual technical skills (Iverson et al. 2003).

Medical students

In one study, medical students made periodic home visits over a three-year period to pregnant women or families with newborns (Mathur, Bhalerao & Gorey 1992). Children in these families were far more likely than control group families to attend well-visits and to have up-to-date immunisations, better weight gain and growth, and fewer episodes of illness.

Parent to parent

Other studies recruited parents to train other parents and showed that parent-to-parent counselling was highly effective—but mostly for very targeted goals. Research showed that parents were able to help each other significantly to decrease excessive infant crying (Wolke, Gray & Meyer 1994). A program at Michigan State University in the United States trained parents of children who had been in the neonatal intensive care unit (NICU) to model appropriate parenting behaviour and provide emotional and informational support to parents of babies in the NICU. This resulted in significant improvement on measures of maternal-infant relationships, home environment and maternal mood, as compared with a control group (Lindsay, Roman, DeWys et al. 1993).

Paraprofessionals versus nurses

In a more systematic study in the United States, Olds et al. (2002) randomised families to paraprofessional (trained non-professional) home visitors versus nurses and showed that mothers in the paraprofessional group interacted more often with their infants. However, the nurse-visited group had more gains on a range of measures including lower subsequent birth-rates, decreased smoking rates, and greater sense of wellbeing, and their children were less likely to exhibit language delays and had superior mental development.

Another Australian study randomised adolescent mothers to receive a series of 5 structured post-partum home visits by the same nurse midwife over a 6-month period, in addition to hospital-based domiciliary services (Quinlivan, Box & Evans 2003). Each visit lasted between 1 to 4 hours. Outcomes at the 6-month follow up included a reduction in adverse neonatal outcomes for the intervention group and a significant increase in contraception knowledge. It is possible that the midwife was more effective at engaging the young parents' participation than if a paraprofessional had been involved, but it could also be due to the length of time of each visit and the developing therapeutic relationship.

Home visitors

Programs in which home visitors addressed social support but did not focus on changing problematic parenting behaviours had limited effectiveness (Hebbeler & Gerlach-Downie 2002). However, home visiting programs also have higher participation rates among at-risk families, since the program comes to the family rather than vice versa (Stormshak, Kaminiski & Goodman 2002).

Culturally sensitive home visitors

A program designed to reduce infant mortality, working with low-income, inner-city, pregnant women of African-American or Mexican-American background, used a team of trained community residents acting as advocates to offer a culturally sensitive home program, accompanied by a nurse (Norr, Crittenden, Lehrer, Reyes, Boyd, Nacion & Watanabe 2003). The teaming was designed to combine the health knowledge of the nurse and the advocate's understanding of the social context of the local community, with the advocates conducting the majority of the program. Outcome results at 12 month follow up for the Afro-American group included more developmentally appropriate parenting expectations and higher infant mental development scores. For the Mexican Americans there were smaller gains such as positive

effects on maternal daily living skills, but the program appeared to have been culturally more biased toward the African-American women.

Frequency and intensity of home visits

Is there a relationship between intensity of visits and outcome?
A Finnish study found that as few as 10 visits a year during the first five years of life, with a focus on child-rearing and family issues, had a long-term benefit in reducing mental health problems by the time children reached adolescence. These positive outcomes were observed in families with, as well as without, high levels of psychosocial risk (Aronen & Kurkela 1996).

In the United States, higher IQs were seen at 24 and 36 months among low birth weight children who had more home visits during the first three years of life, more days of attendance at childcare centres, and whose parents attended more parent meetings, compared to children with less intense intervention (Blair, Ramey & Hardin 1995; McCormick, McCarton, Tonascia et al. 1993; Ramey, Bryant, Waik et al. 1992). Another study, in the West Indies, provided weekly home visits across three years to the families of malnourished children, with the visits focusing on teaching parents how to stimulate their children intellectually and linguistically. The children performed significantly better on measures of intelligence administered 14 years later than did a control group (Gratham-McGregor, Powell, Walker et al. 1994). Children with failure to thrive whose families received home visiting and who attended a developmental stimulation program had higher IQs at three years of age and better behaviour scores than children without such intervention (Casey, Kelleher, Bradley et al. 1994).

In contrast, a home visiting program with limited intensity, that is, one visit, while better than a phone call for improving children's attendance at well-child screening visits, nevertheless failed to have a substantial impact on visit show rates (Selby-Harrington, Sorenson, Quade et al. 1995). Other studies showed no differences between phone contact versus home visits in improving attendance at preventative health care services (Oda, Heilbron & Taylor 1995).

Such studies, in which intervention was quite brief and in which outcomes were minimal, provide additional support for the dose-response theory between intensity of services and children's developmental and behavioural outcomes. David Olds (1992, 2002), in a review of his considerable research on the efficacy of home visiting programs, characterised those which are most successful for high-risk pregnant women by the following:

(1) a focus on families at greater need for the service

(2) the use of nurses who begin during pregnancy and follow the family at least through the second year of the child's life

(3) the promotion of positive health -related behaviours and qualities of infant care giving

(4) efforts to reduce family stress by improving the social and physical environments in which families live (Olds et al. 1999).

Summary: home visiting

Routine home visiting by health professionals is an effective way of delivering nonmedical aspects of care. Home visiting for more substantive family and child problems can also be effective and, importantly, can minimise attrition with families most in need of intervention. Minimising attrition is critical, given the link between the intensity of services and parent engagement, and improved outcomes for the child. Professional training of home visitors, and setting defined goals, are associated with improved outcomes for children across a range of important developmental and social areas, including enhanced language and behavioural development, and decreased child maltreatment and mortality.

Appendix C (p. 121) contains reviews of the major home visiting programs that have defined processes and have been subjected to empirical evaluation with positive results.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Overcomes some of the barriers to families accessing primary care services • Provides opportunities for therapeutic relationships to develop between home visitors and parents • Allows home visitor to see and observe the family circumstances directly	• Effective in reducing negative parental affect and improving emotional responsiveness and nurturing behaviours in mothers • Effective in promoting enhanced language and behavioural development in children • Effective in increasing parental knowledge of developmentally appropriate skills and self-efficacy • Effective in reducing child maltreatment and mental health problems in children • Effective for at-risk families since the program comes to the family rather than vice versa, resulting in higher participation rates • Effective for CALD families, using community advocates together with nurses, to offer a culturally sensitive home program (see next column). • Effective for high riskhigh-risk pregnant women, promoting positive health-related behaviours and qualities of infant care giving • Parent-to-parent home-visiting is highly effective—but mostly for very targeted goals.	• Create an unthreatening environment • Quality of the 'helping relationship' is important in determining the program's success or failure. Strength of relationship is related to intensity and duration of visits • Develop a personal relationship between home visitor and parent, to facilitate experiential learning • For new mothers: Home visitors with specialist child knowledge appear to be most effective. • For high riskhigh-risk pregnant women: Use nurses who begin during pregnancy and follow the family at least through the second year of the child's life • For CALD families: Train teams of community residents to act as advocates to offer a culturally sensitive home program and understanding of the local social context; to work together with nurses providing health knowledge. Ensure the advocates conduct the majority of the program. • Monitor intensity/frequency of home visits to achieve positive outcomes but minimise attrition rates • Focus on families at greater need for the service

PARENT TRAINING

Parenting training programs provide the intense training necessary to achieve complex behavioural change in parents and children. Although programs are often offered and available to parents experiencing the common problems of children, many are designed for parents with specific needs, including parents who are single, of CALD background, disabled, have limited literacy, or have other psychosocial risks including child abuse and neglect. These specialised programs are sometimes conducted in conjunction with home visits (see review of home visiting programs in the previous section, p. 101) and thus provide one of the most intense levels of parent training.

Agencies typically identify cohorts of same-age children and their parents and invite them to attend parent-training classes. Pre-school aged children with conduct problems are one such group and there is a growing body of research literature on the effectiveness of these programs.

Children with behavioural issues

Most parent training programs use a combination of media and approaches. For example, behaviour management training, modelling and desensitisation techniques were used to train parents of chronically ill children in both disease and behaviour management (Rains 1995). The combination of training methods produced lasting improvements in parents' management skills and in children's functioning.

Parent Management Training (PMT), which uses the parent as the change agent for their child's behaviour, involves videotape modelling vignettes and discussion groups (see section on Videotapes, p. 85). This approach has been shown to be effective in several studies in the US (Webster-Stratton 1985; Webster-Stratton & Hammond 1990) and the UK (Patterson, Barlow, Mockford, Klimes, Pyper & Stewart-Brown).

Another program, Parent Child Interaction Therapy (PCIT), focused on the parent–child dyad and in a sample of 24 mother–child pairs found significant improvements following a I-hour a week program over a 14-week period (Eisenstadt, Eyeberg, McNeil, Newcomb & Funderburk 1993). The mothers were less stressed and the children easier to manage, with less disruptive and hyperactive behaviour and increased self-esteem.

Several researchers have adapted existing parenting curricula to the needs of families of children with a range of mental health issues. For example, Parent–child Interaction Therapy was adapted to a range of groups and shown to be effective in reducing separation anxiety, depression, self-injurious behaviour, post-divorce adjustment, ADHD, and child abuse (Johnson, Franklin, Hall & Prieto 2000). An Australian parent training model, the Triple P (Positive Parenting Program), another widely used and validated curriculum, has been adapted for children with early onset conduct problems or ADHD, and for families experiencing marital conflict (Venning, Blampied & France 2003; Ireland, Sanders & Markie-Dadds 2003)

Expecting parents

Among parents attending childbirth classes, one group were given a combination of behavioural training and information on promoting self-sufficient sleep patterns in infants, with a control group given information only (Wolfson, Lacks & Futterman 1992). The infants of parents who received behavioural training had better sleeping patterns than control group infants by nine weeks of age. Parents in the experimental group also reported less stress and anxiety.

Parents with disability

Parenting programs often have a highly specific focus. A program provided through the Australian Mental Health Service, for example, worked over a two-year period with parents who had a major mental illness (Bassett, Lampe, and Lloyd 2001). Intervention focused on parenting skills and provision of developmentally appropriate activities for children. Progress was assessed by staff observation, client self-report, readmission rates and community outcomes. Outcomes included greater parental responsiveness to children, increased adherence to treatment, better access to community services, and a decrease in the numbers of children in foster care over time.

Illiterate, CALD and low-income families

Most parenting programs for other specific populations have focused on high risk groups such as impoverished immigrant families and those with limited English proficiency or limited literacy or both. Several in the United States have been conducted through national early childhood programs such as Even Start or Head Start. One such program, oriented for Spanish-speaking families with limited literacy, found that after 10 weeks of training, parents had lower scores on the Child Abuse Potential Inventory and children had substantively lower scores on the Achenbach Child Behavior Checklist, compared to control group families (McGrogan 1998). Program effectiveness was explained in part by its cultural relevance and by the substantive pilot work designed to assess and address the particular needs of parents with limited English and literacy.

Another effective example was the reworking of the Parents as Teachers curriculum (PAT) to be more sensitive to the limited resources of low-income families (Wagner, Spiker & Linn 2002). The well-validated curriculum, Systematic Training for Effective Parenting (STEP) has also been adapted for specific groups including parents of adolescents, of preschoolers, and of children of middle-childhood age, and it is also available in several languages. Similarly, Triple P, another well-researched and effective parenting program developed in Australia and adopted internationally, includes versions for families with varying levels of challenges in child-rearing, and child age-groups including teenagers.

Father-focused programs

Although there is little in the research literature on programs devoted to helping men become better fathers, there is considerable research on the positive outcomes for children when their dads are involved. The quality of the father–child relationship is a strong predictor of child well-being (Curran 2003). Children have better self-concept, perform better in school, and are less inclined toward situations such as criminality, teen pregnancy and drug use (Webster-Stratton 1985).

A Canadian study of parenting looked at the impact of mothers versus fathers on child behaviour in 2–3 year old children and found some differences (Michalcio & Solomon 2002). Fathers who were more nurturing, let less child misbehaviour go uncorrected, and made less demands on their child in terms of age-inappropriate responsibility and autonomy, reported fewer behaviour problems in their children. As these findings were based largely on self-report, they cannot be generalised. Ulaszek (2001), however, found in another study that parent training for fathers had its greatest impact in these same areas, that is, in improving disciplinary style by reducing over-reactivity, laxity, and ineffectiveness.

A study looking at behavioural parent training for parents of children with disabilities found it to be equally effective for both fathers and mothers of children, in terms of improving quality of instruction giving, positive attention for appropriate child behaviour, and appropriate selection of consequences for misbehaviour (Russell 1997). Still other studies focused only on fathers

and showed improvements in all areas of instruction (Russell & Matson 1998). In general, most published parent interventions embrace both fathers and mothers and train them simultaneously if possible.

Extended families

There is a dearth of literature on the effectiveness of programs designed to help extended families facilitate children's development and behaviour. One study of prenatal classes for pregnant adolescents that involved a child-rearing component found little impact on the extended family (Smith et al. 1985). Cultural differences in the availability and engagement of extended families are reported. One survey of Mexican and Mexican-American families showed strong interest in the training and engagement of the extended family (Powell, Zambrana & Silva-Palacios 1990), while finding some differences in interest in various program components between immigrants and first-generation families.

Foster families

The training of foster parents has consumed far more research attention and there are several well-established curricula devoted to this topic including the Model Approach to Partnerships in Parenting (MAPP)/Group Selection and Participation of Foster and/or Adoptive Families (GPS) (Puddy & Jackson 2003). However, when enrolees were compared to a control group of foster families, the MAPP/GPS program did not prepare them adequately and facilitated only 3 out of 22 basic parenting skills. The researchers concluded that the program may be best suited for helping families make a decision whether or not to become foster families.

In contrast, a parenting program focusing on therapeutic care techniques performed far better in teaching communication and conflict resolution skills and did so whether professionals or experienced foster parents served as instructors (Cobb, Leitenberg & Burchard 1982).

Another study compared two foster parent training curricula addressing issues in sexually abused children—one parent-focused and the other child-focused (Treacy 1995). The results showed no difference in behavioural versus reflective approaches, with both groups showing substantial improvement in knowledge of sexual development, behavioural manifestations, parenting attitudes, and sense of competence.

The innovative Foster Extended Family program focuses on reducing isolation among foster families while building skills in child-rearing. While results were largely anecdotal, foster parents reported high levels of satisfaction and improved parenting skills (Barsh, Moore & Hamerlynck 1983).

When to deliver programs?

There is surprisingly little research on the optimal timing of parent training. The one retrievable study looked at the impact of prenatal education curriculum on pregnant teens and found that advice on health care was followed in the short term, but use of techniques and achievement of goals in the long-term was substantially less successful (Smith et al. 1985). This suggests that the need to know, the teachable moment, the concept of 'just in time' and the immediate demand for information or skills are essential to retention and application of information about optimal or even 'good enough' parenting.

Summary: parent training

Parent training and parenting classes embrace both prevention as well as intervention with developmental, behavioural, and family problems, and can be highly effective. While success rates vary across programs and program evaluation is sometimes less than rigorous, parent training appears more likely than the previously discussed training methods to effect long-term changes in parental skills and child and family outcome, with parent training classes for the most part showing a high degree of effectiveness in both intervention and prevention. There is a need for effective programs focusing on foster parenting, extended families, and particularly step- and de facto fathers, who are more likely than other parents to lack critical parenting skills. Tailoring programs to specific needs and issues is most effective, and is essential. Such programs need to be timely, able to address immediate and specific needs, and make use of peer role models whenever possible.

Positive features	Evidence-based outcomes, best practice applications	Recommendations for effective implementation
• Can produce lasting improvements in parents' management skills and in children's functioning. • Allows direct focus on parenting skills and provision of developmentally appropriate activities for children • Ensures at least short-term cooperation with recommended strategies	• Parent Management Training (PMT), which uses the parent as the change agent for their child's behaviour, has been shown to be effective in several studies using videotape modelling vignettes and discussion groups • Existing parenting curricula have been successfully adapted to the needs of families with children who have mental health issues, e.g. Parent–child Interaction Therapy • The Triple P program developed in Australia has been adapted for children with early onset conduct problems and/or ADHD, and for families experiencing marital conflict. The program includes versions for families with varying levels of challenges in child-rearing, and child age-groups including teenagers • Expectant mothers: Behavioural training plus information on promoting self-sufficient sleep patterns in infants led to better infant sleeping patterns and less parental stress and anxiety • Parents as Teachers curricula (PAT) have been reworked to be more sensitive to the limited resources of low-income families.	• CALD families: Program effectiveness depends upon addressing the particular needs of parents with limited English and literacy. • Assess effectiveness by staff observation, client self-report, readmission rates and community outcomes. • Focus of training with fathers should be on improving disciplinary style by reducing over-reactivity, laxity, and ineffectiveness towards their child's behaviour. • Extended families need programs designed to help facilitate children's development and behaviour • Foster-parents need for parenting programs that focus on therapeutic care techniques and communication and conflict resolution skills • Tailoring programs to specific and immediate needs and issues is effective and essential. These programs should make use of peer role models whenever possible. • More research needed on how to provide effective parent training to foster parents, extended families, and step- and de facto fathers.

CONCLUSION TO PART B

Part B of this literature review has looked at the methodology and effectiveness of the various types of intervention strategies used in the parenting education. The review was based on the body of available knowledge, research, and what is known from clinical practice. No one strategy stands out as being more effective than the others, as many contextual factors are involved and the interventions range from brief and highly specific to prolonged and intensive. It has been possible, however, by identifying the characteristics of effective strategies used for particular target groups and in relevant contexts, to provide some guidance on features to incorporate in future programs. These conclusions have been provided in the summary boxes and tables at the end of each section.

Research limitations

There are some limitations to the research that warrant further discussion.

Evidence-based research and generalisability of results

Many of the studies cited did not offer high levels of evidence of effectiveness, due to a range of methodological limitations. Many did not include the use of an intervention and a control group (for various reasons, often ethical) and there was no randomisation. Sample sizes were often small, particularly for low-income families, and 'dropouts' were common for longer interventions. Often parents were given the choice of being involved in an intervention, and those that accepted may have been more highly motivated (particularly if a small payment was included), potentially biasing the outcomes of the study. Follow-up of study parents was often short, providing no evidence of the maintenance over a longer time of the skills and knowledge that parents had gained. Effects for various strategies were often small in size, and the study design did not take into consideration all the variables. These various limitations mean that the findings have limited generalisability outside the particular target group.

Further quality research is needed, particularly into the use of newer technological information strategies, but also into existing services such as the parent helplines.

Missing effects

Whist there were many positive effects documented from various studies, the reported evaluation of outcomes was often limited in depth and follow-up time, and may have missed other effects (favourable or unfavourable). First and Way (1995, p. 2) term this the 'spread of effects' phenomenon, where researchers examine outcomes only along pre-determined lines and, particularly in the case of group programs, may miss other unexpected effects such as the informal networking and support that participants gained after the program ended.

Cost-effectiveness analysis

Very few studies of interventions mentioned a cost factor, although resources and costs are likely to be high in the case of long-term home visiting or intensive programs such as used in the parent-training model. In his review of 25 years of research into home visiting early programs, Olds (2002) outlines results of an economic evaluation by the Rand Corporation into a 15-year follow-up of an early intervention study and estimates cost savings generated by the program (Karoly, Greenwood, Everingham et al. 1998). Interestingly, where the mother was on a low-income and unmarried on entry to the program, the savings to the government exceeded the cost of the program by a factor of 4 over the life of the child. However there were no savings if the mother was married and from a higher income bracket. Olds (2002) concluded that the beneficial functional and economic effects of the nurse home visitation

program were greatest for families at greater risk and posits that these types of programs are wasteful economically if made universally available to all families. He also urges careful consideration of program protocols and continuous evaluation of outcomes in order to adapt programs and ensure a successful investment.

How much intervention is needed to be effective?

Many of the parenting education studies discussed in the review and some that were not included may have shown an effect, or the effect may have been greater, if in fact they had been sustained for a longer period or learning reinforced by a follow-up dose or 'booster' (Bond & Hauf 2004). Sometimes this is a study design issue or financial in terms of limited resources, but often it may be due to lower-than-expected participation rates by the target group. The program may have planned for higher intensity of the intervention (for example, number of home visits), but for various reasons the families may have received a much lower number. This, in turn, affects other variables such as the relationship with the provider and it can dilute the effectiveness outcomes. It may also work the other way in that too much involvement may lead families to drop out of the intervention.
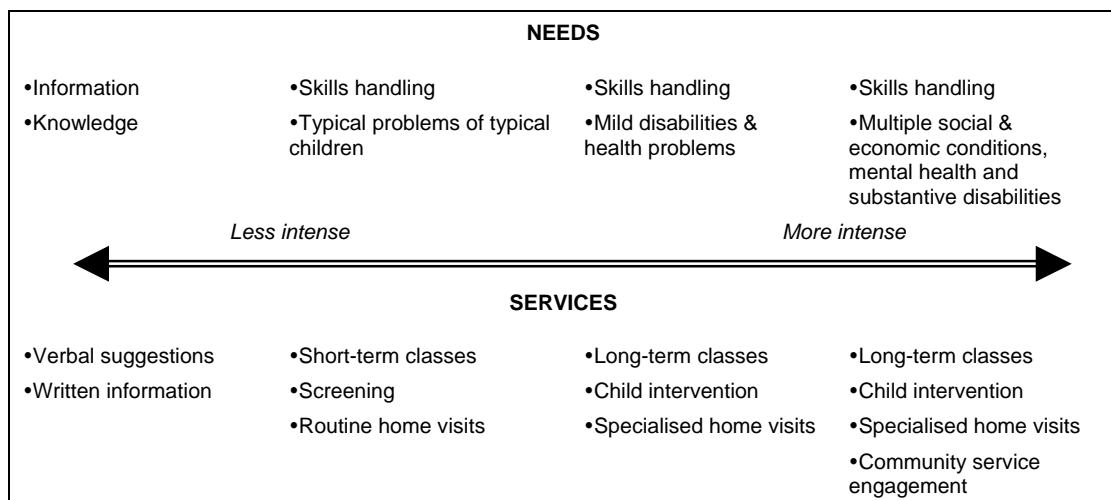
Gauging the intensity of a program in order to minimise the loss of participating parents and maximise the program's potential outcomes will continue to be a challenge for researchers.

Future directions

Most parents both want and need support for their child-rearing efforts. Parents have widely diverse support needs, ranging from information through to extensive training and supervision. When services are tailored to family needs, outcomes for children improve across a range of areas, including infant mortality, developmental morbidity, mental health issues, teen pregnancy, criminality and employment rates. Research on the cost-effectiveness of parenting programs is limited, but what there is suggests that such programs can save society substantive dollars, even when the costs of services are factored in.

Parents' needs range across a broad continuum, and service intensity needs to cover a similar continuum, to address needs appropriately and cost-effectively. Figure 2 sets out this continuum of needs and assistance. The continuum might also include more involved levels of interventions (for example, supervised living for families where parents have disabilities or mental health problems that place children at extreme risk of neglect or abuse). There are a number of highly effective and well-validated models offering a continuum of assistance, for example Australia's Triple P program. Parenting support is also needed across the child-rearing years, from infancy and toddlerhood, through early and middle childhood, and into adolescence. Similarly, professional training is needed across a continuum, to ensure that expertise is available to engage parents, assist them effectively, and allocate families to the most appropriate level of service.

Figure 2: Continuum of family needs and available assistance

NEEDS			
•Information	•Skills handling	•Skills handling	•Skills handling
•Knowledge	•Typical problems of typical children	•Mild disabilities & health problems	•Multiple social & economic conditions, mental health and substantive disabilities
	Less intense		*More intense*
←			→
SERVICES			
•Verbal suggestions	•Short-term classes	•Long-term classes	•Long-term classes
•Written information	•Screening	•Child intervention	•Child intervention
	•Routine home visits	•Specialised home visits	•Specialised home visits
			•Community service engagement

Too often parents with the most intense needs for services are least able to articulate and advocate for their needs, and least aware of the services available. Furthermore, needs may change over time as family circumstances change.

This suggests that almost every professional–parent encounter within the typical settings in which parents and professionals engage each other—including maternal and child health, childcare, preschool and primary school and associated social services—should include efforts to engage parents in a dialogue about their role as parents and their parenting needs, and to identify those parents who, for the variety of reasons discussed in Part A of this review, require further assistance.

If parents are to be motivated to enhance their parenting skills, parenting programs must be able to demonstrate their benefits for both parents and child. Part B of this report has contributed to that process by reviewing the state of knowledge on a wide range of approaches to support parents in the difficult and demanding job of parenting. There are many promising approaches, and this review provides the basis for decision-making by government on the most promising and effective ways to support parents and work towards the wellbeing of future generations.

APPENDICES

APPENDIX A: SOURCES FOR WRITTEN INFORMATION FOR PARENTS

Barton Schmitt: The Pediatric Advisor, (Denver, Colorado: Clinical Reference Systems, Phone: 1-800-237-8401 URL: http://www.patenteducation.com). Computerised handouts on over 1100 topics written by over 20 health care professionals, allows handouts to be individualised, updated yearly and includes Spanish versions of the top 250 topics. The software package costs $495 for a single user. Network packages are also available.

Barton Schmitt, Instructions for Patient Education (W.B. Saunders Co., Independence Square West, Philadelphia 19106, (phone: 1-800-545-2522). This text contains several hundred 1 - 2 page informational handouts. The cost is $42.95. Updates are provided in almost every issue of Contemporary Pediatrics.

William K. Frankenburg, Denver Developmental Activities (DDM, Inc., P.O. 6919, Denver, Colorado 80206-0919, phone: 303-355-4729). These informational handouts on developmental promotion come on tear-off pads arranged into 11 age groups and 4 areas: self-care/socialisation, speech, fine motor, and gross motor.

Carolyn Shroeder and Betty Gordon, Assessment and Treatment of Childhood Problems. (Guilford Press, 72 Spring Street, New York NY 10012, phone: 1-800-365–7006). Written for professionals, this book addresses how to help parents and children with stressful life events—new siblings, sibling rivalry, divorce and death. It also covers management of common problems such as toileting, sleep, sexual abuse, negative behaviour, fears, habits and tics, etc. The appendices include a list of books for parents and children, tools for gathering information from parents and teachers are included, and descriptions of numerous tests. The cost is $45.00.

Wyckoff and Unell, Discipline Without Shouting or Spanking. (Simon & Schuster, 1230 Avenue of the Americas, NY, NY 10020); (phone: 800-223-2336). This simple and inexpensive text is written at the 4th- to 5th- grade level and includes short 2- to 5-page chapters on behavioural problems. It costs $6.00 and not only gives guidance but very helpful examples. www.amazon.com.au

Edward Christopherson, Pediatric Compliance: A Guide for the Primary Care Physician (New York, Plenum Publishing Corporation, 1994, phone: 212-807-1047). This book contains numerous informational handouts and other suggestions for organising general practices to address developmental and behavioural issues. The text, which costs $46.75 includes the Eyberg Child Behavior Inventory, the Connor's Scale and others.

Morris Green (ed) Bright Futures Guidelines. National Maternal Child Health Clearinghouse (703-821-8955). Covers health and psychosocial promotion in primary care, methods for facilitating discussion with families.

The American Academy of Child and Adolescent Psychiatry (URL: (http://www.aacap.org/publications/factsfam/index.htm) has 51 handouts that can be downloaded without cost. The handouts are written in English, Spanish, and French, and address such topics as divorce, disaster recovery and how to chose a psychiatrist

The American Academy of Pediatrics (fax: 1-847-228-5097). has parenting brochures that can be purchased in large quantities. These cover violence, television, single parenting, toileting, hospital stays, health and safety issues, etc. The AAP website (URL: http://www.aap.org) also child-care books, videos, hand-held health records, waiting room magazines, etc. Information for parents is housed at

http://www.medem.com/medlb/medlb_msphs.cfm where a free email newsletter is also available

The Ambulatory Pediatric Association (URL http://www.ambpeds.org/parentpatient.cfm) has a website that houses several downloadable handouts. These focus on building language and preschool skills, socialisation, Other handouts address the most common nonmedical complaints such as discipline and behaviour.

British Columbia Council for the Family (phone: 604-660-0675, URL:http://www.bccf.bc.ca/) can provide individual and bulk copies of books and brochures on such topics as adolescence, marriage, family cohesion, child development, etc. The site describes a parenting program, 'Nobody's Perfect' and its training manuals. There is also an online service called, 'Parents' Resource Almanac' with a list of books, periodicals, associations and research centers devoted to parenting topics

Nemours Foundation: www.kidshealth.org. has articles for parents, adolescents and children on psychosocial and medical topics

Child and Youth Health has a great website with especially in-depth articles on bullying and numerous other psychosocial issues: http://www.cyh.sa.gov.au/

Helpful sources for age-paced newsletters are:

(a) Pierre the Pelican. (Family Publications Center, 1539 Jackson Avenue, Suite 210, New Orleans, LA, phone: 504-523-0555). This newsletter is one of the best researched and most widely used (for example, it is sent to every child born in the state of Louisiana. Usually initiated during the newborn period, there are 12 letters in the first year and bimonthly letters thereafter until age 6. Bulk purchases (sets of 100), cost about $88. or $96. for a version with your office's imprint. A specimen set can be had for $8.. There is also a prenatal version.

(b) Growing Child, (Dunn & Hargitt, Inc. P.O. Box 620, Lafayette, Indiana 47902 phone: 1-800-927-7289) This is a monthly child-rearing newsletter, matched at the time of subscription to the age of the child (birth through 6 years of age). It costs $15 for the first year and $20 each year thereafter. http://www.growingchild.com/

(c) Your Child Now (phone: 1-800-777-0987) is a 4 page supplement bound into regular issues of Child magazine. Subscribers submit their child's date of birth and the magazine sends inserts geared to the specific age of the child or children. Supplements cover development, appropriate toys, etc. An annual subscription of 10 issues to both Child and the supplements costs $12.97. http://www.child.com/index.jsp (the site also supports a listserv on parenting issues)

APPENDIX B: REVIEW OF PARENT TRAINING CURRICULA

(updated from a review of parenting initiatives by the Pew Charitable Trust, 1997)

Avance (the Spanish word for 'Advance'), San Antonio, Texas
Program orientation: education, academic achievement
Primary methodology: centre based (with bi-monthly home visits)
Target age group: infants and young children
http://www.avance.org

Probably the most-recognised program in the country serving Latino populations, Avance targets low-income, minority parents with infants and young children. With 200 staff members in three areas (primarily San Antonio and Houston; 75 per cent of whom are Avance graduates), Avance offers a highly structured program consisting of formal parenting education classes (a full academic year, with graduation), developmentally appropriate play groups and childcare for children, toy-making classes for parents, adult education and bimonthly home visits. Services are interrelated, family centred and preventive in nature. Avance acknowledges deep early-childhood education roots and a strong allegiance to the research of U. Bronfenbrenner, Piaget and B. White.

Avance stresses community partnerships (and works closely with agencies such as United Way, Head Start, and Early Head Start), and seeks to improve the development of children through increasing the skills and self-esteem of their parents. Avance has recently begun to make a serious investment in replication and rollout of its programs, now having a distinct 'national' staff. Avance is one of the few programs with a director of research on staff. Hasbro Toys has been an enthusiastic funder, and their research has been funded by the Carnegie Foundation and conducted by the University of Houston. This involved two annual cohorts (largely Spanish speaking, impoverished, single mothers who were high school drop-outs with high levels of depression) followed for two years at two program sites. Control groups which were randomly assigned at one site and matched at the second site were also employed. Upon completion of the program and then again one year later, data was collected concerning maternal knowledge, behaviour, attitudes and continuing education with both groups. Group comparisons revealed that AVANCE program mothers were observed to: provide a more organised, stimulating and responsive parenting, interact more positively with their children and initiate more social interactions, provide more developmentally appropriate toys, use contingent praise more frequently, spend more time teaching their children and talking with them, more encouraging of child verbalisations, use more developmentally appropriate speech, more mutual responsivity and turn-taking, Increased knowledge and use of community resources* Increased knowledge of contraceptive methods, and parents were also more likely to have continued their education by enrolling in continuing education classes.

ECFE (Early Childhood Family Education), St. Paul, Minnesota
Program orientation: education, school readiness
Primary methodology: school based;
state mandated and funded
Target age group: 0–5
http://education.state.mn.us/html/intro_fam_ed.htm

Begun in 1975, this program is designed for all Minnesota families with children from birth through kindergarten. The program is offered in 398 school districts and the four tribal schools in Minnesota. In 1991–92 over 230 000 children and parents participated in ECFE-reaching 98 per cent of the 0–4 population. Approximately one-fourth of all families participating in ECFE during the fall of 1992 had household incomes of less than $20,000 (over 14 000 home visits were made that year). About 5 per cent (1072 families) had incomes under $5000. Like HIPPY and PAT (described in Appendix C), the mission of the program is based on the belief

that parents are their children's first and most important teachers. The aim is to strengthen families and support the abilities of parents to provide the best environment for the healthy development of their children. Services are varied, being both centre based and home based, based on the needs of the family. ECFE programs are provided by licensed parenting educators and teachers in community sites. They are open to all parents and special sessions are available based on the needs of the families.

According to the 1984 Minnesota statute, all teachers working with parents in ECFE programs must be licensed teachers. A distinction is made between 'parent educator' and 'early-childhood family educator' with the requirement for each being slightly different. Funding is about 2/5 from the state and 3/5 from local education taxes. The budget is in excess of $35 million a year. There are over 2,500 staff members. No state has made a more comprehensive commitment to parenting education than Minnesota.

Only one research report was retrievable on ECFC (other than the information listed on the website above. Mueller (2000) wrote:

> Specific results about parents' attitudes and beliefs following participation include the following: (1) parents had more appropriate expectations of their child's abilities; (2) parents increased their ability to be more empathically aware of their child's needs and to respond in an appropriate fashion; (3) parents believed less strongly in the value of corporal punishment; and (4) parents knew that their child did not exist to please and love them, and instead began to understand that it was their responsibility to respond to their child's needs in an appropriate fashion. A second study showed declines in the number of parents receiving low ratings on measures of parent–child interaction from fall to spring; (4) lower-income families demonstrate different knowledge levels about child development and parenting skills, diverse demographic characteristics, different risk levels, and different amounts of social support; and (5) ECFE'S approach was effective with many different low-income families.

As an aside, Minnesota is the US State with the highest graduation rates, most educated population, with the lowest birth and infant mortality rate, and with an increasingly diverse population (for example, the largest Somali population outside of Somalia) of all other US States. Minnesota is also the only State to have widespread implementation of parent training initiatives over more than 10 years. Coincidence? Probably not.

Parents Anonymous (PA), Claremont, California
Program orientation: child abuse prevention
Primary methodology: self-help, parent support groups
Target age group: 0–18
http://www.parentsanonymous.org/paIndex1.htm

An international self-help organisation with over 1400 chapters in about five countries and most states in the United States, Parents Anonymous (PA) is designed to break the cycle of child abuse by providing 'safe, supportive weekly meetings where parents under stress can discuss their problems with their peers and with trained volunteer professionals.' Founded in 1970, the organisation is free and open to all parents who are 'overwhelmed, isolated or afraid of their anger toward their children.' As of 1981 PA has been one of the largest self-help programs in the nation. PA groups are co-facilitated by volunteer human service professionals, called sponsors, and a parent member, or chairperson, of each group. The sponsor receives training in self-help group facilitation, and then works with the chairpersons to help them develop their facilitation skills. When members join they receive a handbook that explains the goals of PA, its basic guidelines for operation, information about anger, a needs assessment and a page for other members' telephone numbers. PA has been evaluated by independent researchers including Behavior Associates, Tucson and Berkeley Planning Associates. Results show that physical abuse stopped after one month's attendance and verbal abuse showed a significant decrease after two months. Otherwise, there is little in the

way of quality empirical research on the program although several studies are underway according to the organisation's website.

PET (Parent Effectiveness Training), California
Program orientation: normative-personal growth
Primary methodology: psychoeducational workshops for adults
Target age group: across the life span
Founder: Dr. Thomas Gordon
http://www.thomasgordon.com/familyprog.asp

Founded in 1962 by Thomas Gordon (a disciple of Carl Rogers), PET was one of the original parenting education programs in the country. Started for parents to help them become more effective in their relationships with their children, the organisation has since become Effectiveness Training International (for-profit) and serves a wide population including parents, teachers, men, women and couples. Gordon claims to have trained over 1 million parents and several thousand instructors. The program is now aimed at helping people in general be more successful in all their interpersonal relationships. Since its inception, Gordon has been particularly committed to the rethinking of traditional ideas about punishment and discipline.

In recent years the field of parenting has seen many of Gordon's concepts integrated into the fabric of what everyone teaches. So complete has been this assimilation that many programs no longer even acknowledge Gordon's contribution. It is not surprising to learn that the growth of PET in the United States has declined for the last five to seven years, while the international markets for his approach have exploded, especially in Great Britain, Korea and Japan. Most recent research has been conducted outside the untied states including one from Germany showing that PET improved parent–child communication and parental attitudes toward child-rearing but only slightly effective in changing parental behaviour and child-self-concept (Mueller, Hager & Heise 2001). Another from Canada examined reviews of three different approaches to parent education: behaviour modification, PET and an Adlerian approach. However, the overwhelming conclusion was that methodology was problematic (for example, lack of randomisation, long-term follow-up, control groups, etc.) Todres & Bunston, 1993). Only one study involved a meta-analysis of PET studies and concluded that the effect size was 033 standard deviation units (significantly greater than groups in alternative treatments) in terms of parents' knowledge, attitudes, behaviour, and children's self-esteem. Children's behavior was found to have a latency phase. Still, problematic methodology was noted in most included studies (Cedar & Leant 1990). The organisation's website is largely hagiographic. It is also unclear how well PET works with low-income and other unique populations. Thus it may be that other parent educators have stood on the shoulders of PET's founding author and seen further.

STEP (Systematic Training for Effective Parenting)
Program orientation: normative
Primary methodology: individual, self-help groups, support groups
Target age group: school-age-adolescence
http://www.agsnet.com/parenting.asp

STEP offers a nine-week program for parents to follow, and encourages parents to form ongoing support groups. STEP is published and promoted by American Guidance Service, a for-profit publisher based in Minnesota. Includes five parent handbooks, one covering the basic STEP program and four others covering teens, early youth, The Next STEP, a Hispanic version of STEP, and one called 'Biblical STEP' for Christian families. Each curricula is

supported by a leaders guide, videos, flyers, certificates and audiotapes. The author and colleagues offer leadership training across the United States. The content includes units called: Understanding Yourself and Your Child , Understanding Beliefs and Feelings, Encouraging Your Child and Yourself, Listening and Talking to Your Child, Helping Children Learn to Cooperate, Discipline that Makes Sense, Choosing Your Approach.

Research on STEP is reasonably extensive and current. A recent study showed that role-playing when added to the STEP curricula resulted in parental reports of substantially reduced frequency and intensity in children's behavioral problems (Ring 2001; Adams 2001; Larson 2000;). It should be noted that in most studies, parent -subjects were white, middle-class, educated, and married. Attrition appears most likely in parents for whom a sense of entitlement is high (Snow 2000) suggesting that screening for personality issues may be helpful.

Positive Parenting Program (Triple P)
Program orientation: normative, hierarchical
Primary methodology: individual, self-help groups, support groups
Target age group: birth through adolescence
www.triplep.net

Triple P was developed by Sanders and colleagues (1999) from the Parenting and Family Support Centre in the School of Psychology at the University of Queensland} has been developed over the past 20 years. Triple P is particularly unique in that it is a multi-level, parenting and family support strategy that aims to prevent severe behavioral, emotional and developmental problems in children by enhancing the knowledge, skills, and confidence of parents.

Triple P incorporates five levels of intervention of increasing strength for parents of children from birth to age 16. What distinguishes Triple P from other psychosocial interventions for behavioral difficulties is that Levels 1, 2 & 3 of this program have been specifically designed to be carried out in primary care settings within the constraints of the paediatric office and with a target of a 15 minute office visit. Although the average paediatric office visit is less than 15 minutes, office visits for children who have behaviorbehavioural difficulties occur more frequently and are often quite lengthy.

The following levels of intervention have been developed within Triple P with the idea that families can benefit from services at each level, with movement to a higher level of service dictated by failure to respond to the lower level of service. In this way interventions are delivered in an effective yet economical fashion. Triple P Level 1, a universal parent information strategy, provides parents with access to information about parenting through a coordinated media and promotional campaign using print and electronic media. This level of intervention aims to increase community awareness of parenting resources, to encourage parents to participate in programs, and to create a sense of optimism by depicting solutions to common behavioural and developmental concerns. This includes TV, newspaper, and waiting room materials and presentations. Levels 2 & 3 can be carried out within standard paediatric office visits. Level 2 is a brief 1 or 2-session primary health care intervention providing anticipatory developmental guidance to parents of children with mild behaviour difficulties, with the aid of user-friendly parenting tip sheets and videotapes that demonstrate specific parenting strategies. Level 2 & 3 interventions are designed for 15-minute sessions with each family.

Level 3, a four session primary care intervention (15 minutes per session), targets children with mild to moderate behaviour difficulties and includes active skills training for parents. Beyond Level 3, a referral is made to a mental health provider with more specific skills in the realm of behavioural difficulties in children, but who uses an approach with the same underlying social learning principles. For children requiring additional services, higher levels of guidance and family support are provided by mental health professionals working from a

similar social learning orientation. This tiered multi-level strategy recognises that parents have differing needs and desires regarding the type, intensity and mode of assistance they require. The Triple P system is designed to maximise efficiency, contain costs, and ensure the program has wide reach in the community.

Research on Triple P is expanding rapidly and includes randomised controlled trials, often with unique populations using various levels of the Triple P intervention modalities. In one study of Level 5 Triple P with a group of ADHD children, post-training teachers and parents reported significant reductions in disruptive child behaviour problems, aversive parenting practices and maintenance of gains at 3 months post-training. (Hoath & Sanders 2002). In a study of Triple P Level 4 focused on a group of children reported by their parents as lying and stealing, there were not only significant improvements in child behaviour but also in parental depression, anxiety, stress and parental competence (Venning, Blampied & France 2003). Another studied viewed the success of Triple P's media cross-promotional media campaign (newspapers, posters, magazine, telephone information lines) at encouraging family (and primary care providers) participation (Sanders & Turner 2002). Other studies have compared levels 3 and 4 of Triple P with waiting list controls and found both levels significantly reduced disruptive behaviour in 80 per cent of participants but no substantive differences in behavioural change between those assigned to different levels (Bor, Sanders Markie 2002;Ireland, Sanders & Markie 2003). Even a televised version of Triple P had remarkable effectiveness in reducing disruptive child-behaviour and a high degree of acceptability to families (Sanders, Montgomery, Brechman-Toussant 2000) although in another study, families and children made greater gains when exposed to more intense levels of services (Sanders, Markie-Dadds, Tully & Bor 2000).

Overall, Triple P is increasingly well-researched, embraces a continuum of intervention, has well constructed and tested materials, a high degree of family satisfaction with the program at various levels of intensity. It is one of the few programs to deploy an approach that focuses on population-based improvement.

Incredible Years
1411 8th Avenue West Seattle, WA 98119
Program orientation: normative, hierarchical
Primary methodology: individual, small group, videotape, videotape-modelling, workbooks, stickers, puppets, and other teaching materials for children, teacher/leader certification
Target age group: preschool through adolescence
http://www.incredibleyears.com/

The Incredible Years Parents, Teachers, and Children Training Series was developed by Dr. Carolyn Webster-Stratton at the University of Washington in Seattle after several decades of formidable research on the issue of preventing and intervening with conduct disorders in children and adolescents. The Incredible Years (IY) is actually a series of different programs targeting parent training, teacher training, and child training (with latter called Dina the Dinosaur).

IY has two long-range goals. The first is to develop comprehensive treatment programs for young children with early onset conduct problems. The second goal is the development of cost-effective, community-based, universal prevention programs that all families and teachers of young children can use to promote social competence and to prevent children from developing conduct problems in the first place. The purpose of the series is to prevent delinquency, drug abuse, and violence. The short-term goals of the series are to: Decrease negative behaviours and non-compliance with parents at home., decrease peer aggression and disruptive behaviours in the classroom, Increase children's social skills including understanding of feelings, increased skill in conflict management, and decreased negative

attributions, and overall to increase academic engagement, school readiness, and cooperation with teachers.

IY enjoys some of the strongest research of any training program. With regard to the child-training component, participants were significantly more likely than matched controls to show decreased symptoms of conduct disorder, ADHD, and non-compliance although negative parenting practices were unchanged (and were not directly intervened with in this study). (Webster-Stratton, Reid & Hammond 2001). The parent training component, after 13 to 16 weeks of intervention resulted in substantive decreased in child anti-social behaviour and improvements in the proportion of parental praise to ineffective commands as compared with waiting list controls (Scott et al. 2001). A combination of the parent and teacher training component with a Head Start population resulted in decreased negative parenting practices and increased positive ones, improved parent-teacher relationships, decreased child conduct problems and improved teacher classroom management skills. The strongest effects were seen in those children with the most significant conduct problems (Webster-Stratton, Reid & Hammond 2001). Overall, the research supporting this program is voluminous, consistent, and described in detail on the program's website. Recently IY has been successfully exported and adapted for the United Kingdom.

Although IY is well-supported empirically, the program is quite specialised. It focuses on older children, those who are referred (or should be) to mental health services, and those with extant or emerging conduct problems including ADHD, oppositional defiant disorder, etc. IY should probably be in the armamentarium of training programs available to assist parents (as well as children and teachers), it is too narrow in focus to serve as population-based support, prevention, and intervention in the range of parents' needs and issues.

APPENDIX C: REVIEW OF SPECIFIC HOME VISITING PROGRAMS

(updated from Home Visiting: Recent Program Evaluations, Future of Children VOLUME 9, NUMBER 1 - SPRING/SUMMER 1999, www.futureofchildren.org)

Nurse Home Visitation Program
Program focus: child abuse prevention, family economic development,
Target Population: low-income women
Contact: http://www.strengtheningfamilies.org

The Nurse Home Visitation Program (NHVP) has enjoyed more than 20 years of high quality research (by David L. Olds and colleagues) and is a model in which nurses visit mothers beginning during pregnancy and continuing through the child's second birthday to improve pregnancy outcomes, to promote children's health and development, and to strengthen families' economic self-sufficiency. The program benefits the neediest families (low-income, unmarried women), but provides little benefit for the broader population. Among low-income, unmarried women, the program helps reduce rates of childhood injuries and ingestions that may reflect child abuse and neglect, and helps mothers to defer subsequent pregnancies and move into the workforce. Long-term follow-up of families indicates that nurse visited mothers were less likely to abuse or neglect their children, or to have rapid successive pregnancies. Having fewer children enabled women to find work, become economically self-sufficient, and eventually avoid substance abuse and criminal behaviour. By the time their children were age 15, the children had fewer arrests and convictions, smoked and drank less, and had fewer sexual partners. The program produced few effects on birth outcomes or on children's short-term development, except for children born to women who smoked cigarettes when they registered during pregnancy. The positive effects of the program on child abuse and injuries to children were most pronounced among mothers who, at registration, had the lowest psychological resources (defined as high levels of poor mental-health symptoms, limited intellectual functioning, and little belief in their ability to control their own lives). Replication in other communities showed positive but lesser effects than the original settings. Olds (et al., 1999) concludes that the use of nurses as home visitors is key to program success; that services should be offered to the neediest families, rather than to all families; that programs should adopt clinically tested methods; and that services must be implemented with fidelity to the model tested if program benefits are to be reproduced in other communities.

Recent research expanded on these findings. Olds (2002) concluded the program has been successful in improving parental care of the child as reflected in fewer injuries and ingestions that may be associated with child abuse and neglect; and maternal life-course, reflected in fewer subsequent pregnancies, greater work force participation, and reduced use of public assistance and food stamps. In the first trial, the program also produced long-term effects on the number of arrests, convictions, emergent substance use, and promiscuous sexual activity of 15-yr-old children whose nurse-visited mothers were low-income and unmarried when they registered in the study during pregnancy.

In an effort to consider reducing program costs, Olds et al. (2002) compared the effectiveness of paraprofessionals conducting home visits with that of nurses. He concluded that paraprofessionals have half the effectiveness. In contrast, nurse visited mothers were less likely to smoke, had more widely spaced and fewer subsequent pregnancies, were more likely to be employed, interacted more responsively with their children, were less likely to be depressed or to have children with excessive fearfulness. At 21 months of age, nurse-visited children had higher performance on intelligence tests. There were no statistically significant program effects for the nurses on women's use of ancillary prenatal services, educational achievement, use of welfare, or their children's temperament or behaviour problems. For most outcomes on which either visitor produced significant effects, the paraprofessionals typically had effects that were about half the size of those produced by nurses.

Healthy Start Program (Hawai'i)/Healthy Families America
Target Population: birth through preschool age children of impoverished parents
http://www.healthyfamiliesamerica.org/

Hawai'i's popular Healthy Start Program (HSP) was essentially conscripted and expanded into Healthy Families America. The goal is to help expectant and new parents get their children off to a healthy start. Families participate voluntarily in the program and receive home visiting and referrals from trained staff. The project engages families immediately post-partum and has expanded to ensure continuity of primary care, medical home, and access to other health and social services.

The program was launched in 1992 by Prevent Child Abuse America (formerly known as the National Committee to Prevent Child Abuse) in partnership with Ronald McDonald House Charities and was designed to promote positive parenting, enhance child health and development and prevent child abuse and neglect. The Freddie Mac Foundation has also been instrumental in supporting ongoing development of the program.

Initially, Healthy Families America drew largely from existing research, knowledge and experiences of the Hawaii Healthy Start program. Healthy Families America is built on a set of 12 research-based critical elements that provide a benchmark in which quality is measured. As Healthy Families America has continued to evolve, we have incorporated examples of good practice from evaluations of a growing number of communities and prevention models. To date, Healthy Families America exists in over 420 communities in the United States and Canada. 90 per cent of all the families who are invited to participate in the program accept services.

The program is designed to prevent child abuse and neglect and promote child health and development in newborns of families who are at-risk for poor child outcomes. After two years of services, mothers in HSP reported better linkage with paediatric medical care, improved parenting efficacy, decreased parenting stress, more use of non-violent discipline, and decreased injury due to partner violence in the home, as compared with a control group. No overall benefits emerged on child development; the child's home learning environment; parent–child interaction; well-child health care; paediatric health care use for illness or injury; child maltreatment (according to maternal report and child protective services reports); or maternal life skills, mental health, social support, or substance use. However, results varied across implementing agencies, such that families served by some agencies did experience benefits in parent–child interaction, child development, and maternal confidence in adult relationships, and decreases in reported partner violence. Significant differences in program implementation across the three administering agencies had implications for family participation and involvement levels and, possibly, for outcomes achieved. These differences have sparked efforts in Hawaii to use evaluation data for ongoing program improvement. The authors conclude that home visiting programs and evaluations should monitor program implementation and employ comparison groups. Ultimately and despite enthusiasm from professionals and parents, the results appear problematic. For example, participating parents experience greater levels of depression than do non-participants.

Results also suggest that HFA programs may have the most success at improving parent–child interaction, with more limited or mixed success in the areas of health care status and utilisation, the prevention of child abuse and neglect, and improved maternal life course outcomes. HFA programs so far have not demonstrated significant improvements in children's development or maternal social support. Outcomes and attrition rates vary across subgroups of families in these studies, but the authors report that there are no consistent patterns to identify who is most likely to stay enrolled or to benefit. The authors recommend continued research and that researchers and practitioners move beyond a focus on individualised interventions and instead work to create a community-wide and national context in which supports for all new parents is the norm (Daro & Harding, 1999).

Parents as Teachers
Program orientation: education, school readiness
Primary methodology: home based (home visitation) and groups
Target age group: 0–3
http://www.patnc.org/

Originally designed by Burton White and established in 1981 by the Missouri Department of Elementary and Secondary Education, the program is a partnership between home, school and community designed to provide all parents of children, prenatally through age three, with the information they need to be their children's best first teacher. One of the first large-scale home visiting programs, PAT provides all parents of young children with access to monthly home visits by trained parent educators who offer timely information on the child's development and ways to encourage learning. In addition they hold group meetings with other parents to encourage community building and support, do periodic screening of children's development for early detection of problems, and provide linkage with providers of needed services that are beyond the scope of the program.

PAT is one of the largest parenting education organisations in the country and has regional headquarters in almost every of the United States. The program has received significant national recognition (in large part due to some enthusiastic support from a few members of Congress), and a number of longitudinal studies have been conducted. Most recently a study by Wagner, Spiker & Lynn illustrated the effectiveness of PAT with low-income families (2002). The use of groups is somewhat less than most would recommend (average of 74 per cent of parents attend two a year), supervision and update of skills is not strong in replicated models. PAT professes to have trained nearly 4,000 practitioners across the United States in their 30 training programs.

In analyses comparing experimental and control groups as a whole, two evaluations revealed small and inconsistent positive effects on parent knowledge, attitudes and behaviour, and no gains on children's health or development. However, subgroup analyses in the Northern California program indicated that children in primarily Spanish-speaking Latino families benefited more than either non-Latino or English-speaking Latino families, with significant gains in cognitive, communication, social, and self-help development. Subgroup analyses in the Teen PAT Demonstration indicated that the families that received both PAT services as well as comprehensive case management services designed to help mothers improve their lives benefited most. Subgroup analyses in the Northern California study suggest that children in families that received more intensive services benefited more than children whose families received less intensive services. Results from that study suggest that 10 home visits produce about a one-month developmental advantage for participating children.

The Home Instruction Program for Preschool Youngsters (HIPPY)
Program Focus: Academic and Behavioural Readiness for School, parental involvement in children's learn
Target Group: children ages 3–6
Program Method: semi-monthly home visits and small group meetings
In Australia: http://www.hippyaustralia.org.au

Developed in 1969 in Israel to assist its diverse and often poor immigrant population, the first HIPPY programs in the United States began in 1984. Designed to help parents be better first teachers of their three- to five-year-olds, HIPPY programs are delivered to parents in their homes by paraprofessionals who are themselves parents and who have been trained by HIPPY staff members. One of the oldest parenting education programs, the curriculum is

highly structured and designed for parents who have limited formal schooling. As of 1993, approximately 10,000 economically disadvantaged families participate in 61 programs operating in 17 states. Families are visited every other week by their HIPPY teacher, who is typically a native of or familiar with that community. The teacher provides the parents with a packet of materials including structured activities designed to facilitate the learning of new concepts. On alternate weeks small groups of parents meet to share their experiences, which assists in the promotion of community building. HIPPY's rapid growth in the United States is largely attributed to its early use in Arkansas (Better Chance Act, 1991) and its subsequent endorsement by Hillary Clinton.

HIPPY has received acclaim as an early-childhood parenting program and has been widely replicated throughout the country. A three-year longitudinal study showed that teachers rated children who had been in HIPPY as 'significantly better adapted' in their early years of school. HIPPY USA supplies training and technical assistance to the national network of local HIPPY programs in the United States. Even so results varied across the New York and Arkansas sites and across participating groups of children, or cohorts, who enrolled in the first and second years of the programs' operations. For Cohort I, children who had been enrolled in HIPPY scored higher than children in the control/comparison groups on measures of cognitive skills (New York), classroom adaptation (New York and Arkansas), and standardised reading (New York), and they were more likely to be promoted to first grade (Arkansas). For Cohort II, comparison group children outperformed HIPPY children on school readiness and standardised achievement at post-test (Arkansas). Analyses to account for the differing results between cohorts were inconclusive. Qualitative analyses revealed four patterns of attrition from HIPPY: (1) early attrition within the first month after enrolment, (2) attrition between the program's first and second years, (3) attrition due to changes in the life circumstances of participating families, and (4) attrition due to turnover among the home visitors. Families were more likely to participate in home visits than in group meetings, but different family characteristics were associated with participation for each aspect of the program.

Recent research involved a comparison of 516 children in 3rd and 6th grades who as preschoolers who participated in HIPPY to an equal number who did not. HIPPY children were less likely to be suspended from school, had better grades, classroom behaviour and academic achievement scores (Bradley & Gilkey 2002). A study of immigrant groups in the Netherlands was less robust although in fairness HIPPY was adapted in this application and program fidelity may have been a problem. Indeed, there was far more emphasis on language development (in this study of 4 to 6 year olds at risk for academic failure) and on self-esteem and somewhat less emphasis on academics. Van Tuil, Leseman and Rispens (2001) studied Turkish and Moroccan immigrant families and found modest effects of the program on cognitive development and emergent numeracy, small effects on Turkish language development, but no effects on Dutch language development. In contrast, for the Moroccan group the effects were disappointing.

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