

# **Towards improved support for families of young children: The role of communities**

**Tim Moore**

Centre for Community Child Health,  
Royal Children's Hospital, Melbourne, Victoria

*9<sup>th</sup> Australian Institute of Family Studies Conference  
Melbourne, February 2005*

## **Abstract**

This paper addresses the question of how we can build more cohesive communities for children and families. Who are the communities that we in early childhood and family support services serve? Where do we find them? And how can we best support them and meet their needs? In answering these questions, two lines of research and theory are considered. One concerns complexity theory, which suggests that a threshold level of regular contact with other people (eg. parents of young children) is needed for a consensus about their collective needs to emerge. The other concerns the importance of social support, how people's personal networks and social contacts affect their personal well-being and parenting. A third factor that must be taken into account is that our existing early childhood and early childhood intervention service system is no longer meeting all the needs of all the children as effectively as it once did.

Implications of these factors for the early childhood and early childhood intervention service systems are explored. The ultimate aim is the development of more cohesive communities that can better support all children (including those with particular developmental, behavioural or health needs) and all families (including those with exceptional support needs).

---

*This presentation is based on part of an invited address entitled 'Blazing new trails: Finding the most direct routes in early childhood intervention', presented at the 6<sup>th</sup> National Conference of Early Childhood Intervention Australia, Melbourne, July 2004.*

## Introduction

In this paper, I will be addressing the role of communities in supporting families of young children through a consideration of two lines of research and theory: first, complexity theory and the phenomenon of emergent complexity; and then the notion of social capital and the evidence for the benefits of social support. In the second half, I will explore the implications of these two bodies of theory and research for early childhood and family support services.

To begin, some brief comments about community building and working with communities.

### Community building and working with communities

Community development and community building have become the focus of increasing attention in recent years, both overseas (Etzioni, 1993, 1996; Kretzmann and McKnight, 1993; Putnam, 1995, 2000; Schorr, 1997) and in Australia (Cox, 1995; Edgar, 2001; Fiske, 1999; Howe and Cleary, 2001; Ochilree, 2001; Winter, 2000a). There has been concerns about apparent signs of a weakening of the social fabric, a growing recognition of the nature and importance of social capital, and calls for efforts to rebuild communities.

However, it is not clear what 'communities' are, or how service providers and systems can work with them. Services are being asked to respond to the needs of communities, but it is far from clear how we are to know what such needs are. If communities are no more than collections of individuals living in a particular locality, then finding out what their needs are and responding to them becomes problematic: we would have to consult each of them individually and somehow sum up their wishes and come up with an average.

Using other methods such as focus groups or advisory committees is equally problematic – there is no guarantee that those involved in such groups are actually representative or have a good grasp of what the community members collectively wish for. Under such circumstances, most people find it difficult to rise above their own experiences and see the bigger picture. They are not to be blamed for this: we all live in small worlds, and

'... all experience is local – we only know what we know, and the rest of the world, by definition, lies beyond our radar screen. In social networks, the only information we have access to, and therefore the only data we can use to make assessments of the world, lies in our *local neighbourhood* – our friends and acquaintances.' (Watts, 2003, p. 83)

The usual strategy for dealing with this is to seek out leaders to represent the views of the community, people who have that relatively rare ability to stand outside their own experience and see the bigger picture. While community leaders can play an important role, complexity theory suggests another approach: it describes the conditions under which complex collective behaviour emerges in populations without the need for leaders.

Let me illustrate how this occurs through a personal observation of collective human behaviour.

### **Complexity theory / emergent complexity: Human trails**

In my regular hunting and gathering journeys from the Centre for Community Child Health at the Royal Children's Hospital to the University of Melbourne libraries, I enter the university grounds by the Percy Grainger museum and walk around it to get through to the Baillieu Library. As one goes round the northern end of the museum, the most direct route to the walkway leading through to the library cuts across a patch of lawn. Inevitably, people take this route and wear a path across the lawn, much to the irritation of the university grounds staff. Over time, I have watched them try different strategies to protect their precious turf.

To start with, they roped off the patch of lawn and re-sowed it. A week after the lawn had re-grown and the ropes been removed, the dirt track was back. They tried again, this time sowing it with a tougher grass. They removed the ropes once more, and the delinquent walkers, finding the new grass too rough to walk on, simply walked on the softer grass beside it and created a new dirt track. By now, the ground staff were definitely peeved, and plaintive signs appeared at each end of the short path, asking 'Is it really so much further?' Not surprisingly, these did no good whatsoever, so they resorted to more drastic measures: they installed benches across the exit point and planted as large a tree as they could afford in the middle of the lawn. This did the trick, more or less: people now walked around the path as the landscapers had intended, although they did continue to cut the corners in a messy way.

I share this episode with you not only as a dispassionate observer of the human comedy, but because it illustrates an important phenomenon which has real relevance to building and serving communities. Let me explain.

I am not the first person to think about the questions raised by what are known as **human trails**. Such trails are common in the open spaces of urban environments. Sometimes it is reasonably easy to see why such trails have formed – as in the case I observed, they follow more direct routes to commonly used destinations than the landscapers allowed for. However, this is not sufficient to explain the particular characteristics of trail systems, which do not always follow the most direct routes. Nor does it explain how the routes are chosen, since each walker chooses their own route and does not have to follow where others walk.

Among others, a German physicist, Dirk Helbing and his colleagues at the University of Stuttgart studied the human trails created by students across the lawns he could see from his office window (Helbing, Keltsch and Molnar, 1997). They were interested in whether there were any regularities underlying what was apparently random activity. They found that the trails paths rarely followed completely straight lines, usually picking a route where the walking is easiest, and avoiding rough or boggy areas. When any one person chose a route and trampled the grass, that route became a little bit easier to follow, until the route that satisfied most walkers became so well worn it became the only choice, even when it is not the most direct route. Helbing and colleagues found that they could simulate this process relatively easily on a computer, using a few simple equations to describe how each walker tries to

strike a balance between shorter and easier paths, how the grass gets trampled as people walk over it, how this wears the turf and thereby alters the layout of paths available to future walkers, and how the established trails become progressively more attractive to walkers while the alternative routes grow over and disappear. The total length of trails a particular open space can support is limited by the number of people who walk across it each day, but within these constraints, the trails that form produce an optimal system, enabling people to get about on paths that, by and large, are both fairly short and easy to walk on.

Helbing and colleagues suggested that the mathematical algorithms that they had identified could be used by landscapers and town planners to predict where people would walk, so they could then pave these routes and prevent the despoiling of their best-laid plans. (This strategy would not have helped the University of Melbourne landscapers, since they had already laid out their paths and lawns, although there is another strategy they could have used that would also have solved the problem – I'll return to this later.) However, I'm interested in a different aspect of the human trail phenomenon: the fact that no single person determines where the path should go. As Mark Buchanan (2001) has observed, any network of trails emerges from the 'free actions of thousands of people all following their own intentions, and yet it conforms to very simple mathematical rules' (p. 157). Helbing and colleagues note that many other human social phenomena – including cooperation, the growth of settlements, traffic dynamics, and pedestrian movement - also share this feature and can be modeled mathematically.

### **Emergent complexity**

This is also true of a wide range of behaviours found in other species. The phenomenon we are talking about is known as **emergent complexity**, and is part of a wider body of theory and research known as complexity theory (Buchanan, 2001; Camazine, Deneubourg, Franks, Sneyd, Theraulaz and Bonabeau, 2001; Johnson, 2001; Waldrop, 1994; Ward, 2002). So common is this pattern that, according to Duncan Watts (2003), how individual behaviour aggregates to collective behaviour is one of the most fundamental and pervasive questions in all of science.

Camazine, Deneubourg, Franks, Sneyd, Theraulaz and Bonabeau (2001) define self-organisation thus:

*'Self-organisation is a process in which pattern at the global level of a system emerges solely from numerous interactions among the lower-level components of the system. Moreover, the rules specifying interactions among the system's components are executed using only local information, without reference to the global pattern. In short, the pattern is an emergent property of the system, rather than a property imposed on the system by an external ordering influence.'*

Emergent complexity can be found among living cells and organisms everywhere. For example, ant and termite colonies act collectively in highly organised and adaptive ways, yet there is no leader giving the directions – the queen ant or bee is merely a baby factory, not a director or dictator. Similarly, flocks of birds and schools

of fish are able to wheel in perfect synchronisation, yet there is no leader who decides when they should turn or how fast they should go or when they should stop.

The processes that govern the cellular development of our own bodies also display emergent complexity (Johnson, 2001). Cells do not just follow the dictates of DNA: they self-organise into more complicated collective structures by looking to their neighbours, figuring out which passages in the genetic code to pay attention to by observing signals from the cells around them. Thus, embryo development is completely decentralised: since every cell carries a complete copy of the genome, no cell has to wait for instructions from any higher authority, but can act on its own authority and signals from its neighbours.

The human brain is another self-organising system (Edelman, 1992; Siegel, 1999), and self-awareness is an emergent property of the brain: 'No individual neuron is sentient, and yet somehow the union of billions of neurons creates self-awareness' (Johnson, 2001, p. 204).

Can human behaviour follow the same rules and patterns as the behaviour of ants or birds or cells? Yes. The formation of human trails is one simple example. Another is the formation and evolution of neighbourhoods within cities, where people choose to live and why these change over time: neighbourhoods are 'polycentric structures, born of thousands of local interactions, shapes forming within the city's larger shape. ... No one wills them into existence single-handedly; they emerge by a kind of tacit consensus' (Johnson, 2001, p. 91).

Then there are the fads and fashions of speech, dress and behaviour. When I came back from living overseas for many years, I found that all the young people had begun to raise their voices at the end of sentences, as if they were perpetually asking questions. Who among them had decided to do this? More recently, young people began to sit on the ground or pavement whenever they were waiting for buses or just hanging around. They did not see anyone else doing this, and presumably came in from some criticism from their parents for being careless of their clothes.

Some of these emergent trends are transient, but others are much more long lasting. Many complex systems persist over time - the global behavior outlasts any of its component parts (Johnson, 2001). In ant colonies, generations of ants come and go, yet the colony itself matures, grows more stable and organized. Similarly, the cells of the human body are dying and being replaced all the time, without compromising the integrity of the whole or your own ongoing sense of yourself.

A related phenomenon is the pervasiveness throughout the natural world of spontaneous self-organising synchronicity: 'the tendency to synchronise is one of the most pervasive drives in the universe, extending from atoms to animals, from people to planets' (Strogatz, 2003, p. 14). Examples of synchronicity include fireflies in South East Asia and other places that spontaneously synchronise their flashing; sperm swimming side by side en route to the egg beat their tails in unison 'in a primordial display of synchronised swimming' (Strogatz, 2003, p. 14); female friends or coworkers who spend a lot of time together find that their menstrual cycles tend to synchronise; and over the course of millenia, the incessant effects of the tides have locked the moon's spin to its orbit so that it turns on its axis at precisely the same

rate as it circles the earth (so that we only ever see one side). All of these are disparate phenomena are examples of the same underlying theme: 'self-organisation, the spontaneous emergence of order out of chaos' (Strogatz, 2003, p. 14).

What are the key features of emergent complexity or self-organisation?

- ***There is no top-down planning or directive from a higher intelligence or power:*** emergent systems are decentralised bottom-up systems, not centralised top-down systems (Johnson, 2001)
- ***All the elements in the system are equals*** (Watts, 2003) and the system as a whole cannot be controlled by any one of its elements. (Remember the game you played as adolescents, when you first became aware of the random and irritating way in which new words and phrases became fashionable, and you decided to plant a word or phrase of your own devising into the social stratosphere to see if it would become common currency. It didn't, of course, because conscious and deliberate planning rarely or never results in such outcomes. Popular language usage cannot be controlled in this way, any more than any one of the students could have determined exactly where the trail across the lawn should have gone.)
- ***Self-organising systems evolve and adapt to their environments:*** 'complex self-organising systems are *adaptive*, in that they don't just positively respond to events the way a rock might roll around in an earthquake. They actively try to turn whatever happens to their own advantage.' (Waldrop, 1994, p. 11)
- ***Complexity arises out of the interaction between relatively simple elements following simple rules and paying attention to their neighbours:*** The individual components that make up the system can be quite simple, but the interactions between them generate complex behaviour that none of them individually is capable of comprehending, let alone planning (Watts, 2003). 'They think locally and act locally, but their collective action produces global behavior.' (Johnson, 2001, p. 74)
- ***Decentralised systems rely extensively on feedback,*** for both growth and self-regulation. The feedback is both positive and negative, and the balance between these keeps the system in check

How is feedback information exchanged in complex self-organising systems?

Different living organisms use different strategies, all involving the exchange of simple information between neighbouring organisms: bees communicate by waggle dancing, ants rely on pheromones, while birds and fish follow a few simple rules based on what the bird or fish next to them does. Thus, we can simulate flocking behaviour on a computer by instructing the 'birds' to follow three simple rules: (1) match your speed to others; (2) do not run into others; and (3) move toward the centre. This is enough to enable the flock as a whole to move in a coherent fashion (Olson and Eoyand, 2001).

At the human level, feedback occurs in a number of ways. These include

- Indirect observation of the behaviour of others (eg. human trails)
- Direct observation of the behaviour of others (eg. seeing people in public places)

- Informal meetings with others (eg. sporting, entertainment and community activities)
- Formal meetings with others (eg. places of work and study)
- Formal processes of democracy and governance
- Media reports of people's behaviour

One of these forms of feedback that is often overlooked is the information we receive through contact with others in the street and other public places: neighbours learn from each other because they pass each other, and each other's houses and shops, on the footpath. It turns out that footpaths are important not just by virtue of their primary function of providing pedestrian access to places, but also because they 'allow relatively high-bandwidth communication between total strangers, and they mix large numbers of individuals in random configurations' (Johnson, 2001, p. 94).

### **Urban design**

This suggests that urban design plays a role in facilitating contact between people. This is in fact the basis for a town planning movement known as the New Urbanism that has championed the cause of humanising city and urban environments. This movement treats neighbourhoods as walkable catchments, with street layouts being analysed according to the degree to which they provide most residents with walkable access to the neighbourhood's centre, which may be shops, bus or train stops, or other community focal points. In general, most people will walk 400 metres or five minutes to a centre, or 800 metres or ten minutes to a major transit stop, if the route is pleasant and direct. The accessibility and connectivity of neighbourhood catchments are analysed using '*pedshed mapping*', a tool which identifies the proportions of residents living in a 400 metre radius of a neighbourhood centre as well as those who are actually within 400 metres walk of that centre.

An example of New Urbanism principles at work is the *Liveable Neighbourhoods* project of the Western Australian Planning Commission. Comparisons between traditional suburban neighbourhoods in Perth such as Mt. Lawley and new developments such as Ballajura reveal that the old neighbourhoods score much higher on key features such as connectivity, permeability and accessibility. It is simply easier in old-style suburban neighbourhoods to walk to where you need to go and you are likely to see more people in the process.

Note that the issues at stake here are not simply environmental issues such as reducing the dependence upon cars and increasing the amount of exercise people get (although these are matters of importance). The question of interest here is the way that urban environments can promote contact between people or serve to isolate them. In the case of families with young children, what is important is how many of the services they need are within what the *Sure Start* planners in the UK call 'pram pushing distance', how pleasant and safe the walk is, and how many other families with young children are they are likely to meet on the way or when they get there.

### **Community development and community building**

As this example illustrates, the reason for exploring this body of theory and research is because of what it might tell us about how communities of people function and how

services can best support them. We have already noted the difficulties we sometimes have in understanding who or what constitutes the 'community', or knowing how to work with it or them.

The usual strategy for dealing with this is to seek out leaders to represent the views of the community, people who have that relatively rare ability to stand outside their own experience and see the bigger picture. However, complexity theory suggests another approach: it describes the conditions under which complex collective behaviour emerges in populations without the need for leaders. The key conditions are the following (adapted from Johnston, 2002):

- **Critical mass.** For a consensus to emerge, there needs to be a critical mass of members of a population interacting with one another. If there are too few or too many, no consensus will emerge.
- **Simple information.** The information that population members exchange does not need to be complicated; indeed, complex information will only clog up the system. Where systems are densely interconnected and the information exchanged is relatively simple, more sophisticated understandings can emerge naturally.
- **Random encounters.** Decentralized systems rely heavily on the random interactions between members of the community.
- **Permeable environments.** The environment in which the population lives needs to be easy to move around in, so as to maximise random encounters between a wide range of community members.
- **Local information.** Complex collective behaviour only emerges when community members pay attention to those around them, those with whom they have regular contact. It is through the accumulation of local information that global wisdom emerges.

When these conditions are met, a greater degree of consensus is more likely to emerge among community members about the needs of that community. Without such a consensus to guide them, professional services make the decisions about what the communities' needs are and what services to provide. Inevitably, they do not always get it right.

Before considering the implications of all this for services for young children and their families, I want to explore a second important line of research and theory. This concerns the importance of social support and social capital for children and families.

### **Social support and social capital**

There are two related concepts we need to come to grips with. One is the notion of **social support** or **personal support networks** (Crnic and Stormshak, 1997; Crockenberg, 1988; Dunst, Trivette and Jodry, 1997; Roehlkepartain, Scales, Roehlkepartain, Gallo and Rude, 2002; Thompson and Ontai, 2000). These refer to the people in our lives, usually our family and friends, who are the most immediate sources of emotional and practical support. The strength of people's personal

support networks varies according how many people they have in their social network, what sort of tangible support they provide, and how often they see them.

The other is the notion of **social connectedness** or **social capital** (Bush and Baum, 2001; Cooper, Arber, Fee and Ginn, 1999; Cox, 1995; OECD, 2001; Productivity Commission, 2003; Putnam, 1995, 2000; Stone, 2001; Stone and Hughes, 2000; Winter, 2000b; World Bank, 1998). These refer to the nature of the linkages within communities, which can vary according to the general level of trust and reciprocity in the relationships between members of the community.

Both social support and social capital affect the functioning of individuals, families and communities.

### **Social support and personal support networks**

Social support is believed to have both stress-preventive and stress-buffering features (Thompson and Ontai, 2000):

- On one hand, social support surrounds individuals with emotional and practical help that promotes their well-being
- On the other hand, social support reduces the toll of stressful events by helping people cope effectively

What are the key features of social support? According to reviews of the evidence (Cooper, Arber, Fee and Ginn, 1999; Crnic and Stormshak, 1997; Dunst, Trivette and Jodry, 1997), key features include the following:

- **Social support can have both direct and indirect influences on child development and behaviour** (Dunst, Trivette and Jodry, 1997). Direct influences occur through variations in the range and variety of people with whom the child has contact. Indirect influences occur through benefits to the parents and the family in general, which help them meet the child's needs more effectively. As Bronfenbrenner (1979) noted, a child's development can be affected by events in settings in which the child is not even present.
- **Social support can be provided by both informal and formal social network members, that is, by family and friends, or by service providers.** Informal support has a greater influence on the personal functioning of parents than formal support (Dunst, Trivette and Jodry, 1997). When in need of help or support, people tend to turn to family and friends first of all, then to others in their wider circle of acquaintances, and only then to professionals (Roehlkepartain, Scales, Roehlkepartain, Gallo and Rude, 2002).

This phenomenon can be best understood in terms of Urie Bronfenbrenner's socio-ecological model of development (Bronfenbrenner, 1979, 1995; Bronfenbrenner and Ceci, 1994; Bronfenbrenner and Morris, 1998). He proposed that children's development was influenced not only by the more proximal, and relatively stronger influences, of the family and friends, but also by the more distal features of the broader social environment such as the community, formal services, and governmental policies. This model is usually depicted as a series of concentric circles, with the child and family in the innermost circle. What is particularly important to understand about this model is that the circles represent

ever-diminishing sources of influence the further they are from the centre. Formal services (such as early childhood intervention programs) are relatively distal, and are therefore likely to have a lesser impact on family functioning than the extended family and friends.

- ***Not all social networks are supportive:*** people can be surrounded by a large network of individuals who are not supportive or they can have a small number of close friends who very supportive. More commonly, people's networks are made up of a mixture of positive, neutral and negative contacts. The make-up of family personal networks can be plotted using ecological family maps (Begun, 1996; Hartman, 1979).
- ***Whether support provided by professionals has the same beneficial effects depends upon the parents' need for support:*** those with high needs are likely to experience such support positively while those with low needs may experience it negatively. Similarly, where the support offered does not match the parents' needs, it is experienced negatively (Dunst, Trivette and Jodry, 1997).
- ***Whether support provided by professionals has the same beneficial effects also depends upon the nature of the relationship between parents and the professionals:*** the more that parents perceive professionals as being part of their informal social network, then the more likely they are to consult them or seek their support (Dunst, Trivette and Jodry, 1997). (This does not mean that professionals have to become friends with all parents, but it does mean that they need to establish comfortable working relationships with them. To achieve this, they need to stay around long enough, be available often enough, and have the personal qualities and skills to relate well to people of diverse backgrounds.)
- ***By virtue of its capacity to influence child, parent and family functioning, social support functions as a form of early intervention,*** providing supportive experiences and opportunities beyond those directly provided by early intervention programs. As an environmental variable, social support operates whether or not it is deliberately manipulated (Dunst, Trivette and Jodry, 1997).
- ***The larger and more diverse an individual's social network, the more access he or she will have to functional social relationships, and the more potential benefits there are likely to be for health*** (Cooper, Arber, Fee and Ginn, 1999).
- ***Social support may have a more positive effect on health and health-related behaviour, especially in times of stress, if it is provided by people of the same gender, age, ethnicity and socioeconomic background, or by people who have shared similar life-experiences*** (Cooper, Arber, Fee and Ginn, 1999).
- ***Social support has direct benefits for family functioning but mostly influences child functioning in indirect ways:*** 'the primary function of such support systems is to provide a more solid parenting foundation from which parents may, in turn, facilitate more positive child development' (Crnic and Stormshak, 1997, p. 211).

Local evidence of the importance of social support for adults comes from the 2002 Victorian Population Health Survey (Department of Human Services, 2003) which examined the impact of social networks on people's physical and mental health. The survey measured networks ranging from informal social contacts (such as friends,

family, neighbours), to membership or involvement with broader organisations (for example, belonging to a sporting club, church or professional association, attending community events, or helping out a local group as a volunteer). The survey found that people with stronger networks

- enjoy higher levels of physical health and lower levels of psychological distress
- were more easily able to access help of various kinds in cases of emergencies (eg. needing to borrow money urgently, needing child care urgently)
- felt they were able to have a say on important matters in their community
- felt more valued by society
- felt safe walking down the street after dark
- felt that most people could be trusted
- valued living in a multicultural neighbourhood

Among adults, social support has a significant impact on health and well-being (Stansfield, 1999). There is also considerable evidence for the importance of social support for children and families: 'Numerous studies of children and families both at risk and not have shown that social support directly influences the well-being of children and families' (Crnic and Stormshak, 1997, p. 210). Social support has been found to be linked to a number of child and family outcomes, including low birthweight (Oakley, 1992), child abuse (Gracia and Musitu, 2003; Korbin, 2003; Thorpe, 1994; and Tomison, 1996), child neglect (Connell-Carrick, 2003), maternal adjustment (Barakat and Linney, 1992), mental health (Cooper, Arber, Fee and Ginn, 1999), and physical health (Cooper, Arber, Fee and Ginn, 1999).

Social support is just as important for families of children with disabilities as it is for other families. For instance, in a study of families with children with spina bifida, Barakat and Linney (1992) found that the mothers' psychological adjustment improved as the available network, the proportion of family members in the network, and the support satisfaction increased. For children with spina bifida, the better their mothers' social support, the fewer behaviour problems the children had.

It is clear from this brief review that the nature and extent of parents' personal support networks have a significant influence on their personal well-being as well as their capacity to care for and raise their children as they would wish. For families to function well, positive personal support networks are just as important (if not more so) than formal professional services.

Before considering the implications of this for services, I want to look at the theory and evidence regarding social capital and social connectedness.

### **Social capital and social connectedness**

According to Stone (2001), 'Social capital consists of networks of social relations which are characterised by norms of trust and reciprocity' (p. 4). There are various forms of trust, including trust in members of one's immediate and extended family, trust in strangers, and trust in the formal institutions of governance. The second key characteristic of social capital is reciprocity, which is the process of exchange within relationships whereby 'goods and services' provided by one person are repaid in some way by the person receiving them. Thus, in communities that are high in social

capital, there are strong connections between members of the community based on mutual trust and reciprocal exchanges.

Like social support, social capital is thought to have direct benefits for individuals and communities. For example, the OECD (2001) links social capital, and access to such capital, with a number of factors, including improved health, greater well-being according to self-reported survey measures, better care for children, lower crime rates, and improved government - regions or states with higher levels of trust.

When social capital is high and communities are well-connected, children and families benefit in a number of direct and indirect ways (Fegan and Bowes, 1999): 'All families ... need access to information that helps them gain a realistic understanding of their child's development and of the possible impact of developmental changes on family life.' (p. 122) In well-connected communities, families have many opportunities for 'incidental encounters with other children and other parents within the local neighbourhood, encounters that can provide such information, reduce the intensity of uncertainty and alleviate parental anxiety.' (Fegan and Bowes, 1999, p. 122)

However, not all families have equal access to such opportunities:

'There is now good evidence that the network resources available to parents vary substantially depending upon parents educational experience, income, occupation, the number of parents in the household, race, and even in the culture in which they live.' (Cochran and Niego, 2002, p. 137).

Such factors serve to reduce the number of eligible people with whom the parents can form relationships, so that they are at risk of becoming socially isolated. Isolation can be the result of a number of factors (Fegan and Bowes, 1999; Ochiltree, 2001). These include:

- geographic isolation (living in rural and remote areas)
- physical isolation (being cut off from the local neighbourhood by a six-lane highway)
- poor health, disability or special needs
- cultural isolation (not being able to speak the language)
- social isolation (being new to an area and not knowing anyone)
- reduction in support provided by extended families as a result of increased mobility and other factors (eg. grandmothers may be unavailable to provide child care because they are still working)
- increase in the number of single parent families (with associated financial stresses and time pressures)
- lack of money to reciprocate hospitality
- increase in the number of mothers in the workforce (with consequent reduction in time with the children and with other parents)
- difficulty in accessing services or settings used by other families (because of lack of personal or public transport)
- perception that local environments are unsafe

Unfortunately, as Thompson and Ontai (2000) point out, it is often those most in need of social support who are most isolated. This includes families of children with

disabilities, who are at particular risk of social isolation. Apart from all the above reasons, other factors that can contribute to their social isolation include

- loss of their existing support network following birth or diagnosis of child with a disability,
- the narrowing of opportunities to mix with others because of the limitations placed by the child, and
- the tendency to provide specialist support in segregated settings.

It is obvious that the nature and extent of people's personal support networks and the nature of the social connections or social capital in the wider community are likely to be closely linked. It is certainly possible for individual in dysfunctional and poorly connected communities to have strong personal networks, but it is much less likely.

### **Implications**

What are the general implications of these findings regarding social support and social capital?

One implication is that, since personal support networks are important for child development, parental well-being and general family functioning, we should be seeking to ensure that all families have supportive social networks (Cochran, 1991; Dunst, Trivette and Jodry, 1997; Cutrona and Cole, 2000; Erickson and Kurz-Riemer, 1999; Thompson and Ontai, 2000). However, helping build effective family support networks is not a simple matter (Thompson and Ontai, 2001). As mentioned earlier, not all social networks are positive.

'Thus social support interventions must seek to accomplish far more than simply increasing the size of a social network or the frequency of contact with other people, or making recipients feel good about themselves. Interventions must seek primarily to strengthen the constructive influence of natural and formal helpers on the behaviour of parents and children.' (Thompson and Ontai, 2000)

What matters is not just the quantity of social support a person receives, but also the quality of that support – that is, *how* the support is provided is as important as *what* is provided. Thompson and Ontai (2000) suggest that

- social support is more easily accepted when recipients have opportunities to reciprocate or repay the aid they receive
- social support is more readily received in circumstances that minimise the potential for humiliation or stigmatisation, such as when support services are broadly available or universal (rather than specifically targeted to those in greatest need) and accessed in everyday settings (rather than an agency office)
- social support is better received when both the recipient and the provider agree about the need for assistance and the reasons for the need, rather than being based upon another's judgement of the recipient's inadequacy or incompetency

Thompson and Ontai (2000) conclude that efforts to provide social support do not guarantee beneficial outcomes. Instead, the effectiveness of social support depends on factors such as who provides support, what are the goals of doing so, how the recipient responds to this effort, and the broader community context in which this occurs. More specifically, social support interventions are most likely to be effective when:

- there are clear, well-defined goals in mobilising social support that are based on a careful analysis of the needs of family members and how support agents can address these needs;
- the efforts of formal helpers and informal helpers within natural social networks are integrated and co-ordinated;
- social support interventions provide bridges to broader community resources that can offer recipients long-term assistance;
- the need for social support is normalised within the community, so that receiving assistance is not stigmatising or humiliating;
- there are efforts to improve recipient reactions to accepting aid, which may include reducing feelings of vulnerability, failure, or inferiority by providing opportunities to reciprocate aid, promoting recipients' voluntary participation in social support interventions, and developing an environment of mutual respect; and
- help providers are themselves supported through continuing supervision, training, and other forms of assistance.

The other main implication of the findings regarding social capital is that we should be seeking to build social capital and promote community connectedness (Etzioni, 1993, 1996; Edgar, 2001; Homel, Elias and Hay, 2001; Labonté, 1999; Perkins, Crim, Silberman and Brown, 2004; Schorr, 1997; Weissbourd, 2000). In Victoria, this has led the current government to create a whole new department – the Department of Victorian Communities – to focus its efforts in this regard. Similar efforts are being made in other states and countries.

### **Complexity theory and social support**

Now let's put these two bodies of theory and research together and see what they tell us about how we can best support young children and their families.

- Complexity theory suggests that ***communities are capable of determining their own collective needs under certain conditions***. Since it is preferable for communities to determine their own needs, we should seek to create those conditions.
- One of the conditions is that ***there needs to be a critical mass of community members having frequent contact with one another***. Parents need a threshold level of contact with others, not too many and not too few. When making decisions,
  - ‘... asking too few people is potentially bad, because you make yourself susceptible to errors. But asking too many people is bad also, because the relevant information then gets lost in the noise.’ (Watts, 2003, p. 229)

A threshold level of regular contact with others is also necessary of a wider consensus is to emerge, eg. about how to bring up children, or about what services families need.

- Both complexity theory and social support evidence suggest that **parents need lots of opportunities for random encounters with other parents of young children**. Even seeing other parents and children in the street or in shopping centres involves an exchange of information – parents take note of how other parents are behaving towards their children, where they are going, how the children are dressed. All of this provides the parent with a rich array of examples with which to compare their own practices, and this helps them be clearer about what sort of parent they want to be.
- To facilitate such encounters, **we need urban environments that are easy to navigate and that provide lots of opportunities for random encounters between people in the community**. In the terms used by urban planners, we need environments that are high in connectivity, permeability and accessibility.
- Both complexity theory and social support evidence also suggest that **parents and children need regular opportunities to interact with other parents and young children**. These interactions could take place in many settings, including Maternal and Child Health centres (eg. first-time mothers' groups) and playgroups, as well as swimming pools, libraries and shopping centres.
- To facilitate such interactions, we need to ensure that **all families have easy access to family-friendly settings where they can meet other families and also access the services they need**. These settings should be pleasant places that both parents and children look forward to visiting. Where such settings do not exist, we should be exploring how to establish them.
- The social support literature shows suggests that **all families benefit from having positive personal support networks and should be helped to find such support when it is lacking**. However, we need to recognise that personal support networks are, by definition, personal, and therefore cannot be arranged or determined by professionals. All professionals can do is create the conditions under which such networks can develop. Among other things, this would involve doing what is suggested above - providing parents of young children with multiple opportunities to meet other parents of young children, and creating places where they can do so.

The analysis I have just presented forms part of a wider line of reasoning and analysis about why and how services for young children and families need to be reconfigured. There is not time to consider all the other elements of this argument in the same detail as we have just considered complexity theory and social support, but let me share with you the overall framework that is guiding the thinking of my colleagues and I at the Centre for Community Child Health. This framework incorporates reasons why change is needed, what form the changes should take, and what action is needed to make these changes.

### **Need to change**

There are four main reasons why we need to rethink the way we support families with young children:

- ***Changes in families and family circumstances.*** Over the past few decades, families have become more diverse in their structure and cultural background. Families have always been diverse, but there has been an increase in the proportion and variety of 'non-standard' families. Besides the changes in the structure and diversity of families, there have also been significant changes in the circumstances in which families are raising young children. As a result, there are more families with multiple needs, and, overall, parenting young children has become a more complex and more stressful business for many families.
- ***Difficulties that services are having in meeting all the needs of all families.*** As a result of changes in families and family circumstances (as well as other economic, demographic and social factors), early childhood and family support services are having increasing difficulty meeting the needs of all young children and their families effectively. These difficulties take a number of forms, including
  - Many services, both mainstream and specialist, have waiting lists and are unable to provide help when the need is first identified.
  - No single service is capable of meeting the complex needs of many families, and these unmet needs may loom larger in the lives of parents than the needs of the child with a developmental or mental health problem.
  - Families have difficulty finding out about and accessing the services they need
  - Services are often not well integrated with one another and are therefore unable to provide cohesive support to families
  - Services have difficulty tailoring their services to meet the diverse needs of families, and still tend to deliver services at times and in places that suit the needs of the professionals involved rather than those of the families themselves.
  - Services are typically treatment-oriented rather than prevention- or promotion-focused, and therefore cannot respond promptly to emerging child and family needs
  - The service system does not maintain continuous contact with families of young children during the early years

As a result of these and other factors, the early childhood and family support system is no longer meeting all the needs of all the children as effectively as it once did. Overall, we have a system that meets the needs of professionals and bureaucracies more effectively than those of families.

- ***Concerns about poor developmental outcomes.*** Across a wide range of health and well-being indicators, the rates of poor developmental outcomes for adolescents and young adults have risen or are unacceptably high. The distinguished epidemiologist Fiona Stanley, Australian of the Year in 2003, reports that

'Rising rates are being observed for low birth weight, neurodevelopmental disorders, asthma, type 1 diabetes, inflammatory bowel disease, autism, mental health morbidities, child abuse and neglect, adolescent suicide,

obesity, eating disorders, learning disabilities, behavioural disorders, aggressive behaviours and violence, school drop out and truancy, juvenile crime, illicit drug and alcohol use, teenage births.’ (Stanley, 2001)

The developmental pathways that lead to each of these poor developmental outcomes can be traced back to early childhood. While what happens in early childhood does not *determine* what happens later, it does place children on developmental pathways that become increasingly difficult to alter as time passes. Among other reasons why this should be a cause of concern is the fact that all the poor developmental outcomes identified have associated social and financial costs that cumulatively represent a considerable drain on societal resources.

- **Recent findings from developmental research.** Evidence about the nature and importance of development during the early years continues to accumulate. If we had to pick out one set of findings that has the most immediate implications for early childhood and family support services, it would be the impact of risk and protective factors in children’s lives. Risk and protective factors are cumulative in their effects, and interact to produce a wide range of outcomes. Furthermore, we have learned that interventions that address only one risk factor – eg. that only target mothers with postnatal depression or only provide therapy services for a child with a disability – may make a short term difference but cannot produce sustained change, at least for families with complex needs. Sustained change can only be achieved when the service system as a whole coordinates its efforts and addresses multiple risks at different levels simultaneously.

When considered together, these four factors present a compelling argument for reviewing the way that we provide services to young children and their families.

### What to change

What form should this change take? We believe that there are three main ways in which change is needed: we need better integrated communities, better integrated services, and improved forms of dialogue between communities and services.

- **Better integrated communities.** As a result of the pervasive economic, social and demographic changes that have occurred over the past few decades, there has been a partial erosion of traditional family and neighbourhood support networks. This has left a greater proportion of parents of young children with relatively poor social support networks and therefore more vulnerable. The evidence we have already considered about the importance of social support and social connectedness strongly suggests that one way in which we could address this problem is by providing families of young children with multiple opportunities to meet other families of young children. Complexity theory suggests that there is value in random encounters as well.
- **Better integrated services.** In the light of the difficulties that services have in meeting all the needs of all families effectively, the service system needs to become better integrated, so as to be able to meet the multiple needs of services in a more seamless way. We need to turn the system around so that it puts the

customer first, tailoring our services to the needs and circumstances of families rather than the needs of professional and bureaucracies.

- ***Improved forms of dialogue between communities and services.*** For the service system to become more responsive to the emerging needs of young children and families, we need better ways of communicating, more constant feedback. This needs to occur at all levels, involving service providers in their dealings with individual families, agencies with their client groups, and service systems with whole communities. For individual professionals, this means using a service philosophy such as family-centred practice as well as needs-assessment procedures and tools that regard parent input as being as important as professional input. For service systems, it means developing skills in talking to communities of families – in other words, community-centred practice.

### **How to change**

We have identified a number of steps that need to be taken to implement these changes. There is no time to consider these in detail here, but the key elements are as follows:

- **Action:** Develop more supportive social environments for families  
**Method:** *Community-centred practice*
- **Action:** Develop a stronger universal service system  
**Method:** *Family-centred practice*
- **Action:** Develop stronger linkages between services  
**Method:** *Professional partnerships*

### **Implications for early childhood intervention services**

What are the implications of this big picture for early childhood and family support services?

- ***We should seek to create the conditions under which communities can determine their own collective needs.***
- ***We need urban environments that are easy to navigate and that provide lots of opportunities for random encounters between people in the community.***
- ***We should provide families of young children with easy access to family-friendly settings where they can meet other families.***
- ***We should be providing isolated families with help in establishing supportive personal support networks.***
- ***We need a better integrated service system that is easy to access and flexible enough to respond holistically to the emerging needs of children and families.***
- ***We need to develop our skills in working with communities (ie. community-centred practice*** (Adams and Nelson, 1995; Cox, 2002; Prelock, Beatson,

Contompasis and Bishop, 1999). The key features of community-centred practice are

- Service delivery is based on a partnership between professional services and communities
  - Decision-making is shared between communities and professional services
  - Services are tailored to meet the needs and priorities of particular communities
  - Professionals work with communities to identify and build on community assets and strengths
  - A capacity-building and empowerment approach is used to help communities develop solutions to their own problems
  - Local resources are mobilised to meet local needs, and new resources developed as required
  - Services are available to all children and families as the need arises
  - Professionals collaborate to provide an integrated and holistic system of child and family support services
- ***We need to adopt a family-centred approach to community building***, with the ultimate aim of becoming ‘a community in which the economic, physical, and social environment enhances the well-being of the children and families living in it’ (Weissbourd, 2000). This approach has been dubbed *family-centred community building*. Championed by former US Vice-President Al Gore and others, family-centered community building focuses on communities from a family perspective:

‘Most of all, [Family Centered Community Building] is a movement to put the family smack in the middle of community-building, asking at each step of the way, “Does this effort support strong relationships among family members? Does this effort help families do their job of caring for and encouraging all their members? Does this effort bring the whole family and all its members into a greater sense of connection and contribution to community?” ’  
(Erickson and Louv, 2002)

### **Concluding comments**

To conclude, I want to return to human trails, and my example of the lawn-wrecking students at the University of Melbourne. There is another solution to the dilemma faced by the university grounds staff: rather than trying to block off the students’ preferred route and force them to use the one chosen for them by the landscapers, they could simply pave the path the students use and turn the one they don’t like into garden. This is not a solution that landscapers like or perhaps even think of. But then, neither do bureaucrats or service providers – when people don’t use our services, we focus on how to encourage or even force them to do so, rather than looking at redesigning what we offer to suit their needs and preferences better.

Finally, we must all see ourselves as part of the reformation of early childhood and family services that is under way. No individual service or set of services is able to meet all the needs of families we work with, and all early childhood and family support services need to be part of a wider integrated system of child and family

services. Complexity theory suggests that no single person or agency will determine how we get to where we want to go – we all do, by paying close attention to those around us and what they are doing, what they want and what they need.

## References

- Adams, P. and Nelson, K. (Eds.)(1995). **Reinventing Human Services: Community- and Family-Centered Practice**. New York: Aldine de Gruyter.
- Barakat, L.P. and Linney, J.A. (1992). Children with physical handicaps and their mothers: The interrelation of social support, maternal adjustment, and child adjustment. **Journal of Pediatric Psychology**, **17** (6), 725-739.
- Begun, A.L. (1996). Family systems and family-centered care. In P. Rosin, A.D. Whitehead, L.I. Tuchman, G.S. Jesien, A.L. Begun L. and Irwin (1996). **Partnerships in Family-Centred Care: A Guide to Collaborative Intervention**. Baltimore, Maryland: Paul H. Brookes.
- Bronfenbrenner, U. (1979). **The ecology of human development: Experiments by nature and design**. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, & K. Luscher (Eds.), **Examining lives in context: Perspectives on the ecology of human development**. Washington, DC: American Psychological Association.
- Bronfenbrenner, U. and Ceci, S. J. (1994). Nature-nurture reconceptualisation in developmental perspective: A bioecological model. **Psychological Review**, **101**, 568-586.
- Bronfenbrenner, U. and Morris, P. (1998). The ecology of developmental processes. In R. M. Lerner (Ed.), **Handbook of child psychology: Vol. 1. Theoretical models of human development**. New York: Wiley.
- Buchanan, M. (2001). **Ubiquity: The Science of History**. London, UK: Phoenix.
- Bush, R. and Baum, F. (2001). Health, inequities, community and social capital. In R. Eckersley, J. Dixon, and B. Douglas (Eds.). **The Social Origins of Health and Well-Being**. Cambridge, UK: Cambridge University Press.
- Camazine, S., Deneubourg, J.-L., Franks, N.R., Sneyd, J., Theraulaz, G. and Bonabeau, E. (2001). **Self-Organization in Biological Systems**. Princeton, New Jersey: Princeton University Press.
- Cochran, M. (1991). Personal social networks as a focus of support, In D.G. Unger and D.R. Powell (Eds.). **Families as Nurturing Systems: Support Across the Life-Span**. New York: The Haworth Press.

- Cochran, M and Niego, S. (2002). Parenting and social networks. In M.H. Bornstein (Ed.). **Handbook of Parenting (2<sup>nd</sup>. Ed.) – Volume 4**. Marwah, New Jersey: Lawrence Erlbaum Associates.
- Connell-Carrick, K. (2003). A critical review of the empirical literature: Identifying correlates of child neglect. **Child and Adolescent Social Work Journal**, 20 (5), 389-425.
- Cooper, H., Arber, S., Fee, L. and Ginn, J. (1999). **The Influence of Social Support and Social Capital on Health**. London, UK: Health Education Authority.
- Cox, E. (1995). **A Truly Civil Society: Boyer Lectures 1995**. Sydney, NSW: ABC Books.
- Cox, E. (2002). **The Social Audit Cookbook: Recipes for auditing the way we connect**. Melbourne, Victoria: The Lance Reichstein Foundation.
- Crockenberg, S. (1988). Social support and parenting. In W. Fitzgerald, B. Lester and M. Yogman (Eds.). **Research on Support for Parents in the Postnatal Period**. New York: Ablex.
- Crnicek, K. and Stormshak, E. (1997). The effectiveness of providing social support for families of children at risk. In Guralnick, M.J. (Ed.), **The Effectiveness of Early Intervention**. Baltimore, Maryland: Paul H. Brookes,
- Cutrona, C.E. and Cole, V. (2000). Optimizing support in the natural network. In S. Cohen, L.G. Underwood and B.H. Gottlieb (Eds.). **Social Support Measurement and Intervention - A Guide for Health and Social Scientists**. Oxford, UK: Oxford University Press.
- Department of Human Services (2003). **Victorian Population Health Survey 2002**. Melbourne, Victoria: Department of Human Services.
- Dunst, C.J., Trivette, C.M. and Jodry, W. (1997). Influences of social support on children with disabilities and their families. In Guralnick, M.J. (Ed.), **The Effectiveness of Early Intervention**. Baltimore, Maryland: Paul H. Brookes,
- Edelman, G.M. (1992). **Bright Air, Brilliant Fire: On the Matter of the Mind**. London, UK: Allen Lane / the Penguin Press.
- Edgar, D. (2001). **The Patchwork Nation: Re-thinking Government – Re-building Community**. Sydney, NSW: HarperCollins Publishers.
- Erickson, M.F. and Kurz-Riemer, K. (1999). Strengthening family support networks. Ch. 5 in **Infants, Toddlers, and Families: A Framework for Support and Intervention**. New York: The Guilford Press.
- Erickson, M. F. and Louv, R. (2002). The Family Re-Union initiative: A springboard for family-centred community building, locally and nationally. **Family Process**,

41 (4), 569-578.

Etzioni, A. (1993). **The Spirit of Community**. New York: Simon and Schuster.

Etzioni, A. (1996). **The New Golden Rule: Community and Morality in a Democratic Society**. New York: Basic Books.

Fegan, M. and Bowes, J.M. (1999). Isolation in rural, remote and urban communities. In J. M. Bowes and A. Hayes (Eds.). **Children, families and communities: contexts and consequences** (pp115-132) Melbourne: Oxford University Press.

Fiske, G. (1999). **Communities That Care: A Prevention Approach to Build the Resilience of Young People in Our Communities**. A Report of the Study Visit of *Communities That Care* in the US and UK. Melbourne, Victoria: Department of Human Services.

Gracia, E. and Musitu, G. (2003). Social isolation from communities and child maltreatment: a cross-cultural comparison. **Child Abuse and Neglect**, 27 (2), 153-168.

Hartman, A. (1979). **Finding Families: An Ecological Approach to Family Assessment in Adoption**. London, UK: Sage Publications.

Helbing, D., Keltsch, J. and Molnar, P. (1997). Modeling the evolution of human trail systems. **Nature**, 388, 47-50.

Homel, R., Elias, G. and Hay, I. (2001). Developmental prevention in a disadvantaged community. In R. Eckersley, J. Dixon, and B. Douglas (Eds.). **The Social Origins of Health and Well-Being**. Cambridge, UK: Cambridge University Press.

Howe, B. and Cleary, R. (2001). **Community Building: Policy issues and strategies for the Victorian Government**. Melbourne, Victoria: Victorian Department of Premier and Cabinet.

Johnson, S. (2001). **Emergence**. London, UK: Allen Lane The Penguin Press.

Korbin, J.E. (2003). Neighborhood and community connectedness in child maltreatment research. **Child Abuse and Neglect**, 27 (2), 137-140.

Kretzmann, J.P. and McKnight, J.L. (1993). **Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets**. Evanston, Illinois: Institute of Policy Research.

Labonté, R. (1999). Social capital and community development: *Practitioner emptor*. **Australian and New Zealand Journal of Public Health**, 23 (4), 430-433.

Oakley, A. (1992). **Social Support and Motherhood**. Oxford, UK: Blackwell.

- Ochiltree, G. (2001). Building communities: Why bother? In Centre for Community Child Health, **Partnerships for Children – Parents and Community Together**. Melbourne, Victoria: Centre for Community Child Health, Royal Children's Hospital.
- Olson, E.O. and Eoyand, G.H. (2001). **Facilitating Organisation Change - Lessons from Complexity Science**. San Francisco: Jossey-Bass/Pfeiffer.
- Organisation for Economic Co-operation and Development (2001). **The Well-Being of Nations: The Role of Human and Social Capital**. Paris, France: OECD Publications.
- Perkins, D.D., Crim, B., Silberman, P. and Brown, B.B. (2004). Community development as a response to community-level adversity: Ecological theory and research and strengths-based policy. In K.I. Maton, C.J. Schellenbach, B.J. Leadbeater, B.J. and A.L. Solarz, A.L. (Eds.). **Investing in Children, Youth, Families, and Communities : Strengths-Based Research and Policy**. Washington, DC: American Psychological Association.
- Prelock, P.A., Beatson, J., Contompasis, S.H. and Bishop, K.K. (1999). A model for family-centered interdisciplinary practice in the community. **Topics in Language Disorders, 19** (3), 36-51.
- Productivity Commission (2003). **Social Capital: Reviewing the Concept and its Policy Implications**. Commission Research Paper, AusInfo, Canberra.
- Putnam, R.D. (1995). Bowling alone: America's declining social capital. **Journal of Democracy, 6**, 65-78
- Putnam, R.D. (2000). **Bowling Alone: The Collapse and Revival of American Community**. New York: Simon and Schuster.
- Roehlkepartain, E.C., Scales, P.C., Roehlkepartain, J.L. Gallo, C. and Rude, S.P. (2002). **Building Strong Families: A Preliminary Study from YMCA of the USA and Search Institute on What Parents Need to Succeed**. Illinois, Chicago: YMCA of the USA and the Search Institute.
- Schorr, L.B. (1997). **Common Purpose: Strengthening Families and Neighborhoods to Rebuild America**. New York: Anchor Books, Doubleday.
- Siegel, D.J. (1999). **The Developing Mind: Toward a Neurobiology of Interpersonal Experience**. New York: The Guilford Press.
- Stansfeld, S.A. (1999). Social support and social cohesion. In M. Marmot and R.G. Wilkinson (Eds). **Social Determinants of Health**. Oxford, UK: Oxford University Press.
- Stone, W. (2001). **Measuring Social Capital: Towards a Theoretically Informed Measurement Framework for Researching Social Capital in Family and**

**Community Life.** Research Paper No. 24, Australian Institute of Family Studies, Melbourne, Victoria.

Stone, W. and Hughes, J. (2000). What role for social capital in family policy? **Family Matters**, **56**, 20-27.

Strogatz, S. (2003). **Sync: Rhythms of Nature, Rhythms of Ourselves.** London, UK: Allen Lane / The Penguin Press.

Thompson, R.A. and Ontai, L. (2000). Striving to do well what comes naturally: Social support, developmental psychopathology, and social policy. **Development and Psychopathology**, **12** (4), 657-675.

Thorpe, D. (1994). **Evaluating Child Protection.** Buckingham, UK: Open University Press.

Tomison, A. (1996). Intergenerational transmission of maltreatment. **Issues in Child Abuse Prevention**, National Child Protection Clearing House Issues Paper, No. 6.

Waldrop, M.M (1994). **Complexity: The Emerging Science at the Edge of Order and Chaos.** London, UK: Penguin.

Ward, M. (2002). **Universality: The Underlying Theory Behind Life, the Universe and Everything.** London, UK: Pan Macmillan.

Watts, D.J. (2003). **Six Degrees: The Science of a Connected Age.** London, UK: William Heinemann.

Weissbourd, B. (2000). Supportive communities for children and families. **Public Health Reports**, **115** (2), 167-173.

Winter, I. (Ed.) (2000a). **Social Capital and Public Policy in Australia.** Melbourne: Australian Institute of Family Studies.

Winter, I. (2000b). **Towards a Theorised Understanding of Family Life and Social Capital.** Working Paper 21. Melbourne, Victoria: Australian Institute of Family Studies.

World Bank (1998). **The Initiative of Defining, Monitoring and Measuring Social Capital: Overview and Program Description.** Social Capital Initiative Working Paper No. 1. Washington, D.C.: The World Bank.

**CONTACT DETAILS****Dr. Tim Moore***Senior Research Fellow*

Centre for Community Child Health, Royal Children's Hospital,  
Flemington Road, Parkville, Victoria, Australia 3053

Phone: +61·3·9345 5040

Fax: +61·3·9345 5900

Email: [tim.moore@mcri.edu.au](mailto:tim.moore@mcri.edu.au)

Websites: [www.rch.org.au/ccch](http://www.rch.org.au/ccch)

[www.ecconnections.com.au](http://www.ecconnections.com.au)