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# Parallel processes: Common features of effective parenting, human services, management and government

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This paper proposes that there are features that are common to effective relationships between parents / caregivers and young children, human service providers and parents, managers and staff, services and communities, and governments and services. These form a cascade of parallel processes. These commonalities can be seen when one looks at the key features of effective parenting / caregiving of infants, interventions with children with disabilities, family-centred practice, core helping and counselling skills, staff management and supervision, and community-centred practice. The common features to all forms of effective relationships include attunement / engagement, contingent responding, emotional communication, empowerment and strength-building, managing communication breakdowns, moderate stress / challenges, and building coherent narratives.

The paper describes what is known about the neurological bases for these parallel processes. These include the way young children's brains are programmed through relationships with parents and caregivers, and the key role that mirror neurons play. Later development continues to be intimately shaped by the nature of ongoing relationships, and therefore there is some scope for neurobiological / behavioural 'reprogramming' - early adverse experiences can be offset partially or wholly through subsequent positive relationships, including relationships with professionals.

Finally, the implications of these findings for early childhood intervention practice and services are explored. Understanding the key features of effective relationships will obviously help practitioners in their work with young children with disabilities, but also highlights the nature and importance of the relationships they build with parents. The principle of parallel process also has profound implications for managers and policy makers.

*'You need to have an experience with someone first - then you can reproduce it.'*

Gerhardt (2004)

## INTRODUCTION

Rob Gibson, the former viticulturalist in charge of the Penfold's Grange vineyards, has developed a detailed knowledge of a vine's water requirements.* Gibson has found that in order to produce exceptional grapes, it is necessary to keep vines *in tension but not stress*. Unfortunately, he says, vines are complex living organisms with deep root systems, subject to many variables which may compromise this 'balance'.

During a vine's growing season, water is removed from the root zone to the vines canopy until the moisture content drops to a level which causes the vine to wilt. If the water is not replaced in the root zone, the vine will degenerate. In order to prevent the vine from wilting, there should remain an adequate amount of water in the soil for the vine to survive, topped up by rainfall. When the opposite happens, and the pore spaces of the soil particles are totally filled with water, the soil becomes saturated. If this goes on for too long, the vine's roots become water-logged and the vine may even die. Soil texture is another important element in the soil's capacity for retaining water and determining the vine's permanent wilting threshold (ie. state of tension). The more open the soil, the less capacity to withhold water and the deeper the roots must go in order to achieve a balanced moisture position. Vines grow best in areas with scant summer rain, relying on water stored in the soil. If sufficient soil moisture is absent, then some form of irrigation must take place. Not irrigating the vine does not necessarily produce superior grapes, but may result instead in 'stressed' wines.

Gibson's point is that the viticulturalist must keep a constant eye on the state of the vines, taking account to their changing needs over the course of the growing season, and aiming to keep them in a state of tension rather than stress.

As I aim to show in this paper, these key features of viticulture have intriguing correspondences with the key features of human relationships.

### Outline of paper

The paper covers the following topics.

- ***The importance of relationships*** – what evidence there is that relationships of different kinds make a difference to our development and functioning, and what we know about how they make a difference

- ***Common features of effective relationships*** – what characteristics of relationships appear to be common to all types of relationships

- ***The neurobiology of interpersonal relationships*** – what we know about how relationships affect the development and functioning of the brain

- ***Parallel process and the cascade of parallel processes*** – how relationships affect other relationships, and how relationships can be seen as forming a cascade from government / societal levels through to parent and child

- ***Implications for services and service systems*** – relationship-based practice as core feature of effective services and service systems

- ***Conclusions*** – eight summary points

Finally, I will return to Rob Gibson's principles of effective viticulture to see what correspondences there are with the world of human services.

## THE IMPORTANCE OF RELATIONSHIPS

In this section, we will examine the relationships between parents and children, caregivers and children, parents and caregivers of children with disabilities, professionals and parents, doctors and patients, psychotherapists and clients, managers and staff, trainers and trainees, services and communities, and governments and communities.

Two aspects of each of these relationships will be explored: first, the evidence that the relationship in question has a significant impact on the development and well-being of those involved, and second, what features of the relationship are known to be associated with positive outcomes for those in the relationship.

### Parent / child relationships

Of all the relationships to be considered, the importance of that between parents and their young children is the one for which we have most evidence. This evidence shows that young children develop through their relationships with the important people in their lives (Bronfenbrenner, 1988; Gerhardt, 2004; National Scientific Council on the Developing Child, 2004; Richter, 2004). These relationships are what Shonkoff and colleagues (National Scientific Council on the Developing Child, 2004) call the 'active ingredients' of the environment's influence on healthy human development.

> 'The essential features of the environment that influence children's development are their relationships with the important people in their lives – beginning with their parents and other family members, and extending outward to include child care providers, teachers, and coaches – within the places to which they are exposed – from playgrounds to libraries to schools to soccer leagues.' (p. 4).

In a similar vein, Bronbrenner (1988) has said:

> 'In order to develop normally, a child needs the enduring, irrational involvement of one or more adults in care of and in joint activity with that child. In short, somebody's got to be crazy about that kid. Someone also has to be there, and to be doing something – not alone but together with the child.'

On the basis of a review of current theory and empirical evidence on the importance of caregiver-child relationships for the survival and healthy development of children, Richter (2004) concludes that infants and caregivers are prepared, by evolutionary adaptation, for caring interactions through which the child's potential human capacities are realized. Furthermore, these nurturant caregiver-child relationships have universal features across cultures, regardless of differences in specific child care practices.

The inescapable conclusion is that children's development is shaped, for better or worst, by their closest relationships. The next question to consider is what we know about the key features of the parent-child relationship that contribute to young children's positive development.

***Features of effective parenting***

There are numerous accounts of the key features of positive parenting, including Brazelton and Greenspan (2000), Bronfenbrenner (1990), Gerhardt (2004), Greenspan and Lewis (1999), National Scientific Council on the Developing Child (2004), Ramey and Ramey (1992, 1999), Shonkoff and Phillips (2000) and Siegel (2001). According to Shonkoff and colleagues (National Scientific Council on the Developing Child, 2004), the features of those relationships that most promote positive development and well-being are individualized responsiveness, mutual action-and-interaction, and an emotional connection to another human being.

Bronfenbrenner (1990) proposed that the core process involved in promoting child development is the child's emotional, physical, intellectual and social need for ongoing, mutual interaction with a caring adult or adults:

> ‘In order to develop - intellectually, emotionally, socially, and morally - a child requires participation in progressively more complex reciprocal activity, on a regular basis over an extended period in the child's life, with one or more persons with whom the child develops a strong, mutual, irrational, emotional attachment and who is committed to the child's well-being and development, preferably for life.’ (Bronfenbrenner, 1990)

Siegel (2001) has focused on attachment, and identified the five basic elements of how caregivers can foster a secure attachment in the children under their care:

- *Collaboration* - secure relationships are based on collaborative, contingent communication.
- *Reflective dialogue* - secure attachment relationships involve the verbal sharing of a focus on the internal experience of each member of the pair.
- *Repair* - when attuned communication is disrupted, as it inevitably will be, repair of the rupture is an important part of re-establishing the connection between the parent and child.
- *Coherent narratives* - the connection of the past, present, and future is one of the central processes of the mind in the creation of the autobiographical form of self-awareness.
- *Emotional communication* - attachment figures can amplify and share in the positive, joyful experiences, as well as remain connected to the child during moments of uncomfortable emotion.

A synthesis of these and other recent attempts to identify the key experiences that young children need to promote their general development (Brazelton and Greenspan, 2000; Gerhardt, 2004; Greenspan and Lewis, 1999; Guralnick, 1997, 1998; National Scientific Council on the Developing Child, 2004; Ramey and Ramey, 1992, 1999: Richter, 2004; Shonkoff and Phillips, 2000; Siegel, 2001) suggests that we can best promote children’s development by providing them with

- close and ongoing caring relationships with parents or caregivers
- adults who recognise and are responsive to the particular child’s needs, feelings and interests
- adults who are able to help children understand and regulate their emotions
- adults who are able to help children understand their own mental states and those of others

- adults who are able to help children negotiate temporary breakdowns and ruptures in relationships
- protection from harms that children fear and from threats of which they may be unaware
- clear behavioural limits and expectations that are consistently and benignly maintained
- opportunities and support for children to learn new skills and capabilities that are within their reach
- opportunities for children to develop social skills through regular contact with a range of adults and other children
- opportunities and support for children to learn how to resolve conflict with others cooperatively
- stable and supportive communities that are accepting of a different families and cultures

Parenting that provides a basic level of each of these experiences is sufficient to trigger children's biological capacities to become competent and healthy members of families and communities. Parents do not have to be perfect at this job: indeed, as Hoghughi and Speight (1998) point out,

> ' …. it is unhelpful and unrealistic to demand perfection of parents, and to do so undermines the efforts of the vast majority of parents who are in all practical respects 'good enough' to meet their children's needs.(p. 293)

What is needed is what Winnicott (1965) called 'good enough parenting'.

Having established the importance of early relationships for development and the key features of positive parenting, we turn next to a consideration of the relationship between non-parental caregivers and young children.

## Caregiver / child relationships

What do we know about the effect of caregiver- child relationships on child development and well-being? There is strong evidence that the quality of child care is a significant factor in shaping children's development (Clarke-Stewart and Allhusen, 2005; National Scientific Council on the Developing Child, 2004, 2005; Shonkoff and Phillips, 2000):

> 'While child care of poor quality is associated with poorer developmental outcomes, high-quality care is associated with outcomes that all parents want to see in their children, ranging from cooperation with adults to the ability to initiate and sustain positive exchanges with peers, to early competence in math and reading.' (Shonkoff and Phillips, 2000, pp. 313-4)

Not surprisingly, the qualities of non-parental caregiving relationships that best promote children's well-being and development match those that characterise positive parent-child relationships. According to the Committee on Integrating the Science of Early Childhood Development (Shonkoff and Phillips, 2000), quality of care ultimately boils down to the quality of the relationship between the child care provider and the child:

> 'Young children whose caregivers provide ample verbal and cognitive stimulation, who are sensitive and responsive, and who give them generous amounts of attention and support are more advanced in all realms of development compared with children who fail to receive these important inputs.' (p. 315).

This conclusion applies to infants, toddlers and preschoolers and also applies to all forms of child care, ranging from relatives to centre-based programs. Continuity of care is also important - more stable providers have been found to engage in more appropriate attentive and engaged interactions with the children in their care.

Lally (2000) has identified seven essential supports that very young children need at home and in child care:

- *Nurturance* involves providing warmth, feeding, and protection, and responding to each baby individually, thereby promoting strong attachment.
- *Support* involves helping children master key early developmental challenges by acknowledging their powerful feelings, encouraging curiosity and independence, and, at the same time, teaching and enforcing the rules that allow children and adults to live in harmony.
- *Security* involves providing an environment in which the child feels safe.
- *Predictability* involves rituals and rhythms throughout the day that follow regular sequences, and is both social (people I know will be there for me) and spatial (I know where to find the puzzles and where I can ride the tricycle).
- *Focus* involves the caregiver paying attention to what fascinates each child, protecting the child from too much stimulation, and providing a calm and reliable presence that frees the child's energy for learning.
- *Encouragement* involves caregivers understanding that children learn a great deal through their own interest and initiation, and responding with legitimate, specific enthusiasm rather than general cheerleading or coaching.
- *Expansion* of the young child's learning involves building the child's language by carefully observing the child's cues and interests, commenting on what the child is doing, and encouraging the child to use words to guide himself through activities.

Lally (2000) suggests that nurturance, support, security, and predictability let children know that they can count on being loved and cared for in the child care setting. Predictability, focus, encouragement and expansion facilitate the young child's intellectual development.

These and other findings (Lloyd-Jones, 2002; Melhuish, 2003) testify to the important effects that non-parental care can have on children's development, and the features of such care that promote positive development in young children. These features are essentially the same as those that characterise effective parent-child relationships.

The next set of relationships to be considered are those between parents / caregivers and children with developmental delays and disabilities.

## Parenting / caregiving for children with developmental delays and disabilities

Does the quality of parenting and caregiving matter just as much as for children with developmental delays and disabilities as it does for children without developmental problems? Since the core needs of such children are the same as those who do not have developmental problems, the answer is likely to be yes.

Moore (2001) has argued that there is evidence of an increasing convergence toward what Lieber, Schwatrz, Sandall, Horn and Wolery (1999) have called 'a compatible philosophy of instruction' between the early childhood and early childhood intervention fields. This evidence comes from studies of naturalistic approaches to teaching (eg. Delprato, 2001; Kaiser and Hester, 1996), effective ways of working with multiply disabled children (eg. Klein,

Chen and Haney, 2000), parent-child and teacher-child interactions (eg. Mahoney, Boyce, Fewell, Spiker and Wheeden, 1998), and longitudinal studies of preschool curricula for at-risk children (eg. Marcon, 1999).

There are many examples of this form of convergence, but one example will have to suffice for the present. In a recent curriculum devised specifically for young children who have multiple disabilities (Klein, Chen and Haney, 2000), caregivers and service providers facilitate the child's learning by

- carefully and systematically observing the child
- providing predictable routines
- establishing accurate interpretations and providing contingent responses to the child's cues
- building on the child's preferences and interests to motivate communication
- providing enough time for the child to respond
- making input meaningful through consistent, appropriately paced experience

What is striking about these strategies is that they are immediately recognisable as those that characterise sensitive teaching of any child. The only difference in their application is that children with multiple disabilities are likely to learn little or nothing unless all these strategies are properly deployed, whereas children without disabilities are able to learn something even when the teaching is less than ideal. However, they will learn most effectively when taught according to the above principles which apply equally to both groups.

On the basis of this and other examples, Moore (2001) argued that the most effective ways of promoting self-sustaining learning strategies in young children - with or without developmental disabilities - are

- to provide them with as many naturally occurring learning opportunities as possible
- to pay constant attention to whatever they are paying attention to and are interested in
- to join with them in some sort of communication or interaction about this, and
- to trust their capacity to learn

In short, we should be seeking to empower children (Moore, 2000). These strategies are, in fact, developmentally appropriate practices that one would use with every child, and which, with various adaptations, are appropriate for children with disabilities as well.

Establishing the importance and nature of positive parent-child and caregiver-child relationships is relatively easy. What about the relationship between professionals and parents?

## Professional / parent relationships

Within the early childhood intervention field, the importance of the relationship between the workers and the parents has long been recognised (Dunst, Trivette and Deal, 1988; Dunst and Trivette, 1996; Hornby, 1994; Kalmanson and Seligman, 1992). As Hornby (1994) put it,

> 'The competence of professionals in working with parents is as important as expertise in their own professional areas in determining the effectiveness of their work with children with disabilities.'

Kalmanson and Seligman (1992) argued that this was the case even when the relationship itself is not the focus of the intervention:

> 'Effective and sympathetic working relationships enhance parents' all too often neglected recognition that is their efforts that are ultimately most important to their infants. Families with special needs often feel that their particular difficulties set them apart from others, and a good relationship with a professional can enhance the sense of being understood and supported. This, in turn, can lead to changes in the parent-child relationship.'

The importance of collaborative parent-professional relationships is central to family-centred practice, the key philosophy underpinning early childhood intervention service delivery (Moore and Larkin, 2006; Turnbull, Turbiville and Turnbull, 2000; Turnbull and Turnbull, 2000). On the basis of a review of the literature on family-centred practice, Moore and Larkin (2006) identify the key family-centred practices, including the following:

- Families and family members are treated with dignity and respect at all times
- Services are sensitive and responsive to family cultural, ethnic, and socio-economic diversity
- Services are based on the needs and priorities of families
- Services are provided in a flexible fashion according to the evolving needs and circumstances of particular families.
- Service providers acknowledge and respect the family's expert knowledge of the child and the family circumstances as complementing their own professional expertise
- Parents are given opportunities to participate fully in the planning and delivery of services, and service providers support and respect the choices they make.

The implication of these different accounts of parent-professional relationships is that *how* early childhood intervention services are delivered is as important as *what* is delivered (Dunst, Trivette and Deal, 1988; Pawl and St. John, 1998).

What do we know about the key features of effective professional-parent relationships skills? There are numerous accounts of what skills are involved (eg. Davis, Day and Bidmead, 2002; Gilkerson and Ritzler, 2005; Moore and Moore, 2003). According to Moore and Moore (2003), the key skills involved in effective help-giving are

- skills to start people talking (observation of people's behaviour and mood, door openers),
- skills to keep people talking (non-verbal attending, minimal encouragers, reflective listening, available attitude),
- skills to understand what people are saying and feeling (observing, reflecting feelings, questioning and clarifying, repeating and rephrasing, paraphrasing and summarizing), and
- skills to help people move forward (questioning, summarising, assertiveness and challenging, clarifying goals, problem solving).

Gilkerson and Ritzler (2005) propose that the core practice skills needed for effective work with families and others include the capacity to listen carefully, demonstrate concern and empathy, promote reflection, observe and highlight the parent/child relationship, respect role boundaries, respond thoughtfully in emotionally intense interactions, and understand, regulate, and use one's own feelings. Similarly, Davis, Day and Bidmead (2002) identify the core communication skills of helpers as attention / active listening, prompting and

exploration, empathic responding, summarizing, enabling change, negotiating, and problem solving.

There are many direct correspondences between these different accounts. One of the less obvious but nevertheless important elements of effective helping is being able to challenge the person being helped when necessary. According to Heron (1990), confronting others can cause anxiety in the confronter. This anxiety can distort behaviour in two ways, leading either to 'pussyfooting' or 'clobbering', neither of which enable the person being challenged to hear the message. In a similar vein, Furlong (2001) talks about the potential conflict between 'colluding' and 'colliding', that is, between either accepting the world view of clients too easily, or confronting them too fiercely. Effective help-giving involves striking a balance between these extremes and, when appropriate, challenging the client in ways that promote growth.

Another analysis of the key features of effective help-giving comes from Dunst and Trivette (1996). On the basis of a number of studies they have conducted on the characteristics and effects of help-giving behaviours, they conclude that there are three elements of effective help-giving:

- ***Technical knowledge and skills.*** This refers to the help-giver's specialist knowledge and skills. High quality technical knowledge and skills result in the implementation of appropriate educational, therapeutic and medical interventions.
  Help which is technically of a high quality but which does not incorporate the other two elements can have positive outcomes in one area (eg. in the child's health) but negative outcomes in others (eg. parental resentment and disempowerment as a result of the manner in which the services are delivered).

- ***Help-giver behaviours and attributions.*** Help-giver behaviours which positively influence psychological well-being include good listening, empathy and warmth. Help-giver attributions that have positive outcomes include beliefs in the person or family's competences and capabilities. Positive help-giver behaviours and attributions result in (a) greater parental satisfaction with and acceptance of helping, and (b) greater psychological and emotional well-being. Help-giving behaviours and attributions are a necessary but not sufficient condition for strengthening family competencies and developing new capabilities. To achieve that, the third element of effective help-giving is necessary.

- ***Participatory involvement.*** This entails the recipients of help being offered information about intervention options, sharing decision making, and being directly involved in acting on decisions. Effective participatory involvement results in (a) parents feeling more in control, and (b) strengthening of parental competencies.

All three elements need to be present for help-giving to be truly effective. Thus, there is evidence that family-centred programs models incorporating participatory help-giving practices are more effective in empowering families (ie. in supporting and strengthening family competencies and problem solving abilities)(Judge, 1997; King, King, Rosenbaum and Goffin, 1999; Thompson, Lobb, Elling, Herman, Jurkiewicz and Hulleza, 1997; Trivette, Dunst and Hamby, 1996a, 1996b).

Another way of understanding professional-parent relationships is in terms of the key qualities needed by professionals to relate well to parents (Blue-Banning, Summers, Frankland, Nelson and Beegle, 2004; Davis, Day and Bidmead (2002). According to Hilton Davis and colleagues (Davis, Day and Bidmead, 2002), the following qualities are needed for effective helping:

- ***Respect.*** This is the foremost attitude, and refers to the helper trying to suspend judgemental thinking; valuing parents as individuals; thinking positively about them without imposing conditions, and regardless of their problems, status, nationality, values all other personal characteristics.

- ***Genuineness.*** This involves being open to experience, perceiving it accurately, and not distorting it with defences, personal prejudices and one's own problems. People who are genuine are not acting a part or pretending, deliberately or otherwise. They are real in appearing to be what they are, and are flexible and prepared to change.

- ***Humility.*** This is closely related to both respect and genuineness. It involves the helper not having an inflated sense of his/her own importance in relation to parents.

- ***Empathy.*** This refers to a general attempt by the helper to understand the world from the viewpoint of the parents. What is particularly important is that helpers demonstrate their understanding to parents.

- ***Personal integrity.*** This refers to the capacity of the helper to be strong enough to support those who are vulnerable, to tolerate the anxieties of the helping situation, and take a reasonably independent viewpoint.

- ***Quiet enthusiasm.*** This involves taking pride in what one does and enjoying that the attempt to do it well for the benefit of parents.

Similar qualities appear in the list of indicators of professional behaviour that Blue-Banning, Summers, Frankland, Nelson and Beegle (2004) have identified as facilitating collaborative partnerships with parents:

- ***Communication:*** The quality of communication is positive, understandable, and respectful among all members at all levels of the partnership. The quantity of communication is also at a level to enable efficient and effective coordination and understanding among all members.
- ***Commitment:*** The members of the partnership share a sense of assurance about (a) each other's devotion and loyalty to the child and family, and (b) each other's belief in the importance of the goals being pursued on behalf of the child and family.
- ***Equality:*** The members of the partnership feel a sense of equity in decision making and service implementation, and actively work to ensure that all other members of the partnership feel equally powerful in their ability to influence outcomes for children and families
- ***Skills:*** Members of the partnership perceive that others on the team demonstrate competence, including service providers' ability to fulfill their roles and to demonstrate recommended practice approaches to working with children and families.
- ***Trust:*** The members of the partnership share a sense of assurance about the reliability or dependability of the character, ability, strength, or truth of the other members of the partnership.
- ***Respect:*** The members of the partnership regard each other with esteem and demonstrate that esteem and through actions communications.

To sum up, we have seen that how early childhood intervention services are delivered is as important as what is delivered; that is, the nature and quality of the relationships between parents and professionals make a significant difference to the effectiveness of the help that

professionals provide. Moreover, there is a strong consensus about the features of effective help-giving and the qualities of effective help-givers.

To test the validity of these conclusions, we will examine a particular form of professional-parent relationship about which much is known, namely, the relationship between doctor and patient.

## Doctor / patient relationships

There is good evidence that the quality of doctors' interviewing skills in medical consultations influences patient satisfaction and compliance as well as actual health outcomes (Di Blasi, Harkness, Ernst, Georgiou and Kleijnen, 2001; Nobile and Drotar, 2003; Stewart, Brown, Boon, Galajda, Meredith and Sangster, 1999; Stewart, Brown and Weston, 1989). For instance, on the basis of a systematic review of the research, Di Blasi, Harkness, Ernst, Georgiou and Kleijnen (2001) concluded physicians who adopt a warm, friendly, and reassuring manner are more effective than those who keep consultations formal and do not offer reassurance.

The importance of doctors' communication skills is highlighted in a review by Stewart, Brown, Boon, Galajda, Meredith and Sangster (1999). They found that complaints and malpractice actions about doctors are usually due to communication problems rather than issues of technical competency. They also found that effective communication promotes patient adherence to recommended treatment plans, and have a generally positive effect on actual patient health outcomes such as pain, recovery from symptom, anxiety, functional status, and physiologic measures of blood pressure and blood glucose. Another review of parent-provider communication (Nobile and Drotar, 2003) found that effective parent-provider communication is associated with parental satisfaction with care, adherence to treatment recommendations, and enhanced discussion of psychosocial concerns. Moreover, interventions designed to improve parent-provider communication resulted in more discussion of psychosocial concerns, better recall of information from the visit, and improved parent-provider communication.

Although doctors who communicate better generally get better results, there is evidence that some people may value or benefit more than others from such patient-centred approaches. In a large-scale study, Little, Everitt, Williamson, Warner, Moore, Gould, Ferrier and Payne (2001) explored patient's preferences for patient-centred consultation in general practice. They found that, from the patients' perspective, there are at least three important and distinct domains of patient-centredness: communication, partnership, and health promotion. While most patients wanted such an approach rather more than they wanted a prescription or an examination, those who were vulnerable - either psychosocially or because they are feeling particularly unwell – expressed a stronger preference for patient-centred care.

The principles of family-centred care (American Academy of Pediatrics Committee on Hospital Care, 2003; Shelton and Stepenek, 1994) and patient-centred care (Little, Everitt, Williamson, Warner, Moore, Gould, Ferrier and Payne, 2001; Stewart, 2001) in medical settings match those of family-centred practice that were identified earlier. Family-centered care is based upon collaboration among patients, families, physicians, nurses, and other professionals for the planning, delivery, and evaluation of health care as well as in the education of health care professionals (American Academy of Pediatrics Committee on Hospital Care, 2003). These collaborative relationships are guided by core principles, including:

- respecting each child and his or her family
- honouring racial, ethnic, cultural, and socioeconomic diversity
- recognizing and building on the strengths of each child and family

- supporting and facilitating choice for the child and family
- collaborating with families at all levels of health care

These principles have been adopted not simply because it is felt that doctors ought to respect and collaborate with patients, but because health care based upon such principles has been shown to be more beneficial to patients. Thus, American Academy of Pediatrics Committee on Hospital Care (2003) concludes that there is evidence that family-centered care can

- improve patient and family outcomes,
- increase patient and family satisfaction,
- build on child and family strengths,
- increase professional satisfaction,
- decrease health care costs, and
- lead to more effective use of health care resources.

Given the importance of the doctor-patient relationship, what do we know about the qualities of effective doctor-parent communication? According to Stewart, Brown, Boon, Galajda, Meredith and Sangster (1999), the evidence indicates that the key features of effective communication involve

- providing the patient with clear information,
- reaching agreement on goals and expectations,
- encouraging the patient to play an active role, and
- providing positive affect, empathy and support.

According to Brown, Stewart and Tessier (1995), the main domains of patient-centred care are

- exploring the experience of disease and illness - patients' ideas about the problem, feelings, expectations for the visit, and effects on function
- understanding the whole person - personal and developmental issues (for example, feeling emotionally understood) and the context (the family and how life has been affected)
- finding common ground (partnership) - problems, priorities, goals of treatment, and roles of doctor and patient
- focusing on health promotion - health enhancement, risk reduction, early detection of disease
- enhancing the doctor-patient relationship - sharing power, the caring and healing relationship

Once again, the evidence indicates that how medical practitioners relate to patients can have a significant impact on the extent to which patients implement recommended treatment plans, as well as on actual health outcomes. The key qualities of effective doctor-patient relationships include some we have seen before in other relationships, such as listening to the other person’s experience and ideas, providing empathic support, and seeking to work as partners.

Next, we consider the evidence regarding another subset of professional-parent relationships that has been well studied, that between psychotherapists and clients.

## Relationships in psychotherapy

As with doctor / patient relationships, the evidence clearly indicates that the quality of relationships between psychotherapists and their clients is important for outcomes (Orlinsky and Howard, 1986; Wampold, 2001). In a review of studies of outcomes in psychotherapy, Orlinsky and Howard (1986) found that factors related to the quality of the emotional connection between the patient and the therapist was far more important than the theoretical orientation of the therapist. This conclusion is supported by analyses of the efficacy literature conducted by the Institute for the Study of Therapeutic Change (http://www.talkingcure.com/whatworks.htm) which found that the client's relationship with the therapist typically accounted for around 30% of the effectiveness of particular therapies, whereas the therapeutic model and/or technique used only accounted for around 15%.

How does the therapist-client relationship create change? Cozolino (2002) has approached this question by examining the neurobiology of psychotherapeutic change. He suggests that all forms of psychotherapy are successful to the extent to which they enhance change in relevant neural circuits. In his account, the brain is an organ that is continually built and re-built by one's experiences, and psychotherapy is one of the social contexts through which people's brains can be changed. Specifically, there is evidence that empathic connectedness and emotional nurturance from an attuned therapist can trigger biochemical processes that increase brain plasticity, ie. relearning.

Drawing on the evidence from neuroscience and psychotherapy, Cozolino concludes that the important factors in effective psychotherapy are an emotionally safe and empathic relationship, the activation of moderate anxiety and stress, and the use of narrative:

- ***A safe and empathic relationship*** establishes an emotional and neurobiological context conducive to the work of neural reorganisation. It serves as a buffer and scaffolding within which a client can better tolerate the stress required for neural reorganisation.
- ***Emotion and stress*** are important in the process of change because they stimulate the biochemical environment for neural plasticity. Optimal levels of arousal and stress result in increased production of neurotransmitters and neural growth hormones that enhance long-term potentiation, learning, and cortical reorganisation.
- ***Language*** is important because it allows us to create autobiographical narrative that bridge processing from various neural networks into a cohesive and integrated story of the self. Narratives allow us to combine - in conscious memory - our knowledge, sensations, feelings, and behaviours supporting underlying neural network integration.

The findings regarding therapist / client relationships add to the body of evidence that relationships matter, and that how helpers relate to help-seekers makes a difference to the outcomes achieved. The evidence also suggests that these effects can be seen at a neurological as well as a behavioural level, and that key factors contributing to change include establishing a relationship based on empathy, and the use of positive stress and of narratives.

We turn to the next level in the system of services and consider the relationships between managers or supervisors and their staff. Again, the key questions to be considered are whether the nature and quality of these relationships affect the nature and quality of the services that the professionals in turn provide to parents and families, and what we know about the qualities of effective management and supervision.

## Manager / supervisor and staff relationships

The organisational climates that managers and supervisors establish are a significant predictor of service outcomes and service quality. Glisson and Hemmelgarn (1998) describe how organisational climate might affect the work of those providing services to children and families who are at risk of a variety of physical and psychosocial problems:

> 'Because the effectiveness of these services depends heavily on the relationships formed between service providers and the people who receive the services, the attitudes of the service providers play an especially important role in the outcomes of services. Successful outcomes require caseworkers to be responsive to unexpected problems and individualized needs, tenacious in navigating the complex bureaucratic maze of state and federal regulations, and able to form personal relationships that win the trust and confidence of a variety of children and families. Also, caseworkers must perform their jobs in highly stressful situations that can involve, for example, angry family members or seriously emotionally disturbed children. Therefore, the levels of conflict, role clarity, job satisfaction, cooperation, personalization, and other variables that characterize the shared attitudes and climate of their work environments should be powerful determinants of how caseworkers respond to unexpected problems, the tenacity with which difficult problems are solved, and the affective tone of their work-related interactions with children and families.'

In a study exploring this hypothetical causal chain, Glisson and Hemmelgarn (1998) found that improvements in psychosocial functioning are significantly greater for children served by workers from offices with more positive climates.

In the early childhood field, an example of the importance of management style and organisational climate is given by Pawl (1994/95). Based on her experience as a mental health consultant to childcare centres, she found that, in those programs with the poorest relationships between providers and children, there was an unclear flow of authority, while at the same time there were markedly authoritarian methods of doing business with one another. Relationships between staff and director, and between staff and staff were marked by a great deal of hostility, disrespect and insensitivity. This had flow-on effects: those providers who were treated the worst, treated the children the worst.

The same story emerges when we look at the relationship between supervisors and supervisees, and between trainers and trainees. For instance, in a discussion of supervision, Pawl (1994/95) states that 'How one is with someone, how one treats someone -- has an important impact which should not be overlooked.' She suggests that supervisors need to understand this kind of influence if the supervisory relationship is to become truly supportive of the practitioner's work with families. Supervisory relationships that lack the key qualities of respect, mutuality and safety may teach some techniques and skills, but will not reach the heart of what practitioners need to learn and experience to be most effective with their families.

This is also true of trainers and trainees. On the basis of their experience in running an early intervention training program, Mikus, Benn and Weatherston (1994/95) concluded that certain principles of family-centred practice were essential not only for effective work with families but also for the successful implementation of the early intervention training process itself. That is, trainers needed to incorporate principles of family-centred service into their interactions with their trainees. The training would have been less successful without a sensitive and skilful application of family-centred principles and practices by the trainers. When the training facilitator follows and models family-centred practices throughout a training experience, participants are able to experience first-hand the positive regard and sense of meaningfulness which results from being treated respectfully and valued as collaborative

partners. In this way, participants are empowered to use this approach with the families with whom they work. Another finding was that this was true regardless of the composition of the particular training group. That is, experienced as well as novice professionals were able to benefit from this approach, as well as practitioners from a range of disciplines and settings.

These same principles inform the family partnership training developed by Hilton Davis and colleagues in the UK (Davis, Day and Bidmead, 2002). In this model, the trainers seek to embody the principles they teach – that is, they relate to the trainees in the way that they want them to relate to the families they work with.

So far, we have considered relationships between parents / caregivers and children, between various professional helpers and families / clients, and between managers / supervisors and staff members. We will now take a wider social perspective, and examine relationships between professional agencies / networks and communities, and between government and professional agencies / networks.

## Relationships between services / service systems and communities

Many service agencies and service networks seek to work with the communities they serve. There is a growing consensus that the most effective way for service systems to work with communities is to use a ***family-centred community-building approach*** (Adams and Nelson, 1995; Doherty and Carroll, 2002; Mulroy, Nelson and Gour, 2005).

What are the grounds for using such an approach? Based on synthesis of key evidence-based and practice-based analyses (Adams and Nelson, 1995; Botes and van Rensburg, 2000; Edgar, 2001; Kretzmann and McKnight, 1993; Llewellyn-Jones, 2001; Maton, Dodgen, Leadbeater, Sandler, Schellenbach and Solarz, 2004; Schorr, 1997; Wandersman and Florin, 2003; Weissbourd, 2000), the rationale for adopting such an approach is as follows:

- Better outcomes can only be achieved through whole-of-government and whole-of community approaches
- The traditional problem-based and deficiency-based approach to working with families and communities is not effective enough
- There are alternative asset-based and strength-based approaches that are more effective
- The service system needs to become more promptly and truly responsive to the needs of families and communities
- To achieve these changes, the nature of the relationship between governments and communities needs to reconceptualised

Based on the same sources, the key features of community-centred practice are as follows:

- 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

It is apparent that these features of effective community-building are very similar to the features of effective family-centred practice - there is the same emphasis on basing services on local needs, on building partnerships, and on strength building. Again, this approach is being adopted not simply because it is more respectful or democratic, but because it is more effective, that is, it results in more cohesive communities and in services that are more responsive to community needs.

Finally, we turn to a consideration of the relationships between governments (whether local, state or federal) and communities.

## Government / community relationships

Perhaps the most challenging relationships to analyse are those between governments and the communities they represent. Of all the relationships so far considered, that between the elected representatives of the people and the people themselves is the least susceptible to controlled trials and the other apparatus of academic proof. Nevertheless, there are some interesting synchronicities between government / community relationships and the other forms of relationships that we have been examining.

Just as there has been a push for service systems to work more collaboratively with communities, there has also been calls for a reinvention of human services and of the way that governments do business (Adams and Nelson, 1995; Considine, 2005; Edgar, 2001; OECD, 2001; Schorr, 1997). For instance, Edgar (2001) argues that

> 'The essence of postmodern society is complexity and diversity, where no lumbering, centrally controlled system can cope. Adaptability is the name of the game. The new global service – communication economy, now being called the knowledge economy, is the one in which neither centralised government services nor centralised corporate leadership can manage the diverse and ever-changing needs of work, family and community life. One size will no longer fit all. Government will have to allow for tailor-made solutions to widely different regional circumstances.' (p. 2)

This means reconceptualising the role of government as one of 'facilitating community-building through a range of genuine partnerships with business and community organisations, not as providing (or even purchasing) services top-down' (Edgar, 2001, p. 107). What this would involve is a combination of top-down guidelines and locally autonomous decision-making about how these guidelines would be implemented. Edgar calls for governments to adopt a new model of resourcing communities. A key feature of this approach is local family and community participation in defining service needs and programs of action, based on existing resources and community strengths.

Dokecki and Heflinger (1989) note that the implementation of government policies is usually tackled from the top down (which they call forward mapping) and that this approach is not very effective. They recommend an alternative approach, dubbed backward mapping by Elmore (1979-1980), which begins by identifying what a policy is supposed to achieve at the ground level, at what Lipsky (1980) calls the street level:

> ‘Having carefully specified these street-level policy outcomes, the implementation analytic task is to map backward from the loosely coupled organizations involved in the policy system to determine what must be in place or occur at successively higher levels of the system. It is as if we turn the policy telescope around and look through the lens at the other end. The resulting vista is unusual, but important.’ (p. 61)

Dokecki and Heflinger (1989) see backward mapping and forward mapping as complementary, not competing, approaches:

> ‘In all our top-down concerns with the machinations of the policy and service delivery systems, however, our focus on what is really at stake [in implementing any new policy or law] must be kept intact: strengthening families – because they are the most crucial element in the social ecology of young children with handicapping conditions.’ (p. 81)

Does this kind of approach achieve better results? Llewellyn-Jones (2001) has reviewed the literature on community participation in health promotion, concluding that there is strong evidence that involvement of community members in health promotion activities creates more effective outcomes. To achieve such results, health professionals need to accept the agenda set by the communities, be willing to share their sources of power, knowledge and skills, and to take on roles that facilitate and mobilise community action.

Schorr (1997) is another who has argued that community participation is vital for effective service delivery. On the basis of a converging body of knowledge derived form theory, research and practice, Schorr identifies seven attributes of highly effective human services programs, one of which is as follows:

> *Successful programs deal with families as parts of neighbourhoods and communities.* Successful interventions cannot be imposed from without, but respond to the needs identified by the community.

In considering the relationship between governments and service providers, or government and communities, it is worth remembering the aphorism attributed to Tip O’Neill, long-term speaker of the US House of Representatives, that ‘All politics is local’. That is, governments do not have relationships with communities or service systems – *people* in government have relationships with *people* in communities and services. The ability of governments to work effectively with communities and services is therefore dependent upon the quality of the relationships involved, and these relationships will operate according to the same dynamics as all the other forms of relationship we have been considering. The implication is that the relationships that governments have with communities and with service systems will be less effective when politicians and bureaucrats fail to tune in to the experiences of communities and services, do not adopt a true partnership approach to policy development and service provision, and have a high turnover rate of frontline staff.

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Having looked at the evidence that relationships matter, we now turn to the evidence regarding the qualities of effective relationships to see if there are common key qualities across all levels of relationships.

## COMMON FEATURES OF EFFECTIVE RELATIONSHIPS

This paper proposes that there are features that are common to all the different relationships we have examined. These common features are the following:

- attunement / engagement,
- contingent responding,
- emotional communication,
- understanding one's own feelings,
- managing communication breakdowns,
- empowerment and strength-building,
- moderate stress / challenges, and
- building coherent narratives.

These features appear again and again in the evidence we have been considering regarding the qualities of effective relationships of different types.

Each of these will be examined in turn.

### Attunement / engagement

The starting point for all effective relationships is tuning to the other person's world, understanding their perspective and experience, and successfully communicating that understanding to them. This is what true engagement is based upon.

Two key skills needed for effective attunement and engagement are ***observation*** and ***listening***. Observation involves paying close attention to the other person or people, noting body language and behaviour and what they say and do and what this tells you about their states of mind and body. For those trained to act and intervene, learning to observe can be challenging - as Pawl and St. John (1998) put it, the challenge is 'Don't just do something, stand there and pay attention'.

The other key to effective attunement and engagement is listening. Listening involves 'the ability of helpers to capture and understand the messages clients communicate, whether these messages are transmitted verbally or nonverbally, clearly or vaguely' (Egan, 1994, p. 90). This involves more than the listener being able to repeat what the person is saying:

> 'Complete listening involves four things: first, observing and reading the client's *nonverbal* behaviour – posture, facial expressions, movement, tone of voice, and the like. Second, listening to and understanding the client's verbal messages. Third, listening to the *context*; that is, to the whole person in the context of the social settings of his or her life. Fourth, listening to the *sour notes*; that is, things the client says that may have to be challenged.' (p. 94)

Like the skill of observation, this is a complex and demanding task that challenges professionals who have been trained to find specific solutions to narrowly-defined problems rather than to support people in finding their own ways of dealing with the situations in which they find themselves.

## Contingent responding

A second key feature of effective relationships is contingent responding, that is, when those involved in the relationship respond promptly and appropriately to each others' signals, communications and changing states. This can be done nonverbally (through facial expressions and body language) or through direct verbal communication. In the case of young children, contingent responding takes the form of caregivers recognising the signals the children are sending, making sense of them in their own minds, and then communicating to the children in such a manner that helps the children understand their own mental states and those of the caregiver (Siegel, 2001).

The key factor to babies flourishing is responsiveness: 'babies need not too much, not too little, but just the right amount of responsiveness - not the kind that jumps anxiously to meet their every need, nor the kind that ignores them too long, but the kind of relaxed responsiveness that confident parents tend to have' (Gerhardt, 2004, pp. 196-197). The best responsiveness for babies is the 'contingent' kind: 'This means that the parent needs to respond to the actual needs of their particular baby, not to their own idea of what the baby might need.' (Gerhardt, 2004, p. 197)

Contingent responsiveness is also important in relationships between adults:

> 'If you think about your own experience as an adult, you may become aware that you too need contingent responses. General 'niceness', such as people being 'kind' when you're upset in some way, can be quite useless; it washes over you. In fact, very often such niceness is an attempt to drown your feelings and make them go away, just as much as a punitive response does. What works much better is to feel other people willing to get on your wavelength - understanding the specific way that you are feeling, helping you to express it, and thinking about solutions with you.' (Gerhardt, 2004, p. 197)

## Emotional communication

A third characteristic of effective relationships is that those involved acknowledge each other's emotions, both the positive joyful ones as well as the negative uncomfortable ones. It is through the acknowledgment and sharing of these experiences that emotional intelligence / emotional literacy develops (Gerhardt, 2004; Goleman, 1995; Gottman, 1998; Siegel, 2001). The development of emotional intelligence and regulation is, in turn, a prerequisite for the subsequent development of positive mental and physical health and well-being:

> 'There are many well-trodden pathways to misery. People may choose to eat too much or too little, drink too much alcohol, react to other people without thinking, fail to have empathy for others, fall ill, make unreasonable emotional demands, become depressed, attack others physically, and so on, largely because their capacity to manage their own feelings has been impaired by their poorly developed emotional systems.' (Gerhardt, 2004, p. 87)

According to the National Scientific Council on the Developing Child (2005), the core features of emotional intelligence or emotional literacy include the ability to

- identify and understand one's own feelings,
- accurately read and comprehend emotional states in others,
- manage strong emotions and their expression in a constructive manner,
- regulate one's own behaviour,

- develop empathy for others, and
- establish and sustain relationships

To promote these skills in young children, parents and caregivers need to become 'emotion coaches' (Gerhardt, 2004; Gottman, 1998; Greenberg, 2002). This involves learning how to:

- be aware of a child's emotions
- recognize emotional expression as an opportunity for intimacy and teaching
- listen empathetically and validate a child's feelings
- label emotions in words a child can understand
- help a child come up with an appropriate way to solve a problem or deal with an upsetting issue or situation (Gottman, 1998)

Emotion coaching is also used in therapy with adults. In the approach developed by Greenberg (2002),

> '…. an emotion coach helps people identify emotions, differentiate what they feel from what others feel, tolerate emotions, synthesise contradictory emotions, use emotions as information, articulate feelings in words or symbols, use emotion to facilitate thinking, develop emotion knowledge, and reflect on emotions. These are all the tasks of emotional development. They occur throughout childhood and later life and are helped greatly by therapy.' (p. xii)

## Understanding one's own feelings

A fourth characteristic of effective relationships, closely related to the previous one, is understanding and managing one's own emotions. A number of the other key qualities of effective relationships depend upon this ability.

Acknowledging and managing one's own feelings is an important component of effective help-giving. Human service providers need to be aware of their own emotional reactions to the people they are working with and the situations they face. This includes being aware of 'the judgments, wishes, intolerances, hot buttons, or fears that one brings or that become activated in clinical encounters' (Heffron, Ivins and Weston, 2005). It also includes being aware of and appreciating that the internal worlds of others are equally diverse and as individually unique as our own.

As Miller and Sammons (1999) point out, we cannot avoid reacting to differences in others we meet - our first reactions are automatic reflexes, built into our brains. What we do after our first reaction, however, is based on our learning and choices. So, although we cannot control our first automatic responses, we can learn to manage our reactions so that they do not get in the way of our work.

In relationships between parents / caregivers and children, understanding and being able to manage one's feelings is also crucial. If caregivers do not have a comfortable relationship with their own feelings, they may not be able to help children become emotionally literate very effectively (Gerhardt, 2004). The attitudes we learn to towards feelings are crucial:

> 'If they are seen as dangerous enemies, then they can only be managed through exerting social pressure and fear. Alternatively, if every impulse must be gratified, then relationships with others become only a means to your own ends. But if feelings are respected as valuable guides to the state of your own organism, as well as that

> of others, then a very different culture arises in which others' feelings matter, and you are motivated to respond.' (Gerhardt, 2004, p.30)

## Managing communication breakdowns

A fifth key feature of effective relationships is that those involved are able to acknowledge communication breakdowns and restore positive connections when these occur. This has been identified as important in a number of different types of relationships, including those between parent and child (Siegel, 2001) and between members of professional teams (Brunelli and Schneider (2004).

When attuned communication between parent and child is disrupted, as it inevitably will be, repair of the rupture is an important part of re-establishing the connection (Siegel, 2001). Repair is important in helping to teach the child that life is filled with inevitable moments of misunderstandings and missed connections that can be identified and connection created again. Prolonged disconnection, especially if combined with hostility and humiliation, can have significant negative effects on a child's developing sense of self.

## Empowerment and strength-building

A sixth feature of effective relationships of different kinds is that they are characterised by an emphasis on each other's strengths and competencies, rather than on weaknesses and problems.

In human services, the strength-based approach is based on the proposition that 'the strengths and resources of people and their environments, rather than their problems and pathologies, should be the central focus of the helping process' (Chapin, 1995, p. 507).). The aim or outcome of this approach is that 'family members will increase their belief in their ability to learn and make changes in their family life, their ability to think and act critically with regard to life situations, and their power over negative circumstances' (Erickson and Kurz-Riemer, 1999, p. 118).

Adopting a strength-based approach is a common recommendation for a wide range of relationships, including working with children (Pollard and Rosenberg, 2002), families (Bernard, 2006; Silberberg, 2001) and communities (Perkins, Crim, Silberman and Brown, 2004; Schorr, 1997). It also recommended in diverse areas such as early childhood intervention (Erickson and Kurz-Riemer, 1999), child welfare (Berg, 1994; McCashen, 2004; Scott and O'Neil, 1996), social work (Petr, 2004; Saleebey, 2006), and mental health (DeJong and Miller, 1995).

A major reason for adopting a strength-based approach in relationships is that better outcomes are achieved. Thus, according to Solarz, Leadbeater, Sandler, Maton, Schellenbach and Dodgen (2004),

> 'Strengths-based approaches work. They are effective strategies for promoting healthy individuals, families and communities and reducing major social problems.' (p. 344)

The six characteristics of effective relationships that have been mentioned so far are relatively obvious. The last two may be less so.

## Moderate stress / challenges

Effective relationships are characterised by moderate stress and challenges. There are a number of different angles to the stress story.

***Moderate stress as a stimulus to development.*** On the basis of research on individual differences in sensitivity to risk, Rutter (2000) suggests that the qualities that provide resistance to stress-adversity may be acquired through appropriate experiences. Such experiences include successful coping with life's challenges (attempts to shield children completely from stress may be damaging as well as futile); taking responsibility and exercising autonomy and decision taking; and having secure, harmonious, personal relationships.

According to the National Scientific Council on the Developing Child (2005),

> 'Stressful events can be harmful, tolerable, or beneficial, depending on how much of a bodily stress response they provoke and how long the response lasts. These, in turn, depend on whether the stressful experience is controllable, how often and for how long the body's stress system has been activated in the past, and whether the affected child has safe and dependable relationships to turn to for support. Thus, the extent to which stressful events have lasting adverse effects is determined more by the individual's response to the stress, based in part on past experiences and the availability of a supportive adult, than by the nature of the stressor itself.'

The National Scientific Council on the Developing Child (2005) identifies three types of stress:

- ***Toxic stress*** refers to strong, frequent or prolonged activation of the body's stress management system. Stressful events that are chronic, uncontrollable, and/or experienced without the child having access to support from caring adults tend to provoke these types of toxic stress responses. Studies indicate that such stress responses can have an adverse impact on brain architecture.

- ***Tolerable stress*** refers to stress responses that could affect brain architecture but generally occur for briefer periods that allow time for the brain to recover and thereby reverse potentially harmful effects. In addition to their relative brevity, one of the critical ingredients that make stressful events tolerable rather than toxic is the presence of supportive adults who create safe environments that help children learn to cope with and recover from major adverse experiences, such as the death or serious illness of a loved one, a frightening accident, or parental separation or divorce.

- ***Positive stress*** refers to moderate, short-lived stress responses, such as brief increases in heart rate or mild changes in the body's stress hormone levels. This kind of stress is a normal part of life, and learning to adjust to it is an essential feature of healthy development. Adverse events that provoke positive stress responses tend to be those that a child can learn to control and manage well with the support of caring adults, and which occur against the backdrop of generally safe, warm, and positive relationships. Such experiences are an important part of the normal developmental process.

***Key feature of good parenting.*** Moderate stress stimulates neurological development and integration in the young child (Stien and Kendall, 2004). Whereas one-year-olds receive mostly positive responses from parents, toddlers receive more prohibitions. This demand for impulse control creates mild stress, causing an increase in the delivery of neurochemicals associated with the stress response to the prefrontal cortex. This stimulates the formation of the descending pathways from the prefrontal cortex to the lower regions of the brain. These descending pathways eventually allow the prefrontal cortex to override the desires that are generated in the lower centres of the brain. Because the ascending tracts mature first,

unbridled expressions of emotions (such as temper tantrums) are common among toddlers aged 18 to 36 months. This cannot end until an efficient inhibitory system has been laid down.

***Responding positively to adversity.*** There is evidence that some people emerge stronger from adverse experiences, with capacities that may not have emerged otherwise. There are even arguments that resilience does not develop in spite of adversity, but because of it (Bonanno, 2004; Linley and Joseph, 2005; Walsh, 1998). For instance, Bonanno (2004) argues that resilience in adults has often been underestimated and misunderstood, being viewed either as a pathological state or as something seen only in rare and exceptionally healthy individuals. He reviews evidence that resilience in the face of loss or potential trauma is more common than often believed, and that there are multiple and sometimes unexpected pathways to resilience. Similarly, there is evidence that parents of children with disabilities can transcend the distress and disruption involved, and end up stronger than before (Flaherty and Glidden, 2000; King, Zwaigenbaum, King, Baxter, Rosenbaum and Bates, 2006).

***Challenging in therapy and helping.*** As has been seen already, effective helpers and therapists know how to challenge those they work with in ways that creates moderate stress and promotes positive change.

## Building coherent narratives

The last feature of effective relationships to be considered is the building of coherent narratives, that is, telling stories that help people make sense of their lives. This process is important for young children, but also for adults.

Stories are the way we make sense of the events and our lives - both the things that happen to us and the internal experiences that create the rich texture of each individual is unique, subjective sense of life (Siegel and Hartzell, 2003). Such stories are important for young children's development – the connection of the past, present, and future is one of the central processes of the mind in the creation of the autobiographical form of self-awareness (Siegel, 2001). Adults can teach children about the world of the self and of others by joining with them in the co-construction of stories about life events. These stories focus on activities as well as the mental life of the characters, and thereby give children the tools they need to make sense of the internal and external worlds in which we all live.

The way adults make sense of the world has a profound effect on their functioning, including their ability to parent:

> 'A profound finding from attachment research is that the most robust predictor of a child's attachment to parents is the way in which the parents narrate their own recollections of their childhood experiences. This implies that the structure of an adult's narrative process - not merely *what* the adult recalls, but *how* it is recalled - is the most powerful feature in predicting how an adult will relate to a child. Studies of couples expecting their first child can predict how each parent will relate to their yet-to-be-born infant by examining the nature of the narratives of their own childhoods.' (Siegel, 1999, pp. 5-6)

However, Siegel and Hartzell (2003) suggest that parents are not necessarily bound by their early attachment experiences, but can reconstrue them in ways that gives them a different view of themselves and thereby enables them to be relate to their children differently. In other words, we retain the capacity to retell our stories in ways that enable us to be function more effectively.

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These eight characteristics of relationships have been identified because they appear repeatedly in research studies and analyses of widely differing forms of relationships. One of the possible reasons why this occurs is that all forms of relationship have a common neurobiological base. We will now look at what we know about the neurobiology of interpersonal relationships.

## THE NEUROBIOLOGY OF INTERPERSONAL RELATIONSHIPS

We are steadily building a picture of the neurological basis for some of these core features of effective relationships (Cozolino, 2002; Gerhardt, 2004; Schore, 1994, 2003a, 2003b; Siegel, 1999, 2001) and of what Siegel (1999) has called the neurobiology of interpersonal development. Key aspects of this neurobiological perspective are that

- children develop in the context of interpersonal relationships – early neurobiological development is determined by the quality of their attachment experiences
- later development continues to be determined by the nature of relationships – the brain can be 'reprogrammed' through positive relationships
- professional services (such as psychotherapy) can also 'reprogram' the brain

These programming and reprogramming processes involves two complementary aspects of brain functioning: ***hormonal and neurochemical reactions*** and ***mirror neurons***.

***Hormonal / neurochemical reactions*** are involved in all aspects of brain development and functioning. When we are babies, the positive looks and smiles we see in our parents trigger the release of pleasurable neurochemicals (opiates) that actually help the brain to grow. These neurochemical responses, in turn, trigger an enormous increase in glucose metabolism during the first two years of life (Schore, 1994).

The exact sequence is as follows (Gerhardt, 2004):

- When the baby looks at the mother (or father), he/she reads their dilated pupils as indicating that their sympathetic nervous system is pleasurably aroused
- In response, the baby's own nervous system gets pleasurably aroused and his/her heart rate goes up
- These processes trigger off a biochemical response: a pleasure neuropeptide (called beta-endorphin) is released into circulation, specifically into the orbitofrontal region of the brain
- Natural opioids like beta-endorphin help neurons grow, by regulating glucose and insulin, as well as making you feel good
- At the same time, another neurotransmitter called dopamine is released from the brainstem and also makes its way to the prefrontal cortex
- This also enhances the uptake of glucose there, helping new tissue to grow

These naturally-occurring opioids are just some of the many neurochemicals that play an important role in brain functioning and development. As Johnson (2004) points out, one could get arrested for ingesting these same drugs in synthetic form. Indeed, artificial drugs are addictive precisely because they mimic the naturally occurring pleasure drugs in the brain.

Relationships can also protect young children from the damaging effect of toxic hormones and neurochemicals. For instance, the relationships children have with their caregivers help regulate stress hormone production during the early years of life.

> ‘Those who experience the benefits of secure relationships have a more controlled stress hormone reaction when they are upset or frightened. This means that they are able to explore the world, meet challenges, and be frightened at times without sustaining the adverse neurological impacts of chronically elevated levels of hormones such as cortisol that increase reactivity of selected brain systems to stress and threat. In contrast, children whose relationships are insecure or disorganized demonstrate higher stress hormone levels when they are even mildly frightened. This results in an increased incidence of elevated cortisol levels which may alter the development of brain circuits in ways that make some children less capable of coping effectively with stress as they grow up.’ (National Scientific Council on the Developing Child, 2005)

The presence of sensitive and responsive caregivers – in the home or in early care and education settings - can prevent elevations in cortisol among toddlers, even in children who are temperamentally fearful or anxious.

The other neurological basis of some of the core features of effective relationships are what are known as ***mirror neurons***.

Mirror neurons represent the neural basis of a mechanism that creates a direct link between the sender of a message and its receiver. Mirror neurons are found in various parts of the brain and function to link motor action to perception. A particular mirror neuron will fire if you watch someone else doing something intentionally, and will also fire if you do the same action yourself. These neurons do not merely fire in response to any action seen in another person: the behaviour must have an intention behind it. Thanks to this mechanism, actions done by other individuals become messages that are understood by an observer without any cognitive mediation (Gallese, 2003; Rizzolatti and Craighero, 2004). Originally identified in monkeys, there is now rapidly accumulating evidence of their existence in humans (Stefan, Cohen, Duque, Mazzocchio, Celnik, Sawaki, Ungerleider and Classen, 2005), and of the important role they may have played in the evolution of human brains and language (Ramachandran, 2000; Stamenov and Gallese, 2002).

Siegel and Hartzell (2003) suggest that mirror neurons are central to creating resonance between the minds of parents and infants. Mirror neurons not only enable the brain to detect the intention of another person, but also link the perception of emotional expressions to the creation of those states inside the observer. In this way, when we perceive another's emotions, automatically, unconsciously, that state is created inside us.

There is some evidence that a dysfunctional mirror neuron system in high-functioning individuals with autism spectrum disorder might underlie their deficits in theory of mind and empathy (Dapretto, Davies, Pfeifer, Scott, Sigman, Bookheimer and Iacoboni, 2006; Oberman, Hubbard, McCleery, Altschuler, Ramachandran and Pineda, 2005).

The existence of mirror neurons may be one of the reasons why true intentions and feelings cannot be faked. Without knowing it, we process a host of non-verbal signals from others – facial expressions, body language – that convey information about their true feelings and intentions. The human face has 90 different muscles which in various combinations can form as many as 10,000 expressions. About half of these can provide information about our intentions. Using this information, children are able to see when there is a gap between what parents say and what they really mean or feel.

This may lie behind the observation made by Dunst and Trivette (1996) that key aspects of help-giving cannot be faked. As noted earlier, they propose that there are three aspects of effective helping, all three of which need to be present for helpgiving to be truly effective: technical knowledge and skills, help-giver behaviours and attributions, and participatory involvement. The second and third components provide value-added benefits, but cannot be faked:

> 'Research indicates that help receivers are especially able to 'see through' helpgivers who act as if they care but don't, and helpgivers that give the impression that help receivers have meaningful choices and decisions when they do not.' (Dunst and Trivette, 1996, p. 337)

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Having considered the growing evidence regarding the neurobiological basis of relationships, we will now consider one of the major implications of the finding that different forms of relationship have common features: that what are known as parallel processes operate across the spectrum of relationships.

## PARALLEL PROCESSES

The concept of ***parallel process*** will be familiar to those who work in infant mental health or social work. In these fields, it refers to the way that the relationship between a professional and a client parallels the relationship between the client and others in their lives, and therefore has the capacity to strengthen or weaken such relationships. Thus, there is a flow-on effect, in which relationships influence relationships (Johnston and Brinamen, 2005).

This flow-on effect can be seen in the relationships between early childhood professionals and parents of young children:

> 'People learn how to be with others by experiencing how others are with them. This is how one's views and feelings (internal models) of relationships are formed and how they may be modified. Therefore, how parents are with their babies (warm, sensitive, responsive, consistent, available) is as important as what they do (feed, change, soothe, protect, teach), and how [professionals] are with parents (respectful, attentive, consistent, available) is as important as what they do (inform, support, guide, refer, counsel).' (Gowen and Nebrig, 2001, p.8)

Thus, early childhood interventionists teach parents how to relate to their young children by how they (the interventionists) relate to the parents, rather than by directly modeling parenting behaviour with the child.

To convey a sense of this parallel process, Jeree Pawl (Pawl, 1994/95; Pawl and St. John, 1998) has coined a shorthand 'platinum' rule to supplement the Biblical golden rule (that you should do unto others as you would have them do unto you). Her rule is

> ***Do unto others as you would have others do unto others.***

This notion of parallel process goes beyond understanding that the relationship between professional and parent is important. What it adds is that the nature of that relationship needs to be informed by the important relationships that the other person has – the way we are with the person needs to reflect and model the way they need to be with others in their lives.

The commonalities that we found in all the different types of relationships suggest that parallel processes operate across the full spectrum of relationships, not just in the

relationship between professionals and parents. They can be seen as forming a ***cascade of parallel processes***:

The way that governments relate to services ↘

parallels the way that services relate to communities ↘

that parallels the way that managers relate to staff ↘

that parallels the way that staff relate to parents ↘

that parallels the way the parents relate to children

What evidence is there that parallel processes (and the cascade of parallel processes) operate in this way and make a significant contribution to how we develop and function?

## Evidence for parallel process and the cascade of parallel processes

One source of support for the parallel process effect is the evidence that our own ability to parent is significantly dependent upon how we were parented. Siegel (1999, 2001, 2003) summarises this evidence, showing that people's own experiences of attachment to their early caregivers (as measured by the Adult Attachment Interview) predicts how they parent their own children. This is an illustration of the general point made by Sue Gerhardt (2004) and cited earlier: 'You need to have an experience with someone first - then you can reproduce it.'

Some support for the broader concept of relationship cascades comes from Urie Bronfenbrenner's work on the impact of the social ecology on the functioning of individuals, families and communities. On the basis of a range of ecological studies, he identified a number of key processes that foster the development of human competence and character (Bronfenbrenner, 1990). Three of these involve the nature of the relationships between caregivers and others in their social environment:

- For parents to be able to establish and maintain patterns of progressively more complex interaction and emotional attachment with their children, they need at least one other adult, a third party who supports, encourages, and expresses admiration and affection for them. Elsewhere, Bronfenbrenner (cited by Greenleaf, 1978) put it this way: 'A person cannot be committed to a child unless other people are committed to that person's commitment to children'.
- Effective child-rearing in the family and other child settings requires establishing patterns of effective communication and mutual trust between the principal settings in which children and their parents live their lives (including the home, child-care programs, the school, and the parents' place of work).
- Effective child-rearing in the family and other child settings also requires public policies and practices that support child-rearing activities not only on the part of parents, caregivers, teachers, and other professional personnel, but also relatives, friends, neighbours, co-workers, communities, and the major economic, social, and political institutions of the entire society.

Further support for the relationship cascade hypothesis comes from a national US study conducted by Dunst, Trivette, Starnes, Hamby and Gordon (1993). This focused on the status of family support initiatives for persons with developmental disabilities, and explored the links between policies and practices at federal, state, community, agency and case worker levels. They found some evidence of a cascade effect whereby the more that family support initiatives and principles were espoused and operationalised at a particular level, the more likely it was that they would be put into effect at the next level down. Strongest links

were between the levels that were immediately adjacent (eg. supervisor and direct service provider) and weakest between those that were furthest apart (eg. state policies and direct service provision).

## Counterarguments and exceptions

Are there any arguments against the logic of parallel processes and relationship-based practice? Is there any evidence of exceptions to the hypothesis that parallel processes are evident in relationships at all levels? There are at least three.

One challenge to the cascade model is that the ability of parents to relate effectively to their children is obviously not solely dependent upon (or even primarily dependent upon) the nature of the support they receive from professionals. On the contrary, the most important forms of support usually come from their personal networks (family and friends) rather than from formal services. However, these informal sources of support also form relationship cascades: the ability of parents to support their children is significantly dependent upon the nature of the support they receive from their personal support network, and the ability of their personal support network members to perform this role is in turn dependent upon the nature of the support they get from the broader community.

Another challenge to the cascade model is that we can all think of particular practitioners and managers who were able to deliver truly responsive and family-centred services despite not working in a service or environment that supports or parallels those qualities. These practitioners act as circuit breakers, or what Jeree Pawl terms ‘buffer supervisors’ (Pawl, 1995/95). Even when a system's basic attitude is negative and disrespectful and this negative influence is passed along the chain of command, there are exceptional individuals who change the valence from negative to positive. They are people who are strong enough in their personal qualities and convictions to be able to relate to those who work with them or for them in respectful and collaborative ways, without needing environmental support. This suggests that parallel processes are not a necessary condition for effective service delivery. However, such people are exceptions to the rule and we cannot build a complete system around them. Instead, most practitioners need support to be able to deliver services in the way that is most effective, and this support needs to be provided in ways that parallel the manner in which we want practitioners to relate to families.

Another aspect of professional efficacy not captured by the simple cascade model is that the ability of professionals to support parents effectively is dependent not only upon the nature of the support they receive from their superiors, but also from their colleagues and their own personal networks. The importance of supportive relationships among practitioners has long been recognized as important to effective early intervention service delivery (Brunnelli and Schneider, 2004; Edelman, 2004; Pilkington and Malinowski, 2002). Without close communication and collaboration between colleagues, there is a greater risk of fragmenting or duplicating services as well as failing to meet the needs of families they serve (Edelman, 2004). Correspondingly, when communication and collaboration are done well, there are real benefits:

> ‘Relationship-based responses at all levels of an infant-family setting can help staff members reduce stress, attain professional satisfaction, and focus on the family. In early intervention, the team generates, plans, supports, and reflects on relationship-based responses.’ (Brunnelli and Schneider, 2004, p. 47)

Together, these three challenges suggest that the relationship cascade outlined above is too simple and does not capture all the factors that influence relationships at different levels. Instead, it is apparent that our personal well-being and our ability to relate effectively with others are partly the product of several relationship cascades. Nevertheless, the underlying

notion that parallel processes operate, and that these form relationship cascades still appears to be valid.

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What implications does all this have for services and service systems?

## IMPLICATIONS FOR SERVICES AND SERVICE SYSTEMS

The implications for services and service systems will be considered under four headings:

- Relationship-based practice
- Training and supervision
- Implementing a relationship-based approach
- Parallel processes as psychosocial fractals

### Relationship-based practice

The approach that I have been describing has been called ***relationship-based practice***, initially within the infant mental health field (Heffron, 2000; Ruch, 2005; Weston, Ivins, Heffron and Sweet, 1997), but increasingly in early intervention services for children with developmental disabilities and delays (Edelman, 2004; Gilkerson and Ritzler, 2005; Wilcox and Weber, 2001).

According to Heffron (2000),

> '… relationship-based preventive intervention is a way of delivering a variety of services to infants, toddlers, and families that includes a focus on the importance of parent-child interaction, knowledge of how parallel process or how the staff-family relationship influences the family-child relationships, and the deliberate use of the intervenor's self awareness in working with infants and families where relationships are at risk' (p. 16).

This approach seeks to integrate a focus on the parent-child relationship and a focus on the professional-parent relationship. Thus, Ruch (2005) sees the central premise of relationship-based practice as being

> ' … the emphasis placed on the professional relationship as the medium through which the practitioner can engage with the complexity of an individual's internal and external worlds and intervene. The practitioner–client relationship is recognized to be an important source of information for the practitioner to understand how best to help, and simultaneously this relationship is the means by which any help or intervention is offered.' (p. 113)

In a similar vein, Wilcox and Weber (2001) see the primary goal of a relationship-based model for early intervention services as being

> '… to facilitate optimal parent-child interactions by focusing on individualized parent-professional relationships as the practitioner mirrors the attributes and attitudes that need to be fostered between parent and child. Therefore, early interventionists using this approach should demonstrate more family-centered behaviours and attitudes and in turn, their families should feel more confident and comfortable in supporting their children's development.'

This approach builds upon family-centred and strength-based approaches, with the key focus being *responsive caregiving*: 'It is important to remember that we are not in the home to meet the needs of the baby himself; instead we are in the home to try to assure that the baby's needs are met.' (Trout, 1987)

Weston, Ivins, Heffron and Sweet (1997) suggest that making relationships central to all that early childhood intervention services do constitutes a paradigm shift in how such services work, moving us beyond what they call additive models of service. The centrality of relationships acts as a 'unifying principle for theory, service models, program evaluation, and efficacy research' (p. 10).

Similarly, Norman-Murch (2005) suggests that there is an emerging understanding of the core knowledge, principles, and practices that are shared by a broad range of professionals who work with young children and their families. This understanding is based on an awareness of the critical importance of early social and emotional development as an organizer of overall development, and on the tremendous impact that caregiver-child relationships have on child development. There is also a growing appreciation of the ways in which the caregiver-professional relationships can either support or interfere with effective service delivery and the ways in which that relationship functions as a form of intervention.

Based upon some of these formulations, Gilkerson and Ritzler (2005) identify the following principles as being central to relationship-based practice:

- Centrality of relationships is reflected in all aspects of the effort.
- Process is as important as content in intervention.
- The development of a respectful, collaborative alliance with families is central.
- Relationships are seen as the organizer of early development, and so focus is placed on supporting parent-child relationship and paying attention to both the parent's experience of the child and child's social-emotional world.
- Knowledge of parallel process--how relationships affect relationships--is essential: how management-staff relationships affect staff-family relationships, how staff-family relationships influence the family-child relationships, etc.
- Development of self-awareness is a professional competency.
- Reflection is encouraged at all levels.

What skills are needed to work in this way? According to Wilcox and Weber (2001), the relationship-based approach to early intervention service delivery builds upon family-centred and strength-based approaches, and is based upon five practitioner abilities:

- the ability to observe ecologically
- the ability to form a therapeutic alliance with the family on behalf of the child
- the ability to be aware of your own values/attitudes and the impact of your interactions with a family
- the ability to be reflective and strengths-based
- the ability to contract and clarify

How new is this idea of relationship-based practice? As we have seen previously, early childhood interventionists have known for a long time that the quality of the relationship with parents is an important contributor to effectiveness – that *how* we deliver services is as important as *what* we deliver (Dunst, Trivette and Deal, 1988; Dunst and Trivette, 1996;

Hornby, 1994; Kalmanson and Seligman, 1992; Moore and Moore, 2003). This has been a core part of family-centred practice, the guiding philosophy in early childhood intervention for the past 15 years or more. However, this does not mean that, as a field, we have acted upon the implications of this message. Thus, there is no comprehensive training program in people / helping skills available for early childhood intervention workers, even though training packages have been developed (Early Childhood Intervention Australia – NSW, 1998; Moore and Moore, 2003).

What is new – to many early childhood interventionists, at least – is the notion of parallel process. This clarifies and expands our understanding of what we are seeking to do when we are working with families. Another notion that throws fresh light on how we function is the idea that relationships of *all* kinds affect our ability to support families effectively – not only relationships with our supervisors, but also with our colleagues, our friends, and our families.

*Relationship-based* practice needs to be distinguished from *relationship-focused* practice, ie. services that treat the infant-caregiver relationship as the principle focus of intervention. There is a strong tradition of relationship-focused interventions within the infant mental health and family support fields (eg. Heinicke, Fineman, Ponce and Guthrie, 2001; Heinicke, Goorsky, Moscov, Dudley, Gordon, Schneider and Guthrie, 2000; McDonough, 2004), and there are also some well-developed models in early childhood intervention, such as the responsive teaching model developed by Gerald Mahoney and James MacDonald (Mahoney and MacDonald, in press; Mahoney and Perales, 2003, 2005). Relationship-based practice is a broader concept that recognizes the importance of parent-child interaction, but also takes into account how the relationship between the service provider and the family influences the family-child relationship.

## Training and supervision

Implementing a relationship-based approach has clear implications for training and supervision. In addition to one's expertise in child development and training in a specific discipline, practitioners must also master a range of general interpersonal skills needed to build individualized, respectful, responsive, supportive relationships with families. These include the abilities to listen carefully, to demonstrate concern and empathy, to promote reflection, to observe and highlight qualities of the parent/child relationship, to respond thoughtfully in emotionally intense interactions, and to understand, regulate, and use one's own feelings (Gilkerson and Taylor Ritzler, 2005).

Ruch (2005) argues that 'for the potential of relationship-based practice to be fully realized, practitioners need to develop their reflective capabilities' (p. 111). Accounts by early childhood intervention services of their efforts to do just this have been provided by Copa, Lucinski, Olsen and Wollenburg (1999) and by Trudi Norman-Murch and colleagues (Norman-Murch, 2005; Norman-Murch and Ward, 1999). Weston (2005) has also outlined the challenges in training reflective practitioners.

Specific programs to train early childhood intervention staff in relationship-based practice have been described by Gilkerson and Kopel (2005) and Norman-Murch (2005). Gilkerson and Kopel (2005) outline a two-day training course on relationship-based practice that was run for early childhood intervention practitioners. The training focused on the practitioner's capacity to

- listen carefully and demonstrate concern and empathy,
- ask questions that promote reflection,
- observe, highlight, and foster the parent/child relationship, and

- understand the professional use of self (eg, being aware of one's own feelings and desires to help, thinking about one's impact on the parent and child, being aware of social and cultural differences, and being aware of the parent's history of relationships)

Norman-Murch (2005) describes the development of a training program as part of a process of introducing relationship-based practice into an early childhood intervention agency. The training focuses on three core elements:

- child development – including knowledge about developmental themes or tasks such as self-regulation and attachment.
- caregiver-child relationships – including the ability to recognize and support positive relationships.
- professional use of self – including paying attention to the ways we are with families; how the quality of our relationships with families impacts our ability to be effective with them.

Approaches to training in the communication skills needed for relationship-based practice have been discussed by Davis, Day and Bidmead (2002) and Moore and Moore (2003). The most comprehensive training package is the *Family Partnership Model* developed by Hilton Davis and colleagues (Davis, Day and Bidmead, 2002) in the UK. The key features of this approach are:

- It is based on a parent / professionals partnership or working alliance that recognises their complementary expertise
- Professionals are trained to use communication skills to help parents develop their own goals and problem-solving capacities
- The qualities needed by helpers are empathy, respect, humility, genuineness or congruence, quiet enthusiasm, and personal strength or integrity

This training approach is also explicitly based upon parallel process – the course facilitators seek to exemplify the qualities of the model, and to relate to the course participants in a way that mirrors / models the way that the participants are being taught to relate to the families they work with. Davis, Day and Bidmead (2002) also note the implications that their underlying model has for other relationships: the qualities and processes that characterise effective professional / parent relationships are also those of effective relationships between parents and their children, or between the parents themselves.

The following table (see next page) summarises the training needs of early childhood intervention practitioners in terms of the three elements of effective helping identified by Dunst and Trivette (1996) and outlined earlier.

As this table shows, supervision plays a critical role in ensuring that the skills that practitioners learn about on training courses are fully integrated into their practice. To ensure that this happens, programs need to provide a supervisory structure that supports practitioners in their relationship-based work. A supervision relationship should model the kinds of interpersonal interactions that characterise other relationships. Working with infants and their families from a relationship perspective requires ongoing, regular opportunities for reflection (Gilkerson and Ritzler, 2005; Norman-Murch, 2005).

***Elements of effective helping and corresponding training needs***

| *Elements of effective helping* | *Training needs* |
|---|---|
| Technical knowledge and skills | • Pre-service training in discipline-specific knowledge and skills<br>• Ongoing professional development training in discipline-specific knowledge and skills<br>• Ongoing supervision, mentoring and support |
| Attitudes and behaviour of service providers | • Training in communication and helping skills (eg. Family Partnership Training)<br>• Training in relationship-based practice<br>• Ongoing supervision, mentoring and support |
| Sharing decisions and actions | • Training in family-centred practice (eg. Partners, ECIA-NSW, 1998)<br>• Strength-based training (eg. McCashen, 2004)<br>• Ongoing supervision, mentoring and support |

To meet this need for reflection, many programs have adopted the practice of ***reflective supervision***, an approach designed to encourage learning through thoughtful observation of oneself and others (Bertacchi and Norman-Murch, 1999; Copa, Lucinski, Olsen and Wollenburg, 1999; Norman-Murch, 1996; Parlakian, 2001). Reflective supervision forms a cornerstone of supervisory interaction in a relationship-based program. Reflective supervision involves thoughtful dialogue and active listening. It can be accomplished through individual, group, and/or peer supervision. Bertacchi and Norman-Murch (1999) describe some of the challenges that arise, and the skills supervisors need to learn in order to practice reflective supervision and support relationship-based work. These include a partnering approach to problem solving, supporting staff in becoming self-reflective, and using a strength-based approach.

## Implementing relationship-based practice

The considerable benefits and challenges of building a relationship-based community agency have been well described (Bertacchi, 1996; Norman-Murch, 1999). There is also a growing body of evidence as to what organisations need to do if they wish to adopt this approach.

What have we learned about this process? Organisations need to provide a range of conditions and resources to support the adoption of a relationship-based approach (Bertacchi, 1996; Edelman, 2004; Weston, Ivins, Heffron and Sweet, 1997). The organisational structure of the program needs to parallel and model a relationship-based direct service approach. Organisational features such as mission, training, program evaluation, personnel policies, supervision, and communication channels should be developed with the intent to support relationship-based practices (Pilkington and Malinowski, 2002; Weston et al, 1997). Administrators need to set a tone that values and supports a deep level of teamwork, communication, and problem-solving (Richardson and Earle, 2005).

Organisations need to secure funding to support the otherwise non-reimbursed time required for essential functions such as teamwork, planning, training, and supervision.

Accounts of what is involved in adopting a relationship-based approach have been provided by Moss and Gotts (1997/98) and by Gilkerson and colleagues (Gilkerson and Kopel, 2005; Gilkerson and Ritzler, 2005). Moss and Gotts (1997/98) describe introducing relationship-based early intervention into a state-supported early intervention system, using an affective curriculum - *Partners in Parenting Education* (Butterfield, 1996) - as a resource. Their experience suggests that the use of a relationship-based framework for early intervention services supports the achievement of desirable outcomes for children and families, but only if the following conditions are met:

- There is a desire at the administrative, supervisory, and service provider levels to seek effective means of developing true partnerships with families
- There is a willingness among administrators, supervisors, and staff to spend the necessary extra time to develop and try something new
- There are appropriate resources to stimulate ideas and fresh thinking about approaches to parenting education for a range of parent/child needs
- There are staff who are already competent communicators and who value effective relationships with parents as they provide services
- There are creative and flexible staff who are willing to take the time and make the effort to review the new materials, select appropriate ideas and activities, and modify them to meet the needs of specific families and their circumstances
- There is regular reflective supervision time to review early intervention specialist and parent responses to a new approach, identifying what works and what does not

A successful attempt to introduce relationship-based practice into an early childhood intervention system has been undertaken by Linda Gilkerson and colleagues (Gilkerson and Kopel, 2005; Gilkerson and Ritzler, 2005) in Illinois. They describe the development and implementation of a relationship-based model for meeting the social-emotional and mental health needs of children and families using early childhood intervention services in Illinois. The model was based on the core principles of a relationship approach — centrality of all relationships, particularly parent/child relationship; attention to the social-emotional world of the child and the family; and the importance placed on the process of intervention. The emphasis on parallel process — how relationships affect relationships at all levels — was a central feature of this initiative which sought to build a relationship-based service system based upon the principle of parallel process. Thus, the project was designed with the awareness that each element of this multilayered process would shape the quality of activity in the next layer: the quality of relationships and collaboration in the planning committee would impact the quality of relationships and collaboration at the local early childhood intervention network level, which would impact the quality of relationships among providers and families, which would bring about changes in practice that ultimately affect children and families.

The core elements of the initiative included the addition of a social-emotional specialist for ongoing consultation and support, training in relationship-based early intervention, reflective consultation for leadership, reflective supervision for staff, and integrated provider work groups to support teaming and relationship-based practice. Evaluation results indicate that this is a cost-effective approach that produces positive changes in staff knowledge, practice, and role satisfaction, and increases the early identification of social-emotional concerns and provision of appropriate services. The Illinois Bureau of Early Intervention is funding the rollout of the pilot model across the state.

## Parallel processes as psychosocial fractals

If we accept the hypothesis of a cascade of parallel processes, then we might think of this phenomenon as being a kind of psychosocial fractal, analogous to fractals in mathematics and the real world (Mandelbrot, 1982). Fractals are intricately repeated shapes in which the parts resemble the whole across several levels of resolution. Many examples of fractal shapes appear in nature. An example given by Strogatz (2005) is Romanesque broccoli. The surface of this broccoli is exquisitely symmetrical, sporting dozens of knobbly florets, each a miniature version of the entire structure, and each built from even smaller copies of the whole. Other examples of fractals in nature include fern fronds and snow-flakes.

New evidence shows that many real-world network systems display this same kind of symmetry, just as if they were fractal shapes (Song, Havlin and Makse, 2005; Strogatz, 2005). This is what I am suggesting is occurring with parallel processes: no matter what level one examines - the micro-level of parent and infant, or the macro-level of government and citizenry - the same key features of relationships can be observed.

## CONCLUSIONS

What can we conclude from this review of relationships of various types?

- ***Relationships matter.*** Our relationships shape our development and functioning, whether they are the relationships with children, with families, with our colleagues, with our staff, or with communities.

- ***Relationships change brains.*** We are changed neurologically and neurochemically by relationships, and these changes may be for the better or for the worse.

- ***Relationships affect other relationships.*** Parallel processes operate at all levels of the chain of relationships and services, so that our capacity to relate to others is supported or undermined by the quality of our own support relationships.

  > *'You need to have an experience with someone first - then you can reproduce it.'* (Gerhardt, 2004)

- ***Relationships form a cascade of parallel processes.*** As a working hypothesis, I have proposed that relationships form a cascade of parallel processes from governments and societies through to parents and children. The evidence for such a phenomenon is strongest at the lower reaches of the cascade.

- ***Effective relationships at all levels share common characteristics.*** These include eight key characteristics: attunement / engagement, contingent responding, emotional communication, understanding one's own feelings, managing communication breakdowns, empowerment and strength-building, moderate stress / challenges, and building coherent narratives.

- ***Services and service systems should be relationship-based.*** This means that they should be based on a recognition of the importance of building positive relationships with families as well as between professionals, and an awareness of how these relationships flow through to other relationships, including that between parents and children.

- ***Practitioners should be trained in relationship-based practice.*** This includes training in the core helping skills necessary to building effective relationships with others, in the

family-centred practice skills needed to base services on family goals, and in the strength-based skills necessary to help parents develop new competencies.

- ***Relationship-based practice needs ongoing support.*** This support should include reflective supervision as well as support from social-emotional (mental health) specialists.

## POSTSCRIPT: Parallels with viticulture

There are two key features of Rob Gibson's viticultural practice that match the key features of relationship-based practice:

- close attunement to the state of the vines at each stage of development,
- keeping them in a state of moderate stress.

There are other features of Gibson's viticultural methods that I did not mention earlier that are relevant to work with children and families. He says there are four points in the annual growth cycle when vines are vulnerable to stress:

- The first critical irrigation period is during flowering: a stressed vine will shut down resulting in poor set fruit
- The second period is during 'varaison' – the time when the grapes change colour from green.
- Third, during the final ripening period vines must not be stressed: a loss of leaves at this stage will result in the grapes ripening by dehydration, creating a raisin 'cooked' flavour
- After vintage – whilst the leaves are still on the vine, a final watering assists in the full development of cane carbohydrates for the following vintage.

At each of these four points, the vines are vulnerable to stress, and the job of the good viticulturalist is to be particularly vigilant during such transitions so as to ensure that the vines are not over-stressed.

There is a direct parallel to work with young children and families. There are well-known transition points in the lives of young children and families when they are potentially subject to stress – these include becoming pregnant, the birth itself, establishing early patterns of care, commencing out-of-home care, commencing school. At each of these transition points, services need to be particularly vigilant and ready to provide extra support if there are signs of stress.

## NOTES

* Information about Rob Gibson's viticultural practices was taken from *Vintage Direct*, newsletter of Nick's Wine Merchants, August 2005.

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