Trauma responsive care model:
An Aotearoa New Zealand research informed practice model for residential group homes

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ABSTRACT

INTRODUCTION: This article presents a research-informed model of trauma responsive care for use in residential care practice social work settings with children and young people in Aotearoa New Zealand. The model was developed from a qualitative project which sought to address the research question "Does the quality of relationships with staff members have a positive impact on outcomes for children who reside in group home settings?"

METHODS: Using semi-structured, in-depth interviews, eight children were interviewed regarding their experience of relationships while living within supervised group homes (SGHs). In order to gain multiple perspectives on this topic, six biological parents and two legal guardians of children were interviewed and focus group discussions were held with staff members from three SGHs. Thematic analysis was used to identify key themes identified from the findings.

FINDINGS: Five dominant themes were identified from the children's and parent's interviews. The central theme was the importance of relationships; that relationship is the key when working with children who have experienced trauma. Children who have experienced trauma need to feel safe in the context of relationships and benefit from bottom-up interventions in order to heal from their traumatic experiences.

CONCLUSION: A research-informed model of trauma responsive care was constructed from study findings informed by two principal bodies of knowledge: (1) attachment theory; and (2) neuroscience. The resultant trauma responsive care model provides a framework of strategies for anyone working with children in residential care settings who have experienced trauma and/ or attachment difficulties.

KEYWORDS: Foster care; residential group homes; therapeutic model; trauma-informed practice; trauma responsive care; child-centred practice; attachment

This article presents a trauma-informed and relationship-based framework to help understand some of the challenging behaviours exhibited by children in foster care who have experienced trauma and who have attachment difficulties. "She is just attention-seeking"; "they are just naughty kids"; "they just need to learn consequences." These are phrases we commonly hear from well-meaning individuals when referring to challenging behaviours exhibited by children and young people who have

experienced trauma or who have attachment difficulties. Is it *just* attention-seeking behaviours or is there an underlying driver of the behaviour? What would happen if we started using a trauma-informed lens and re-framed "attention-seeking" behaviours as "connection-seeking"?

This qualitative research project was focused on hearing children's experiences while they lived in supervised group homes (SGHs) within Aotearoa New Zealand. SGHs are staffed residences that provide care for children who have high to intensive needs (Child, Youth and Family, 2010). The majority of these children have experienced trauma, abuse and neglect throughout their childhoods and, by the time they enter the group homes, they often have complex needs and challenging behavioural issues such as aggression and self-injury (Child Youth and Family, 2010). While completing this research project, I was working as a social worker within an SGH and was motivated to complete a piece of work that had the potential to facilitate positive outcomes for children in care.

Scholarly residential settings literature highlights that practice within this field is typically underpinned by behavioural approaches which aim to change or modify undesirable behaviour by altering its antecedent or consequence, or both. These behavioural approaches at times have an unintended effect of re-traumatising children and youth (American Association of Children's Residential Centers, 2014). Trauma literature, by contrast, claims that practitioners need to incorporate a more reflective approach in their practice, one that supports them to make sense of the child's behaviour by considering the reasons that might underlie their actions. A gap in this knowledge motivated the current study.

The lack of a child-centred and trauma-informed approach is not isolated to residential settings, and appears to have been an organisational-wide gap within Oranga Tamariki (formerly known as Child, Youth and Family), Aotearoa New Zealand's child protection agency. This knowledge gap was highlighted in both the interim report (Ministry of Social Development [MSD], 2015a) and the final report (MSD, 2015b) by an independent Expert Panel. The Expert Panel was established by the Minister for Social Development in April 2015 to oversee the development of the business case for modernising Child, Youth and Family.

The Children's Commissioner's State of Care report (Children's Commissioner, 2016) has emphasised the need for a consistent child-centred and trauma-informed approach within residential services. Given that most youth in residential settings have extensive histories of trauma exposure (Briggs et al., 2012), it is crucial that a trauma-informed approach is undertaken in our interventions. Caring for children with attachment difficulties and a history of trauma needs to be more than behaviour management. We need to have a deeper understanding of how early attachment experiences and early trauma have impacted on their current behaviour and with that lens of understanding, provide therapeutic strategies that can bring healing and restoration to children who have suffered trauma.

The trauma responsive care model is a research-informed practice model that I have developed, building on the current research findings, and located within the Aotearoa context. The model incorporates attachment-based and trauma-informed strategies for working with children who have experienced trauma. This article outlines the research undertaken and how the trauma responsive care model was developed as a framework from the research findings and the literature reviewed.

Methodology

The research question, as stated earlier, was: "Does the quality of relationships with staff members have a positive impact on outcomes for children who reside in group home settings?" A qualitative approach involving

semi-structured, in-depth interviews was undertaken. Eight children were asked about their experience of care and the importance of relationships while living in group homes. In order to gain multiple perspectives on this topic, eight parents or guardians of children were interviewed and focus group discussions were held with staff members from the three group homes. Using triangulation, multiple forms of evidence were gathered rather than relying on one source of data (Creswell & Miller, 2000).

Participants and sampling

The four-point sampling approach by Robinson (2014) was used in this research. The "target population" was three SGHs in Aotearoa New Zealand selected based on geographical distance. Children residing in the three SGHs, their parents or legal guardians and staff members who worked in the SGHs were the sample population.

The sample size of eight children and eight parents/guardians was decided on due to the number of children placed in the various homes. Staff members who worked within the three SGHs were approached to take part in focus group discussions. To ensure the information collected describes a range of possible experiences, a maximum variation method of sampling was utilised (Bryman, 2012).

Lastly, sourcing the sample and recruiting participants was the final step. Consistent with ethics approval, third party contact was made with all potential candidates. Three sets of participants comprising children, parents/guardians and staff members consented to take place in the study. No participants were approached until a written consent to participate was received from them.

Ethics approval

Ethical approval was sought and gained from the University of Otago Human Ethics Research Committee before any research

was carried out. Approval from the MSD Research Access Committee was also sought and approved in line with their requirement that any research project that involves clients and staff must be approved by them (MSD, n.d.). The ethical implications of interviewing children were addressed to ensure that research was carried out in an ethical and safe manner (Powell, 2011).

Data collection and analysis

Semi-structured interviews were used with the children, their parents/guardians and the focus groups with staff members. A list of interview questions was used. During the interview, an open-questioning technique where the precise nature of the questions was not determined but depended on the way the interview developed. Each interview lasted for approximately an hour and all interviews, including the focus group discussions, were audio recorded. Some examples of questions that were asked of the children were "Tell me about what it is like for you living here?; What is important to you living in this group home?; Who do you think cares about you while you are living here?; How do you know they care?; Describe a staff member that you like, why do you like him or her?"

Thematic analysis was utilised to find themes relevant to the research question (Braun & Clarke, 2006). Each interview and focus group interviews were transcribed verbatim and the data were then read and re-read to ensure thorough comprehension of the data (Bryman, 2012). Data analysis was completed manually with the use of Microsoft Access to categorise common themes.

Summary of findings

The five major themes from the children's and parent/guardian's interviews are summarised below:

Theme 1 How children enter and exit group homes: The children and parents/guardians talked about how they were admitted into

group homes and the impact of that process on them. Five out the eight children talked about not knowing anything about the SGH before shifting in:

> **Child**: *[I knew] absolutely nothing! I just knew it was in city X and knew it was a home. And I didn't even get to come down for a visit first and everyone else gets visits. I just got chucked in… Yeah and they told me I was going … in 3 weeks. It was the next day! My Social Worker rang me that night, oh no and said I was coming down tomorrow.*

> **Researcher**: *Yup, so you didn't get any notice.*

> **Child**: *Or sleep… It was horrible.*

Both children and parents voiced wanting to be involved in a clear transition plan to and from the group home. Children who were older wanted to develop more skills and independence to enable their smooth transition to adulthood.

Theme 2 Importance of relationships, having a secure base: Relationships formed the dominant theme that was identified across all interviews. All eight children talked about the importance of having trusted relationships with staff members. Children expressed that they liked staff members who were positive in their engagement and attitude, who showed the child they cared through their tone and actions and staff who modelled trust in the relationship.

> **Child:** *When a staff member was spending time getting to know me, listening and talking to me when I first arrived, took me shopping for my school books. I felt safe.*

Theme 3 Creating safety within relationships and the environment: During the interviews, children shared their experiences of living in the SGH environment. The children spoke about the rigid structure and rules in the group home and how punitive they found the points and levels system to be. The physical environment of the SGH was talked about and children expressed wanting a more relaxed atmosphere rather than having everything contained and locked.

> **Researcher:** *Okay, so I am really curious on the lock on the fridge, so when you are hungry what happens?*

> **Child:** *You just gotta go. We have set times of when we are allowed to eat which is normal times.*

> **Researcher:** *Yeah.*

> **Child:** *And we just have to go ask for staff to open the fridge or open the pantry.*

> **Researcher:** *How does that feel if you are hungry?*

> **Child:** *I reckon it's dumb.*

> **Researcher:** *Mmm okay. So if you could change that you wouldn't put a padlock?*

> **Child:** *No, it's like we are treated like not humans.*

Theme 4 Importance of family: All eight children interviewed mentioned how important family is to them and the importance of having regular contact (face-to face) with them and phone calls being an addition to that. One child who lived in a different city from her family discussed how difficult this was for her.

> **Child:** *It's crap. Horrible. Cause I have to watch other people walk out of the house with their family and I mean mum can't even come down because they can't fund for her. And it's difficult being in a different city to my family.*

Theme 5 Children want a voice: it was clear in the interviews that the children want to have a say in their plans and to be heard while residing in the SGH. They want to be included in setting goals for themselves.

> **Researcher:** *…so what would work well for you?*

> **Child**: *For me? Just like what we've been doing, the individual goals and stuff.*

Discussion

The findings presented in this article, show that children want to have a clear transition plan when they enter and exit group homes. The children also voiced the importance of a trusted relationship with staff members within the group home and wanting an environment that promotes a sense of safety. Contact with their family was also an important theme that was identified and, lastly, children wanted a voice and say over their plans and goal setting.

Figure 1 depicts the trauma responsive care model which is a diagrammatic representation of the findings from the research project and the literature reviewed.

Overview of model

Figure 1 depicts the trauma responsive care model. The wharenui (Māori meeting house) is first viewed from the marae ātea/courtyard. This represents how children enter and exit residential group homes. The marae ātea/courtyard is divided into three segments: pre-transition, transition and post-transition. This represents the phased transition that needs to occur when children enter and exit the SGHs.

The words "secure base" are at the base of the wharenui emphasising that our interventions with children need to be built on the foundations of attachment relationships. On the right amo (the vertical supports that hold up the ends of the maihi) there is an arrow pointing up with the words "brain development" illustrating how the brain develops upwards from the base. Within the wharenui, the four rectangles parallel the hierarchical development of the human brain which develops from the "brainstem" to the "cortex"; from the "bottom-up" and the "inside out." Each rectangle within the wharenui summarises key practice interventions based on the interviews from the children and parents/guardians and the literature reviewed.
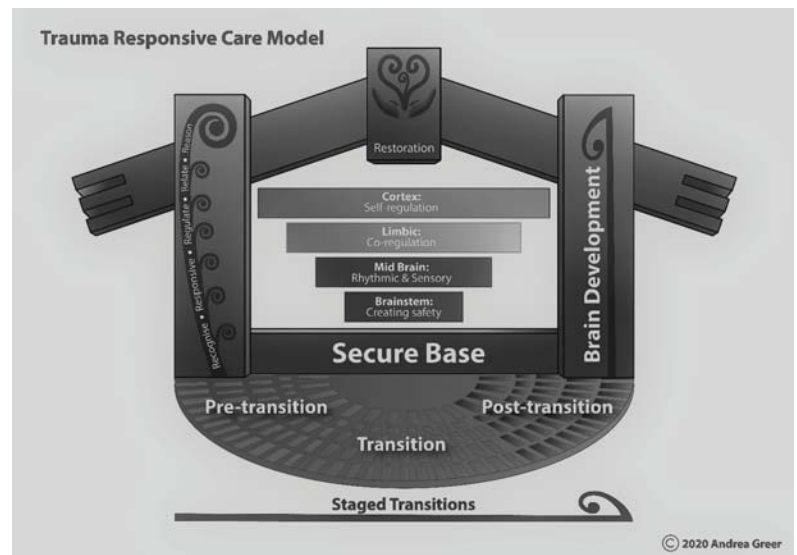

Figure 1. Trauma Responsive Care Model.

On the left amo are the words "Recognise, Responsive, Regulate, Relate and Reason," These 5Rs provide practice prompts for staff to implement bottom-up strategies when working with children who have experienced trauma. The journey of supporting a child begins with first recognising the effects of trauma (Substance Abuse and Mental Health Services Administration, 2014), then being responsive to their individual needs, followed by interventions completed in this specific order "regulate, relate, reason" (Perry, 2017, p. 6). The final "R" of the model is the word "Restoration" which is located on the koruru of the wharenui; it signifies that the entire trauma responsive care model is about bringing restoration to children's lives. We discuss each part of the model in further detail in the following sections.

Staged transitions

The model is first viewed from left to right at the marae ātea/courtyard area, where "the length of stay" of children residing in residential group homes starts from "pre-transition" moves to "transition", and finally to "post-transition". It is important that when children enter and exit group homes that this is done in a planned, staged and purposeful manner.

Children and parents expressed clearly in their interviews that they wanted pre-visits to the SGH before they were admitted. The children said that not having prior knowledge of the home and not having familiar relationships there was a fearful experience for them. Five out of eight children felt they did not have a choice about living at the group home and did not know anything about the home before they moved in. Children expressed that having a visit to the home before they shifted in and having a familiar face coming into a new environment would help their transition.

Transitions into new placements need to be child-centred rather than system-centred; allowing the child's needs to guide the process of transition rather than time frames which are depicted by the pressures of the system. The National Care Standards came into effect from July 1 2019 and mandate that the child or young person must be supported through transitions to ensure that their care transition needs are met (New Zealand Legislation, 2019).

From a neuroscience perspective, involving children in where they live and a pre-visit to their placement before they shift helps to create safety because familiarity with the physical environment will reduce the risk of the fear system within the brain being triggered (Streeck-Fischer & Van Der Kolk, 2000; Porges, 2004). A sense of safety increases the likelihood of placement stability and success.

Based on the interviews with the children and parents as well as the literature reviewed, it is recommended that children's admission to the SGH and care placements need to be a stepped process so they are given time and space to adjust to new people and the new environment. Before a child shifts into their placement, it is recommended that they visit the placement with a trusted adult. These visits to the placement could consist of settling-in activities that help a child to adapt and integrate into their new home environment

(Jones et al., 2016). These settling in strategies are a process rather than a one-time event and consist of providing something special to help a child feel valued and to promote a sense of belonging. Jones et al. (2016) discuss ways to help children settle in by integrating belongings into rooms, by accommodating food preferences, by being sensitive to individual needs, and by helping children internalise routines.

Creating a secure base: The foundation of the model

At the base of the wharenui are the words "secure base." One of the most important interventions that caregivers and staff can provide is a secure therapeutic relationship where children feel nurtured and safe (Geller & Porges, 2014). Providing a secure attachment relationship is crucial in trauma healing for children (Bowlby, 1988). Harder et al. (2012) recognises that the relationship between child and worker is an important factor contributing to positive outcomes for children in care.

All eight children interviewed in the research project talked about the importance of having a trusted relationship with a staff member. It made a huge difference to the children when they knew a staff member cared for them and had a connection to them. This is what attachment theory calls the *secure base*, where the primary caregiver provides a safe, nurturing and consistent relationship for the child (Graham, 2006).

At Seneca Center Residential Program, "the staff–client relationship and interaction is used as the treatment to promote self-regulation of emotion and behaviour" (Sprinson & Berrick, 2010, p. 6). Applying attachment theory and employing trauma-informed interventions will enable staff members and caregivers to develop a deeper understanding of the trauma experienced in the life of a child and the behaviours exhibited that could otherwise seem like "bad" or disturbing behaviours (Sprinson & Berrick, 2010, p. 21).

Children who have experienced trauma need to feel safe in the context of relationships (Szalavitz & Perry, 2011). Through repetition and consistency, children learn that they are safe and would not be abused (Ziegler, 1994). We have an opportunity to re-work their internal working model of themselves and re-wire their brains through positive relationship experiences (Ziegler, 1994). Through experiencing nurturing, safe, responsive and sensitive relationships, children begin to see the world as a place of safety, learning and exploration (Golding, 2008). Relationships were the most mentioned theme in the interviews with the children and, for any intervention to be successful, we need to start off with creating a secure base as the foundation of the model.

The vertical part of model: healing trauma using bottom-up approaches

The next part of the model is vertical which parallels how the brain develops from birth; from the brain-stem to the cortex, from the bottom up. The brain develops sequentially at birth from the brainstem to the diencephalon (midbrain), to the limbic system and to the cortex; from the "bottom" up and the "inside out" (Perry, 2010). The brain is also organised in a "hierarchical fashion" (Perry, 2006, p. 30).

Toxic stress caused by trauma, neglect or maltreatment in childhood and infancy causes structural and functional changes to the brain (De Bellis, 2005). However, therapeutic interventions can help to heal traumatised brains through using bottom-up approaches; from the brainstem up to the cortex (Van Der Kolk, 2014). Perry has come up with 3Rs "regulate, relate, reason" that need to be completed in this specific order for it to be effective (Perry, 2020). If a person is not regulated (feeling emotionally and physically settled), he/she will not be able to relate through feeling connected and comfortable (Perry, 2020). Until a person can relate to another, they will not have the ability to engage their cognitive reasoning and problem-solving skills (Perry, 2020).

Healing trauma starting from the brainstem: creating safety

We begin with the brainstem as it is the first area of the brain to develop from conception. The brainstem is known as the "survival brain" because it controls the autonomic functions necessary for life, like breathing, heart rate, blood pressure, appetite and sleep (Perry, 2005). This is the most primitive part of the brain that is already "online" when we are born and is also known as the reptilian brain (Van Der Kolk, 2014). A baby is born dependent on another human being to meet its basic survival needs for example, feeding, protection from danger, comforting while distressed and to be looked after when ill (Howe, 2005). Relationships are key to our survival (Szalavitz & Perry, 2011).

The survival brain as it is designed to detect threats in the environment. Through sensory input, the brain can choose a "fight", "flight" or "freeze" response (Van Der Kolk, 2002). Children who are exposed to continuing threats in their environment become hyper-vigilant to threats in their environment (Ziegler, 1994). The result is that traumatised children become "brainstem driven" (Perry, 2006) by adopting different styles of adaptation to threats. The response of a traumatised child perceiving a threat in the environment is fear. The fearful child is often misunderstood as being oppositional, defiant or exhibiting controlling behaviours (Perry, 1997). Ironically, the main aim of the child at this point is to achieve the neuroception of safety, a subconcious quest for safety (Porges, 2004).

In order for traumatised children to regulate their stress response, they need to re-experience the caregiving relationship as a source of safety (Howe, 2005). Zelechoski et al. (2013) argue that non-clinical programme staff in residential homes are part of the treatment process because they facilitate and model safe, healthy and appropriate relationships for traumatised children.

Children in a state of alarm or fear pay more attention to non-verbal cues such as tone,

facial expression and body language (Howe, 2005). It was evident from the interviews with children and parents that these non-verbal cues that staff displayed were very important to them. Children and parents expressed that they liked staff members who were positive in their engagement and attitude, staff members they liked were "warm and friendly", "respectful", "tone of voice is friendly" and staff who had a "nice attitude". Children spoke fondly of staff members who modelled trust in the relationship, were attentive to their feelings, listened and engaged well with them. The open and engaged stance is crucial for a strong therapeutic relationship because "without openness there can be no real trust and connection" (Hughes & Baylin, 2012, p. 104).

On the other hand, children made it clear which staff they disliked. Children described these staff members as those who had a negative or grumpy tone, those who failed to listen and attend to the child's emotions and those whom the children felt were unfair. Porges (2004) discusses the impact that non-verbal cues such as a flat facial affect, lack of inflection in tone of voice and rigid muscles of the face can activate the neuroception of danger and cues of life threat. Adult interaction with children is the best form of intervention because they model to the children how to regulate their emotions by being calm and in control of their behaviours and reactions (Sprinson & Berrick, 2010).

Healing trauma, the midbrain: rhythmic and sensory activities

The second part of the brain to develop is the midbrain which controls sensory integration and how our brain integrates our senses from the environment (Forbes, 2012). As this primary sensory input first comes into the brain stem and midbrain, it is matched against previous experiences and if it is associated with a previous threat, the brain will activate a set of responses to ensure survival (Child Trauma Academy, 2004). There is good evidence that early

abuse and neglect significantly affect the part of the brain that processes sensory input which makes children with such histories vulnerable to misinterpreting sensory input as danger and threat (Van Der Kolk, 2002).

When caring for children who have experienced trauma, it is important to create an environment that sends messages of *safety* rather than fear or control. The children talked about how they perceived the SGH environment in their interviews. Overall, children felt their physical needs were well provided for: things like meals and a bed. However, children expressed that they were struggling with the rigid environment of the home where everything was locked and expressed wanting more normality and a more relaxed, family-like environment.

Physical environments convey powerful symbolic and concrete messages (American Association of Children's Residential Centers, 2014). The "home environment which is warm and inviting, comfortably appointed, and adorned with age developmentally, and culturally appropriate accoutrements convey a sense of belonging and worth to the inhabitants. This includes the living environment and offices, waiting rooms, and general areas" (American Association of Children's Residential Centers, 2014, p. 100). It is crucial to take into consideration locks, barriers and feelings of confinement which may convey a message of power and control instead of helping children feel a sense of safety and security (American Association of Children's Residential Centers, 2014). In order to help create a therapeutic milieu, a place where children feel a sense of belonging, feel at home and safe, it is important that the physical environment is inviting, warm and child friendly. Examples of this would be providing cushions and bean bags for living areas, child-friendly photos, art work on the walls, allowing children to decorate their room with personal belongings and photos and even having soft toys available for children. An environment which is warm and inviting signals to the somatosensory

system and the lower parts of the brain that they are in a safe place.

As mentioned, children who have experienced maltreatment and neglect often have sensory processing difficulties because they have missed out on behavioural, cognitive and social experiences at key times during their development (Hambrick et al., 2019). It is important to understand each child's unique sensory system and how they respond to stimulation in the environment. Children's sensory processing deficits can often be misinterpreted as misbehaviour due to a lack of understanding (Forbes, 2012).

It is recommended that staff or caregivers understand each child's unique sensory needs and develop individualised sensory-based interventions (McGreevy & Boland, 2020) with the support of an occupational therapist. Understanding what sensory activities help children when they are dysregulated is vital. (Champagne, 2006). Examples of calming activities could be a warm bath, looking at a lava lamp, or smelling lavender. Another idea is to create individualised sensory toolboxes for children where they can select different items from the sensory box to help them regulate their senses (Champagne, 2003). Creating a room designated as a sensory space where children have access to items that help promote the regulation of their nervous system is also recommended (Champagne, 2006).

Perry (2006) identified the effect of abuse on the growing brain and highlighted the use of sensory experience and creative therapies in healing. One child expressed in her interview wanting practitioners to provide support for children to calm down when in a state of distress. Repetitive motor movement is a way practitioners can support children regulate their state of arousal. Patterned, rhythmic, and repetitive movements settle the brain and activate the vestibular system (Forbes, 2012). Examples of ways to provide rhythmic repetitive movement are using a rocking chair, sitting on a swing/hammock or bouncing on a swiss ball. These rhythmic and repetitive movements are calming to the lower parts of the brain.

Healing trauma, the limbic system: co-regulation

The third part of the model is the limbic system. This is also known as the "emotional or social brain" as it controls attachment and our ability to relate to others (Ziegler, 2002). Attachment determines survival early in life and our ability to form meaningful relationships later in life (Ziegler, 2002). The first key attachment relationship formed is with our biological parent or primary caregiver (Bowlby, 1988). Positive parental co-regulation experiences that occur within the context of a parent–child relationship supports the development of self-regulation skills (Herbers et al., 2014).

Newborn babies are unable to regulate their own arousal (Howe, 2005). They need an external regulator, a caring parent that helps them to regulate their arousal when they are stressed (Schore, 2011) by providing soothing and calming activities such as rocking, singing, making soothing noises and comforting touch. An external regulator calming a baby down is known as co-regulation. The experience of a caregiver soothing the infant successfully teaches the infant how to manage their emotions and eventually as they grow older, they learn to self-regulate their emotions (Golding, 2008).

Co-regulation is done by adults modelling how to be calm through words and actions (Perry, 2011). We can teach children how to self-regulate by providing them with co-regulation first. When we are calm, we can regulate the children we work with and help them to calm down. When our young people are distressed, it is about tuning into their emotions, and modelling being calm in our tone of voice and body language.

In interviews with children and their birth parents, all children and seven out of eight parents talked about how important family contact is to them emphasising the

importance of having regular face-to-face contact as well as additional phone calls. Children expressed wanting quality time with their biological parents, what Herbers et al. (2014) call positive parental co-regulation experiences.

The importance of contact with family was also a dominant theme that emerged in Atwool's (2010) interviews with 47 children and young people in care. Research on children's perspectives on contact with birth families highlights that children want contact with their family, particularly their mother and siblings and this desire for contact does not decrease over time (Munro, 2001). It emerged in the interviews that many children do not give up hope of returning to live with their biological family (Wilson & Sinclair, 2004).

The literature suggests it is important that no rule of thumb be applied when making decisions as to whether children have contact with birth parents (Atwool, 2013). A consistent message that has come through the research and the findings is that contact with the birth family is important and that children want to be consulted about this (Atwool, 2013). The importance of family came through in all interviews, and when the children were asked the question "Who do you think cares for you?" All eight children said "family."

Healing trauma, the cortex: self-regulation

The final part of the model is the cortex, the highly developed part of the human brain and responsible for higher executive functions and self-regulation skills (Howe, 2008).

The points and levels system is a behaviour change model that utilises concepts of the token economy system based on principles of operant conditioning (Bailey et al., 2011). The aim of a token economy system is to increase positive behaviours and decrease misbehaviours by allowing children to access privileges when they perform desirable

behaviours (Spiegler & Guevermont, 2003). The points and level system was being used across the SGHs at the time that the interviews were conducted.

Children expressed in their interviews that the points and levels system did not feel normal and did not allow them to be themselves. One child described it as feeling like a bribe and another child said it was too difficult to attain level three, the highest level in the system, so they had all given up. On the points and levels system, when children drop down to level one, they had to wait eight days before they could redeem privileges and rewards. Eight days felt like a long time to the children.

Incentive systems like the points and rewards system rely heavily on executive functions of the prefrontal cortex (Warner et al., 2013). Six out of eight children interviewed expressed frustration and dislike toward the points and levels system at the SGH. Spiegler and Guevermont (2003) discuss "response cost" to be a punitive consequence. Response cost refers to the removal of some specified amount of reinforcer following undesired behaviour (Mohr et al., 2009). Within the points and levels system, children receive a loss of points and are possibly demoted to a lower level if they are engaging in overt, undesired behaviours (Mohr et al., 2009). Staff members verbalising to a child "acting out" that they are losing points can often aggravate their behaviour (Mohr et al., 2009).

From a neuroscience perspective, if a child is operating from their lower brain regions, telling a child or reasoning with them that they are losing points is an ineffective behaviour management strategy. Behaviour change models presume the cortex can deal with the emotional limbic system and other lower brain regions (Howe, 2005). In fact, trying to reason with a child while they are experiencing arousal and threat will only increase their danger cues of flight, fight and freeze modes (Porges, 2004). While behavioural approaches may benefit some

children, it is important to bear in mind that children who are extremely dysregulated may not benefit from this top-down approach (Mackinnon, 2012).

The points and levels system will work well for children who are functioning at their chronological age. However, it is important to remember that the population of children within foster care and residential settings are rarely functioning developmentally at their normal age-range. Children who have been raised in chaotic, neglectful, relationally deprived and cognitively impoverished environments will develop key functional capabilities at a much slower rate (De Bellis, 2005). Therefore, when working with children, we need to have developmentally appropriate treatment plans that are individualised to their specific needs (Mohr et al., 2009). As Perry (2006) highlights, it is "stage not age." We should be targeting programmes to suit children's developmental stages, not their chronological age. This is a complete mind-set shift for professionals and caregivers working with children within foster care.

Even though children expressed frustration at the points system during their interviews, they still saw the importance of setting goals. All eight children talked about the theme of goal setting during their interviews and preferred to have individual goals rather than a one-size-fits-all points and levels system (Bailey et al., 2011).

Conclusion

The results of interviewing children in the SGHs underscores that relationships must be at the core of our work with children for interventions to be effective. The trauma responsive care model provides a framework of interventions when working with children who have experienced trauma. Healing the emotional pain of the past needs to be done through providing a secure base and reflectively consider how children's experiences are affecting them currently. Interventions need to be

bottom-up approaches and grounded on principles of attachment theory and neurodevelopment. Children in care need to experience relationships around them with unconditional care, compassion and commitment which will help to re-work their internal working models of themselves and the world around them. I conclude with a quote from Perry: "The more healthy relationships a child has, the more likely they will be to recover from trauma and thrive. Relationships are the agents of change and the most powerful therapy is human love" (Perry, 2006, p. 230).

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