plays a role in generating unique or novel responses and a range of studies has found that cognitive flexibility is a consistent deficit in children with autism.

"There is no fixed neuropsychological profile for disorders on the autistic spectrum..."

Planning abilities have also been highlighted as an executive dysfunction in children with autism (Hill, 2004). Hill suggested that planning requires an individual to create a plan of action for a task while simultaneously self-monitoring and maintaining that plan to ensure it is being executed. Hill also suggested that planning involves the ability to re-evaluate and update one's actions. Rumsey et al (1988) found deficits in planning and organisation on the Rey-Osterrieth Complex Figure test despite children showing an adequate ability to copy its component parts. Booth et al (2003) also used a drawing task to measure planning ability and found that children with autism tended to show both a detail-focused drawing style and planning deficits. Similarly, Ozonoff et al. (1991) administered two measures of planning - the Wisconsin Card Sorting Test (WCST; Berg, 1948) and the Tower Test (Boyrs et al, 1982). In this study 96% of the participants with autism were found to have executive functioning deficits compared with the control group. In particular, a lack of efficiency and poor planning were found.

Conclusions

There appears to be no doubt that children with autism present with a range of cognitive deficits. All facets of cognitive functioning have been found to be involved including memory, attention, intellectual ability and executive functioning. However, the research shows that there is no fixed neuropsychological profile for disorders on the autistic spectrum. Therefore, while the diagnostic requirements are fixed it is clear that each child's pattern of cognitive deficits is not. As a result, the only thing one can say with certainty is that each child with autism will likely have some form or a pattern of cognitive deficits. Exactly what that pattern or profile of deficits looks like will require further investigation.

Please visit www.schoolink.chw.edu.au for the references to this article.

neuroscience of caregiving: a seminar with Dr Daniel Hughes...

By Anders Hansson, Statewide Behaviour Intervention Service



Dan Hughes is a clinical psychologist from Pennsylvania. United States, who has been a pioneer in using attachment and neuroscience resourcing adaptive and positive connections between traumatised children and

their parents or caregivers. His approach is family centred and offers very practical strategies for a wide range of professionals who work with vulnerable children and their relationship contexts. The principles of his approach apply to any context where social engagement is desired.

Dan's seminar was organised by the *Australian Childhood Foundation* and was held at Sydney Convention Centre in Darling Harbour. I think most would agree with me when I say the event was exceptionally worthwhile and stimulating.

The first day focused on the brain in relation to the development of secure attachment relationships and how developmental trauma or chronic stress can interfere with this development. We learned that this can result in the affected person living in fear, distrusting others and being defensive rather than being socially engaged in their relationships. This can be devastating, with persistent feelings of shame and low selfworth stifling the person's ability to live their life as they would like.

The good news is that Dan's therapeutic approach, which focuses on the whole family, provides hope for breaking this pattern. The approach provides the person and their attachment figures (e.g. parents, carers, teachers, partners, therapist) with a therapeutic framework that promotes playfulness, acceptance, curiosity and empathy in their relationships.

Dan refers to this as PACE (Playfulness, Acceptance, Curiosity, Empathy), A playful stance provides a sense of safety from which the child can re-engage with the world and most importantly with their attachment figures. Acceptance refers to being able to engage non-judgementally with the person and accepting their subjective experience. This encourages a sense of trust and respect within the relationship.

A sense of curiosity within the PACE therapeutic model is vital to enable the exploration of presenting and emerging themes and introducing new meanings to the narrative for the person and their attachment figure/s.

The last "ingredient" of PACE – empathy – is required to enable the attachment figure to "empathise with" the person and allow the person to experience this.

This *intersubjective* experience is considered the central agent of change (Hughes, 2007).

On the second day, Dan explored the PACE therapeutic model further and shared his therapeutic experiences anecdotally using several video clips of PACE in action. This was invaluable and definitely the highlight of two wonderful days of professional development.

Dan is the author and co-author of several excellent books on the use of a brain-based attachment approach in therapy, parenting and relating, including

Hughes, D. A. (2006). Building the Bonds of Attachment: Awakening Love in Deeply Troubled Children. NJ: Jason Aronson Inc.

Hughes, D. A. (2007). Attachment-Focused Family Therapy. NY: W. W. Norton & Co.

Hughes, D. A. (2009). Principles of Attachment-Focused Parenting: Effective Ways to Care for Children. NY: W. W. Norton & Co.

Hughes, D. A. (2011). Attachment-Focused Family Therapy Workbook. NY: W. W. Norton & Co.

Hughes, D. A. & Baylin, J. (2012). Brain-Based Parenting: The Neuroscience of Caregiving for Healthy Attachment. NY: W. W. Norton & Co.

For more information about Dan and resources visit www.danielhughes.org.

Anders is a Senior Clinical Consultant with the Statewide Behaviour Intervention Service, which is part of the Clinical Innovation & Governance Directorate, ADHC, NSW Department of Family and Community Services.

The Regents of the University of California. (2013). Picture of Dan Hughes, retrieved September 9 from https://

www.uclaextension.edu/attachment/ Pages/Gallery/hughes.jpg