## Art Therapy Online: ATOL

Hass-Cohen, N & Carr, R (2008) Art Therapy and Clinical Neuroscience. London and Philadelphia. Jessica Kingsley Publishers.

**Book Review: Frances O'Brien** 

I was excited when this book arrived for me to review. At last, I thought, a book that will increase art therapists clinical credence, scientifically researched evidence to give us knowledge and skills to underpin our understanding. My interest in clinical neuroscience spans many years, and I use this understanding to conceptualise meaning in the sometimes difficult to understand communications that the client/patient brings to the therapy room. On reading, I discover the various chapters give detailed theoretical understanding of brain regions, how neural pathways grow and connect, and how we might use this understanding to help our art therapy patients.

The book has an impressive cover, a vividly coloured figure, made from soft organic shapes and fMRI scans, collaged together and placed onto a shining black ground. There is a richness of research and the wealth of diagrams and tables explain the complex science that is explored. It is edited by Noah Hass-Cohen and Richard Carr and includes chapters from fifteen authors, most of whom are artists or musicians as well as art therapists and academics.

Although it is intellectually challenging to incorporate so much research into a digestible discourse that we can translate into working practice, it is certainly worth pursuing, as there is much that is helpful. However, it is a book perhaps not to be read from cover to cover, but rather one to savour in smaller

portions, following clinical need so that sense can be made of the psychological difficulties our patients bring.

The book is divided into three sections, the first part being devoted to disseminating neurobiology research, with useful diagrams of brain areas and complex descriptions of how brain function, structure and connectedness develop through genetic information and environmental influence. This section is referred to as the "Framework"; and is logically laid out.

While Hass-Cohen's introduction to neurobiology is written at depth and complexity, she writes with clarity to help the reader stay with concepts that may be unfamiliar. The art activity and purposefulness of art making in the presence of a relational other is linked with an understanding of neurobiological research in a meaningful way. A stated aim is that "the therapeutic goals of interpersonal neurobiology are to recruit the other's mind in order to increase flexible, adaptive, coherent, energized and stable states of mind" (p.36). Noah Hass-Cohen describes how clinical neuroscience reveals "the dynamic interplay of the nervous system, particularly the brain, with a persons environment" (p21). She describes the art process as "an expression of how the self organizes internally as well as in relationship with others. It is a visual reiteration of the interplay between the person and their environment". This places the art therapy process in a unique position as the patient finds both concrete and symbolic language to describe their internal world and their lived environment. The expression of mind body connectivity is facilitated by art therapy, and clients positive feelings associated with creating of a piece of art become generalised in the outside world.

Richard Carr is co-editor and describes the way in which the world is sensed, both consciously and unconsciously. The thalamus, the "sensory gateway from the body and brainstem to higher brain centres, spreads its information over large areas of the cortex" (p47). Carr reminds us "sensory art therapy practices stimulate thalamic connections to and from cortical and sub cortical brain regions" (p50), thus placing the art process in a position to regulate affect and to fuel neural connections. Chapters devoted to the Cortex,

Neurotransmitters and the Visual system follow. For the reader with less medical knowledge there can be a daunting quantity of information, but with perseverance the chapters offer a fascinating and informative journey into the working of the brain and how it evolved through the ages.

The second part of the book highlights "Ideas", with chapters describing Relatedness and Attachment, ADHD, Memory and Art and Gender Differences. These chapters; similarly to the preceding ones are clear with diagrams and tables to help the reader. Showing how theory might be put into practice the authors use their own artwork, or images from role-play to explore theory. This section helps the reader move from theory to practice.

Kathy Kravits describes the neurobiology of relatedness and she elucidates developmental milestones. Relationship to the infant by parents or carers is at the core of attachment and affect regulation. The brain (and through that I understand the development of mind) is largely built on attachment and relating. "A significant environmental factor critical to adaptive development appears to be the quality of the relationship between the infant and the caregiver" (p131). Secure attachment promotes neural growth and myelination of pathways, while insecure attachment inhibits connectedness. The author emphasises how "attachment forms and is re-formed during relatedness" (p144); we can understand this as therapeutic relatedness as well as parental.

Deficits in attentional functioning seen in ADHD, with difficulties associated with sensory processing, frontal cortex functioning, limbic deficits and psychosocial challenges are outlined (Darryl Christian p148). Art therapy treatment directed towards "activating attention through training, repetition, control, and coordination" (p151) is explained, manipulating materials and carrying through a process to create an artwork encourages a more top down than bottom up way for the brain to work and this may be carried into other areas of daily life.

The last part is called "In Praxis" and is concerned with the practical application of theory. Within this section are case examples to show how the art therapy process helped clients and the outcome attained. Each chapter is a touching story of patient(s) seeking mastery and connectedness. Diagnosis such as Immunity Risk, PTSD, Alzheimer's and AIDS are covered. Pictures of artwork produced are included, some formed from directives from the therapist, some self-directed by the client.

The last chapter is called CREATE in which Noah Hass-Cohen describes how she has brought neuroscience into her work as a relational art therapist. Through using this model she promotes mental health and states, "art therapy experiences contribute to integrating both the mentalizing and empathic capacities necessary for the emergent relational self" (p305). This must surely be a desirable outcome for patients.

The wide-ranging glossary included at the end gives useful definitions of the hard to understand terminology that is necessarily part of any comprehensive overview of the research into clinical neurobiology, and each chapter has a full list of references, giving access to further recent research. All contributors link their understanding of neurobiology to the process of art making, making this book a legitimate part of the art therapy milieu.

I found Art Therapy and Clinical Neuroscience to be a well researched and thought provoking book. It covers a wide range of clinical need including mental and physical health for both children and adults and brings together the disciplines in a meaningful way. It will be a valuable resource in many departments of art therapy and in addition, helpful to clinicians from related disciplines. The science provided might be indicated in helping to make evidence available to service providers, to inform them about the efficacy of art therapy strengthened by neuroscience.

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