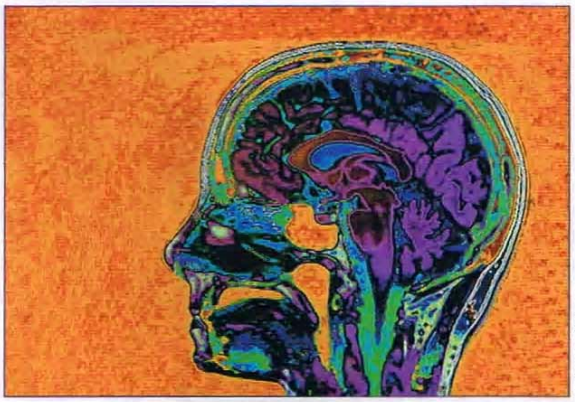
Sensory processing disorder in mental health

A multidisciplinary team from Cornwall Partnership NHS Trust describe the work being undertaken on a programme of work to help clients develop self-regulation skills, through a combination of cognitive behaviour therapy and sensory integration



The 1990s were declared the 'Decade of the Brain' in the US. With financial support from the US government there was an explosion in brain related research, including the development of sophisticated tools to non-invasively map, measure and explore the brain.

It has been recognised now that many psychiatric disorders have biological origins, including depression and schizophrenia. These developments in neuroscience add evidence to the theory of sensory integration as developed by A Jean Ayres more than 30 years ago.

They add credibility to sensory integration as a therapy with a growing scientific evidence base. There is now a worldwide (*www.ot-innovations.com*) growing interest towards this convergence of neuroscience and therapy for adults with attachment and mental health difficulties.

Clients who have difficulty modulating and regulating sensory information find it difficult to effectively use traditional 'talking therapies', such as counselling and cognitive behavioural strategies (including brief solution focused therapy, anxiety management and relaxation training), which are typically provided on acute mental health inpatient units.

OTs draw on many different theoretical frames of references – some specific to OT and others more generic. In Cornwall, OTs working in the acute mental health units (MHU) using dialectical behaviour therapy (DBT), realised some clients were unable to respond to traditional 'talking' therapies and postulated that this was because the clients had unmet sensory needs.

These clients were often described by the multidisciplinary teams as 'difficult to manage'. They were considered 'at risk', therefore substantial and expensive packages of care, including numerous and lengthy inpatient stays or out of county placements, were sought for them. The OTs used a combination of cognitive behaviour therapy and the theory and practice of aspects of sensory integration to enable clients to develop self-regulation skills.

The result has been an improvement in health, wellbeing and social engagement skills, with an increased ability to benefit from meaningful occupation, including education, employment and leisure/recreational activities. For some clients this also included increased capability to be a parent and engage in family life.

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These psycho-developmental approaches bring together cognitive therapy methods and sensory integration theory. This helps clients become 'talking therapy ready'. It is considered to be 'pre-cognitive' work and follows a developmental sequence of learning – starting with sensory skills that underpin development of sensory-motor, perceptual-motor and emotion regulation skills.

Relaxing space: the sensory room at Longreach House, Cornwall

Sensory equipment – Be SMaRT™ sensory programme

These can be considered to be the building blocks of higher order functioning, including cognitive processing, behaviour and communication. When capacity for sensory integration and or sensory processing is interrupted, higher order functioning is impacted. This then typically presents as difficulties in carrying out activities of daily living, and problematic patterns of communication, often presenting as social withdrawal (agoraphobia) or behaviours that socially isolate the individual, for example self-harm or alcohol abuse.

This novel approach, now called the Be SMaRT™ (Sensory Modulation and Regulation Therapy) Programme, offers an alternative strategy to increasing self management for clients with mental health difficulties who are distressed, angry, disorganised or are engaging in self harm behaviours; in other words having difficulty modulating and regulating incoming sensory information.

The Be SMaRT™ programme assessment phase accurately predicts how clients will respond at a physiological and neuro-psychological level to specific 'sensory integration' strategies. The assessment requires clients to self select activities they enjoy. This allows therapists to predict which sensory interventions, including alternative therapies, will be effective at raising or decreasing arousal levels, it enables clients to experience rapid success at managing difficult sensations/emotions, and promotes continued engagement.

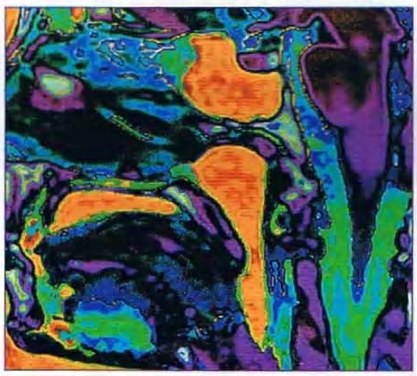
It allows therapists to provide 'just the right challenges' in order to facilitate self organisation and integration, and promotes enhanced participation in daily life and occupation, such as self care, leisure, social activities and work.

The Be SMaRT™ profile supports and empowers clients and their carers to take responsibility for making informed choices about care, thus creating pathways that allow hospitalised service users to be able to return home swiftly. It also facilitates greater social integration into their own community. It helps reframe behaviours, helping clients, their family, their friends and staff to understand better the reasons a client may have had in the past in struggling to self regulate.

The entire programme provides a framework within which learning and integration of new skills can be supported to occur. The local nursing staff are now able to actively support clients to use helpful sensory self-regulation strategies, including 'self soothe' boxes and bags and/or motivate/alerting equipment to either increase or decrease arousal levels.

Other opportunities for clients, available as part of this therapy approach, include active sensory exercise in the gym, sensory complimentary therapies, sensory craft work, sensory housework, gardening and sensory baking.

An audit of the approach in 2003 showed the measurable changes included decreased self-harm behaviour, and use of illegal substances, alcohol and reliance on tranquilising medication. Clients demonstrated improved interpersonal skills, ability to manage distress, engagement with therapy, and the ability to engage in social, learning and work opportunities.



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This meant reduced crisis admissions and length and frequency of inpatient stays, a reduction in human resources required to effectively manage these clients in ward settings, reduced use of control and restraint and reduced use of enhanced observations.

Clients report feeling in more in control, are not as easily overwhelmed and dissociated during regular therapy sessions, better understand and use personal space and are able to more effectively deal with fluctuating levels of arousal.

This approach is being expanded locally across mental health services in Cornwall. It has been presented nationally at a variety of forums, including the National Institute for Mental Health England (NIMHE) and the Association of Occupational Therapists in Mental Health (AOTMH). We hope to extend this and are currently working with SI Network UK to develop the sensory integration in mental health course. This may become a regular course provided by SI Network on an annual basis.

Funding has been received to do a small research study – 'An investigative approach towards an increased prevalence of neurodevelopmental disorders in borderline personality disorder diagnosed clients'. The research team is multidisciplinary and comprises psychiatrists, OTs, a psychologist, a specialist nurse and service users. The team is currently seeking funding for a wider study into the effectiveness of sensory modulation and regulation therapy in mental health.

Service users are working with the team to develop adult appropriate sensory resources, especially those suitable for use in secure and intensive care mental health settings. This includes the Be SMaRT™ Cart (finalist in the 2005 Medical Futures Innovation Award) and the Be SMaRT™ profile – an advanced directive to support service user choice in care, with a view to promoting use of sensory strategies as a way to managing distress and support 'de-escalation'.

Service users are also involved in the development of this therapy further. They are currently liaising to develop a Be SMaRT™ self help group and a website.

Professor Stephen Brown, Dr Rohit Shankar, Kathryn Smith, Angie Turner and Tamsin Wyndham-Smith are all currently employed by Cornwall Partnership NHS Trust. For further information contact Kathryn Smith on tel: 01209 881877/881820 or email: Email: *Kathryn.Smith@cpt.cornwall.nhs.uk*

This research links closely to an article submitted to the Royal College of Psychiatry Bulletin by Professor Stephen Brown, Dr Rohit Shankar and Kathryn Smith entitled *Role of sensory processing in borderline personality disorder and other biological aspects.*