

Nothing about me without me

Object Permanence, Interoception and Theory of Mind

This resource is designed to support the Object Permanence, Interoception and Theory of Mind poster.

The autism spectrum and delayed object permanence: not a theory of mind issue

Autistic individuals may exhibit behaviours that appear challenging and unreasonable to outside observers. At times such behaviours have been linked to a lack of empathy, to being difficult and to not appreciating concepts associated with **theory of mind** (knowing others have their own thoughts, feelings and ideas that may be different to one's own).

Many autistic individuals find it difficult to maintain eye contact, identify emotions of self or others and struggle to generalise various concepts (yours, mine, then, later and so on). This inability to attend to several things simultaneously has been misinterpreted as poor theory of mind.

Interoception¹ (the conscious connection to what's happening inside ourselves, eg our heart rate, feelings of hunger, thirst, needing to empty our bladder, anger, whether we are hot, cold and so on) is also required for the cognitive development of **object permanence** (knowing an object/person/place continues to exist even when you cannot see it). Without interoception it's much harder to regulate emotions, and connect to the bigger picture that tells us what we or others might need.

Interoception and object permanence require individuals to attend to multiple stimuli. For autistics this is difficult. In regards to object permanence, whether the object is in view or hidden from view, autistic individuals may discern details but not the wider context. (eg two autistic students might know their drink bottles are in their lunch bag, even when they can't see them, BUT, they don't seem to know that Mummy is still there, just not within their view). How is it they know one concept, but not the other?

For object permanence and interoception to develop individuals must make connections and 'notice' what is happening within their body as well as outside of themselves. It is thought that autism, due to a lack of "big picture" thinking which requires a full range of cognitive and sensorimotor skills to work synchronously within the brain, makes it very difficult to notice things inside and outside of themselves at the same time. This is a barrier for individuals to determine, "where/how am I?" and "where is it?" especially in regards to object permanence, interoception and generalisation.

¹ <https://www.education.sa.gov.au/doc/interoception-101>

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Neuroplasticity describes the way to change an individual's cognitive skills through intentionally changing the brain by creating new neural connections².

Intentional change occurs through repeated exposure to novel/new tasks that strengthen neural connections involved in a range of cognitive processes such as; visual, auditory, and speed processing, short-term and long-term memory, attention, logic and reasoning. However, for learning to take place the individual must be "attending". Whatever is most interesting for the individual will win their single point of focus/attention³. This single focus is a useful strategy; if the individual is most interested in a Disney princess doll, then the Disney princess doll must be incorporated into the novel task in order to capture the individual's interest and attention, enabling them to learn a novel/new task or skill. Disney characters, Lego models, video games (such as SIMMS video games), comic strip stories based upon super heroes, dinosaurs, role playing, etc. are all ideal motivators that can be used to initiate interest across the broader concepts of object permanence, if within an individual's existing passion.

Being able to grasp why some behaviour is so challenging, what causes this and how to remedy it, is vitally important. Being able to understand connections to interoception and object permanence in autistics builds confidence in these individuals, their families, carers, teachers and clinicians. It is a myth that autistics lack empathy. Exploring ways and means to build concepts, which relieve fear and anxiety in autistic individuals, changes lives for the better. Appreciating the differences between a fully developed sense of interoception and of object permanence when compared to theory of mind issues, not only changes perceptions but enables appropriate support.

² <http://www.lifescienceglobal.com/pms/index.php/jiddt/article/view/4562>

³ <https://www.education.sa.gov.au/sites/g/files/net691/f/nothing-about-me-without-me-learning-what-works-in-autism.pdf>