Application:

**Autistic Spectrum Disorder (ASD)** is a pervasive neurodevelopmental disorder. In the DSM-V characterised ASD as having problems in:
- Social communication and interaction (e.g. poor modulation of eye contact)
- Having restricted interests; e.g. Fixation on trains
- Lacking flexibility in behaviours and planning.
- Restricted and repetitive patterns of behaviour; tends to be ritualistic.
- Much more in men than women. Ratio of 6:1 roughly.

Corroborating evidence has tried to link visual perception and attention in Autism as a way of explaining the more complex social deficits.

Children with ASD have been found to have:
- Superior visual search (O’Riordan et al., 2001; Joseph et al., 2013).
- Higher threshold for global dot motion detection although typical levels of flicker contrast sensitivity (Simmons et al., 2009).
- Do not succumb as easily to some visual illusions (Roopar & Mitchell, 1999; Mitchell et al., 2010).
- Have a local processing bias (Plaisted et al., 1999)
- Problems in Gestalt processing (Brosnan et al., 2004)
- Abnormal global processing of objects in dorsal visual pathway (Pellicano et al., 2005).
- Enhanced perceptual functioning (Mottron et al., 2006)

**Cognitive Ageing**

As you get older there are inevitable changes in visual processing. There are changes in the visual and cognitive processing.

Inevitably slower as one gets older.

**Faust** (1999) said that we can’t compare RT scores from older vs. younger studies. We need to account for older people.

For example, he used **Z-Scores** instead of RT’s.

In visual perception past research has shown that older adults tend to be (compared to younger adults):
- Have more global interference (Roux & Ceccaldi, 2001)
- Slower reaction time to detect motion (Porciatti et al., 1999).
- Reduced global precedence (Straudinger et al., 2010)
- Problems in selecting low salient visual information. Perhaps the real reason for slow RT’s is a result of the pictures don’t stand out well enough or aren’t clear etc. (Tsvetanov et al., 2013)