

THEY KNOW BETTER!!

Why knowing right from wrong is not enough to prevent people with severe impairments in multiple brain areas from doing the ‘wrong thing’ (and why they shouldn’t be punished for having impairments)!

Many people wrongly assume that if people with Fetal Alcohol Spectrum Disorder (FASD) or with other severe brain-based impairments ‘know’ right from wrong then they can and should be able to ‘do’ the right thing in situations that require it. However, ‘knowing’ and ‘doing’ require different sets of skills and subskills. ‘Doing’, is more complex and typically performed under more demanding circumstances than ‘knowing’ and therefore will be more significantly impacted in people with FASD.



BRAIN AND BODY DOMAINS	ADAPTIVE FUNCTION (everyday skills of life)	EXECUTIVE FUNCTION (e.g., impulsivity, organisation, linking cause and effect, working memory)	ATTENTION	AFFECT (e.g., depression, anxiety, emotional regulation)	ACADEMIC (numeracy and literacy)	LANGUAGE (use and understanding)	COGNITION (e.g., IQ, processing speed, problem solving)	MEMORY	MOTOR SKILLS (fine and gross motor, visuo-motor)	BRAIN STRUCTURE	SENSORY
FASD	IMPAIRMENT IN A MINIMUM OF THREE DOMAINS REQUIRED FOR DIAGNOSIS BUT MOST CHILDREN WITH FASD HAVE MORE! (AVERAGE = 4)										
‘KNOWING’ RIGHT FROM WRONG REQUIRES SPECIFIC SKILLS IN	The ability to understand abstract concepts such as time, money, ownership, laws etc, understanding spoken and unspoken social conventions and rules	Basic understanding that actions have consequences	The ability to pay attention long enough to take in all the details of rules			Requires abilities in understanding written and/or spoken information	Requires skills in verbal comprehension, being able to understand that the same knowledge can be applied in lots of different situations	The ability to remember formal and informal rules including acceptable exceptions to rules			
BRAIN AREAS IMPLICATED	✓	✓	✓			✓	✓	✓			
‘DOING’ THE RIGHT THING REQUIRES SPECIFIC SKILLS IN	Understanding spoken and unspoken rules, the ability to understand the abstract concepts of time, money and ownership, the ability to resist peer pressure and the desire to fit in	The ability to understand cause and effect, the ability to inhibit behavioral responses and the ability to manage impulsivity, skills in planning and prioritising	The ability to maintain focus and attention	The capacity to independently regulate and manage strong emotions such as anger, desire, excitement, the ability to self-sooth	The ability to read, skills in mathematical calculations	The capacity to understand language and express yourself in appropriate ways	Skills in simple and complex problem solving, being able to process and integrate new and old information quickly and accurately, the ability to generalise rules and information from one situation to another	The ability to remember ‘rules’ quickly and then apply them specifically in new and often complex situations	Physical skills (gross and fine motor) to execute the actions required in given situations		Skills in managing overwhelming sensory experiences and distressing sensations
BRAIN AREAS IMPLICATED	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓

The boxes shaded in orange represent the most dominant brain-based domains required.

'KNOWING' RIGHT FROM WRONG

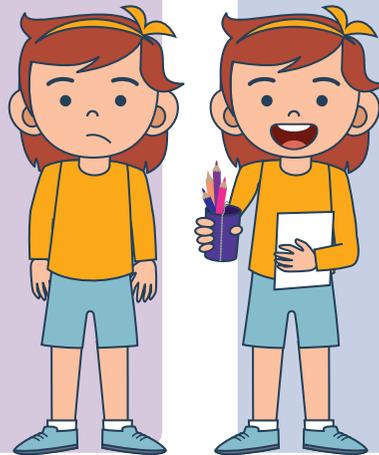
'Knowing' right from wrong, often happens under very different circumstances to 'doing' right or wrong. Knowing or learning right from wrong frequently happens in quieter, calmer circumstances with lower levels of emotional activation.

While people with FASD may have severe impairments in many areas associated with 'knowing' right from wrong these impairments often won't have significant impacts except in educational settings where someone might test their knowledge or in criminal justice settings where levels of knowing might be immediately connected to expectations about their 'doing' abilities. However, many people wrongly assume that people with FASD know right from wrong without assessing the brain domains involved and determining their actual abilities.

Nodding, smiling and even saying 'Yes I understand' doesn't confirm knowledge. Understanding should be always be checked by asking the person to explain what was said in their own words (making sure they are not just repeating back your words).

Example (Child)

8 year old Tia has FASD. She has been caught stealing at school, again. She took another child's pencil case and used the pencils and pen's in it even giving away some of the contents to friends. She has been sent to the office and is sitting quietly with the admin assistant (calming sensory environment), helping her with some stapling (emotional regulation) when the deputy principal arrives. She nods (motor skills) when the principal frowns and asks her if she knows stealing is wrong (social skills). When asked what she should have done she says that she should have asked first (memory, expressive language). When asked what else she could have done she "shrugs" (poor problem-solving skills) and just looks away (attention). She says she is sorry (social skills) and asks if she can go back to class now (poor understanding of the impact of her actions on future events).



'DOING' THE RIGHT THING...

Demands to 'do' the right thing are more likely to occur under circumstances of high emotion. They often occur in unexpected situations or situations that require rapid problem solving, information processing, and/or when other people are around. Doing the right things also requires the ability to prioritise competing needs, more complex memory skills and decision making.

Many of these more advanced skills will be negatively impacted by impairments in other areas of functioning or by noisy and emotional environments.

For example, severe impairments in executive functioning such as impulsivity, emotional regulation, attention and memory make it extremely difficult to carry out more complicated tasks such as problem solving and integrating new information with old information. More complicated tasks and abilities are always filtered through lower order functions first! When lower order functions are impacted, everything is impacted!

Tia loves pencils, pens and colouring (sensory, social). She loves colouring with some other girls at lunch-time but they don't always let her join in (social). She has her own pencils but forgot to pack them this morning after using them at home last night (poor organisational skills – executive functioning). At lunch she realises she doesn't have them (memory) and panics (emotional regulation) that she will be left out (poor problem solving). All the kids rush past her to get outside (sensory) and start their break. She see's a pencil case just sitting on an empty desk by the door (lack of understanding of ownership – adaptive functioning) and grabs it as she rushes out to join her friends (impulsivity, unable to predict the consequences of her actions – executive functioning). The other girls are cranky she is late and she offers them some of her new pens to cheer them up and let her join (social skills).