

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.

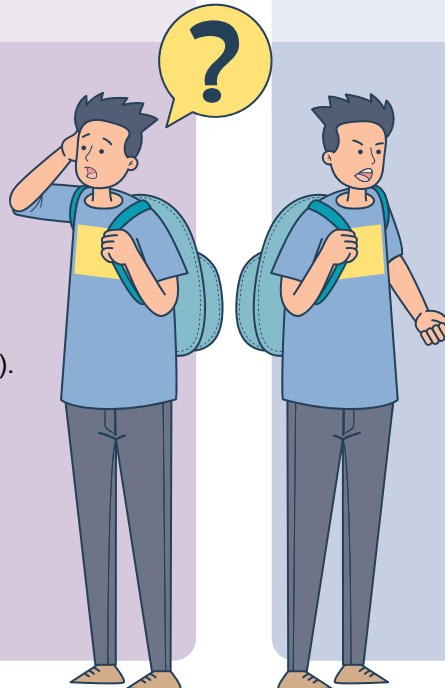
'KNOWING' RIGHT FROM WRONG

'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).

23 year old Marcus has FASD. He has been arrested by the police after punching and seriously injuring a man, witnesses claim, totally out of the blue. Talking to his legal aid solicitor 3 weeks after the incident (memory, quiet, calm sensory environment), he is asked if the police told him that he had the right to legal representation (receptive language, comprehension, memory), he nods yes (motor skills) but isn't sure what "rights" or "representation mean". When they ask him to answer them out loud (receptive language) rather than nodding he yells back "yes" (concrete thinking, comprehension). His lawyer, tells him to calm down and says "it will be alright, just tell me everything that happened". Marcus starts telling her a long story about things nothing to do with the incident (comprehension, concrete thinking) but when the lawyer asks him the same questions several times, he just starts to agree with her so he can get out of there faster (attention, impulsivity, lack of understanding of the consequences of his actions – executive functioning), expressive language.



'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!

Marcus was traveling home on the train during peak hour a few weeks back. He hates crowds (loud noises - sensory, attention) and puts his headphones so he can listen to his favorite music to help calm him down (emotional regulation). He places his bag on an empty seat next to him. A man comes up and stands over him, mouthing something he can't hear (poor understanding of language - receptive language skills). The man looks angry (poor social skills) and then puts his hand out and touches Marcus' bag. Marcus reacts instantly (emotional regulation, impulsivity - executive functioning) jumping up and snatching for his bag. The man yells and Marcus yells back (emotional regulation skills, poor problem-solving). The train brakes to pull into a station and the man surges towards him. Marcus feels threatened and swings a punch (impulsivity - executive functioning), connecting with the man's face. Panicked, Marcus jumps off at the station (impulsiveness, difficulties predicting the consequences of his actions, poor problem solving - executive functioning, cognition). Several people film the incident on their phones and call the police.