

EF in Young People with ADHD and/or Asperger's during their Post-Secondary Transition

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A New Understanding of ADHD

ADHD = developmental impairment of the brain's management system, its executive functions.

(Brown, 2005, 2006, 2013)

What are “Executive Functions” (EF)?

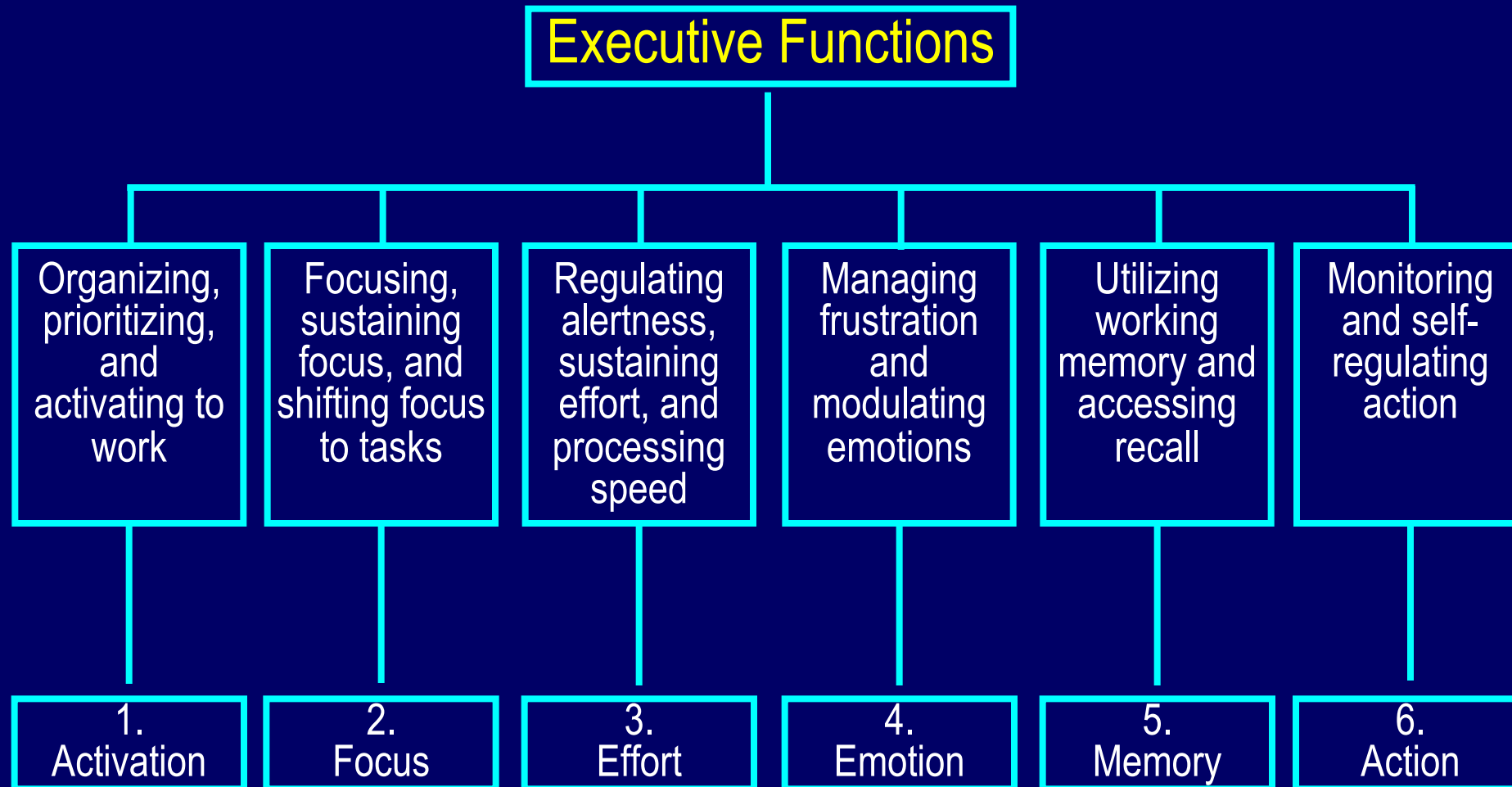
- ◆ A wide range of **central control processes** of the **brain** that interact dynamically to:
- ◆ **connect, prioritize, and integrate** cognitive functions—moment by moment
- ◆ like conductor of a symphony orchestra
- ◆ Lezak: “**Will you do it and, if so, how and when?**”

Characteristics of ADHD Symptoms

- ◆ **Dimensional, not “all-or-nothing”**
 - Everyone sometimes has some impairments in these functions;
in ADHD: chronic, severe impairment
- ◆ **Situational variability: “If I’m interested”**
 - Most persons with ADHD have a few activities where ADHD impairments are absent

ADHD looks like willpower problem, but it isn't!

Executive Functions Often Impaired in ADHD



Executive Functions operate in dynamic, integrated ways

For example, EF of “focus”

- Does not mean
 - as in holding the camera still to take a photo of an unmoving object
- Does mean
 - as in focusing on the task of driving a car

Scaffolding

may support or undermine executive functioning

- ◆ Parents
- ◆ Siblings
- ◆ Teachers
- ◆ Friends (peers and adults)
- ◆ Extended family
- ◆ Physician, counselor or therapist

Post-Secondary Transition

Finishing high school and then:

- ◆ Moving away from home to go to college
- ◆ Living at home while attending college or trade school
- ◆ Living at home while seeking and/or sustaining employment
- ◆ Taking a “gap year” to travel or defer decisions

Impacts of Post-Secondary Transition

- ◆ ends predictable sequence of school years
- ◆ multiple decisions impacting family dynamics, loyalties, and finances
- ◆ Loss/distancing from usual scaffolding relations
- ◆ need to integrate self into new social systems for work, schooling, living arrangements
- ◆ much uncertainty about one's ability to meet new challenges, how one will fit in or not, future

4 major problems in post-secondary transition for young people with ADHD/Asperger's

- ◆ Uncertainty about realistic **aims/choices for now and future** (schooling, location, career)
- ◆ Persisting EF impairments **not adequately treated** (wish to avoid meds, med access problems)
- ◆ **Avoidance of help-seeking** (wish to feel and appear as adult who does not need support)
- ◆ **Social anxiety** exacerbated by loss of supports and unfamiliar demands of new situations

• Social Anxiety (social phobia)

Adolescents (13-18 yrs) 11.7% (Burstein, et al., 2011)

Adults w/ADHD (18-44 yrs) 29.3% * (Kessler, et al. , 2006)

* (most frequently reported dx comorbid with ADHD)

People with social anxiety usually experience significant **distress in anticipating or being in situations** such as:

- Being introduced to other people, being teased or criticized,
- being watched or observed while doing something
- meeting people in authority ("important people/authority figures")
- Feeling insecure and out of place in social situations ("I don't know what to say.")
- Embarrassing easily (e.g., blushing, shaking), meeting other peoples' eyes
- Swallowing, writing, talking, making phone calls if in public

James – 23 yo college student

- Graduated high school with 3.6 GPA
- Entered a competitive university as engineering student. Did well in math courses, but **struggled with writing essay tests and papers**
- **Avoided attending class when papers were to be handed in, then felt unable to resume class attendance or contact professor or TA or learning center by email, phone or office hours visit**
- Was put on academic probation
- Took voluntary leave of absence and found a job
- Sought treatment 1-1/2 yrs after leaving college—wanted to return

James (2)

- Initial consult: handsome, well-built, articulate, a bit shy, wanted to return to university but felt need to deal with his **problems with writing, difficulties with reading comprehension and recall, and shyness about talking with faculty or TAs**. Father described James as **somewhat shy in childhood and adolescence, but no problems with school attendance or getting work done**. Some participation in youth sports leagues, but “not super social”, “**tends to pull into his shell**”.
- Currently **living with girlfriend who dominated and depended on him** in apartment paid for by parents 3 hours from away from parents in the city where he had been attending university. Had just ended job due to company moving. No abuse of drugs or alcohol.

Impressions and Recommendations

DX: ADHD with Social Anxiety Disorder

- Educated patient and father re: diagnoses and nature of **phobia**
- Recommended cognitive behavioral therapy in city where he was currently living with girlfriend. Initial target—get another job. Longer term goal—increase ability to deal with faculty and staff re: school
- Recommended LDX with start of FLU after LDX dose stabilized
- Referred for treatment of ADHD and tutoring to deal with writing problem
- Supported his wish to return to school, but suggested starting first with just one course in local community college.

Arthur 19 yo college student

- Came with both parents after being terminated end of 1st year first year of study in honors engineering program at competitive state university due to low grades
- Had been honor student in high school, participated in robotics club and continued activity in Boy Scouts. **Limited social contacts outside of school.**
- Had been seen by me initially when 8 yo—diagnosed as ADHD with Aspergers. Started on ATX (helpful at 80 mg q am). Seemed to be doing well until 8th grade when added LDX 40 + Dex 10 booster to support EF and homework. Responded well, parents supportive, no further contact until end of 1st yr college. **(no prep for transition)**

Initial presentation

- Tall, thin, **tense-looking, limited eye contact** except when addressed, dressed in baggy jeans, hair pulled back in pony tail, spoke rapidly.
- “Found college was really different from high school where I was used to the place and the people. It was really hard to get used to.”
- “**Didn’t tell my parents I was having trouble until end of year when I knew I would not be able to return. Was too embarrassed to tell.**”
- “I’m extremely nervous talking with other people”
- “**Went to classes, but mostly kept in my room, had no friends**”
- “Lots trouble writing papers, but **too afraid to go to writing clinic**”

Impression and Recommendations

- Social anxiety, ADHD, dysthymia, Asperger's Disorder
- Continue ATX 80 mg, LDX 40 mg, Dex 10 mg, Add FLU 10->20
- Psychotherapy with Cognitive Behavioral focus x1 q 2 weeks
- Encouraged parents to push him to do more social interactions, e.g. go to stores, make phone calls, setting up study groups, driving self
- **Continue to live at home while starting summer course in local community college** (1 course in each of 2 sessions) and then continue in community college taking 2 courses in fall term and 3 or 4 in spring term, **then review options for schooling following year.**

Targets addressed during therapy (action, not just talk)

- **Go to** interview with advisor at college for course selection & plan
- Rehearse answer for “**why aren’t you away at college?**”
- Volunteer as an advisor for high school robotics club
- Challenge avoidance of seeking out study group partners (“**fear vs bigger fear**”). Approach to invite and **get names and contact info**)
- **Rehearsal** of how introduce self to other students and ask if they would be interested in forming a study group
- **Go to see TA and professor** to seek help with specific questions or problem sets, even if help not really needed
- “Make my room more liveable, **cleaning out from hoarding**”
- “Join engineering club at college”

Support for writing problem (written expression demands more EF)

- **Bring syllabi for all courses** and identify writing assignments
- Discuss each writing assignment and bring in materials to be read
- Do some work in session **identifying key ideas** from readings that are to be written about
- Learn to use **“Webspiration Pro software”** to organize ideas for paper
- **Bring initial draft of paper** to session for critique
- Identify areas where **more elaboration** of ideas is needed
- Encouraged **use of writing clinic at school and meeting with profs** while writing is in progress.

Progress report

- “I’ve decided that my addiction to watch YouTube is related to issues my parents argue parents argue, about...when I get nervous.”
- “I avoid dealing with people because I fear rejection. Am afraid people just won’t want me around.”
- (Example of feeling rejected?) 9th grade I liked a girl and spent time with her for 2 yrs, then it didn’t work out. Was very painful.”
- “I was cold, distant, and unemotional, like my father. But now my comfort zone has been expanding, now I can start a conversation and do some small talk.”
- Grades are mostly good, though I may fail Calc 2 and need to retake.”

Post-secondary Employment for young people with ADHD/Asperger's

- **Job search** is usually terrifying and frustrating (support is needed)

On the job:

- those with Aspergers often have important strengths:
 - reliable, persistent, technically able, knowledgeable, accurate, logical
- Yet they also may have some significant difficulties:
 - teamwork skills, coping with change, fitting in with co-workers, asking for help, accepting advice (Atwood, 2007)

Preparation for transition should begin in early adolescence

- Henry a very bright boy in 8th grade had gone on strike refusing to do assigned work in his special ed and co-taught classes, frequent legalistic arguments about teachers not respecting his rights, often head on desk throughout class period.
- Initial visits: no eye contact, weak handshake, lay down and curled up on couch, winced when my chair squeaked, reluctant to respond
- “I hate school and I have no real friends.” “The teachers keep telling me that I’m very smart, but they treat me like a 4th grader. I’m not going to do what they tell me until they start treating me a lot better.”
- Gave IQ test: scored in the superior range. Seeing results, he said, “Ok, I know I’m smart, but I really am broken”

Elements of this Intervention

- Listen empathically to patient's view of his current situation
- Start medication to reduce anxiety (FLU 10->20)
- Test to identify strengths
- Teach patient about ADHD, social anxiety and emotional IQ
- Reintroduce stimulant for ADHD cautiously (SBC, rebound)
- Confront maladaptive behaviors in specifics of present interaction
- Design and encourage more adaptive responses
- Support persistent effort to work toward goal (out of special ed)

2 Important Types of Intelligence

Rational intelligence: logical, evidence and fact-based intelligence

Emotional intelligence: psychological, emotion-based intelligence

Rational intelligence recognizes need to pay **attention to the irrational** (EIQ)

Emotional intelligence is not as predictable as rational—often more complex, with more exceptions e.g. why is a joke funny in some situations, but not in others?

Some need to **use their rational intellect to understand** some important **psychological factors** that most others pick up just by watching and listening.

Teaching Emotional Intelligence

Empathize, but focus on specifics of present situation, then generalize

handshake, eye contact, limp fish

lying down on couch curling up

not responding to questions

leaving it to mother to answer

complaining about my squeaking chair

blaming others for whatever is wrong

assuming equal status and power with adults, esp teachers

ignoring theory of different minds, not all about you

Key Points

- Recognize subtle, complex, but massive difficulties in transition for everyone, especially those with ADHD and/or Asperger's
- Don't underestimate the power of social anxiety to disrupt transition
- Utilize medications when needed for ADHD and/or anxiety
- Identify individual strengths and also vulnerabilities
- Utilize empathy with confrontation
- Teach emotional intelligence in specifics of interaction
- Teach skills and press for actions to practice them
- Reinforce successes and support persistence, esp in failures