Adolescence and Social Issues in ACC
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I. ACC and Adolescence
- Around age 12 and through adolescence, the corpus callosum of typical children becomes more efficient and effective – this is results in the greater complexity of thought, emotion, and relationship that becomes possible during our teen years

- When the corpus callosum is absent or malformed, it is possible that a child who has been developmentally "typical" may begin to lag behind as his or her peers increasingly depend on their corpus callosums

- Or if a child with a callosal disorder has been somewhat delayed, the increased social expectations of teenagers may make the child's delays even more obvious

II. Key Issues for Older Children and Adolescents
A. Social adjustment
- Complex – must read others' cues and recognize unstated social rules
- Subtle – appropriate behavior is learned through social interactions and is much more nuanced than in younger years
- Due to difficulty reading others' intentions, may be susceptible to bullies or to being manipulated

B. Emotional Modulation
- May have greater moodiness, periods of sadness and negative attitudes
- As they become further behind their peers, teens with ACC may be more frustrated

C. Self-awareness
- Typically, at this age people become very self-aware, both of their internal reality and of their social status
- However, individuals with ACC are often lacking in self-awareness and thus may be confused about why they are having social difficulty

D. Sexual Development
- In general individuals with ACC seem to develop typically regarding sexual function
- However, the tendency toward social inappropriateness and lack of reading social cues may result in conflict situations

E. Independent living skills
- Teens with ACC may be less cooperative and willing to follow instructions but also less independent than expected for age level
- They may compare themselves with peers and feel badly that they cannot attain the same level of independence (on the other hand, they may be so lacking in insight that they try to act more independent activities than they can handle)

F. Complex Cognitive Understanding – "why?"
- In order to compensate for difficulty understanding complexities, an individual with ACC may develop a rule-bound morality with limited insight

- They may also become dogmatically attached to particular issues or areas of knowledge

III. How to help them
   A. Be Explicit
      - When explaining a social situation or giving guidance about appropriate behavior, be explicit about the details
      - They are likely to take your statements literally
      - Use their rigid thinking to your advantage …
   B. Focus on Life Skills
      - In addition to academic training, individuals with ACC may need repeated, detailed and explicit instruction on daily life activities such as laundry, money management, and time management (patience is key here!!)

Thinking guidelines for the parent
1. Plan ahead what you will say to your child
2. Anticipate your child's response
3. IF you expect resistance, be creative about how to set a positive tone
   a. timing – when they will be in a good mood,
   b. use a modality that makes this activity/topic interesting and motivating – use their interests and desires,
   c. positive reinforcement during or after – verbal praise, time with parent, whatever is a positive experience for them)
4. Teach yourself to think in a very concrete, detailed and well sequenced fashion when it comes to ways to communicate with your child (Find a strategy that works for you, such as imagining that they are from a different culture and everything is foreign or imagining that they are much younger than they are)
5. Be willing to experiment, fail, and be creative in terms of finding appropriate routes of intervention (for example when trying to teach buttoning … be creative by having them use one hand, or close their eyes to visualize it, or make it a game, or practice on your shirt instead of theirs or use big buttons first … whatever creative alternative you can think of)
6. Always think in terms of what is most motivating, interesting, and stimulating for your child (and this will change as the child's interests change). And always try to incorporate these things into skill building and guiding their behavior.
7. If you have problems with organization, get help for yourself first (uncluttering your home, organized routines for daily activity). There are books on this, professionals who can help, or ask for help from your compulsively organized family member or friend J

Never feel as though you must listen to those who say that you are spoiling or over-protecting your child! The line between dependence and independence is dynamic and constantly evolving. You are in the precarious position of balancing responding to very real and deeply felt needs, emotions, and limitations with your desire (and others' desire) for your child to

function independently and at an age appropriate level. This balance is difficult and outsiders have no concept of the struggle.

Main Intervention Goals
- Minimize novelty
- Enhance predictability
- Minimize complexity
- Reduce stress
- Plan ahead
- Learn to read your child's cues (for ex. when they begin to whine at homework or refuse to do any more they may be feeling overwhelmed with the number of items in front of them)
- Whole-part-whole: Big-picture/overview to detail – tell them what you are going to teach them and generalize the concept (for ex. we are going to practice buttoning … buttons are on clothes, on your backpack, etc …)
- External environment to internal experience – start with the external environment because it is the easiest to manage and predict (introduce the physical tools & environment going from overview to detail & sequence) and then talk about the internal/emotional/personal experience (overview to detail & sequence)
- Use concrete language that describes action vs. vague concepts such as feelings, meanings, generalizations, etc …
- Always provide a detailed sequence
- Summarize
- Paraphrase
- Rehearsal & repetition
- Memorization strategies (ex, acronyms)
- In-vivo training (use everyday experiences to teach)
- Timely intervention (immediate correction, prior preparation, etc …)
- Providing choices vs. open-ended questions (instead of "what would you like to drink?" ask "would you like milk or juice?")
- Warmth and acceptance
- Positive feedback and praise!

Environmental – the external environment is the "easiest" place to make modifications, in other words uncluttering a room is uncluttering a mind; the goal is to minimize the experience of unpredictability and the need for novel problem solving in routine environments (home and school) as possible
- Quiet (less background noise & unexpected noise) – vents, freeway,
- Uncluttered (minimize visual stimulation) – things that are visible on the walls are relevant to whatever is current focus of training
- Predictability in the environment (what the physical environment looks like, sounds like, etc … house uncluttered, consistency in where things are located in the fridge, in the bathroom, the furniture)

- Predictability in locations of useful objects – specific and consistent location for things that are needed on a regular basis (keys, backpack, papers for mom to sign)
- Separate location for doing homework – quiet, away from activity
- Use external aids as needed (earplugs or headphones to screen-out noise)

Daily Routines – the more repeated tasks/scenarios that can be routinized and encoded as habit to the point of automaticity (no longer requires thought), the more that the child's resources will be freed for higher level thinking tasks and challenges
- Structured time slots (time for waking, eating, TV-time, snack-time, bed-time)
- Sameness in sequence (minute detail of steps for new activities – ex. how to bathe in the shower or how to dress yourself) For a new sequence, write a step-by-step list (or picture list) and have them practice it until mastered
- Behavior mod for reinforcing the learning of routine sequences (award charts)
- Teach routines in order from more basic (bathroom before bed) to more complex (organizing backpack)
- Index card of activities specific to the day (ex. turn in science homework, meet Dad after school at playground door, etc) – kept somewhere easily accessible (in a clear pocket on their folder or in a pocket so they will "run into" it if they forget)

Social Routines – situations commonly encountered that have somewhat predictable patterns, map out scripts that the child can easily encode, memorize and implement
- Greetings / Good-byes – predictable script that can be taught (for ex. script one, child initiates greeting, waits for response, and uses response to determine next step in the script – a decision-tree model; script two, someone initiates greeting toward the child, etc …)
- Introductions / first meetings (for ex. for peer introductions stress the behaviors that are important such as eye contact and gestures that demonstrate warmth and friendliness and then teach them what these are: smiling, listening, asking questions etc …)
- Teaching behaviors that convey qualities, attitudes, and feelings (for ex, for warmth – eye contact, smiling, and listening; for friendliness – a higher pitched tone of voice, eye contact, asking questions, compliments, and invitations to join)
- Authority interaction (for ex. more listening than talking, say please and thank you, being certain to ask for clarification when uncertain of an authority's request: NOTs don't talk-over, no anger, don't yell, limited frustration, don't disobey, don't beg when told "no")
- One-to-one peer interaction (physical proximity and distance; no touching; being responsive to non-verbal cues and teaching specific non-verbal cues that indicate they have done something wrong or are overstepping boundaries such as when someone turns their back, sighs, looks at watch; recognizing when activities are over, don't talk about yourself too much)
- Group peer interaction (for ex. don't talk over others, don't insist on your own way, listen to others' ideas, compliment or support others' ideas, provide help when others need it such as cleaning up, participate in the group activity, stay on topic)

- Joining a conversation or group (for ex. listen and determine the topic they are already discussing before you speak, speak on the topic that they are discussing, wait until a break in the conversation or until someone addresses you before greeting or speaking)
- Unstructured vs. structured social activity (for structured activities you can prepare the child for what to expect, for unstructured activities you teach problem solving script such as SODA-Stop, Observe, Deliberate, Action)
- Rules of etiquette for particular environments (for example restaurant, movie theater, church, funerals, etc …)

Pre-event interventions – the idea is to minimize novelty and unpredictability by meetin with child prior to an event and introducing possibilities and mapping out strategies for addressing situations where the child may encounter confusion or distress – this will increase the predictability of the situation, provide a cognitive and behavioral map or structure that the child can sequence and follow, and reduce anxiety and distress during periods of confusion.
- Strategy – sit down w/ child before the activity, first explain the overview of what the activity is about (meaning), then introduce details moving from external to internal (ex. we will arrive in parking lot and then go in the building and … to know what to expect visually and spatially) and from beginning to end (to know what sequence of events to expect)
- Imagine that they are encountering a situation that they've never seen before and try to see it through their very clueless perspective
- Trying to set up predictable transitional cues (first we'll go inside and stand in the lobby, then I'll tell you it is time to go into the room and sit in our assigned seat, then the lights will go off and the people on the stage will …)
- Once you set up the external sequence, then set up the expectations about what other people might be acting like, feeling, doing … and how they will respond
- Then explore how they might be feeling at this event
- Safety nets – give them "safety nets" prior (for ex, assume that something doesn't go as planned and you don't know what you are supposed to do, what should you do … 1. breathing exercise – to reduce anxiety, then 2. whatever is specific to the situation – problem solving)

Higher-level Critical Thinking skills
- Cause and effect
- Teaching the concept of alternate approaches to solve the same problem (strategy, for ex using trial-and-error information)
- Determining meaning such as inference, generalization, subtleties
- Non-literal language (irony, figures of speech, humor)
- Discriminating opinion statements from fact statements
- Theory of mind – discerning others' intentions (teach them to not assume what others mean, and then ask someone trustworthy to help them interpret the situation)
- Specifics:

- Decision making – start simple and use real-world opportunities to teach decision making (for example, after providing two choices of what to drink and getting them what they want, then ask "what else might have been in the refridgerator that you like to drink?"… "so if I ask you tomorrow 'what do you want to drink?' what should be the first thing you think of?" – you want them to think "what are my choices?" or "what are my options?"   Then the next time you are getting them a drink start by saying "I was going to offer you a drink. What are you supposed to think of first when I ask you what you want?" …)

An approach to teaching how to think:
1. observe (watch, sequence, study)
2. compare (look for similarities) and contrast (look for differences)
3. categorize (group related information together)
4. identify patterns (is there a predictable sequence in which things occur?)
5. watch for cause-and-effect (does something happen predictably following a particular event?)
6. generalize (apply what they have learned, or figure out how they can apply what they have learned, to a different situation)
7. problem solve (what is the appropriate method to approach a novel situation or a novel problem?)

Teach the concept that many things in the environment are a substitute for having to think (for ex. the red hand vs. the white walk figure – this is a replacement for thinking on your own about when it is safe to cross the street or not, so when there are no lights you have to figure it out on your own)

Consider in engaging in activities that will teach cause-and-effect, observation skills, compare-and-contrast, and problem solving (such as having a pet, playing card games, going for a walk after a rain or when the seasons are changing, walking by a construction site, visiting a demonstration or political rally just to observe, etc …)

For computer games and gameboy etc … limit their choices to a few mindless (shoot-em' up, racecar driving) games and a lot of games that have a constructional component (planning, building, etc … the Simm Series games)

Teaching how to lose
Teaching child how to explain their difficulty or limits
Gardening
Shopping – teaching to compare-contrast
Advertising – teaching compare-and-contrast and fact-from-fiction

Sexual development (use their rigidity to your advantage, if in doubt overprotect and intervene)
Addressing anosagnosia (teach behavior structures that will be reinforcing, DON'T try to teach insight) – they will be self-focused so use it in a way that motivates them

Use peer mentors – structure social opportunities to reinforce the attitudes and behaviors that will serve them (i.e. involvement with "good kids")

Skill building (teaching, modeling, showing)
- Refer to daily routine
- Refer to social routine
- No matter how mundane the script and routine being taught it teaches a more underlying concept parallel to the surface concept (surface – how to take a shower; underlying – process of organization, sequence, and structure)

Introducing the "big picture" you probably will have to blend external and internal info (we are going to a funeral and funerals are sad)