

Introduction to the Use and Adaptation of CBT for Adults with Autism Spectrum Disorder

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Purposes of the Workshop

- Recognize common characteristics of a person with ASD;
- Describe mental health challenges that some people with ASD may experience; and
- Identify adaptations to standard CBT that may be helpful for clients with ASD



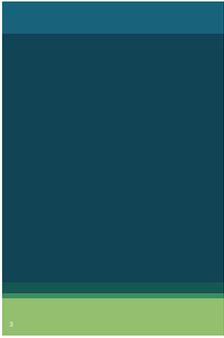
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On this sheep-scale, how do you feel today?



WOOL FOR EVERY DAY #WOOLWOOLYOU

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Fundamentals



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Language



- Survey within the UK of people connected to autism about preferred language
 - Among British autistic adults – *autistic person*
 - Among a **Use the language preferred by the person you're speaking with** *in the autism spectrum*
 - United Nations *autism* *capabilities - person with*
- Preferred language for other people
 - Neurotypical person or typically developing person



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An introduction to CBT and ASD

- We are **not** here to learn to diagnose, treat, or 'cure' ASD
 - Autism is not an illness or a disease, it's a neurological difference
- There is something about the nature of ASD that makes comorbid conditions more intense, more severe, and more complex often seen among neurotypical people



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Comorbidity and ASD



- About 70% of autistic people have at least 1 comorbid psychiatric condition; 41% have 2 or more
 - Internalizing disorders: anxiety, mood, OCD and related disorders
 - Externalizing disorders: ADHD, Behavioral Dysregulation disorder
- Comorbid conditions are often not diagnosed until later adolescence or adulthood
 - May be dismissed as "just autism"

Simonoff et al, 2008; Franklin, Young, & Reuland, 2019



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Impact of comorbidity

- Presence of ASD often increases impairment across multiple settings

Anxiety <ul style="list-style-type: none"> • More social skill deficits • Increased repetitive behaviors • Increased sensory symptoms • Increase in core ASD symptoms • Lower school or work attendance • Lower family cohesion • Poorer academic performance 	Depression <ul style="list-style-type: none"> • Increased social withdrawal • Decreased QOL • Increased meltdowns • Increased frequency of suicide ideation, intent, attempts • Increased family strain
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- People may often be 0→60 in their reactions because they miss the cues that they're in distress

Franklin, Young, & Reuland, 2019



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People with ASD may also have difficulty with:



- Meeting their own goals
- Understanding and using abstract communication
- Processing info about self
 - Emotional self-perception and regulation
- Processing info about others
 - Empathy, attention to / use of social cues



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Context



Peers, partners, colleagues, and family may also note ASD-related differences which could include

- Strong, singular interests
- Anger outbursts
- Poor self-care
- Repetitive rituals
- Unusual behavior
- Atypical social skills



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The Core of CBT for ASD

Because CBT will focus not on the ASD, but instead on the unique areas of skill and distress for the individual, CBT for people with ASD is really a question of

modifying traditional CBT
for the strengths and challenges inherent
in living with ASD



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Can autistic people benefit from CBT?



In CBT, clients learn to monitor their own thoughts and perceptions, check the accuracy / helpfulness of those thoughts, change to more accurate / helpful thinking, and shift their behavior or reactions

With proper adaptations to meet the unique cognitive profile of the individual, autistic people can certainly learn to do this through CBT



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CBT and ASD

- Clients learn to re-conceptualize social interactions and more accurately read the behavior of others. As they begin to understand the "rules of the game" in social situations, they can more easily monitor and adjust their own behavior and responses
- They can also learn to recognize and modify unhelpful patterns of information processing which contribute to stress, anxiety and depression



 NeuroCatalyst

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Potential CBT Targets

- Teach new cognitive and behavioral skills that haven't been learned
- Teach coping strategies for patterns that will not change
- Teach strategies to decrease or prevent symptoms of comorbid mental health problems
- Foster self-acceptance
- Help people identify and move toward their own unique goals



 NeuroCatalyst

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Making No Assumptions

- Autistic clients, like all people, have unique strengths, goals, and challenges. Although they may present for services for reasons related to ASD, we should not *assume* that ASD-related issues are why they are seeking services

If we assume otherwise,
what message are we sending?

 NeuroCatalyst

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Making No Assumptions

- Prioritize treatment issues collaboratively
- ASD-related challenges may be the primary presenting problem, but not always
 - When it is **primary**, treatment should focus on how ASD-related issues are creating a barrier to the client's goals
 - When another issue is primary, be mindful of the ways in which ASD can impact current functioning and participation in therapy



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A Brief Primer on ASD



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Diagnostic Criteria for ASD

Persistent deficits in

- Social-emotional reciprocity
- Nonverbal communications for social interaction
- Developing, maintaining, and understanding relationships

Symptoms must be present in early development, cause impairment, and not be better explained by a different diagnosis

At least 2 of the following:

- Stereotyped or repetitive motor movements, use of objects, or speech
- Insistence on sameness, inflexible adherence to routine, or ritualized patterns of verbal or nonverbal behavior
- Highly restricted, fixed interests that are abnormal in intensity or focus
- Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment



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Cognitive Abilities

- May have asymmetrical verbal and visual reasoning skills
 - Guides our approach toward an emphasis on verbal (discussion, reading) or visual (illustrating, role play) information
- May also have challenges related to social reasoning skills or the understanding and expression of emotions
 - Theory of Mind* skills
 - Ability to read the facial cues of particular feeling states
 - Conceptualization of friendship



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Theory of Mind



- **Theory of Mind:** the ability to attribute mental states—beliefs, intents, desires, pretending, knowledge, etc.—to oneself and others and to understand that others have beliefs, desires, intentions, and perspectives that are different from one's own

Baron-Cohen, 1988



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Theory of Mind Challenges



- ...can contribute to problems relating socially and communicating with other people
- That is, autistic people may not be able to anticipate what others will say or do in various situations. In addition, because they may have difficulty understanding that others have their own thoughts and emotions, and may thus appear to be self-centered, eccentric, or uncaring

Baron-Cohen, 1988



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Alternative Hypotheses



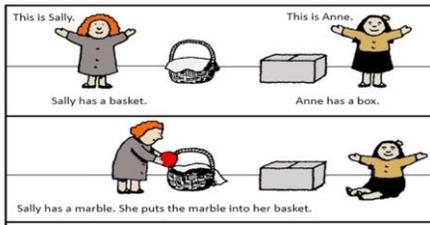
- Theory of Mind is not without controversy, but that is beyond the scope of today's talk
 - May be related more closely to challenges with communication or other confounds

See Gernsbacher & Vergeau, 2019 for further discussion of these questions



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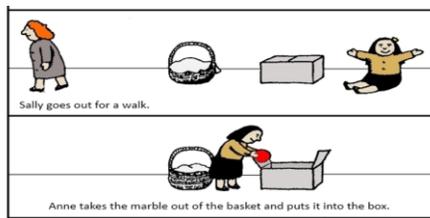
False Beliefs: Sally, Anne, and her Marble



Baron-Cohen, Leslie, & Frith, 1985



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Now Sally comes back. She wants to play with her marble.

Where will Sally look for her marble?





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Hinting Task



Rebecca's birthday is approaching so she says to her dad: "I love animals, especially dogs."

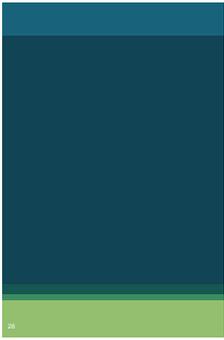
- Question: What does Rebecca really mean when she says this?

Rebecca goes on to ask: "Is the pet shop open on my birthday, dad?"

- Question: What does Rebecca want her dad to do?

Corcoran et al., 1995





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Setting the Stage for Treatment



The therapeutic relationship

- Development of the relationship is always essential - but autistic people can take an instant and lasting like or dislike of others
- Be mindful of common interaction styles of clients with ASD
 - Challenges with taking turns in conversation or interrupting
 - Being interpreted as overly formal, teachy, precise, or arrogant



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Talking about Autism



- Some (younger) clients may not know that they have been diagnosed with ASD
 - Family or providers may worry about stigma, worry it will be upsetting, be unsure how to talk about it
 - Autistic people can end up internalizing a lot of shame instead
- Sharing info about ASD can be an important intervention in itself



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"Communication" includes understanding what people are saying, what they are doing, and what they mean. In addition, communication includes using words and behaviors to help other people understand you!

*People with ASD often find it difficult to communicate with other people, especially when other people don't say what they mean (humor or sarcasm, use of metaphors or allegories). That means it takes some **time and practice** to build up communication skills.*

Franklin, Young, & Reutand, 2019



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A Few Strategies for Concrete Thinkers



- Use visual representations and repetition
 - Instead of "We're meeting again next Thursday," reference a calendar or have the client add "Therapy" on the calendar for next Thursday
- Adjust language accordingly
 - Instead of "The ball is in your court," try "The decision is yours to make."
- Use concrete examples to support comprehension
 - Connect examples to experiences the client has had or things they have observed



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Other Differences



- These clients will typically need more time to process explanations and new strategies. Helpful approaches include
 - A clear, structured, and systematic approach
 - Shorter but more frequent sessions
 - Lots and lots of practice – including neurotypical peers – for generalization
 - "Take away messages" to review between sessions and at the start of the next session



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Affective Education



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Affective Education

2 continuums to consider in emotion

Intensity of the experience



Intensity of the expression



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Alexithymia

- People with ASD often have a hard time understanding and communicating their experiences of emotions
- Psychoeducation can be very helpful time and practice



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Anxiety



What is anxiety?

- Anxiety is a feeling we get when it seems like we aren't in control of what's about to happen. Since anxiety is a feeling, it can feel good or bad, depending on whether we're looking forward to a situation.

What does anxiety feel like?

- Anxiety feels different to everyone! You might have sweaty or cold hands and feet, dry mouth, toss and turn in bed, shake or tremble, feel dizzy, or have 'pins and needles' in your fingers or toes.

Why do we get anxious?

- In certain places, or around certain people, you might think about all of the bad things that could happen. When we only think about the bad stuff, it's easy to believe the bad things are the only things that can happen... so we feel pretty sure that something bad is about to happen.

What can we do about being anxious?

- Everyone gets anxious! Being anxious isn't always a bad thing, but sometimes the feeling is so strong that we end up doing things that get us in trouble because we're anxious. That's why it is important that we learn how to control our behavior when we're anxious. Franklin, Young, & Reuland, 2019

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Depression

What is depression?

- Depression is a feeling word that describes situations where we feel bad about ourselves and the people and things around us most of the time. Although depression seems "bad," it feels different from person to person. Some people feel sad or lonely, others may feel angry, and still others may feel numb.

Why do we get depressed?

- When you are depressed, you tend to have negative thoughts about yourself ("I'm not a good person.") and about the world around you ("Nothing is good or fun anymore.") on a regular bases. (It feels like it will never change.) When you have these 3 types of thoughts, you start to believe that the things, activities, and people you used to enjoy are no longer enjoyable. Because of these thoughts and beliefs, you tend to avoid people, places, and things more and more.

What does depression feel like?

- Although depression may feel numb or bad, it can look different for everyone. One thing all depressive symptoms have in common is that the feelings and behaviors are always a change from what was once normal for us. For example, we may sleep more or less than usual (but not the same as before), or eat more or less than usual (but not the same as before.) We might also feel more aches and pains – or sad, lonely, or angry – more often than usual. Lots of people feel this way now and then, but depression is when these feelings won't go away.

What can we do about being depressed?

- Everyone feels "sad" or "down" sometimes, and it's ok to feel sad sometimes. However, when we feel so depressed that we stop doing important things, the depression can get in the way of being able to feel happy, or keep us from enjoying life. That is why it is so important to get help in learning how to deal with times when you feel depressed.

Franklin, Young, & Reuland, 2019



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Anger

What is anger?

- Anger is a feeling word. It's the feeling you might have when something happens that you weren't expecting (or hoping for), so that things don't go the way you wanted them to go. When you don't like how things are going, or when you feel as though things aren't fair, it doesn't feel very good, and you may want to make people stop or change what they're doing.

What does anger feel like?

- Anger feels different to everyone! You might feel your muscles clench in your jaw, shoulders or hands. You might start to feel hot and sweaty, or start breathing harder. You also might feel your heart start to beat really quickly.

Why do we get angry?

- When you are angry, it is very difficult to "cool off" or take time to understand or be patient with other people. You may feel as though people are doing things just to be mean, or to make you angry. Unfortunately, when you are angry, you tend to do things in a hurry – without thinking about the consequences. You may make some poor choices, or say and do things that you regret later, such as saying hurtful things to others or hitting / kicking other people of things.

What can we do about being angry?

- Everyone gets angry, and it is always ok to feel angry. However, when you don't know how to control your anger, and you say or do things in a hurry while you're angry, it can get you in a lot of trouble. This is why it is important to learn how to recognize when you're getting angry, and learn how to do to cool down.

Franklin, Young, & Reuland, 2019

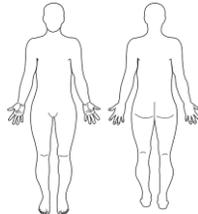


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Body mapping

Anxiety can feel like:

- | | |
|---------------------------------|---------------------|
| • Heart beating fast | • Headache |
| • Stomach ache | • Numb / tingly |
| • Sweaty | • Breathing quickly |
| • Hot | • Tense shoulders |
| • Shaky | • Pain |
| • Dizzy | • Blurry vision |
| • Needing to go to the bathroom | • Feel like jelly |
| | • Dry mouth |



Autistic people may feel the physical signs and may notice the experience of the emotion, but may not link the two. This can help them notice, which can help them cope.

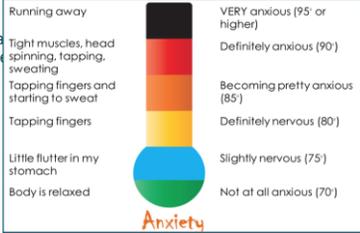


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Keep in mind...



• Main



more
press
indicate

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Social Reasoning



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Social Reasoning Skills: Learning the Rules of the Game

- Autistic clients may need help learning the rules of social interaction that many neurotypical people learn indirectly
 - Appropriate social behavior
 - Conflict resolution
 - Friendship skills



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Social Reasoning Skills



- Clients with ASD may struggle to understand the perspective, beliefs and thoughts of others, leading to conflict
- Limited skills in compromise and repairing friendships exacerbate these social challenges
- Stress related to the anticipation and experience of social situations contributes to anxiety, depression and anger



Deane C. Kolb

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Social Stories

- Teach the “rules of the game” by providing meaningful and accurate information in a supportive, safe, positive way
 - Not intended to directly change behavior - behavior shift is often the result of improved understanding of events and expectations (the rules)
 - At least half of the Social Stories should praise something the person already does well

Gray, 1998



Deane C. Kolb

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Creating Social Stories

- Collaboratively describe a specific situation in the client’s life including
 - Information (from client, family, partner, friends) about who, what, when, where, why, and how in a given situation
 - Describe behavior in a reassuring and patient manner, rather than directing the client toward specific behavior
 - Literal language that is meaningful to the client



Deane C. Kolb

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Creating Social Stories, ctd

- Careful consideration of formatting choices (e.g., story length, font style/size, illustrations)
- Describe social information rather than directing the client to specific behavior
- A plan for editing, comprehension checks, and story review schedules
- Remember to include things the person already does well

For more info, see carolgraysocialstories.com/social-stories/social-story-sampler/



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A young adult Social Story



In secondary school, Adam’s classes all had assigned seating, and the open-seating policy in his university classes makes him uncomfortable. He becomes very anxious about how to choose a seat, and once he has chosen, he becomes angry if he is unable to sit in it again at the next class meeting. He has been skipping class to avoid the seating uncertainty.



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Finding a Seat for Class



- I am a student at University of Manchester. At this school, students are allowed to choose a different empty seat each time they come to class.
- When I arrive at class each day, I can choose a seat to sit in. If there are more empty seats than taken seats, I should choose a seat that leaves one or two seats empty between me and another student.
- When I leave this kind of space between me and the next student, they like that I am respecting their personal space. Less personal space is needed when there are fewer empty seats. This means that if there are fewer empty seats than taken seats, I can choose any empty seat.
- When students leave at the end of class, the seats become available to everyone for sitting again. This is a good thing, because it means that I can choose from all the empty seats when I come back.



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weraspies.weebly.com/social-stories.html

Firm Handshake



Shaking hands shows confidence. I will give the interviewer a firm handshake and a smile when I walk into the office. If they sense that I am confident, they will be more likely to hire me.



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Other good Social Story topics

- Special events
 - Wedding, funeral, parent-teacher conference
- Workplace situations
 - Interviewing, business meetings, lunchtime at work
- Errands
 - Grocery store, mailing a package, seeing a doctor
- Many examples online ("adult social stories") to start from



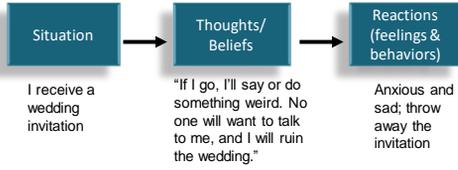
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Cognitive Restructuring



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Beliefs inform our interpretation of situations, leading to our reactions.



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Cognitive Restructuring



- As with any client, cognitive restructuring helps autistic people to check and change cognitions
- Literal thinking may lead clients to interpret something to an extreme or inaccurately. They are less able to put things in perspective, seek new information, and consider alternative ways of thinking or responding



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Literal Thinking

"When I was 11, I was posed this math question:

*A frog is 10 feet away from a pond.
 Day 1, it jumps halfway (5 feet) toward the pond.
 On Day 2, it jumps halfway again (2.5 feet).
 On Day 3, it jumps halfway again (1.25 feet) toward the pond.
 Every day it jumps exactly halfway toward the pond.
 Will the frog ever reach the pond? Give reasons for your answer.*

In case you need it, I'll give a long paragraph break with a nice picture of a frog before telling you the answer."



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Literal Thinking



Mathematically, the frog will never reach the pond.

In order to reach the finish line, there would have to be a day when the frog goes the whole way. And if the frog only every goes halfway, that will never happen. I got the answer half right. This is what I wrote.

Will the frog ever reach the pond? *No.*

Give reasons for your answer. *Frogs are amphibians. If they go 3 days without water, their skin will dry up and they will die.*

Which is entirely true! I got the answer even more correct than the so-called correct answer, and I still lost a point! Eighteen years later, it still bugs me to this day. The lesson learned was this: Whenever you're answering a test question, don't give the correct answer. Give the expected answer. Only then do you get a point.

<http://autisicondweird.com/baking-things-literally-when-having-autism-actually-pretty-funny/>

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Cognitive Restructuring



A CBT therapist helps clients to build skills to gather evidence about beliefs and gather clarification as necessary.

- Learning to use comments like, "I'm not sure what you mean," can be very valuable.
- Similar phrases can be learned for other situations, like trying to interpret another person's intentions ("I'm not sure why that happened. Could you tell me?") or after offending someone ("I'm sorry I upset you.")



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Cognitive Restructuring: Attribution Retraining



- People with ASD may blame or hold others responsible for undesirable events, seeking to get even or punish the other person
 - May be hard to consider their own contribution
- Others, particularly those with lower self-worth, may feel solely responsible for undesirable events, leading to anxiety and guilt
- Attribution retraining involves establishing facts and determining how the client can shift perspective to a more accurate / helpful one



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Attribution Retraining



While neurotypical people may be able to identify alternative attributions in response to a few questions ("Can you think of any other reason that might have happened?"), challenges in perspective-taking and rigidity in thinking may make this harder for autistic clients

- Keep a journal of positive and negative events, listing the primary cause for each event and at least one alternative cause
- Notice patterns in attributions, like unrealistically attributing self-blame for negative outcomes
- Examine in session, with a focus on more realistic and adaptive attributions



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Attribution retraining, ctd



- Review the negative event that led to the attribution, highlight patterns, help the client search for alternative explanations, and rate their believability

Difficulties with academics: May benefit from strategies focused on effort attributions, like attributing negative events to unstable attributions rather than stable ones (eg didn't study enough vs being 'stupid')

- BUT keep attributions realistic!



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Comic Strip Conversations (Gray, 1998)

- Provides visual representations of a conversation
 - Explicit communication, intentions, feelings
- Concrete illustrations make abstract aspects of social communication more concrete and easier to understand, leading to a new perspective or correction of errors or assumptions



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Comic Strip Conversations

- Symbols represent social interactions and other abstract concepts (listening, thinking, interrupting)



- Colors represent emotions and ideas



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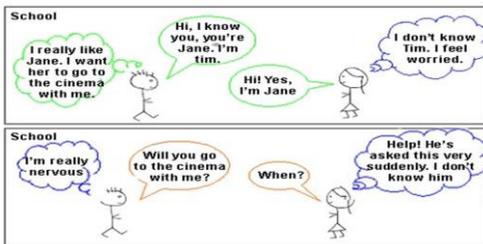
Comic Strip Conversations

Helpful for

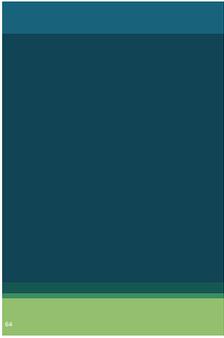
- Clarifying the client's perception of events and the rationale behind their thoughts and responses
- Identifying and correcting any misperceptions
- Building a repertoire of alternative responses
- Considering how alternative responses could affect the thoughts and reactions of others



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In Closing

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In closing

- Autistic clients are just as diverse as the rest of us, so the key is to understand an individual's goals and strengths, and then present CBT skills in a responsive way
- Many go-to strategies have been developed to support common challenges for autistic clients, but remember to not make assumptions
- Generalization relies on abstraction, so remember to focus on guided practice across many settings
- Beyond the individual, consider how well the people in their family, work, or social context understand their profile of abilities – intervention can extend beyond the individual to help create an informed, accepting context

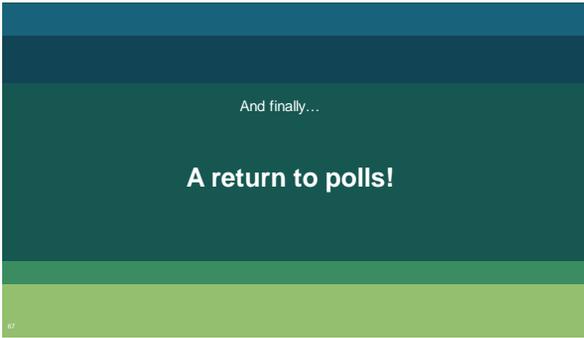
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Resources

- NHS www.england.nhs.uk/learning-disabilities/about/useful-autism-resources-and-training
- National Autistic Society
 - Includes local support groups
- Ambitious about Autism
- Local support groups
- Social media (with some caveats)

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