COMORBID AUTISM SPECTRUM DISORDER AND BORDERLINE PERSONALITY DISORDER: CASE CONCEPTUALIZATION AND TREATMENT IMPLICATIONS

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ADVANCES IN AUTISM, 2024

AUTISM SPECTRUM DISORDER (ASD)

- Neurodevelopmental disorder characterized by chronic difficulties in social communication and interaction, and restricted and repetitive interests and behaviors (APA, 2022)
  - Full etiology is not known but related to genetic and neurobiological variants (Lord et al., 2018)
  - Adult population prevalence of 2.2% in the United States (Dietz et al., 2020)
  - Recent increase in diagnosis due to improvements in detection

HETEROGENEITY IN ASD

Heterogeneous disorder with highly individualized symptom presentation

- Ranging from mild to severe (Lord et al., 2018)

People with lower support needs (less visible difficulties) are more likely to "camouflage" or "mask" symptoms

- Results on later diagnosis than more severe presentations (Lai et al., 2017)

Individuals with delayed diagnosis suffer adverse social problems

- Bullying, problems in relationships, and isolation (Huang et al., 2020)

PERSONALITY DISORDER (PD)

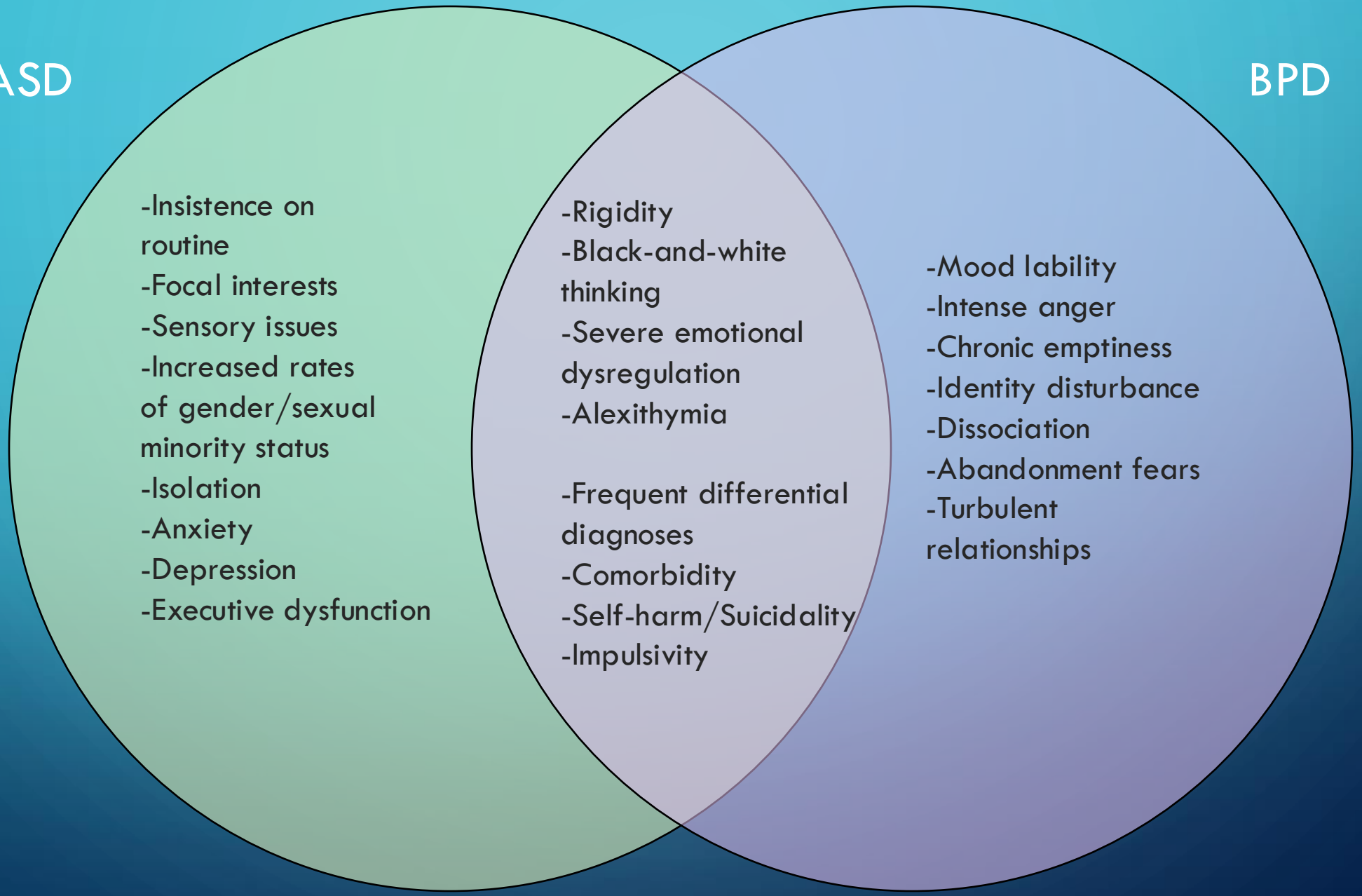
Persistent, pervasive, rigid pattern of inner experience and conduct that diverges significantly from cultural norms and expectations, which can influence cognition, emotion, interpersonal functioning, and impulse control (APA, 2022)

Currently, DSM-5 Section II uses a categorical diagnosis system

- DSM-5 Section III introduces the Alternative Model of Personality Disorders (AMPD), supported by research, and addresses issues such as heterogeneity and comorbidity within categories (emphasis on SELF and OTHER functioning)

BORDERLINE PERSONALITY DISORDER (BPD)

- Prevalence of 1.7% in general population (Gunderson et al., 2018)
  - 5 of 9 diagnostic criteria (APA, 2022)
    - efforts to avoid abandonment, pattern of unstable and intense interpersonal relationships, identity disturbance, impulsivity in at least two areas, recurrent suicidal or self-harming behavior, chronic feelings of emptiness, intense anger, and stress-related paranoid ideation or severe dissociative symptoms
- Linehan's biosocial theory of BPD
  - Sensitive temperament (heightened emotional sensitivity, difficulty regulating intense emotions, slow return to baseline) met with invalidating environment (dismisses or does not tolerate emotions or attributes)
  - Emotional sensitivity + traumatic invalidation results in emotional, cognitive, behavioral, self dysregulation
- Research has demonstrated that BPD may represent an overall latent factor of general PD (Sharp et al., 2015) - encompasses self and other domains


ASD
-Insistence on routine
-Focal interests
-Sensory issues
-Increased rates of gender/sexual minority status
-Isolation
-Anxiety
-Depression
-Executive dysfunction
-Rigidity
-Black-and-white thinking
-Severe emotional dysregulation
-Alexithymia
-Frequent differential diagnoses
-Comorbidity
-Self-harm/Suicidality
-Impulsivity
BPD
-Mood lability
-Intense anger
-Chronic emptiness
-Identity disturbance
-Dissociation
-Abandonment fears
-Turbulent relationships

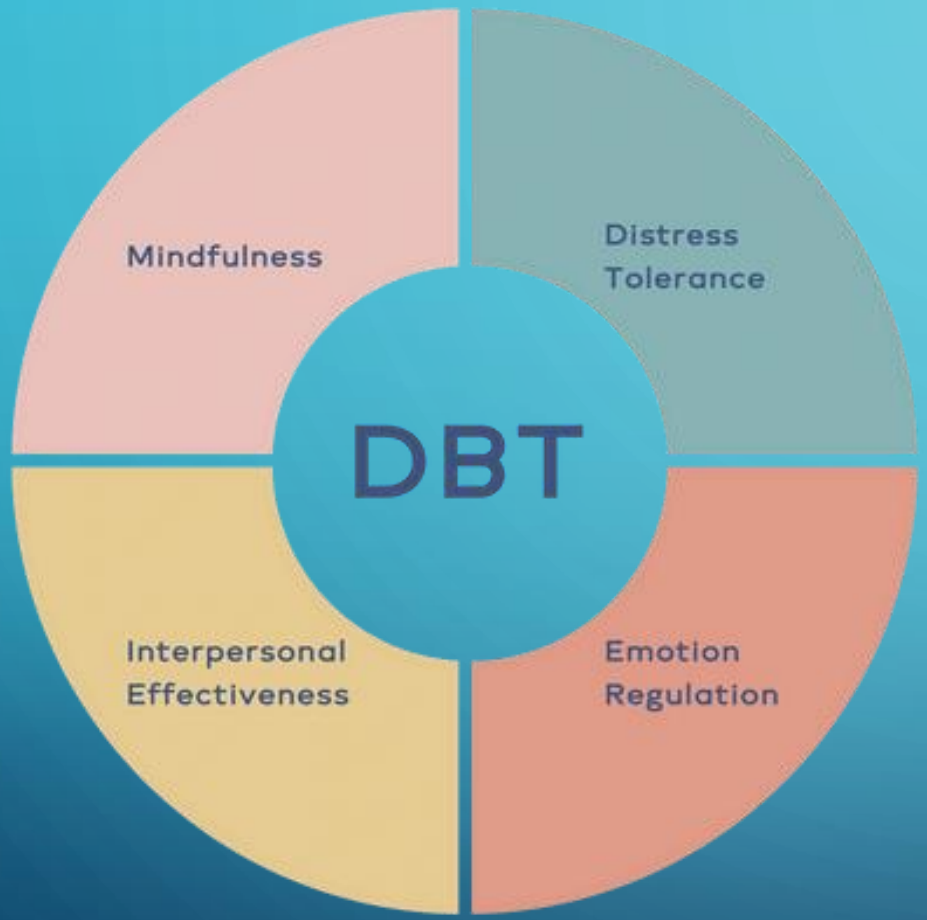
CO-OCCURRENCE OF ASD AND BPD

Research has shown significant comorbidity of ASD and BPD (Rinaldi et al., 2021)	62% of adults with ASD meet criteria for at least one PD 17% met criteria for multiple (underscoring utility of AMPD with this population)
ASD traits increase risk of psychiatric disorders (including suicidality) (Dell'Osso et al., 2023)	Personality functioning mediates the relationship with ASD symptoms and well-being (Rinaldi et al.., 2021)
Undiagnosed ASD may in fact be a predisposing factor for development of BPD	Increased emotional sensitivity + invalidation from the environment

GAPS IN TREATMENT FOR COMORBID ASD + BPD

- Treatment for individuals with ASD frequently targets social-communication outcomes, executive functioning, managing repetitive and restrictive behaviors and interests, and improving adaptive behaviors (Gosling et al., 2022)
- Treatment for BPD emphasizes emotional and behavioral functioning, development of sense, and enhancing social functioning (Sharp & Fonagy, 2015)
- Existing treatments for ASD+BPD populations emphasize task-related outcomes (CBT; Wang et al., 2021) and “social signaling” for interpersonal functioning (RO-DBT; Lynch, 2018)
- However, existing treatments lack an emphasis on emotion regulation for ASD+BPD populations

DIALECTICAL BEHAVIOR THERAPY (DBT)



- Gold-standard treatment for BPD – targeting emotion dysregulation and functionally impairing symptoms
  - Developed for suicidal/parasuicidal patients by Marsha Linehan (1987)
- Individual and skills training groups
- Synthesizes “change” strategies rooted in behavior therapy AND ”acceptance” strategies based in Zen philosophy with emphasis on relationship with therapist
- 4 domains: distress tolerance, emotion regulation, interpersonal effectiveness, mindfulness (Linehan, 1993)
- Several studies have demonstrated positive treatment results of standard DBT on ASD symptoms
  - However, no treatments currently exist for ASD BPD populations

THE CURRENT STUDY

- Young non-binary adult who presented in our clinic
- Previously diagnosed with BPD
- Received standard DBT for 2 years with modest results
- The therapist recommended an assessment due to sensory difficulties and lack of progress in treatment

"ANNA"

- 20 years old, non-binary person
- Assigned female at birth
- Uses they/them pronouns

Developmental history

- Born full-term
- Birth complications – septal defect
- Physical therapy for help walking

- Described by parents as "always different"
- Diagnosed with ADHD during at age 9
  - Prescribed stimulants with mixed results, discontinued at age 11
- Social difficulties throughout development
  - 1-2 close friends, minimal contact with other peers
- Sensory problems
  - Issues with loud sounds, crowds, lights
  - Self-stimulatory behavior (banging head, scratching self during tantrums)

CURRENT FUNCTIONING

During adolescence

- Difficulty with changes in routine
- Hyper fixation with specific TV shows, watching over and over
- Problems with hygiene
  - Disliked brushing teeth, showering due to sensory issues
- Frequent arguments with parents
- Risky sexual and substance use behavior
- Poor academic performance
- Aggressive behavior toward parents
- Symptoms of depression
  - Irritability, low mood, disrupted sleep, anhedonia
- Suicidal ideation following break-up with romantic partner

ANNA'S EXPERIENCE IN DBT

- Following non-lethal suicide attempt, hospitalized and referred to DBT IOP (intensive outpatient program) – group format for skills training + individual therapy
- Struggle with group format
  - Distracted by peers or "unaware"
- Seemed to "learn" skills- able to recite concepts verbally
- Observed decrease in suicidality and self-harm
- Transition to virtual treatment
  - Coincided with "stall" in treatment
- Continued to struggle with interpersonal relationships, arguments with parents, basic functioning (hygiene, taking care of pet)
- DBT therapist reported struggle with building rapport/contingencies

CLINICAL ASSESSMENT

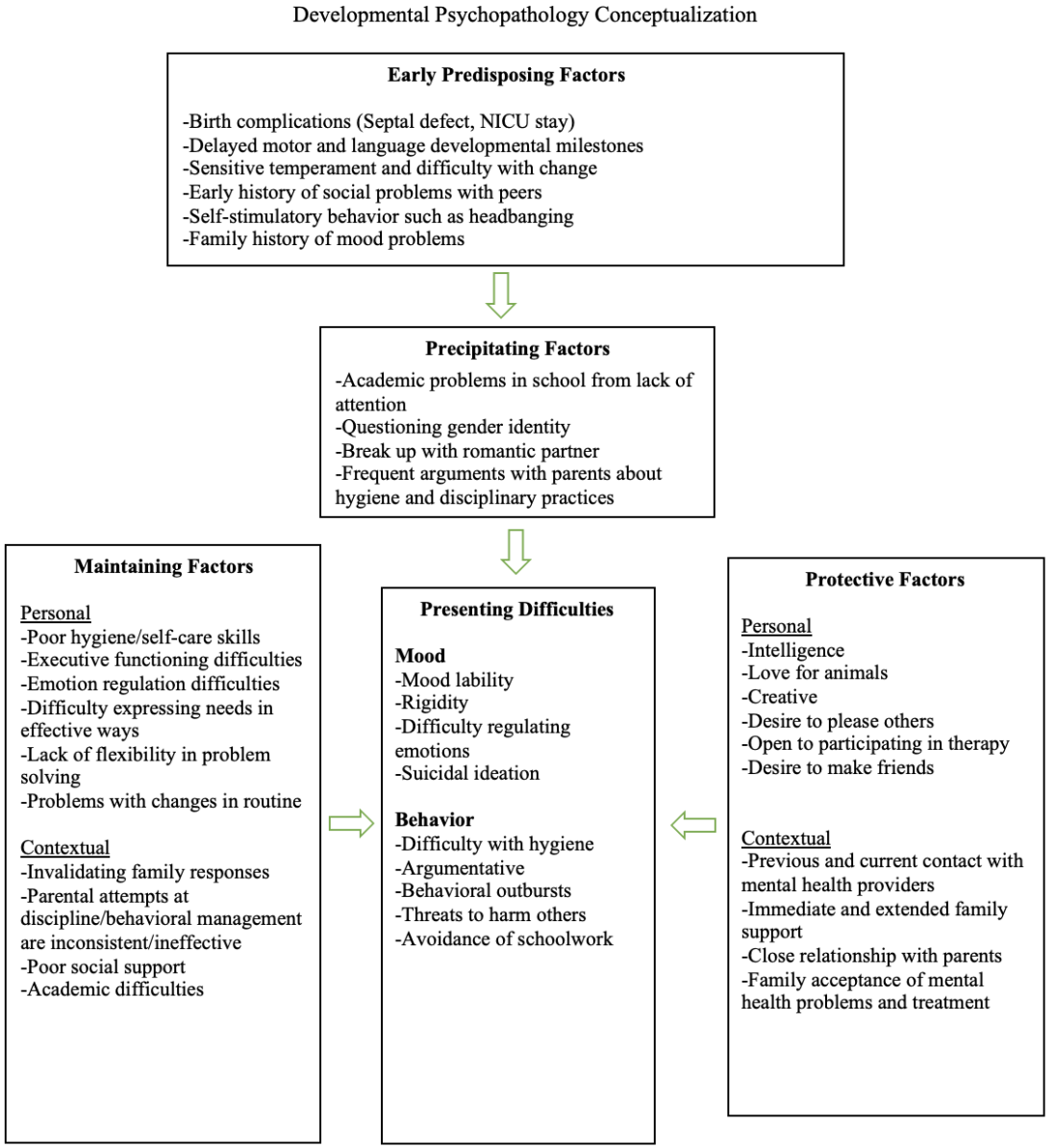
- Behavioral observations
  - Abnormal eye contact
  - Fidgeting, removed shoes
  - Insistence on finishing task once started
  - Tendency to discuss abnormal topics (tangential, self-focused)
- Cognitive
  - WAIS-IV FSIQ = 108
    - High variability: Perceptual Reasoning (88) to Verbal Comprehension (125)
- Neurodevelopmental
  - ADOS-2 score consistent with Autism Spectrum
  - Social Responsiveness Scale = Severe range with highest scores within Autistic Mannerisms and Social Motivation
- Executive functioning
  - Conners Continuous Performance Test indicated no atypical attention difficulties

CLINICAL ASSESSMENT

- Psychopathology self-report
  - PAI yielded elevations in **Anxiety** (Affective, Physiological), **Anxiety-Related Disorders** (Phobia, Traumatic Stress), **Depression** (Cognitive, Affective, Physiological), **Paranoia** (Hypervigilance, Persecution), **Schizophrenia** (Psychotic Experiences, Social Detachment, Thought Disorder), **Borderline Features** (Affective Instability, Identity Problems, Negative Relationships, Self-Harm), and **Antisocial Features** (Behavior, Sensation Seeking)
- Personality assessment
  - Structured Interview for DSM-IV Personality (SIDP) yielded endorsement of 6 of 9 BPD Criteria (Abandonment Fears, Affective Instability, Emptiness, Identity Disturbance, Suicidality/Self-Harm, and Impulsivity)
  - AMPD Levels of Personality Functioning – Brief Form (LPFS-BF-2.0) consistent with severe personality dysfunction in both self and other domains

FORMULATION

- Autism Spectrum Disorder without accompanying intellectual impairment, without accompanying language impairment
  - Persistent deficits in social communication across multiple contexts
  - Restricted, repetitive behavior, interests, and activities
  - Onset of symptoms was early in development according to parental reports
- Borderline Personality Disorder
  - Abandonment Fears, Affective Instability, Feelings of Emptiness, Identity Disturbance, History of Suicidality or Self-Harm, and Impulsivity (6 of 9 diagnostic criteria)



TREATMENT RECOMMENDATIONS

ASD-informed DBT

Given the client's previous success with DBT, we provided specifically tailored recommendations for her treatment of emotion dysregulation and behavior problems

Emphasis on "behavioral mindset"

Ensure client can perform behaviors and skills of interest (not just repeat / discuss the concept)

Concrete examples to enhance learning

Multiple examples, plain language

Broken down into small components for mastery

If possible, include focal interests (client's favorite TV shows, musicians)

Repetition, longer treatment timeline

Emphasize generalization into social environment

In-person treatment is preferred

TREATMENT RECOMMENDATIONS

- High levels of reinforcement for positive behaviors
  - Including positive peer interaction
  - Group activities would be useful if possible
- Parent involvement in treatment
  - Family should receive support and information about ASD
  - Home environment should support Anna's treatment
- Duration of treatment may be extended due to Anna's learning style
  - Large goals should be broken down into small parts

CLIENT RESPONSE

- Did not collect long-term follow-up data for Anna and their family
- Initial response was positive
- Family felt it "helped to explain" Anna's problems and made sense to them
- Anna struggled to understand why parents did not "figure this out" earlier
- Planned to use recommendations in therapy and felt hopeful about the future
  - Therapist indicated that recommendations were useful and would help structure sessions in treatment
- Manualized DBT uses the therapeutic relationship as reinforcement for behaviors
  - Therapist stated that Anna had "never" responded typically to social reinforcement, and now she felt she had more ideas for reinforcing Anna's positive behavior

CASE ILLUSTRATION: PROGRESSIVE MUSCLE RELAXATION

- First, therapist must analyze skillset of client to determine whether repeated teaching is needed
- To teach Progressive Muscle Relaxation, must slowly, step-by-step, go over tensing and releasing each muscle in the body
  - May start with a stress ball or other toy of interest to learn to associate sensations of tense and relaxed muscles
  - If client struggles to identify internal sensation, may apply external or visual cues or representations (ex: a slinky expanding or contracting)
  - May need to demonstrate before transferring to client (exaggerated or other in vivo examples)
- Client should practice across multiple environments with therapist to enhance generalization
  - In therapy room, in waiting area, out on sidewalk in front of therapist office
- In ASD, generalization across new environments is often a difficulty
  - In the naturalistic environment, would also be useful to identify common antecedent events or feelings which should prompt use of progressive muscle relaxation (ex: before driving, before going to school, after a stressful meeting)

CASE ILLUSTRATION: OPPOSITE ACTION

- DBT Emotion Regulation Skill
  - Client recognizes their current emotion and associated action urge (for example: Sadness and urge to isolate). Then, client determines if the urge is "effective" (helping them toward their goals). If NOT effective, client is to "act opposite" to the urge and change their emotion (for example: call a friend instead of isolating themselves to change their emotion of sadness).
  - Taught in a single skills-group format in 1 hour

- ASD-adapted teaching for Anna
  - Spend several sessions teaching the components (identifying emotions, action urges, effectiveness)
  - Learn skills separately, THEN link them together
  - Repetition and multiple exemplars
- Incorporate her favorite TV shows (for example: the Office) to enhance attention to training
  - "What was Pam feeling in that moment? What was her action urge? Was it effective? What could she have done to change her emotion?"
- Begin training in-vivo for Anna in session in-clinic to ensure mastery
  - Build to generalize in their typical environment

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