Playful Occupational Therapy Intervention for Children and Adolescents with Autism: Innovative, Creative, and Evidence-Based Strategies for Success

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Introduction to Speakers

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Learning Objectives

- Understand the evidence supporting a playful approach to occupational therapy intervention with children and adolescents with autism
- Identify opportunities for innovative, creative, and evidence-based playful occupational therapy intervention with children and adolescents with autism
- Consider ways to implement playful occupational therapy in one’s own clinic and school setting

The Importance of Play: Child Development

In studies of typical children play has been associated with:
- Divergent and convergent thinking (Fisher, 1992; Russ, Robbins, & Christianso, 1999; Wyver & Spence, 1999);
- Associative fluency or the ability to suggest alternative uses for an object (Danksy & Silverman, 1973);
- Creativity (Howard-Jones, Taylor, & Sutton, 2002; Saracho, 2002);

The Importance of Play: Autism

- Documented neurological deficits in multiple brain areas in autism
- Animal research suggests that play impacts these brain regions

Through brain plasticity- play could provide environmental enrichment of the sort that improves function and changes developmental trajectories

The Importance of Play: Family- & Child-Centered Care

- “Family-centered service recognizes that each family is unique; that the family is the constant in the child’s life; and that they are the experts on the child’s abilities and needs. The family works together with service providers to make informed decisions about the services and supports the child and family receive. In family-centered service, the strengths and needs of all family members are considered.” (King et al, 2004)
- FCC is about maximizing parents ability to foster their child’s development and well being
- Often what families care about = play and friendships
The State of Play in OT

- What we did 10+ years ago (Couch, Dietz, & Kanny, 1998)
- What do we do now? (Brown, et al., 2005; Howard, 2002; Kramer et al., 2009; Kuhaneck & Tanta, in preparation; Rodger et al., 2006; Saleh et al., 2008)

The State of Play in OT: Barriers

- Reported barriers
  - Funding sources
  - Contextual factors (i.e., school based practice)
- Removing barriers
  - Goal writing
  - Education of others
  - Family members as allies

Play-Based & Occupation-Focused Intervention in Occupational Therapy (Kuhaneck, Spitzer, & Miller, 2010)

- Play & Pediatric OT: Play as an occupation (Parham, 2008)
  - The missing piece of meaning
  - Play in natural environments: daily life
  - Contextual influences:
    - Physical safety
    - Space for play
    - Time for play
    - Availability of developmentally appropriate & preferred play materials
    - Appropriate social interaction

Play-Based & Occupation-Focused Intervention in Occupational Therapy (cont’d) (Parham, 2008)

Best practice:

- We must become more comfortable with play as a GOAL rather than a means to achieve some other goal
- But- we must be able to explain to others why play is important
- For some children, especially those with autism, being able to play IS an important goal- as we will now see

Capabilities and difficulties of children with autism in relation to play

- Play Skills: The Structure/Form of Play
  - Delayed or different in quality & quantity- Spitzer (2008)

Play difficulties in children with autism: Object play

- Both extreme preoccupation with and atypical use of objects is noted (Baranek et al., 2005; Ozonoff et al., 2008; Rowland & Schweigert, 2009; Williams, 2003; Williams, Costall, & Reddy, 1999; Williams, Kendell-Scott, & Costall, 2005)
- Objects hold the potential for fear and anxiety (Grandin, 1997)
Play difficulties in children with autism: Functional Play

- No differences in frequency
- Differences in quality and total time spent in this realm (Charman et al., 1997; Jarrod, Boucher, & Smith, 1996; Lewis & Boucher, 1988 Williams, 2003; Williams, Costall, & Reddy, 1999)

Play difficulties in Children with Autism: Symbolic Play

- Less likely to engage in pretend play
- Spend less total time in pretend play
- Impaired in production of novel pretend acts
- BUT - Are capable of pretending—especially when elicited by an adult (Charman & Baron-Cohen, 1997; Hobson, Lee, & Hobson, 2009; Jarrod, 2003; Jarrod et al., 1996; Lewis & Boucher, 1988; Libby et al., 1998)

Play difficulties in Children with Autism: Natural free play with peers

- Greater differences noted in play when free play is observed (vs. elicited play)
- Interactions with others rare, and when they occur—most often with adults
- Play episodes are brief
- In one study—preferred play and play objects were sensorimotor in nature (Holmes and Procaccino, 2009; Holmes & Willoughby, 2005; McGee, Feldman, and Morrier, 1997)

Play in Children with Autism: The Experience

- The Experience of Play: Motivation & Mental Health
  - Play and individual meaning
  - Play and the self as an occupational being
  - The experience of play for children with autism

Assessment: Examining Personal Meaning in Occupations of Children with Autism

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Assessment: Occupational Profile
- Gathering Information about likes, dislikes, preferences
  - Observations
  - Interviews/reports
  - Participation

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Assessment: Occupational Profile
- Identifying unconventional Occupations
  - Intentional actions
  - A set of actions
  - With meaning

Spitzer (2003b, 2010)

Assessment: Occupational Profile
- The Challenge of Identifying Meaning and Intention
  - The child’s perspective often is different due to differences in:
    - development,
    - language,
    - perception

Spitzer (2003a)

Assessment: Child-Specific Activity Analysis
- An essential component
  - “a sophisticated understanding of the unique qualities of the activities” (Fidler & Velde, 1999, p. 2)
  - sensory experience, physical characteristics, child’s skill, other child characteristics
  - Details/nuances of what & how the child does the activity are critical
  - Helps identify what is the occupation

Assessment: Clinical Reasoning & Interpretation
- Meaning and Intention in Occupation
  - Framing the Occupation:
    - The What and How: Behavioral/Material Content
      observations of obvious and subtle behaviors and use of materials
    - The Why: Subjective Meaning
      making connections to infer & interpret meaning

Assessment: Clinical Reasoning & Interpretation
- Case examples: “Playing with” Dirt for Mike & Alex

Being Playful: Therapeutic Use of Self in Pediatric OT for Children with Autism
- L.O.: Consider ways to implement playful occupational therapy in one’s own clinic and school setting

Being Playful: Therapeutic Use of Self
- Communication
  - Understanding the Child
  - Communicating that Therapy is fun!

Kuhaneck, Spitzer, & Miller (2010)

Being Playful: Understanding the Child
- Suspend adult assumptions (i.e., superiority) (Curtin, 2001; Fine & Sandstrom, 1988)
- Level power differences/inequality—avoid being an authority figure, minimize stopping and directing of the client, let them show us (Curtin, 2001; Fine & Sandstrom, 1988)
- Look for effect/impact of adult presence (Fine & Sandstrom, 1988)

From Spitzer (2004), adapted from Spitzer (2003)

Being Playful: Understanding the Child
- Assume all actions are potentially communicative (Durig, 1996)
- Attend to communication through occupational engagement, especially shared occupations (Grandin & Scariano, 1986; Spitzer, 2003a; Williams, 1992)
- Look for individualized communication strategies around shared routines, physical environment, likes and dislikes, and bodily expressions (Goode, 1980, 1994; Spitzer, 2003a)

From Spitzer (2004), adapted from Spitzer (2003)

Being Playful: Understanding the Child
- Develop a shared history with the client—understand their favorite objects and preferences, and participate in activities with them (Goode, 1980, 1994; Spitzer, 2003a)
- Interview other people knowledgeable about the client
- Follow the client’s directions—at times, let them lead us, “passive obedience” (Goode, 1980)

From Spitzer (2004), adapted from Spitzer (2003)

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Being Playful:
Understanding the Child

- Imitate, physically simulate, or imagine the individual’s sensory experience of the occupation to “feel” the experience (Goode, 1980; Spitzer 2003a)
- Sharpen conscious awareness of various auditory, visual, tactile, and kinesthetic sensations (Spitzer, 2003a)

From Spitzer (2004), adapted from Spitzer (2003)

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Being Playful:
Communicating that Therapy is Fun!

- Eyes?
- Face
- Body
- Touch?

Kuhaneck, Spitzer, & Miller (2010)

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Being Playful:
Communicating that Therapy is Fun!

- Voice (vocalizations)
  - Use a playful tone
  - Vary pitch, loudness, rhythm
  - Repeat sounds
  - Imitate sounds and ways that sounds are used by child

Kuhaneck, Spitzer, & Miller (2010)

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Being Playful:
Demonstrating Empathy & Rapport

- Empathy & Rapport
  - Empathy—informed caring
  - Rapport & Therapeutic Relationship—working alliance or bond (Tickle-Degnen, 2002)

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Being Playful:
Demonstrating Empathy & Rapport in Play

- Sharing Control—partners
- Spontaneity & Flexibility
- Managing Challenges in Play
- Focusing on Future Possibilities

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Being Playful: Evidence

- Occupational therapy literature on therapeutic use of self
- Correlated with clients’ perceived outcomes (Law, 1998; Darragh, Sample, & Krieger, 2001; Palmadottir, 2003)

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Being Playful: Evidence

- Interdisciplinary research on adult–child play: adult actions can influence play in general
- Feedback & encouragement to use interactive strategies more frequently → more competent play (Belsky, Goode, & Most, 1980)

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Being Playful: Evidence

- Interdisciplinary research on adult–child play: adult actions can influence play in children with disabilities
- Amount of play; playfulness (Lawson, Parrinello, & Ruff, 1992; Daunhauer, Coster, Tickle-Degnen, & Cermak, 2007; Chiarello, Huntington, & Bundy, 2006; Evans & Meyer, 1999)

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Being Playful: Evidence

- Autism & Adult-Child Play
  - Nadel, Martini, Field, Escalona, and Lundy (2008)
    - Looked at, approached, and touched adults more frequently when adult more often looked at the child, smiled at the child, moved toward the child, had relaxed body tone, made sounds, imitated the child, and was playful.
  - Tiegerman & Primavera (1981)
    - Frequency & duration of object manipulation was greatest when the adult imitated the child by using both the materials and methods of play that the child chose, rather than different action or object
  - Skaines, Rodger, & Bundy (2006)
    - Adult structure of play increased playfulness

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Playful Strategies:

Selecting, Adapting, & Creating Activities that Children Want to Do

- Using Personal Interests & Preferences to Reframe “Work” into “Play” (in therapy & daily life)
- Embedding “Play” in “Work”
- Expanding Current Occupations
- Adapting Individual Interests into Shared, Social Activities

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Reframing “Work” into “Play”

The What and How: Behavioral/Material Content

The Why: Subjective Meaning

WORK or PLAY???


Reframing “Work” into “Play”

- What they Like to Do (more like play)
  - Visual feedback
  - Construction
  - Sensory properties
  - Sensorimotor engagement
  - Favorite toys
  - Narratives from favorite stories or movies (Spitzer, 2008)

- What They Need to Do (often more work)
  - ADLs/Self-Care
  - Sleep
  - Education
  - “Play”
  - Social Participation

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Reframing “Work” into “Play” Video Case: Self-Care

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Reframing “Work” into “Play”

- The Work of Self-Care/Dressing

Kuhaneck, Spitzer, & Miller (2010)

Reframing “Work” into “Play”

- The Work of Writing
  - Writing Work → Car Writing Game

Kuhaneck, Spitzer, & Miller (2010)

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Reframing “Work” into “Play”

- The Work of Writing: More examples

Embedding “Play” in “Work”

- The Case of Beneficial “Off-Task” Behavior

Expanding Current Occupations

- Lack of interests
- Narrow Interests
- Limited Interests & Social Play

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Expanding Current Occupations

- Lack of Interests
  - Create occupational appeal (Munier, Myers, & Pierce, 2008), then gradually grade and adapt
  - A way to “get-in”

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Expanding Current Occupations

- Narrow Interests & Opposition to Other Things
  - Combine elements of what the child likes with elements of what they need to do
  - Start where the child is
  - Explain and negotiate: Example cards

Kuhaneck, Spitzer, & Miller (2010); Spitzer (2008)

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Expanding Current Occupations

- Narrow Interests (& Opposition to Other Things)

Kuhaneck, Spitzer, & Miller (2010)

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Expanding Current Occupations

- Recognizing & Extending Hints of Play
  - Kuhaneck, Spitzer, & Miller (2010); Spitzer (2008)
  - Case Examples

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Expanding Current Occupations

- Recognizing & Extending Hints of Play
  - Construction & Destruction ➔ “Don’t Break the Ice”

Adapting Individual Interests into Shared, Social Activities

- Example: Tag Games, Follow-the-_____ Leader Games
- Example: New Pretend Games

Application to Adolescents

- Many of the strategies we have discussed can be adapted for use with older children and adolescents
- Adolescents also need play / leisure opportunities and the ability to socialize with peers

Case Studies: Play in Adolescents with ASD

- Reframing Work into Play
  - Reporter: Daniel & Paul
  - Ari from the Future

Ideas for Play in Adolescents with ASD

- Video games or themes
- Elements to rename Alert Program “speeds”
- Sports or sport themes
- Create a new “sport”
- Made-up games to promote social interaction/negotiation
- Social media combined with the work of keyboarding
- Other personal interests
  - Explain to a peer to share
  - Bring a favorite item
- Card “Games”—commercially available or have them make-up

Focusing on Outcomes

- We will be more likely to work with children in a playful fashion and to work on play specifically if we assess and write goals for play
- Sample play goals and objectives for children with autism
- Common concerns with reimbursement and other’s perceptions
- Supporting the importance of play using evidence
Play Evidence

- Evidence on Effectiveness: Incorporating Play
  - Play is an effective modality in OT (& other interventions) for developing skills in children with disabilities (for example: Case-Smith, 2000; Esdale, 1996; O’Connor & Stagniti, 2011; Olson, Heaney, & Soppas-Hoffman, 1989; Sakemiller & Nelson, 1998; Sparling, Walker, & Singdahlsen, 1984)
  - Play-based approaches are valued by parents (Stahmer et al., 2011)

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Play Evidence

- Evidence on Effectiveness: Incorporating Personal Interests
  - Research supports that including child choice, preference, or interest can be an effective strategy for promoting engagement in toy play and social play in children with autism (i.e., Baker, Koegel, & Koegel, 1998; Koegel, Dyer, & Bell, 1987; Reinhartsen, Garfinkle, & Wolery, 2002; Vismara & Lyons, 2007)

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Play Evidence

- Future Research on Incorporating Personal Interests & Play
  - Is it more effective?
  - For which outcomes?

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"Life should be more than compliance, and actions and expression should be more than training and a means to an end. Life should, at some point, be a rewarding end in itself.”

Donna Williams (1996, p. 128)
an adult with autism

Thank you!

children & their families, colleagues, mentors, friends, family, & you

Questions & Answers
References


Kuhaneck & Tanta, in preparation;


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