Supporting the Mental Health of School-Aged Youth with ASD: The Positive Potential of School Partnerships

9th Annual JFK Autism Spectrum Disorder Conference – October 2021

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Conflict of Interest:

Royalties:
Facing Your Fears: Group Therapy for Managing Anxiety in Children with High-Functioning Autism Spectrum Disorders
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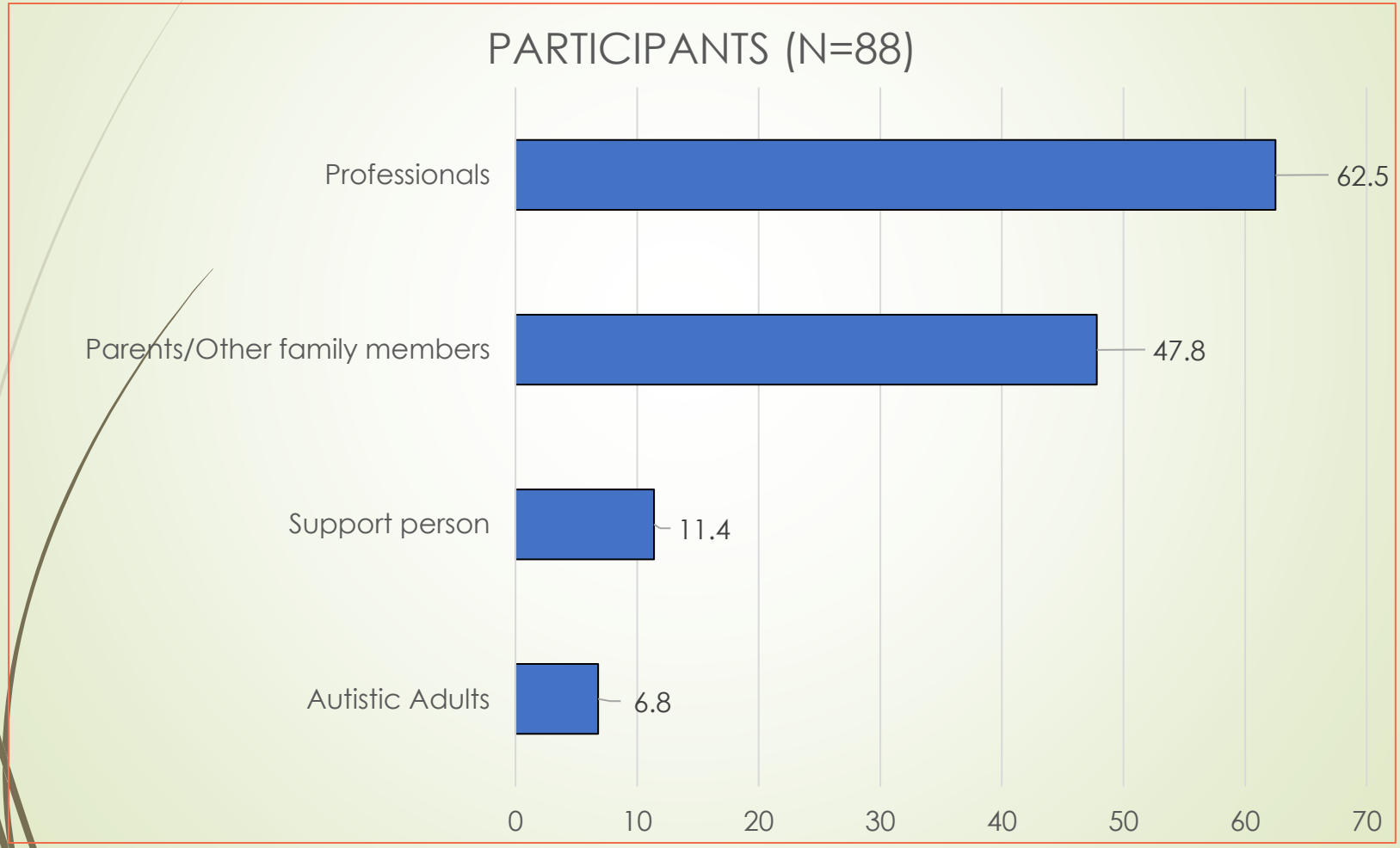
Significance: Mental Health and Youth with ASD

- **Prevalence**
  - MH symptoms are common in people with ASD/NDD (Middleton et al. in press; Simonoff et al. 2008)
- **Impact**
  - MH symptoms increase risk for academic, social, and emotional problem (Rotheram-Fuller & MacMullen, 2011)
- **Without Intervention Symptoms Can Worsen Over Time**
- **Potential to Treat**
  - Best practice approaches (CBT) are effective in non-autistic youth (Olatunji et al. 2010)
  - CBT extended to youth with ASD encouraging (McConachie et al. 2014; Storch et al. 2013; Wood et al. 2009; 2020)

Colorado Stakeholder Input: Mental Health Survey (October 2020)



Common Mental Health/Behavioral Concerns

Common Mental Health or Behavioral Concerns (Choose top 3)	Percent Response
Anxiety, Fears, Worries	72.7%
Attention, Concentration, Impulsivity	64.8%
Outburst, meltdown, tantrums	55.7%
Noncompliance, refusals, defiance	25%
Aggression (people or property)	17%
Sadness, irritability, depression	14.8%
Video Game or other online addiction	14.8%
Increase in behaviors (e.g., sensory-seeking, repetitive behaviors)	13.6%
Self-harm or suicidal behaviors	11.4%

Common Mental Health/Behavioral Concerns: Family Members and Professionals

Common Mental Health or Behavioral Concerns (Choose top 3)	Percent Response Family Members	Professionals
Anxiety, Fears, Worries	84%	71%
Attention, Concentration, Impulsivity	56%	73%
Outburst, meltdown, tantrums	36%	62%
Noncompliance, refusals, defiance	32%	27%
Aggression (people or property)	12%	18%
Sadness, irritability, depression	20%	9%
Video Game or other online addiction	20%	13%
Increase in behaviors (e.g., sensory-seeking, repetitive behaviors)	8%	16%
Self-harm or suicidal behaviors	12%	4%

Contributing Factors – COVID-19

COVID-19 FACTORS	DEFINITE IMPACT	VERY MUCH OF AN IMPACT	PERCENT TOTAL
Impact on School (Virtual learning, hybrid models, technology challenges, helping children with homework)	39.1	51.7	90.8
Family Stress (multiple roles, financial challenges, job loss/change, relationship conflict)	39.1	33.3	72.4
Restrictions	37.5	31.8	69.3
Worry About Illness	31.8	5.7	37.5

COVID and ASD/NDD: Lost opportunities (Bellomo et al. 2020)

- Disproportionately impacted youth with ASD/NDD (and different communities)
- Disruption in usual medical care/educational experiences
- Missed diagnoses – both NDD and MH
- Unknown impact of social isolation – missed opportunities to have challenges addressed
- Impact of Covid-19; fear of illness/disease; financial burden
- Even with telehealth delivery, burden on parents/caregivers
- Home school and multiple roles of parents

Identifying MH Concerns in ASD

Age of Identification

6-9 (37.9%)

10-12 (33.3%)

13-15 (18.4%)

Age of Identification

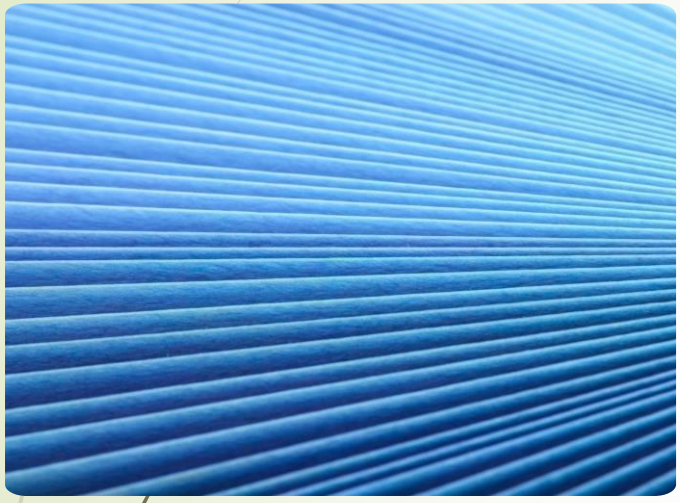
	Fam	Prof
6-9	(44%)	(33%)
10-12	(32%)	(38%)
13-15	(12%)	(18%)

First to Notice MH concerns

Parents/Caregivers (90.8%)

Teachers/School Professionals (66.7%)

Where Do Youth with ASD Receive MH Services?



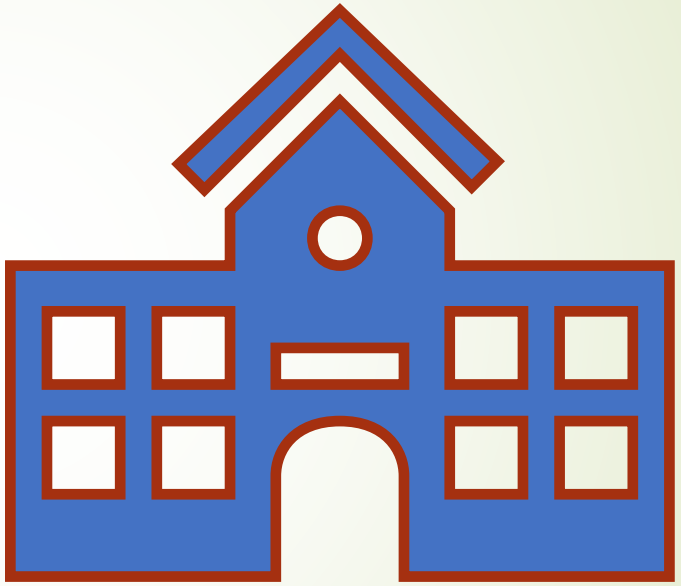
Ages 6-9: Schools (60%)

Ages 10-12: Day Treatment Programs (38.5%); Private MH (35.4%)

Ages 13-15: Private MH (47.9%); CMHC (34.7%); Outpatient MH through Hospitals (34.%)

"Most families I see get the majority of services from schools – at least until high school. They rely heavily on school services due to cost, wait lists, availability, schedules, etc. "

Why Form School Partnerships?



Importance of Working in Schools

- Students with ASD/NDD display marked anxiety/problem behavior in school (Rotheram-Fuller & MacMullen, 2011).
- Evidence-based interventions frequently unavailable in school settings
- Effective way to reach historically underserved students
- Training non-mental health providers expands capacity to serve students
- **Schools are the location of choice** (Mychailyszyn et al., 2011; Van Acker & Mayer, 2009).

Substantial Disparities in Access to Mental Health Services

Racial Disparities in CBT Research for Anxiety in ASD (Pickard, Reyes, & Reaven, 2018)

- Reviewed 14 studies, 473 participants with ASD and anxiety in the US
- Compared demographics of the participants with US Census
- Significantly more White participants/significantly fewer Black/Latino youth than what US Census would suggest
- Highly educated sample – most caregivers with college degree or above
- Implications

Real World Impact of Anxiety

Common Fears:

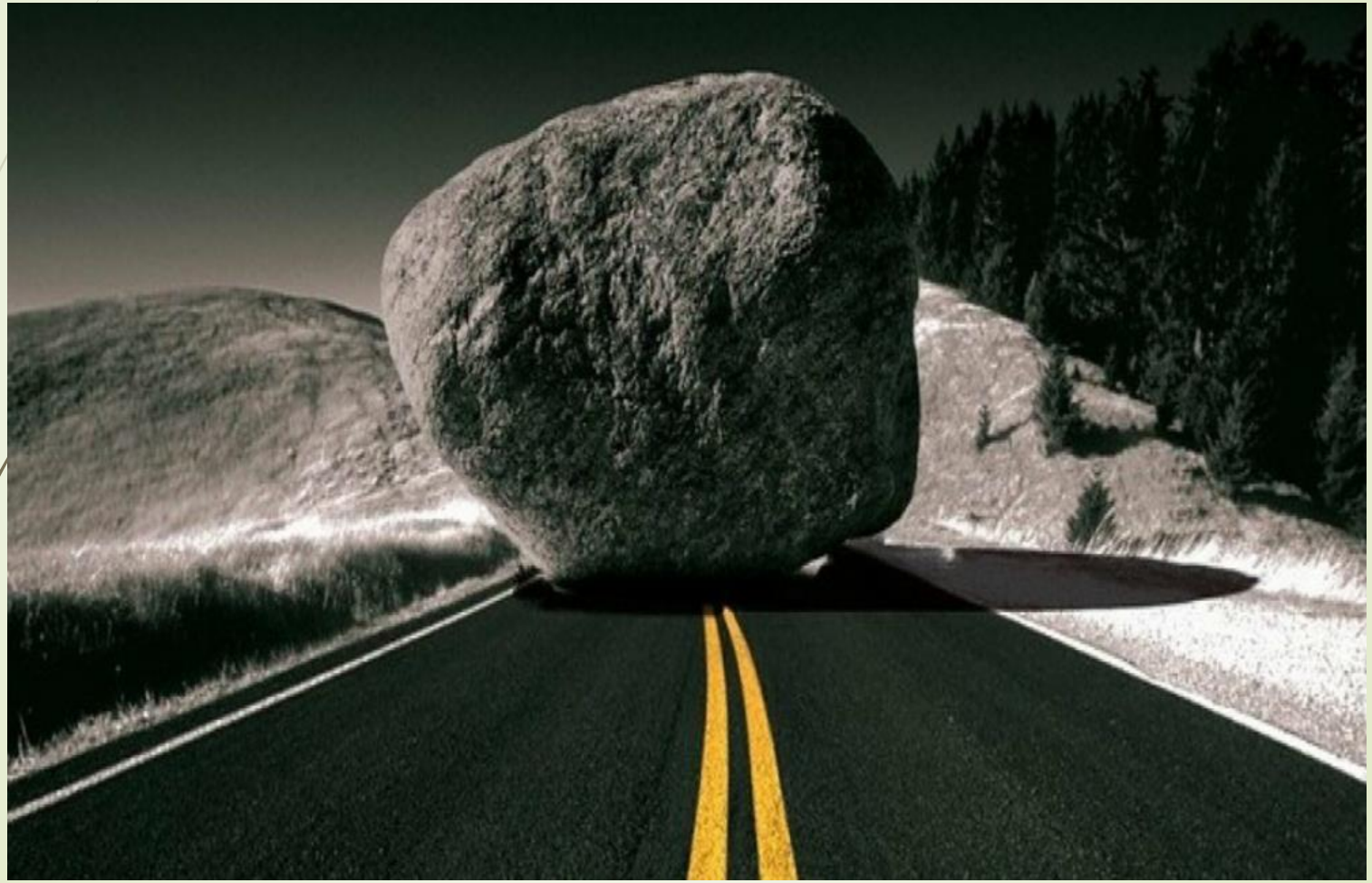
- Using the school bathroom (e.g., toilets flushing, other kids, or germs)
- Fear of being late
- Talking to new people or in class/asking for help
- Separating from parents to attend school
- Making mistakes/accepting criticism

Real World Impact (in a virtual world)

Common Fears:

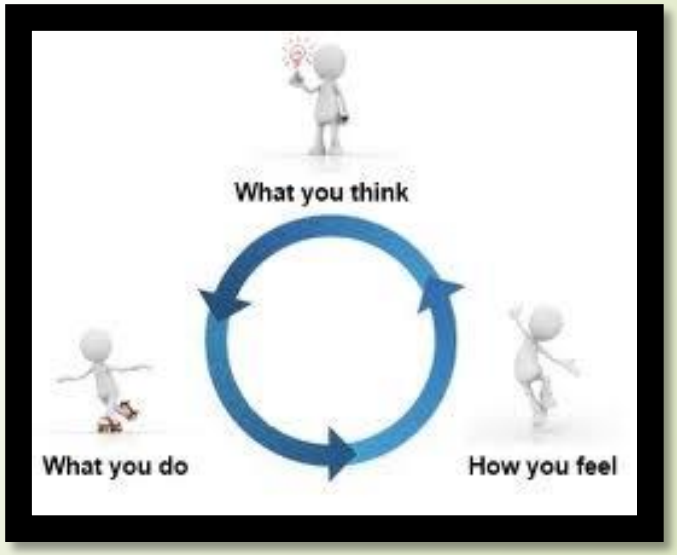
- Trouble logging on; internet connectivity
- Keeping the video on
- Talking/answering questions/asking for help
- Making mistakes/accepting criticism

The Obstacle of Anxiety



Cognitive Behavior Therapy

- Connection between thoughts, feelings and behavior
- Changing thinking patterns; calm your mind; relax your body
- Use problem-solving skills to manage difficult situations
- Structured approaches to teaching new skills (e.g., role play, modeling)
- Homework/practice
- Emphasis on coping strategies



FYF Treatment Program – Youth with ASD and Anxiety (ages 8-14) (Reaven et al. 2011)

- **Duration of treatment**: 14 weeks – 1 ½ hour per session
- **Modality**: varied; children alone, parents alone, dyads and large group work
- **First seven weeks**: Define anxiety symptoms, identify anxiety provoking situations, develop a set of "tools" (somatic management, helpful thoughts, emotion regulation, graded exposure)
- **Second seven weeks**: Identify goals and create stimulus hierarchy, apply "tools" across settings, in-vivo graded exposure, video activity to reinforce core concepts
- **Parent involvement:** ongoing; integrated parent curriculum
- **Booster session**: 4-6 weeks post-treatment

Cognitive-Behavioral Group Treatment for Anxiety Symptoms in Children With High-Functioning Autism Spectrum Disorders

A Pilot Study

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Individuals with autism spectrum disorders (ASD) are at increased risk for developing anxiety disorders relative to children without ASD and those with other developmental disabilities. Thirty-three children with high-functioning ASD and their parents participated in an original, manualized cognitive behavioral group treatment aimed at reducing severity of anxiety symptoms. Parent-child dyads entered into either an Active Treatment Condition or Wait List Control Condition. Results indicated significant reductions in parent report of anxiety symptoms after the delivery of the group treatment, compared with the Wait List Control Condition. The findings of this study are promising, particularly in light of the high rates of

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Journal of Child Psychology and Psychiatry 53:4 (2012), pp 410–419 doi:10.1111/j.1469-7610.2011.02486.x

Group cognitive behavior therapy for children with high-functioning autism spectrum disorders and anxiety: a randomized trial

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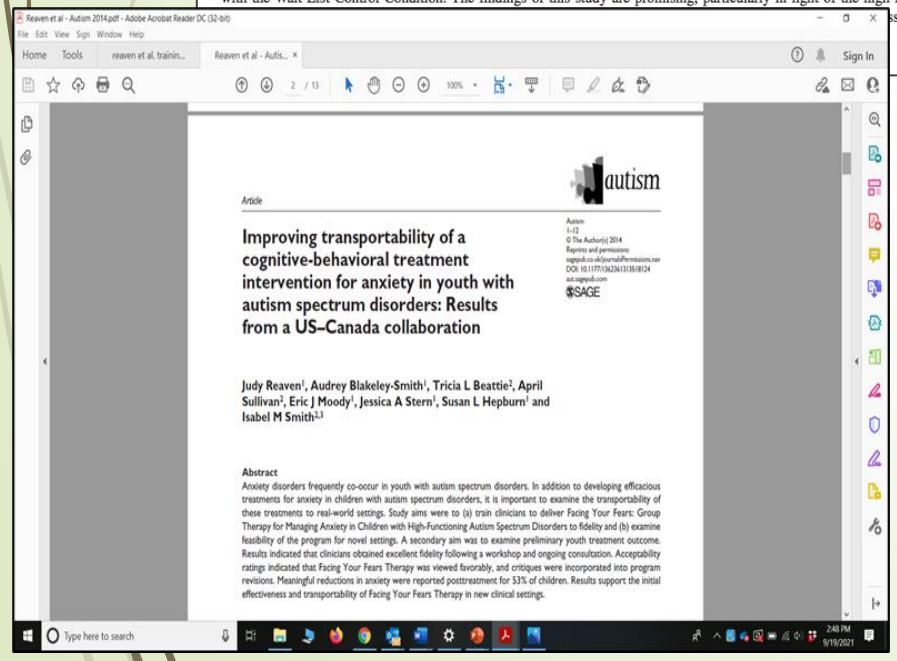
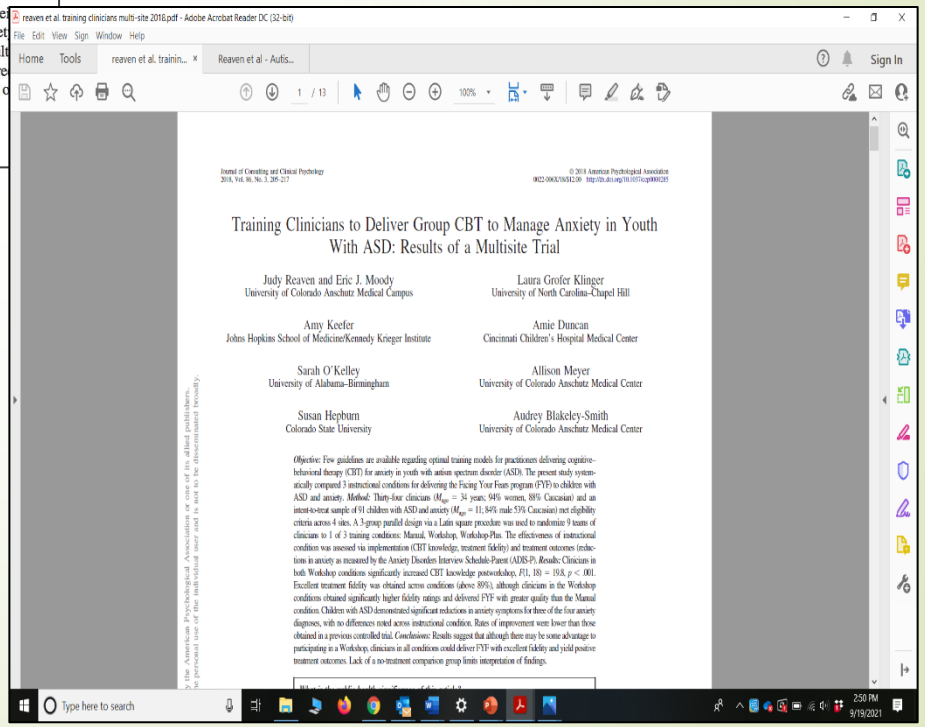
Background: Children with high-functioning autism spectrum disorders (ASD) are at high risk for developing significant anxiety. Anxiety can adversely impact functioning across school, home and community environments. Cognitive behavioral therapies (CBT) are frequently used with success for children with anxiety symptoms. Modified CBT interventions for anxiety in children with ASD have also yielded promising results. **Methods:** Fifty children with high-functioning ASD and anxiety were randomized to group CBT or treatment-as-usual (TAU) for 12 weeks. Independent clinical evaluators, blind to condition, completed structured interviews (Anxiety Disorders Interview Schedule – Parent Version; ADIS-P) pre- and post-intervention condition. **Results:** Forty-seven children completed either the CBT or TAU condition. Results indicated markedly better outcomes for the CBT group. Significant differences by group were noted in Clinician Severity Ratings, diagnostic status, and clinician ratings of global improvement. In the intent-to-treat sample, 10 of 20 children (50%) in the CBT group had a clinically meaningful positive treatment response, compared to 2 of 23 children (8.7%) in the TAU group. **Conclusions:** Initial results from this randomized, designed treatment study suggest that a group CBT intervention specifically developed for children with ASD may be effective in decreasing anxiety. Limitations of this study include small sample size, lack of an attention control group, and use of outcome measures normed with typically developing children. **Keywords:** Autism, anxiety, cognitive behavioral therapies, group.





Implementing CBT in Colorado Schools

Low income
Racially/ethnically diverse communities

Denver Public Schools
Littleton Public Schools
Cherry Creek School District

HRSA# : R41MC31075-01-00

Aims of the FYF-School Based Study

Year 1:

- Focus Groups & Program Development (Qualitative Phase)

Year 2:

- Pilot Groups & Training Interdisciplinary Providers

Year 3:

- **Randomized Trial; Delivering FYF through a Train-The-Trainer Approach**

FYF-School Based
12, 40-minute sessions (during school day)

Session 1 & 2
Welcome & Introduction

- Getting to know you/ice breaker
- Learning about emotions
- Everybody worries and gets upset sometimes
- How I react/feel when I worry

Session 3 -4
Understanding My Worry/Upset and Calming My Body

- Time Spent Worrying/Upset
- Externalizing worries: Worry bugs
- False Alarms; Stress-o-meters
- Measuring worry/upset; Deep Breathing

Sessions 5-6
Managing the Mind; Calming the Body

- Identifying relaxing activities
- Active Minds and Helpful Thoughts
- Putting it Altogether
- Plan to Get to Green

Sessions 8-12
Practice Facing Fears

- Introduction to Exposure: Facing Fears
- Creating exposure hierarchies/steps to success
- Optional: Movie Making
- Review & Graduation

Two Parent Sessions

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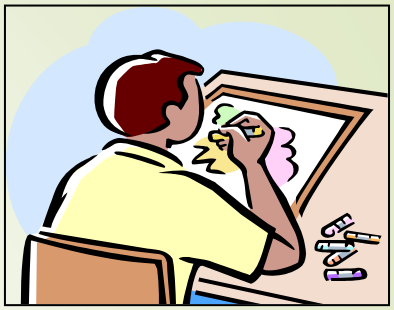
Session 1:
Overview of FYF-SB; introduce tools/ strategies

Session 2:
Introduction to Graded Exposure; Wrap-up and review student progress

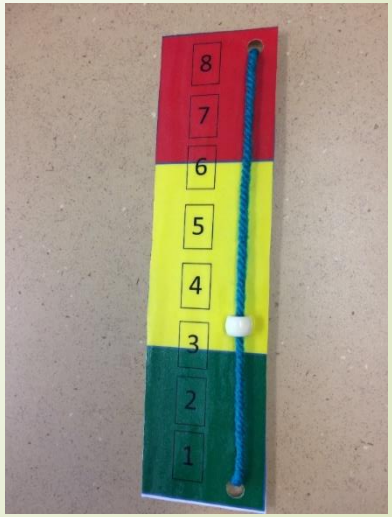
Core Components of FYF-SB



- **Psychoeducation**
- **<u>Cognitive strategies/somatic management</u>**
  - Increase emotion vocabulary
  - Identify anxiety symptoms (enhance self-awareness)
  - Identify physiological symptoms of worry/anxiety/upset
  - Compare "anxiety" vs "fun" time
  - Emotion Regulation:

Calming the body/managing the mind

  - Plan to Get to Green



Core Components of FYF-SB

Graded Exposure

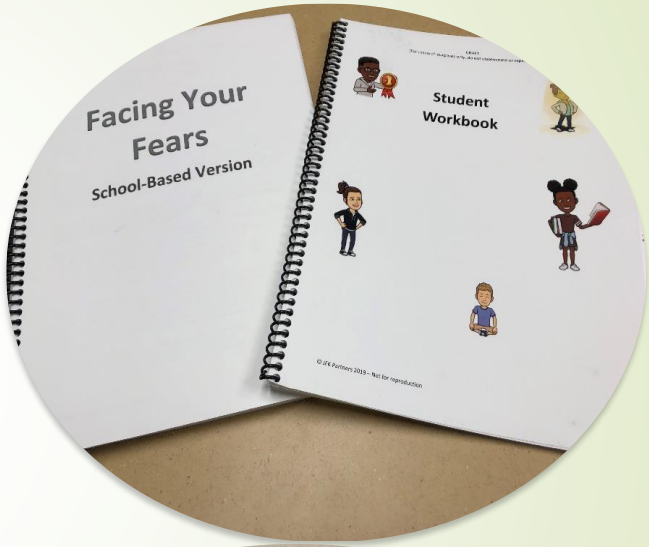
- Identify anxiety/fears that interfere with school functioning
- Develop a fear hierarchy or "to do" list
- Practice facing fears a little at a time to manage/conquer the fear
- Emphasize fear tolerance!

Using Videos to Teach Exposure: Facing Your Fear of Toilet Flushing

1. Student stands outside the bathroom entrance and toilet flushes
2. Student stands closer to a stall and toilet flushes
3. Student flushes the toilet himself.
4. Student stands close to a stall and several toilets flush and a peer washes hands.

FYF-SB SWAG


FYF


Facing Your Fears
School-Based Version
Student Workbook

Training and Implementation Phase (Similar for Pilot/Randomized Trial)

School Provider Inclusion Criteria

- Interdisciplinary school providers working with students with ASD
- At least one mental health provider on the team
- Included all disciplines, but not paraeducators (yet!)
- Attended 12 hour didactic/interactive workshop
- Received 20-30 minutes, bi-monthly consultation calls

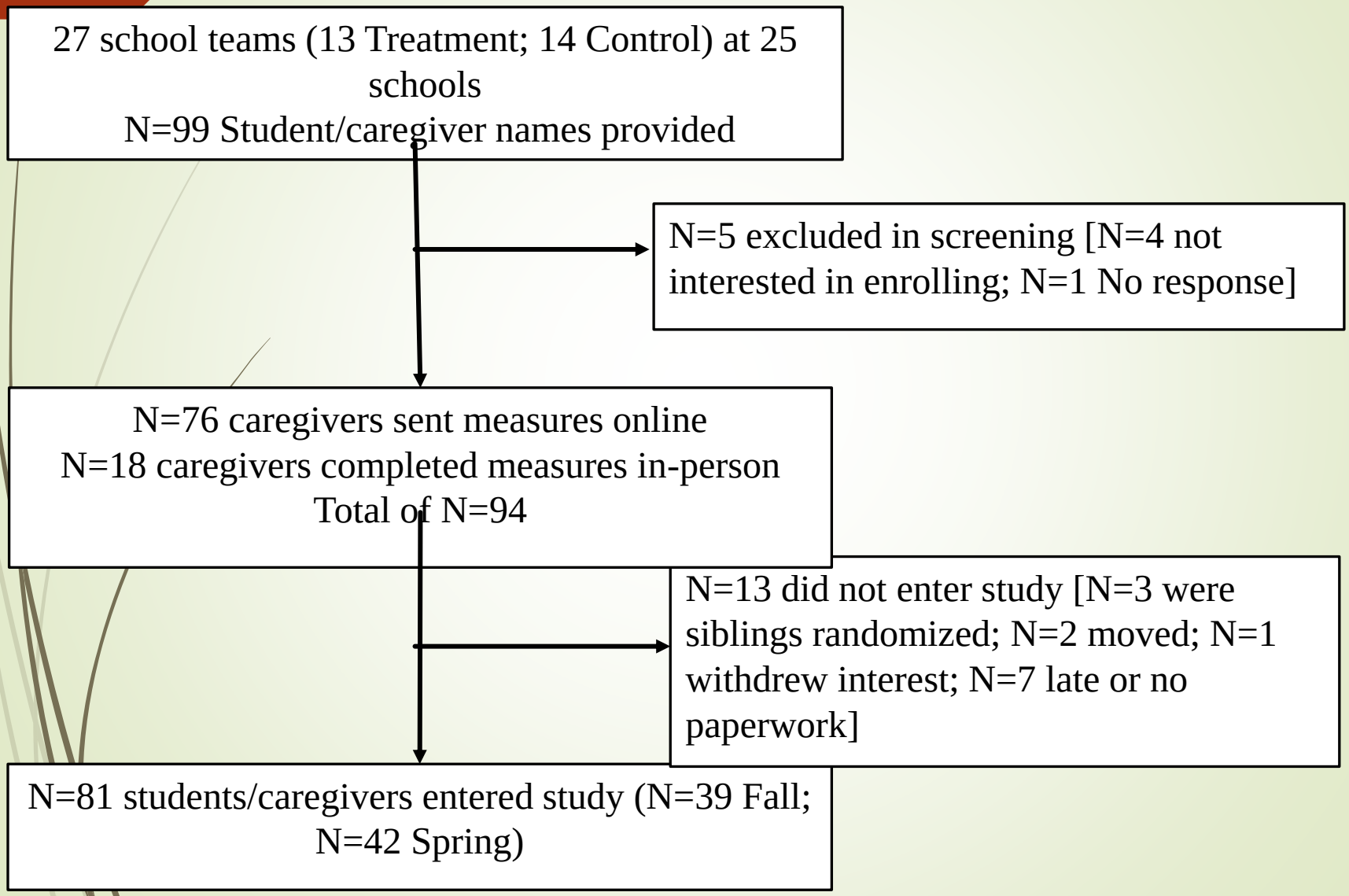
Student Participants

- Inclusion Criteria
  - Students with ASD or suspected ASD
  - Elevations on the Social Responsiveness Scale (SRS-2) (Constantino & Gruber, 2005) (Above T-Score – 60)
  - 2nd – 8th grade students
  - Estimated IQ above 70
  - Interfering anxiety symptoms

Treatment Outcomes:

- **SCARED (Birmaher et al. 1999)**
- PRAS-ASD (Scahill et al. 2019)
- School Anxiety Scale (Lyneham et al. 2008)
- ADIS-ASA (Kerns et al. 2017)

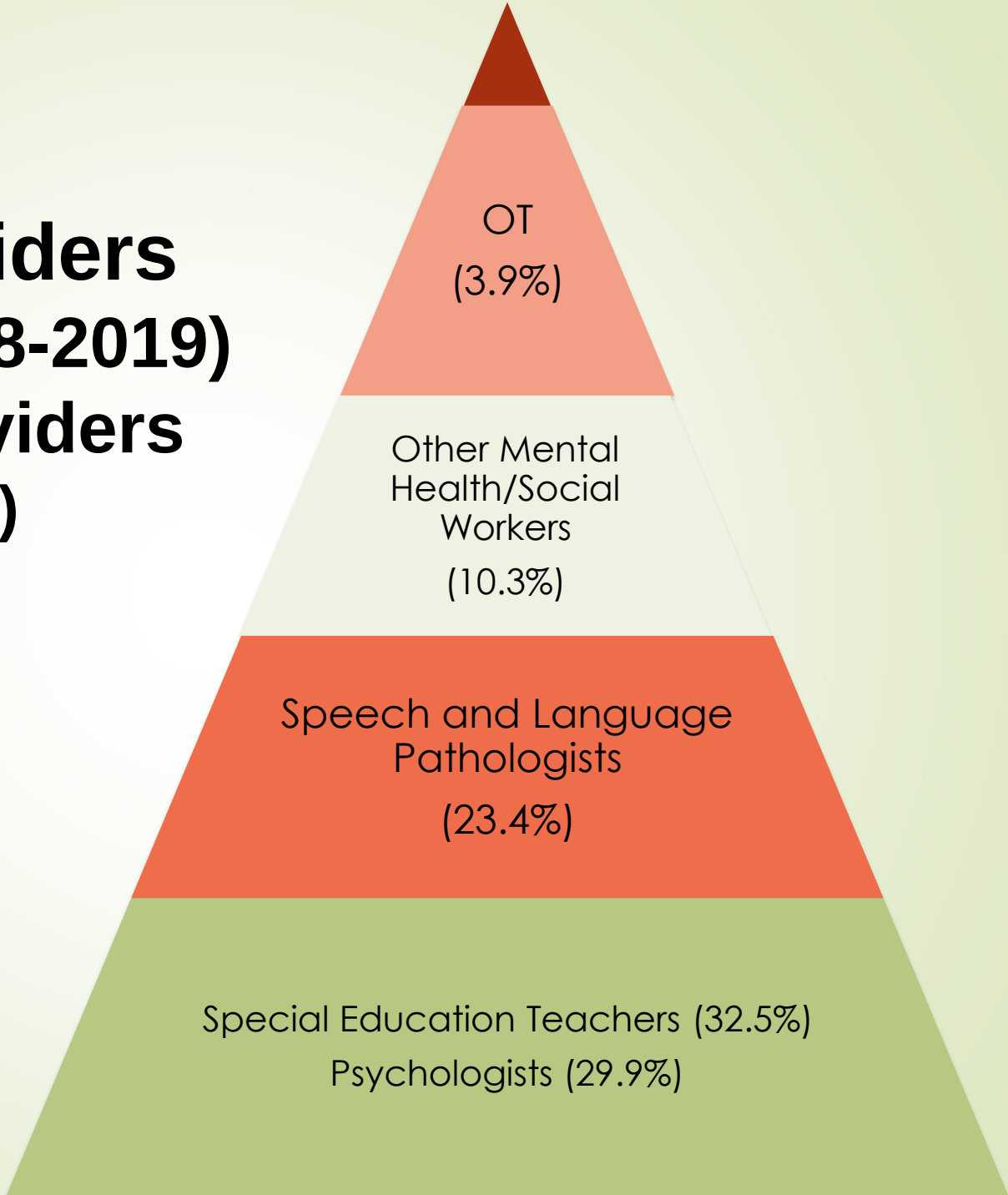
Expanding FYF-SB across Colorado: Train-the-Trainer Approach



School Providers

14 trainers (2018-2019)

77 school providers (2019-2020)



IEP Eligibility Designation (n=58)

- *ASD*: 39.5% (n=32)
- *Learning Disability*: 9.9% (n=8)
- *Language Disorder*: 8.6% (n=7)
- *Serious Emotional Disability*: 8.6% (n=7)
- *Other Health Impairment*: 3.7% (n=3)
- *Developmental Delay*: 1.2% (n=1)

Preliminary Outcomes (RCT)

- Treatment Completion and Fidelity (Adherence)
  - Thirteen fall schools delivered FYF-SB
  - # of sessions completed: 6-12 (*M*=10)
  - 60% of sessions were coded for fidelity
  - Adherence (absence/presence of core components): Range: 76-98% (*M*=86.15%)

Most school teams were able to deliver the program as intended!

Acceptability Data

- **Providers**
  - "FYF-SB was easy to understand and put into practice" (90% agree/strongly agree)
  - "FYF-SB enhanced my ability to manage my students' anxiety (88% agree/strongly agree)
- **Students**
  - "How much did you enjoy participating in FYF-SB?" (71% very much/the most)
  - "Do you feel better after participating in FYF-SB?" (68% very much/the most)

Preliminary Treatment Outcomes - SCARED

- Parent Report (SCARED)
  - ***Significant reductions***: Total Score: Panic, separation, social anxiety symptoms
  - *Non-significant*: school anxiety; generalized anxiety
- Student Report (SCARED)
  - ***Significant reductions***; Separation and social anxiety improved
  - *Non-significant*: Panic, school and generalized anxiety

Real World Success

- Using bathrooms at school
- Walking into the classroom, even when late.
- Talking to new people; asking for help
- Going to school and/or after school activities
- Turning in homework, making mistakes on tests
- Keeping your video on
- Using the chat function on zoom

What I Hope You Will Remember

- MH conditions are common in youth with ASD/NDD, and anxiety is one of the most common
- There are effective interventions to manage anxiety and emotion regulation in youth with ASD
- Non-mental health providers can deliver interventions
- School partnerships may hold the key to access and success

Acknowledgements

- **Organization for Autism Research (FYF: FYF-IDD**)
- Doug Flutie Foundation
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- **HRSA:** #1R40MC15593A; **#1R41MC31075-01-00**
- **Children/Adolescents with ASD and their families**
- **Community Stakeholders**

Thank You!!

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