Testing Technology-Delivered Behavioral Health Services: Addressing Rural Child Needs

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The Power or Partnerships

- A **relationship** involving close collaboration between parents, schools, and service providers with clear *rights* and *responsibilities*

- Relationships that are:
    - Valued
    - Balanced
    - Cooperative and interdependent
    - Based on mutual respect, trust, and open communication
    - Student-centered   (Sheridan & Kratochwill, 2008, p. 1)

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Family-School Partnerships in Context

- Family-school partnerships can leverage resources in underserved communities

- Family-school partnerships have been demonstrated to be effective for diverse students

- The unique context and characteristics must be considered when developing family-school partnerships

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The Rural Context

- Rural Families
  - Rural schools face unique barriers to partnership
    - Limited access and resources, isolation, lack of privacy and stigma
  - Family-school partnerships have been shown to benefit rural students even more than urban students

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Teachers and Parents as Partners (TAPP)

- TAPP is a structured, family-school partnership model for addressing student behavioral needs

- In TAPP, teachers and parents jointly identify and address behavioral concerns by providing input and developing plans to improve student outcomes

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The TAPP Structure

Building on Strengths

The TAPP process focuses on strengths to empower students and help them achieve their goals.
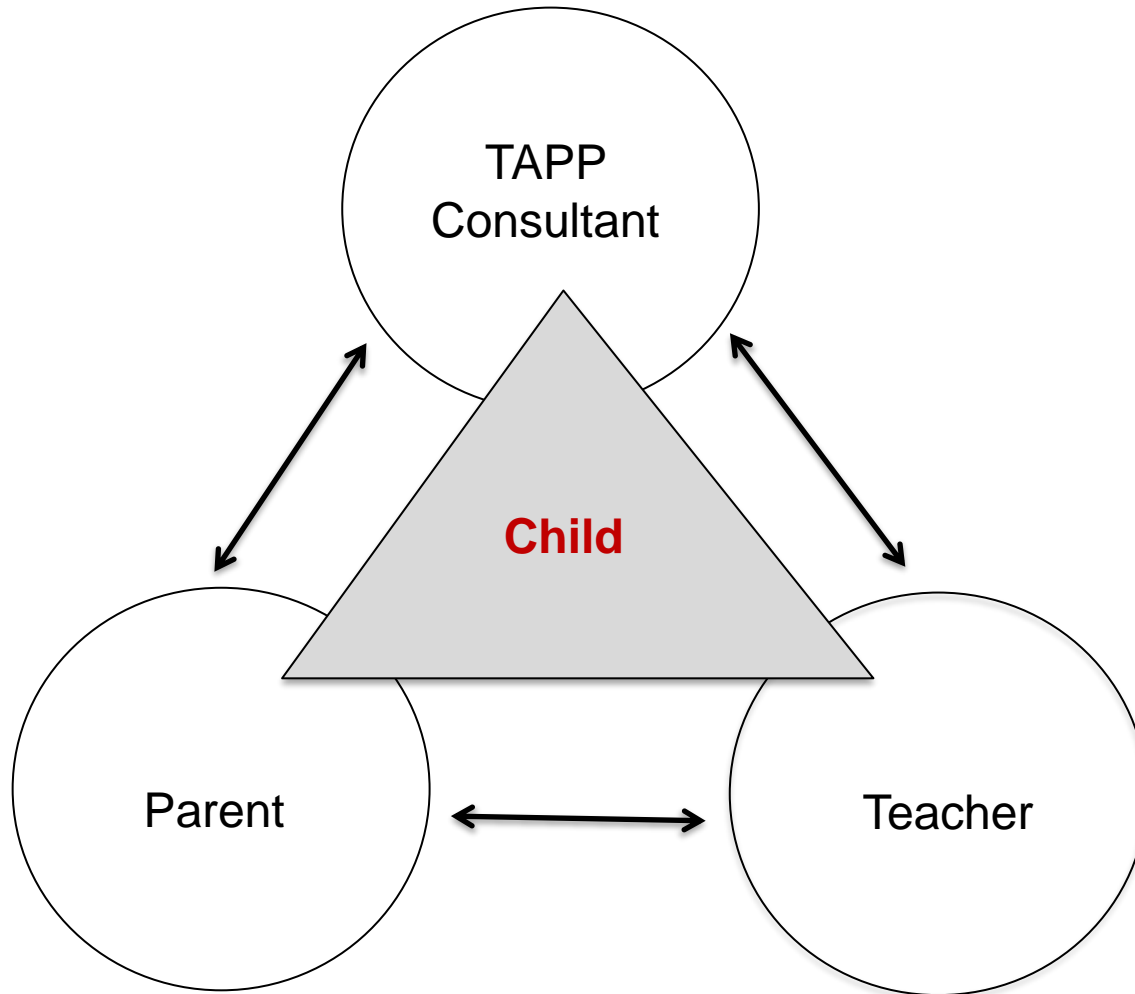
Planning for Success

Together, teachers and parents monitor student behavior, then select strategies to use at home and school.

Making Decisions Together

Parents and teachers check in with each other to review progress and adjust plans for student success.

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TAPP Participants

TAPP in Rural Schools

- TAPP has been associated with many positive rural student outcomes:
  - Improved student academic skills, behaviors and performance
  - Improved student social skills and behaviors
  - Decreased disruptive behaviors

TAPP in Rural Schools

- TAPP has also been shown to result in positive rural parent and teacher outcomes:
  - Greater parent and teacher competence in problem-solving
  - Greater parent efficacy for helping their child
  - Improved teacher practices
  - Improved teachers' appropriate strategy use
  - Improved parent-teacher relationships

Leveraging Technology

- However, all research to date has utilized in-person consultants

- This type of "traveling consultant" is not sustainable and routine on-site services are not always feasible in rural communities where TAPP consultants are limited or non-existent.

- Distance technology offers potential as a method of delivering TAPP ("tele-TAPP") that bypasses access barriers facing rural communities.

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Study Purpose

- This study sought to determine:
  - Does tele-TAPP reduce child behavior problems in rural Appalachian communities?
  - Is tele-TAPP feasible and acceptable for caregivers and teachers?

Who was involved?

- Participants in this pilot study were:
  - Three K-2nd grade students and their primary caregivers and teachers

Students			
	Age at Posttest	**Gender**	**Race/Ethnicity**	**Grade**
Student 1	6	Male	White, non-Hispanic	K
Student 2	7	Male	White, non-Hispanic	2
Student 3	6	Male	White, non-Hispanic	1

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Caregivers

	Age	Race/Ethnicity	Relationship to Student	Marital Status	Highest Degree
Caregiver 1	61	White, non-Hispanic	Grandmother	Married	Associates/2-year degree
Caregiver 2	41	White, non-Hispanic	Mother	Divorced	GED
Caregiver 3	36	White, non-Hispanic	Mother	Never married	High school diploma

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Teachers

	Years Teaching	Gender	Race/Ethnicity	Grade level	Highest Degree
Teacher 1	1	Female	White, non-Hispanic	K	Bachelors
Teacher 2	18	Female	White, non-Hispanic	2	Masters
Teacher 3	5	Female	White, non-Hispanic	1	Masters

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What Did We Work On?

- Child Behavior
  - Off-task behaviors at school
    - Video observations
  - Disruptive behaviors at home
    - Parent Daily Report (PDR)
- Feasibility and Acceptability of Tele-TAPP
  - Caregiver & teacher experiences
    - Behavioral Intervention Rating Scale (BIRS)
    - Consultant Evaluation Form (CEF)

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What Did We Do?
Tele-TAPP Meetings

- A trained graduate assistant (Rachel) served as the tele-TAPP consultant

- Tele-TAPP meetings took place with caregivers and teachers together at the students' schools and the consultant participating remotely via Zoom.

- An average of four 60-minute meetings followed the standard structure of TAPP

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What Did We Do?
Collaborative Interventions

- Home-School Communication
  - Remind App, Class DOJO, note in school folder
- Positive Consequences
  - praise, social & tangible rewards
- Preventative Techniques
  - effective commands, catch being good, task modification
- Skill Building
  - teach and practice expectations, calming strategy

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Data Collection

- Classroom observations
- Home behavior reports
  - collected across baseline and intervention
- Teacher and caregiver experiences
  - collected via on-line survey after tele-TAPP was completed

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What Did We Learn?

- Tele-TAPP resulted in improved behavioral outcomes at home and school

- Caregivers and teachers reported tele-TAPP to be highly acceptable

- Caregivers and teachers reported high levels of satisfaction with the consultant serving in a distance role

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Off-Task at School

	Baseline Mean (SD)	Intervention Mean (SD)	Level Change	% Change
Student 1	74.25% (18.83%)	59.79% (17.93%)	-14.46%	-19.47%
Student 2	52.87% (19.23%)	41.92% (20.71%)	-10.95%	-20.71%
Student 3	25.17% (16.62%)	24.84% (14.04%)	-0.33%	-1.31%

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Disruptive Behavior at Home

	Baseline Mean (SD)	Intervention Mean (SD)	Level Change	% Change
Student 1	11.5 (2.38)	B: 11.25 (0.96)	-0.25	-2.2%
		C: 4.0 (1.41)	-7.5	-65.2%
Student 2	3.6 (2.19)	0.75 (0.96)	-2.85	-79.2%
Student 3	5.0 (0.0)	1.56 (0.88)	-3.44	-68.8%

Tele-TAPP Acceptability

- On a scale of 1 to 6 (with 6 being highly acceptable), both parents and teachers rated Tele-TAPP procedures to be highly acceptable
  - Caregivers' ratings averaged 5.31 (SD = 0.54)
  - Teachers' ratings averaged 5.6 (SD = 0.37).
- Comparable to, if not higher, than ratings from parents and teachers who received TAPP delivered in person

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Tele-Consultant Effectiveness

- On a scale of 1 to 7 (with high scores reflecting greater satisfaction), both parents and teachers reported high levels of satisfaction with Tele-TAPP and the consultant
    - Caregivers' ratings averaged 6.33 (SD = 0.58)
    - Teachers' ratings averaged 6.58 (SD = 0.50)
- Tele-TAPP consultant effectiveness ratings are consistent with ratings reported for in-person consultants (Sheridan et al., 2009)

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Implications

- One possible positive outcome of the pandemic increased skill and comfort with distance technology

  - Teleconsultation may now be more acceptable in both rural and urban settings

- Teleconsultation, and particularly Tele-TAPP, offers a promising avenue for enhancing family connections and problem-solving when in-person meetings are not possible

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Implications For Rural Communities
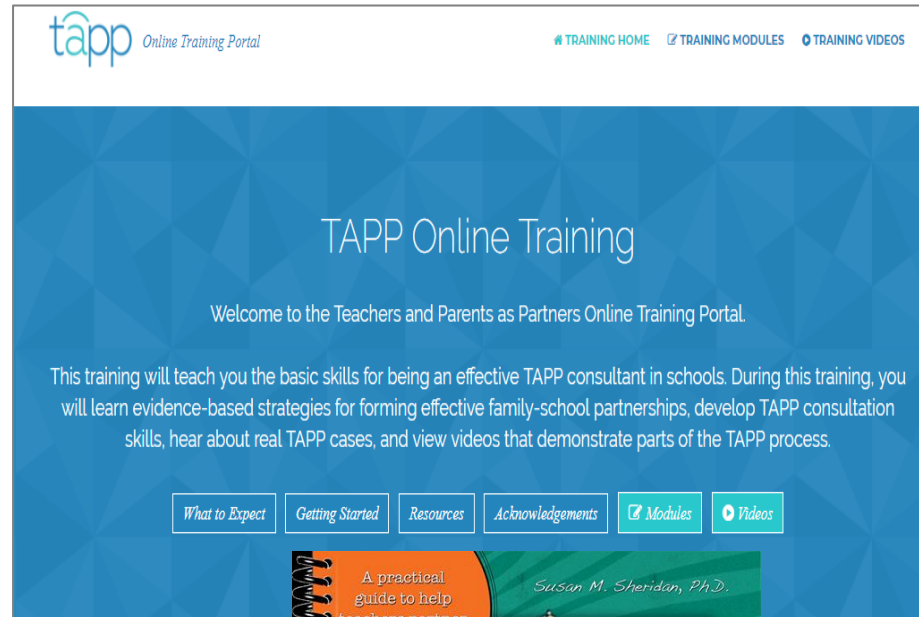
- Findings from this pilot study provide promising initial support for a tele-TAPP in rural schools

- Tele-TAPP may be an efficient and effective tool for rural schools

- Rural schools are in a unique position to benefit from distance-delivered partnership interventions

Implications For Research

- These findings will inform future research to test tele-TAPP on a larger scale in more communities

- Tools and procedures piloted can be adapted for larger scale testing

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TAPP Resources

- Website: tapp.unl.edu
  - Video Examples
  - Research Briefs
  - Online Training

- Sheridan, S. M. (2014). *The tough kid: Teachers and parents as partners.* Eugene, OR: Pacific Northwest Publishers
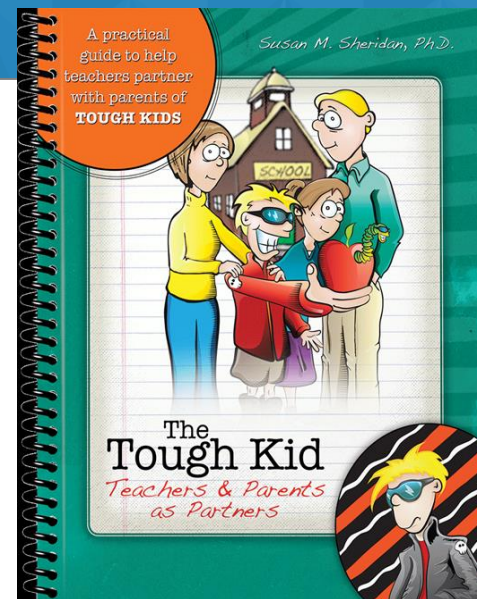
Thank You

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