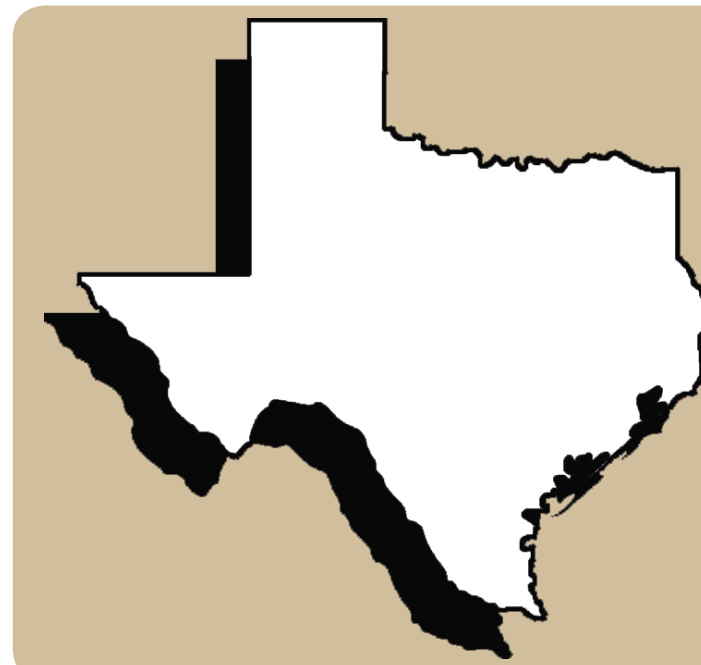


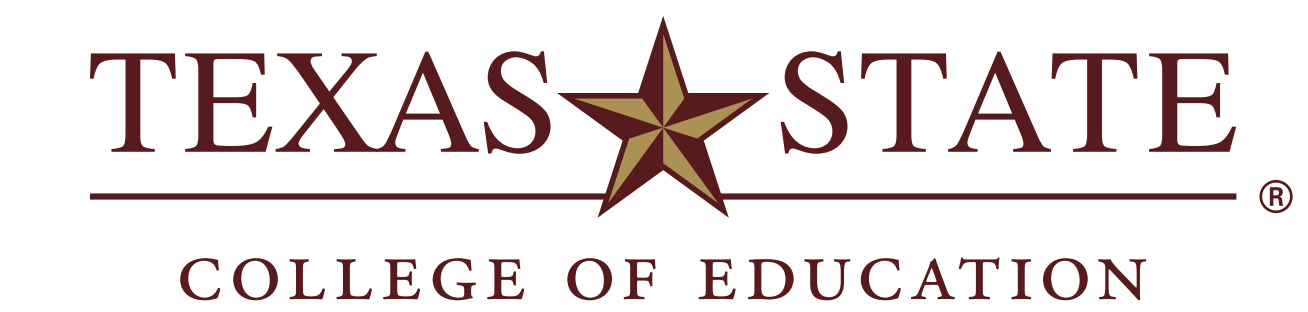
THE CARES RESPONSE: PRACTICE-DRIVEN APPLIED RESEARCH TO IMPROVE POLICY AND PRACTICE FOR INDIVIDUALS WITH AUTISM

Research Goals: Improve assessment, education, treatment and services for individuals with autism through applied research methods focused on bridging the research-to-practice gap.



TEXAS CHILDREN WITH AUTISM ARE UNDERSERVED

- CDC estimates 1 in 68 children (1 in 42 boys) have autism
- Estimated 89,500 Texas children (12,500 children ages 3-8) have autism
- Texas child population accounts for 50% of total child population increase in the US
- Texas ranks 48th overall and 48th or lower in children's health care access and affordability, prevention and treatment, and equity



Clinic for Autism Research, Evaluation, and Support (CARES)

Services for Children with Autism

- early-in-life behavioral intervention to facilitate language development
- teaching communication, social skills, and play to reduce problem behaviors, such as aggression and self-injury

Training

- parent and teacher training and support
- coursework and practicum for 10-12 graduate students each year

Clinic Space

- waiting room
- 13 treatment rooms, with audio/video recording systems; data transmitted to secure server
- 2 digital observation rooms
 - » allow parents to observe treatment sessions
 - » facilitate graduate student training with hands-on applied practice
- parent training spaces and play rooms
- assessment library, toys, books, and assistive technology
- up-to-date technology and software
- FERPA-/HIPPA-secure records room



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INDIVIDUALS WITH AUTISM

- Direct assessment of and/or treatment to ~ 130 children/year in CARES clinic
- Pilot early intervention service for TxHHSC to address needs of underserved children
- Annual summer camp for children with autism
 - » serves 70+ children from low-SES families
 - » \$400 child care scholarships available
 - » high-quality camp experiences sensitive to each child's unique abilities
 - » no child turned away based on severity of his/her disability
 - » individual attention to improve social, language, communication, and motor skills

FINDINGS FROM SUMMER CAMPS

- Psychomotor intervention improved body awareness, body concepts, space concept, and overall psychomotor concepts compared to control group
- Yoga improved physical performance, emotional expression, and social interaction
- Fine and gross motor difficulties may be related to delayed sensory processing to visual, auditory, tactile, and movement stimuli

LAW-ENFORCEMENT

- Develop online training for school resource officers/law enforcement personnel to:
 - » recognize communicative, physical, and behavioral characteristics of autism
 - » identify strategies that lead to reasonable, acceptable outcomes of encounters with law enforcement officers
 - » identify law enforcement responses that may interfere with desired outcomes



AUTISM: WE CARE



PARENTS

- Intensive Parent Training funded by state Autism Grant Program
 - » train 37 parents to effectively deliver evidenced-based treatments to enhance communication and social skills, and reduce aggression and self-injury (\$2,852 per child)
 - » measure extent to which parents learned to provide treatment and how treatment improved child functioning
 - » validated methods are integrated into required graduate program training

FINDINGS FROM OUTSIDE EVALUATOR

- Training is empirically and socially valid as well as effective and efficient intervention
- If implemented across Texas, has potential to:
 - » improve specific parent behaviors, which can lead to positive outcomes for children
 - » meet interim needs of underserved families, based on training time and cost efficiencies
 - » train service providers with fidelity; service providers can then effectively train parents

TEACHERS

Program continued by TEA upon completion of project

- TEA-funded partnership with RESC 13 provides professional development in evidenced-based practices to 82 teachers serving 484 public schools students with autism (\$370 per child)
- Determine extent to which 1) teachers acquire target skills, and 2) training impacted the students with autism they serve
- Video samples of training made available online through the Texas Statewide Leadership for Autism Training (TSLAT) website
- Modified training offered via professional development meetings and annual conferences

Research Assets

- CARES clinic space
- Expertise in Single Case Design (SCD) methodology – often preferable to Randomized Clinical Trials (RCT) when working with children with autism
- Psychomotor, fine and gross motor skills, and school readiness intervention programs
- Hands-on training for Texas State students in clinic and summer camp
 - » integrate and apply theory, knowledge and skills, and practice to develop professional skills
 - » conduct meaningful research to satisfy degree requirements
 - » 3000+ hours of service during summer camp

Future Research

- Debunk pseudoscience and unproven treatment fads
- Develop and validate innovative, cost-effective ways to meet the needs of underserved children with autism
- Identify ways children with autism express happiness and how idiosyncratic indicators of happiness can be used in treatment research and practice
- Identify environmental or internal contingencies that elicit and support specific forms of play behavior to support remediation of play deficits to improve social skills and happiness
- Measure relationship of engagement in task and impact on fine and gross motor skills, cognitive development, and school readiness in children with autism

Future Needs & Collaborators

- Clinical staff to treat more children, serve more schools, and supervise training additional graduate students
- Research staff to secure and implement externally-funded projects
- Scholarships to increase enrollment in the Autism and Applied Behavior Analysis concentration of the Special Education graduate degree program
- Financial support to provide CARES services free of charge or at reduced rate to low income families
- Medical imaging and analysis, autism experts, and neuroscientists for autism research collaboration