



The Selective Mutism Anxiety Research and Treatment Center (SMart Center) and the Selective Mutism Research Institute (SMRI) are committed to delivering and disseminating information on Selective Mutism treatment options, new scientific advances and results of current research studies.

Research is ongoing through SMRI, a privately funded research institute. The Third phase of outcome studies regarding Dr. Shipon-Blum's Social Communication Anxiety Treatment (S-CAT)<sup>®</sup> is completed. Researchers tracked and analyzed the progress of eligible patients in the 5-12 year age range for changes in social communication in the home, public and school settings.

Results of the recent research study conducted by Dr.'s Klein and Armstrong, associate professors at La Salle University, have found children made statistically significant improvements in their ability to communicate orally in school and other social settings following S-CAT<sup>®</sup> therapy as measured by the Selective Mutism (SMQ) (Bergman, Keller, Placentini & Bergman, 2008). Children and their parents were followed over 15 weeks with S-CAT<sup>®</sup>, receiving in-office treatment at 3-week intervals (Seen for one initial consult and 3 follow up visits) & supplemented by weekly phone consultations.

The research results also showed that implementation by parents and schools are important to see the most progress. Those children with higher implementation scores made more statistically significant improvements over those with lower program implementation scores

The quickest and most effective results occur when children and parents and school personnel work on the games/goals provided by the treatment professional.

Therefore, results indicate that relying on therapy in the office without follow thru is not nearly as effective as children having goals/games to play, parenting goals and accommodations/interventions within the school setting.

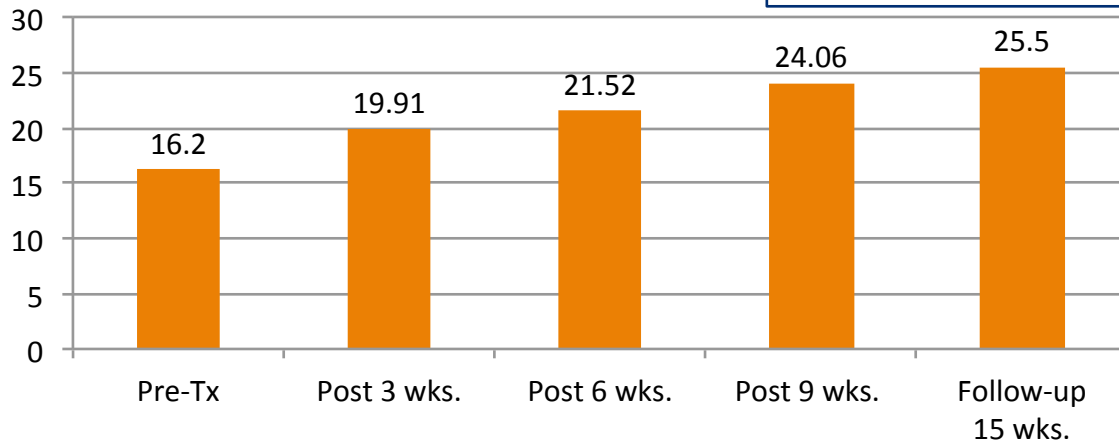
We are all very excited with the results of the treatment efficacy study because although families were being successfully treated and quickly, the research results now validate the positive effects of Dr. Shipon-Blum's Social Communication Anxiety Treatment (S-CAT)<sup>®</sup> for children with Selective Mutism.

# Progress in Social Communication in Children with Selective Mutism using S-CAT®

Klein & Armstrong, 2012

SMQ Total Scores over time indicate significant increase in speaking across settings after 3 sessions; maintained at follow-up after therapy using Social-Communication Anxiety Treatment (S-CAT)®

$F(2.71, 84.11) = 34.57, p < .001$   
Partial Eta Squared = .527  
(moderate effect size)  
 $n = 32$  children from Phase 3



SMQ maximum score = 51 for the 17 items, Mean for Non-SM Children = 46, Mean for SM Children = 12.99 [Bergman, et al. (2008), *Journal of child and Adolescent Psychology*, 37(2), p. 461.]

## Explanation of slide:

This slide refers to 32 children between 5 and 12 years old who were receiving S-CAT®.

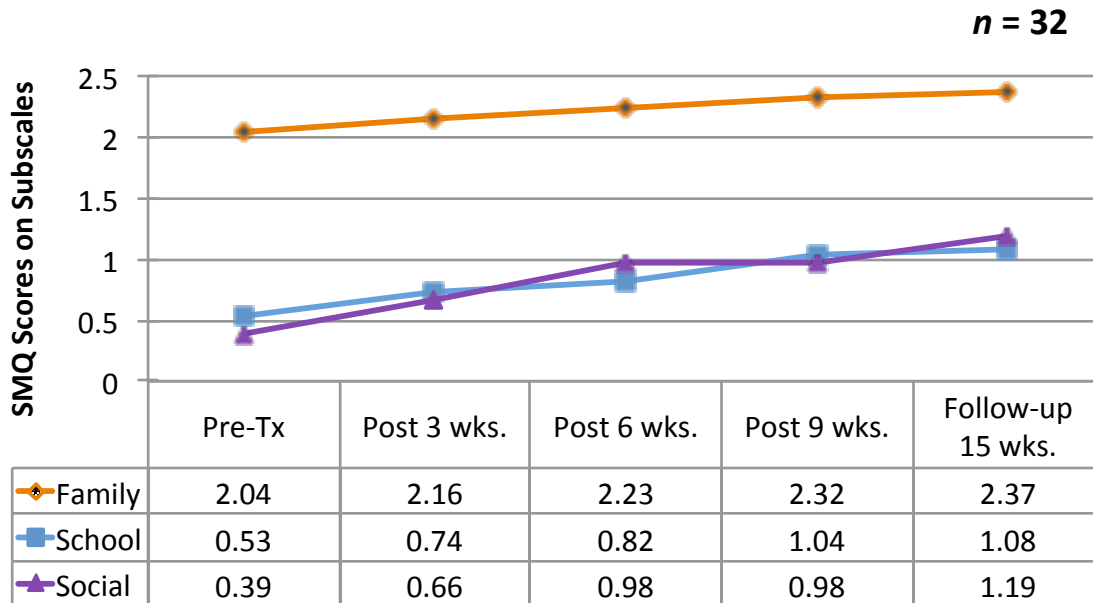
They were scored using the SMQ (Selective Mutism Questionnaire) with 17 items relating to speaking behaviors.

A child without SM generally scores 46 points on average. Children with SM generally score 13 points on average.

Our sample started with a score of 16 and after 3 sessions with S-CAT® reached 24 points. Over the next 6 weeks they didn't receive treatment and their SMQ scores continued to rise reaching 25.

**This gain reflects a statistically significant increase in speaking abilities.**

## Children with SM Made Significant Progress ( $p < .01$ ) Speaking at Home, School, and in Social Settings from Pre-Treatment to Follow-Up using S-CAT®



SMQ Questionnaires were completed by parents of children with SM over time.

Klein & Armstrong, 2012

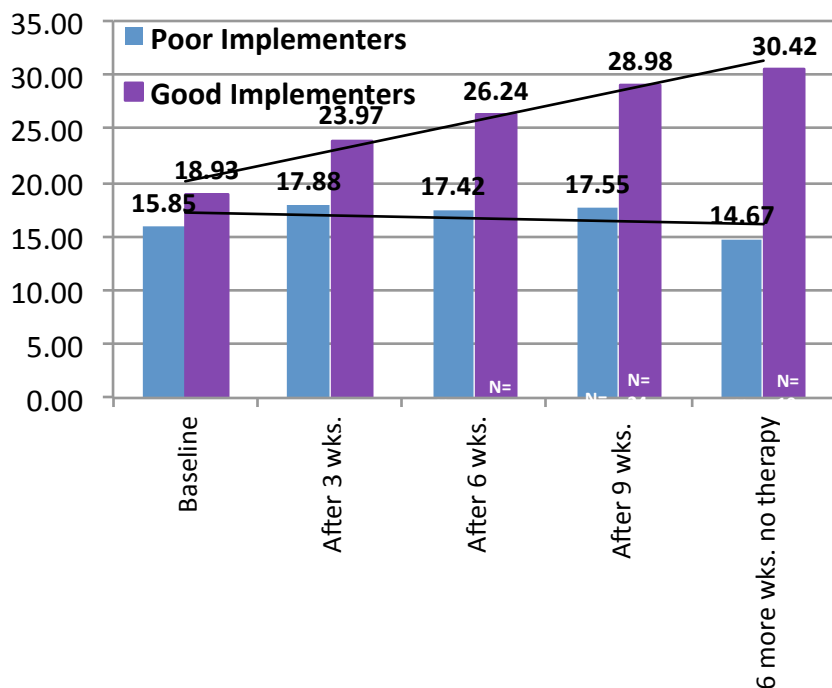
### Explanation of slide:

This figure shows the subscales of the main SMQ measure. Here we see 3 scales and it is evident that children with SM speak more readily at home.

For 32 children over the course of S-CAT® treatment, they made **statistically significant** gains on all 3 scales (they range from 0 to 3 for normal speaking abilities).

Children improved significantly at school and in public settings and even spoke more to people who visited at home.

## Differences in SMQ Total Scores for Poor and Good Implementers of S-CAT®



Higher S-CAT® implementers scored significantly higher on the SMQ (Bergman, et al., 2008), than did poorer implementers ( $p < .01$ ).

Implementation ratings (from 1-10) were based on a mean of five different scores for therapeutic compliance at home, school, and in public settings. Ratings were generated from parents, therapist, office support staff, school, & children themselves.

Klein & Armstrong, 2012

This slide compares children and families who implemented S-CAT® well and those who didn't.

Based on several implementation scores from parents, therapist, therapy staff, school, and children themselves, study participants were divided into good and poor implementation groups.

The poor implementers did not show statistical improvement over time.

The good S-CAT® implementers showed **statistically significant** improvement over time with their SMQ scores increasing from 19 to 30 on the SMQ at follow-up time.