



## **Evidence of impact in an Irish outpatient Child & Adolescent Mental Health Service (CAMHS)**

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Senior Speech & Language Therapists

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# The Secret Agent Society



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# Presentation

- **What is SAS?**
- **The evidence base**
- **SAS Research in CAMHS**
- **Future Directions**



# What is SAS?

- Fun, multi-media program for 8-12 year olds
- For children with a range of social-emotional challenges e.g. ASD, ADHD, AD, Anger difficulties
- Spy-themed activities to teach:

**Emotion Recognition**

**Emotion Regulation**

**Social Communication**



# How is SAS unique?

- Evidence based curriculum
- Detailed, explicit instructions
- Involves and supports children, parents and teachers
- Motivating and fun
- Visual supports
- Interactive technology



# SAS Small Group Structure

**CHILD + PARENT  
CONSULTATION SESSION**



**TEACHER TRAINING SESSION**  
(1 x 2 hour)



**CHILDREN'S GROUP SESSIONS**  
(9 x 90 minutes)



**PARENT TRAINING SESSIONS**  
(4 x 2 hour)



**CHILDREN & PARENT FOLLOW UP GROUPS**  
(3 + 6 month)



# How Effective is SAS?

The rising profile of SAS was initially triggered by the publication of results from the first RCT.

RCT: **Beaumont, R., & Sofronoff, K. (2008)**. A multi-component social skills intervention for children with Asperger Syndrome: The Junior Detective Training Program, *Journal of Child Psychology and Psychiatry*, 49, 743-753.

# How Effective is SAS?

## Results from initial RCT:

- ✓ Children's social skills significantly improved
- ✓ Improvements made at home and at school
- ✓ 76% of children improved from having severe social difficulties to showing social skills within normal range
- ✓ Program equally effective regardless of age, IQ or co-occurring disorders.
- ✓ Weekly home missions → Better treatment outcome





# How Effective is SAS?

- **Mainstream schools** (e.g. Beaumont et al., 2015)
- **Individual delivery** (e.g. Thomson et al., 2015)
- **Skype/phone** (e.g. Sofronoff et al. 2015)
- **ASD classes** (e.g. Einfeld et al., 2017)
- **Hospital Clinics** (e.g. Sauve et al., 2018)
- **University clinics** (e.g. Beaumont et al., 2018)



No published evidence currently exists for SAS within CAMHS

# Current Research Project

- **Aim:** To evaluate the efficacy of SAS in an Irish outpatient CAMHS
- **Exploratory** intervention study
- **Purposive sampling**
- **3 CAMHS Clinics:** Dun Laoghaire, Bray, Wicklow
- **Data collection:** August 2017 – December 2018



# Inclusion Criteria

- 8 – 12 years
- Mainstream primary school
- Diagnosis of ADHD or AD or ASD
- Significant difficulty expressing emotions and socialising
- Cognitive ability and language skills within the average range

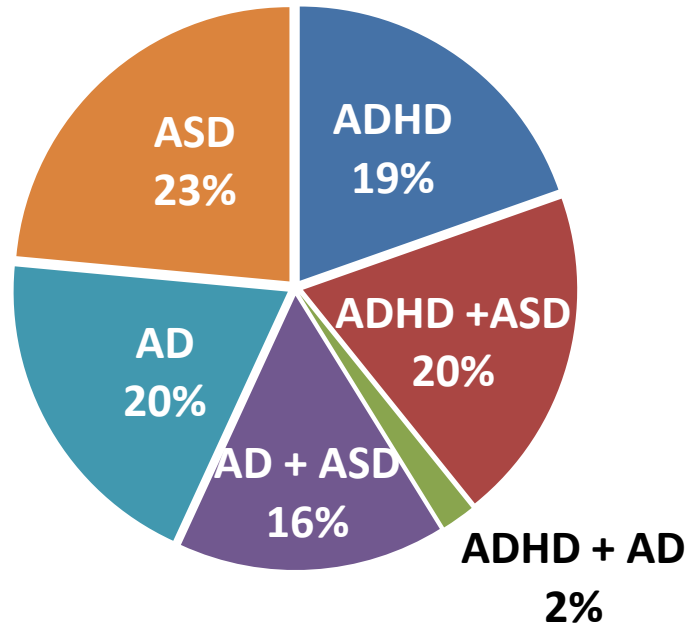


# Participant Profiles

- 51 children (147 participants)
- Mean age: 10 yrs 11 mnths
- 41% girls 59% boys
- 47% taking medication
- High attendance rate
- 49 children attended SAS only



# Participant Diagnoses



# Clinical Outcome Measures

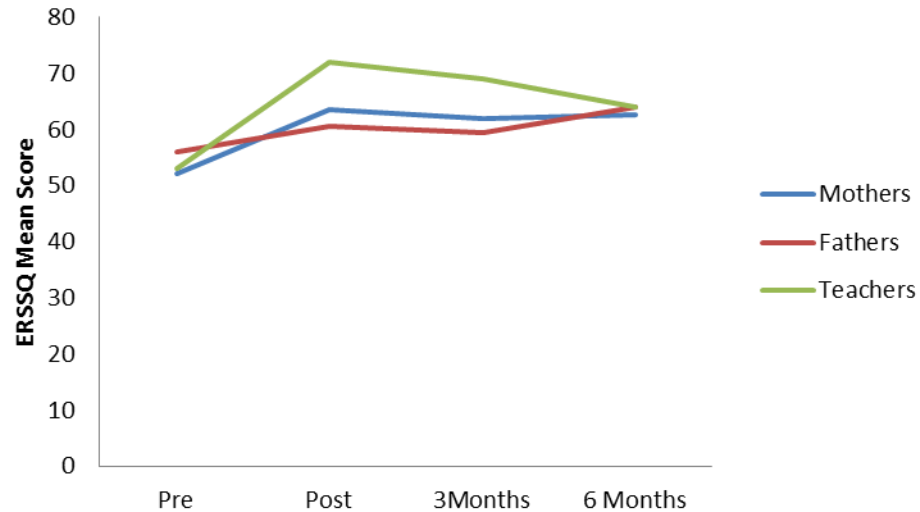
- Completed at baseline, post-treatment and at 3 and 6 month follow up
- **Parent and Teacher questionnaires:**
  - Emotional Regulation and Social Skills Questionnaire (ERSSQ, Beaumont & Sofronoff, 2008)
  - Social Skills Questionnaire (SSQ, Spence, 1995)
  - Program Satisfaction Questionnaires
- **Children's questionnaires:**
  - James and the Maths Test (Attwood, 2004a)
  - Dylan is being Teased (Attwood, 2004b)
  - Program Satisfaction Questionnaire



# Results: ERSSQ

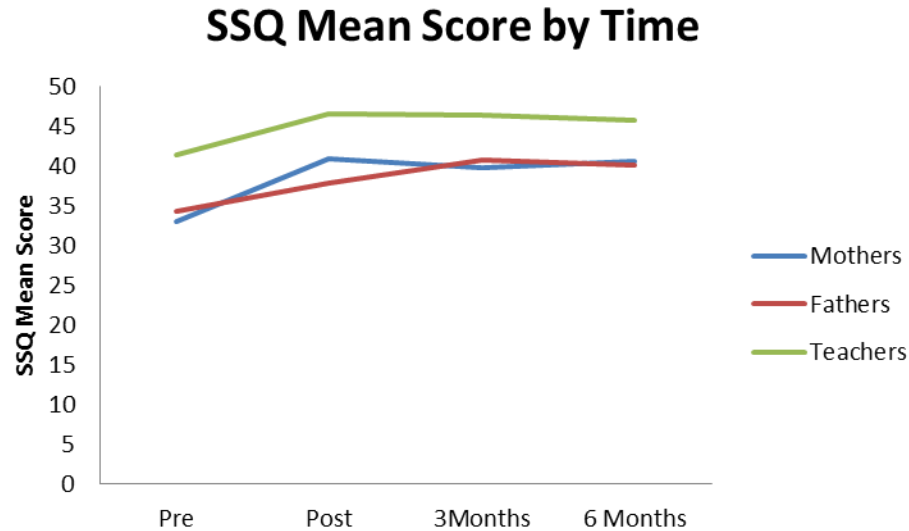
Statistically significant improvements in emotional regulation and social skills

## ERSSQ Mean scores by Time



# Results: SSQ

## Statistically significant improvements in social skills





# Results

## Post hoc paired t tests

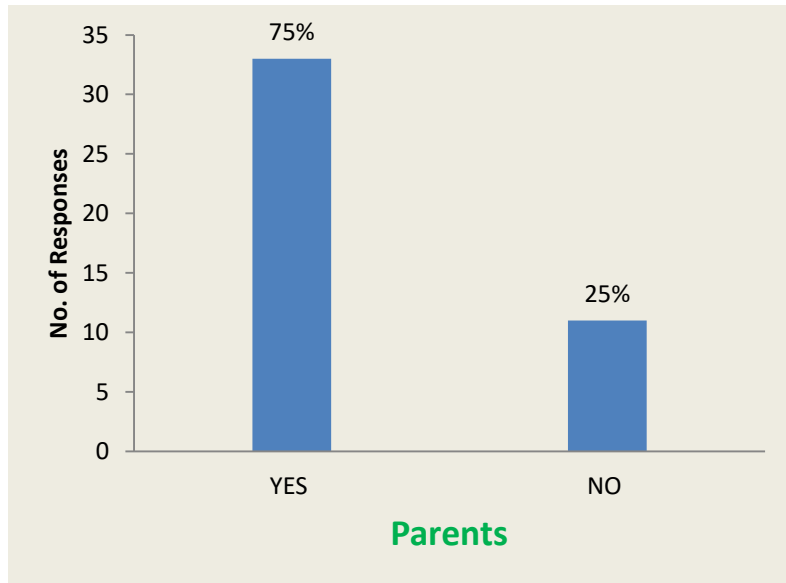
| Measure | Group    | N  | Pre intervention<br><i>M (SD)</i> | Post intervention<br><i>M (SD)</i> | <i>t</i> | <i>p</i> |
|---------|----------|----|-----------------------------------|------------------------------------|----------|----------|
| SSQ     | Mothers  | 40 | 31.9(8.5)                         | 40.9(11.6)                         | 5.86     | *0.001   |
| SSQ     | Fathers  | 37 | 33.2(8.8)                         | 37.9(9.9)                          | 4.37     | *0.001   |
| SSQ     | Teachers | 37 | 40.2(10.9)                        | 46.6(10.2)                         | 4.08     | *0.001   |
| ERSSQ   | Mothers  | 38 | 48.8(13.1)                        | 64.0(16.1)                         | 6.04     | *0.001   |
| ERSSQ   | Fathers  | 36 | 52.5(10.7)                        | 61.0(11.8)                         | 4.62     | *0.001   |
| ERSSQ   | Teachers | 36 | 56.2(15.8)                        | 65.8(14.3)                         | 4.32     | *0.001   |

*\*Significant at 0.050 with bonferroni correction applied*

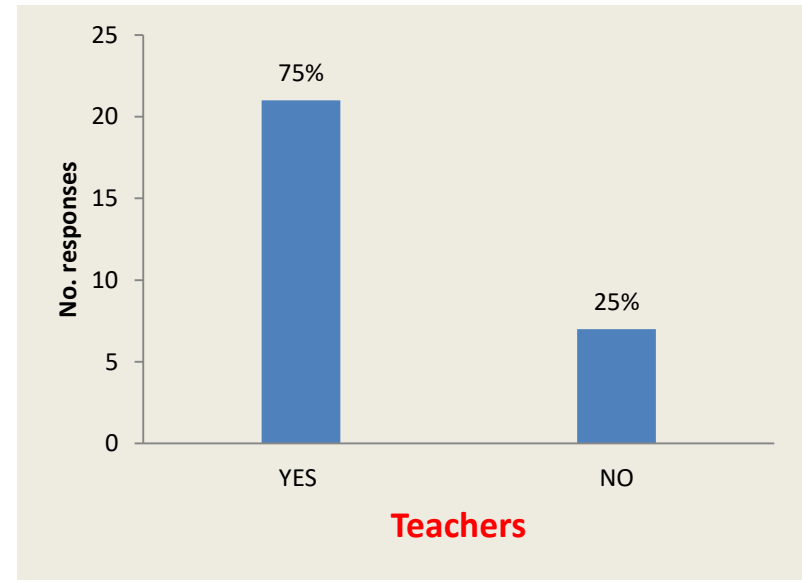
# Lasting Changes in the Child

Do you believe the SAS program contributed to **lasting changes** in...

**Your child's skills and/or behaviour?  
(Parents)**

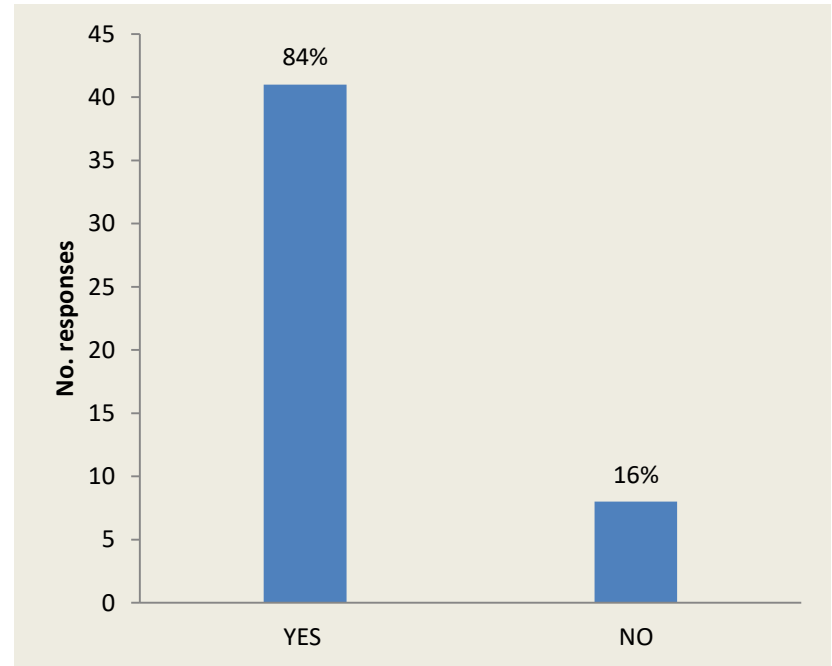


**Your student's classroom /playground  
behaviour? (Teachers)**



# Lasting Changes in the Parent

**Do you believe that SAS has contributed to lasting changes in how you support your child?**



# Parent Feedback

*Z15 is a very different child and has learned so much about herself and emotions and what triggers anxiety and how to help herself (Z15M)*

*SAS provides family/parents and child with a language to speak about feelings and the skills to utilise, it's empowering for the child meeting other children, less feelings of isolation (Z15M)*

*As a parent I feel that I can help him in a positive way to keep his anxiety to a minimum (Y4M)*

# Teacher Feedback

*It's given us all a common language to discuss feelings and situations  
(Z12T)*

*I really liked the visual cues as they helped me to quickly identify any anxiety attack or anger attack  
(Y4T)*

*I think this has been a very beneficial program and its effects will be long lasting  
(Z3T)*

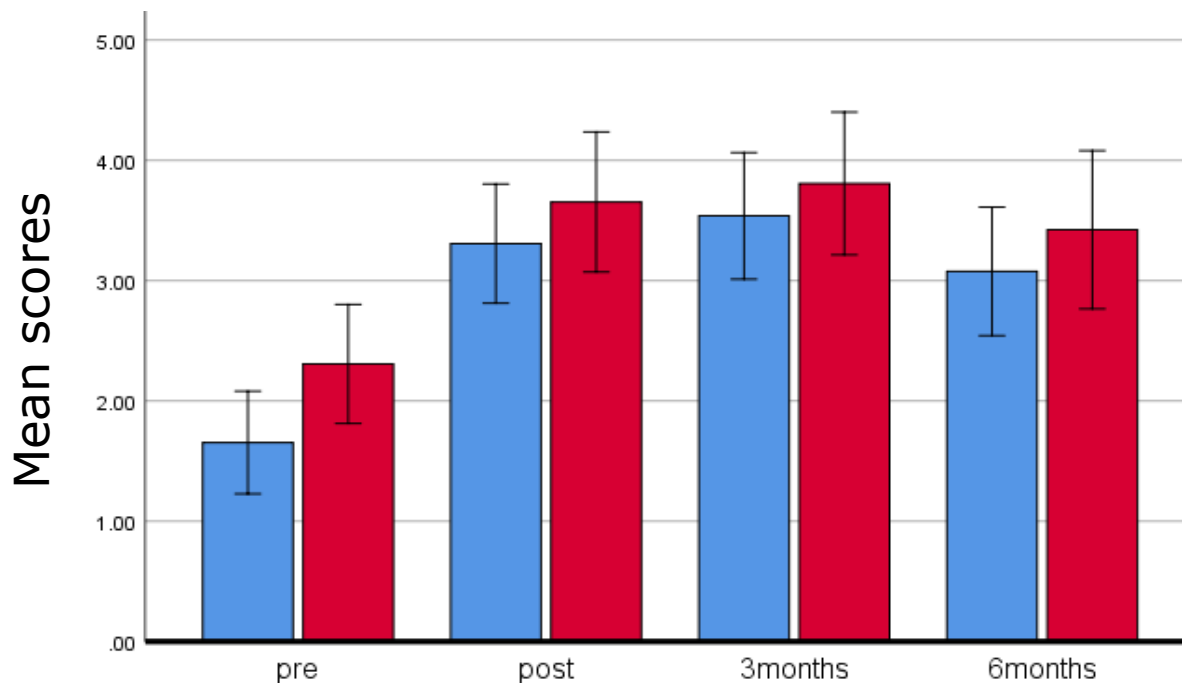
*It was an invaluable help to a child that was crippled with anxiety  
(X17T)*

# Children's Results

**Improvement  
in mean scores  
maintained on  
both measures  
at 3 months  
at 3 months**

■ Mean JATMT scores

■ Mean DIBT scores



# Children's Results

## Repeated Measures Anova Statistically Significant Difference

| Measure | N  | Pre intervention<br><i>M (SD)</i> | Post intervention<br><i>M(SD)</i> | 3 months  | 6 months  | <i>f</i> | <i>p</i> |
|---------|----|-----------------------------------|-----------------------------------|-----------|-----------|----------|----------|
| JATMT   | 26 | 1.65(1.0)                         | 3.30(1.2)                         | 3.54(1.3) | 3.08(1.3) | 22.75    | *0.001   |
| DIBT    | 26 | 2.31(1.2)                         | 3.65(1.4)                         | 3.80(1.5) | 3.42(1.6) | 9.14     | *0.001   |

*\*Significant at 0.050 with bonferroni correction applied*

# Children's Results

## Post hoc paired *t* test Statistically Significant Difference

| Measure                  | N  | Pre intervention <i>M</i> ( <i>SD</i> ) | Post intervention <i>M</i> ( <i>SD</i> ) | <i>t</i> | <i>p</i> |
|--------------------------|----|---|--|----------|----------|
| James and The Maths Test | 47 | 1.68(1.0)                               | 3.51(1.3)                                | 9.23     | *0.001   |
| Dylan is Being Teased    | 47 | 2.4(1.3)                                | 3.8(1.4)                                 | 6.21     | *0.001   |

*\*Significant at 0.050 with bonferroni correction applied*



# Children's Feedback

*I liked how it gave us loads of information to help us with our problems, with our anger, to see how to solve bad problems, to deal with bullies (X12)*

*Now whenever I get anxious I know what to do (Z8)*

*If one strategy doesn't work, you have 'back-ups' other than throwing yourself on the floor (Y12)*

# Limitations

- Exploratory study
- Small sample size
- Consider RCT



# Future Directions

## Clinical perspective

- SAS groups recommenced September 2019
- Facilitator Training Dublin, October 2019
- Expansion to other outpatient clinics
- Information sharing about SAS:
  - Conferences
  - Special Interest Groups
  - Print Media
  - Publication



# Future Directions

## Data analysis perspective

- Continued analysis of quantitative data:
  - Diagnostic groups
  - Age groups
  - Boys vs girls
  - Medication vs non medication
- Qualitative analysis:
  - Children's experiences
  - Mothers' vs fathers' experiences



# Conclusion

- **Preliminary evidence** for the efficacy of SAS in an Irish outpatient CAMHS.
- **SAS has the potential to improve** mental health outcomes.
- **Further research** is warranted.
- **Improved quality** of clinical service provision.



# References

- Attwood, T., (2004b). James and the maths test. In *Exploring feelings: Cognitive behaviour therapy to manage anxiety*. Texas: Future Horizons Inc.
- Attwood, T., (2004c). Dylan is being teased. In *Exploring feelings: Cognitive behaviour therapy to manage anger*. Texas: Future Horizons Inc.
- Beaumont, R., Pearson, R., & Sofronoff, K. (2018). A novel intervention for peer relationship difficulties in children: The Secret Agent Society Program. *Journal of Child and Family Studies* (in press).
- Beaumont, R. & Sofronoff, K. (2008). A multi-component social skills intervention for children with Asperger Syndrome: The junior detective training program. *Journal of Child Psychology and Psychiatry*. 49(7), 743-753.
- Beaumont, R., Rotolone, C. & Sofronoff, K. (2015). The Secret Agent Society social skills program for children with High-Functioning Autism Spectrum Disorders: A comparison of two school variants. *Psychology in the Schools*. 52(4), 390-402.
- Einfeld, S., Beaumont, R., Clark, T., Clarke, K., Costley, D., Gray, K., Horstead, S., Hodge, A., Roberts, J., Sofronoff, K., Taffe, J., Howlin, P. (2017). School-based social skills training for young people with autism spectrum disorders, *Journal of Intellectual & Developmental Disability*. 43(1) 29-39.
- Sauv e, S., O'Haire, C., Hall, H., Lane, C., Hudson, B (2018). Adapting a Social Skills Intervention for Children with Autism within an Urban Specialty Community Clinic, *Evidence-Based Practice in Child and Adolescent Mental Health*. 3(4), 219-235.
- Sofronoff, K., Silva, J., & Beaumont, R. (2015). The Secret Agent Society social-emotional skills program for children with High-Functioning Autism Spectrum Disorder: A parent-directed trial. *Focus on Autism and Other Developmental Disabilities*, 1-16.
- Spence, S.H. (1995). Social Skills Questionnaire. In *Social skills training: Enhancing social competence with children and adolescents*. Windsor: NFER-Nelson.
- Thomson, K., Burnham Riosa, P., & Weiss, J.(2015). Brief report of preliminary outcomes of an emotion regulation intervention for children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*. 45(1), 3487-3495.

# Thank you to...

- 147 participants who took part in the study
- Bray, Dun Laoghaire and Wicklow MDTs
- Lucena Clinic Management
- SJOG Research Department
- SJOG Development Company



# Why CAMHS?



IT'S EVERYONE'S  
**BUSINESS**



# Discharge post SAS

- 41 % discharged within 15 months
- 35% discharged within 9 months
- 27% discharged within 6 months

1 child re-referred