

Background

- Literature regarding the impact of having a sibling with ASD on psychological wellbeing is currently mixed.^{1,2}
- Previous research has highlighted both positive and negative qualities of the sibling relationship when one child has ASD, as well as delayed knowledge acquisition about ASD in typically-developing siblings.^{3,4}
- Support groups have been developed to address the unique needs of siblings of children with ASD.
- Research on the impact of support groups on siblings' psychological wellbeing and knowledge of ASD has yielded mixed results, with few studies examining the impact of support groups on sibling relationship quality.^{5,6}
- We aimed to evaluate the effectiveness of a sibling support group in improving the quality of sibling relationships and siblings' knowledge of ASD.

Methods

Participants

- 41 typically-developing children (age range = 6-17, $M = 9.86$, $SD = 2.86$, males = 9) with at least one sibling with an established ASD diagnosis and one parent of each child participated in the study.
- Sibling support groups were conducted across 2 sites:
 - Yale Child Study Center ($n = 27$)
 - Virginia Tech Center for Autism Research ($n = 14$)
- Groups were composed of similarly aged children to ensure matched developmental level.

Measures

- Sibling Relationship Questionnaire (SRQ), Parent- and Self-Report⁷
 - Questionnaire measure assessing warmth/support (positivity) and hostility/coercion (negativity) within the sibling relationship
- Satisfaction with the Sibling Relationship Questionnaire (SSRQ)⁸
 - Questionnaire measure assessing overall satisfaction with the sibling relationship
- Concepts of Autism Protocol (CAP)⁴
 - Clinical interview assessing child's knowledge of the nature of ASD and the implications / impact of the disorder on their own and their siblings' lives

Procedure

- Nine 10-week sibling support groups for unaffected siblings of children with ASD were conducted across the 2 study sites.
- Support groups were based on the Sibshop model⁹, with additional activities targeting knowledge of ASD and coping with stress.
- The SRQ and SSRQ were administered pre- and post-group to assess the quality of the sibling relationship.
- The CAP interview was administered pre- and post-group and coded by raters blind to timepoint to assess ASD knowledge.

Results

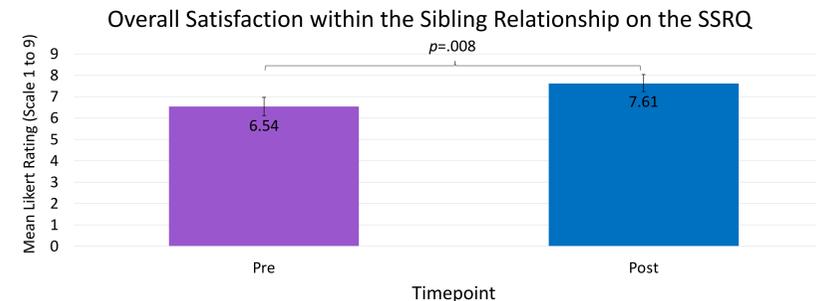


Figure 1. On the SSRQ, participants' overall satisfaction with their sibling relationship increased significantly following the intervention [$t(27)=2.86$, $p=.008$]. Error bars represent SEM.

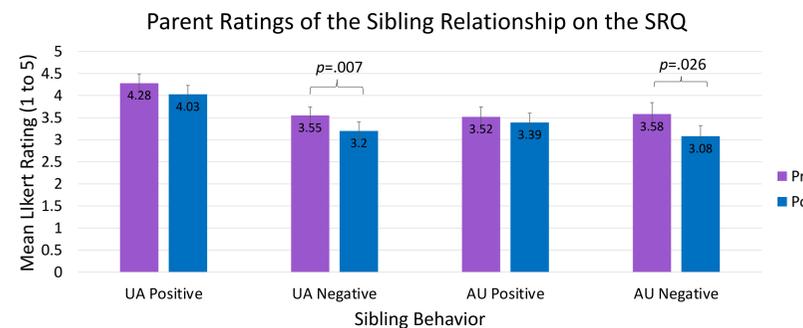


Figure 2. On the SRQ, parents reported a significant reduction in negative behaviors within the sibling relationship, both by the sibling with ASD [$t(34)=-2.32$, $p=.026$] and by the unaffected sibling [$t(33)=-2.86$, $p=.007$], while no significant changes were found in positive behaviors. Further, no changes were found in siblings' self-reported ratings (not depicted). UA=Behaviors of unaffected siblings toward their siblings with ASD; AU=Behaviors of siblings with ASD toward their unaffected siblings. Error bars represent SEM.

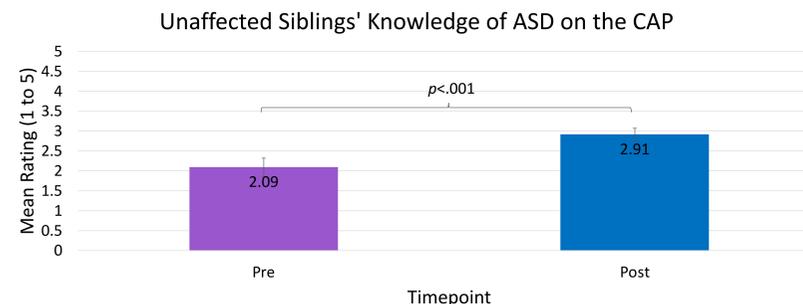


Figure 3. On the CAP, participants showed increased knowledge about ASD following the intervention [$t(31)=4.03$, $p<.001$]. Higher ratings reflect a more developmentally sophisticated understanding of ASD. No changes were found in their understanding of the implications of autism for their own or their siblings' lives (not depicted). Error bars represent SEM.

Conclusions

- This study contributes to the research literature on the experiences of unaffected siblings of children on the autism spectrum by evaluating the impact of support groups on the quality of the sibling relationship and siblings' knowledge of ASD.
- Siblings in the support group reported improved overall satisfaction in the quality of their relationship with their sibling with ASD.
- Parents reported reduced negative behaviors within the sibling relationship by both the child with ASD and the unaffected sibling.
- The sibling support group was effective in improving siblings' knowledge about ASD.
- Future work should focus on replicating these findings in larger samples through randomized controlled trials.
- These findings highlight the value of including sibling support groups within service provision for families affected by ASD.

References

1. Shivers, C. M., Jackson, J. B., & McGregor, C. M. (2019). Functioning among typically developing siblings of individuals with autism spectrum disorder: A meta-analysis. *Clinical Child and Family Psychology Review*, 22(2), 172-196.
2. Dempsey, A. G., Llorens, A., Brewton, C., Mulchandani, S., & Goin-Kochel, R. P. (2012). Emotional and behavioral adjustment in typically developing siblings of children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(7), 1393-1402.
3. Kaminsky, L., & Dewey, D. (2001). Siblings relationships of children with autism. *Journal of Autism and Developmental Disorders*, 31(4), 399-410.
4. Glasberg, B. A. (2000). The development of siblings' understanding of autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 30(2), 143-156.
5. Tudor, M. E., & Lerner, M. D. (2015). Intervention and support for siblings of youth with developmental disabilities: A systematic review. *Clinical Child and Family Psychology Review*, 18(1), 1-23.
6. Brouzos, A., Vassilopoulos, S. P., & Tassi, C. (2017). A psychoeducational group intervention for siblings of children with autism spectrum disorder. *The Journal for Specialists in Group Work*, 42(4), 274-298.
7. Slomkowski, C., Rende, R., Conger, K. J., Simons, R. L., & Conger, R. D. (2001). Sisters, brothers, and delinquency: Evaluating social influence during early and middle adolescence. *Child Development*, 72(1), 271-283. doi:10.1111/1467-8624.00278
8. McHale, S. M., & Gamble, W. C. (1989). Sibling relationships of children with disabled and nondisabled brothers and sisters. *Developmental Psychology*, 25(3), 421-429. https://doi.org/10.1037/0012-1649.25.3.421
9. Meyer, D., Vadasy, P., & Fewell, R. (1994). Sibshops. In *Workshops for siblings of children with special needs*. Brookes.

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