

**Critical Review:**



talking in different contexts, (2) confidence and knowledge about stuttering, and (3) negative reactions to stuttering.  $n$   $n$  was the only subsection with changes that were maintained from post- to three months follow-up.

The qualitative results suggested that participants felt a sense of community at the convention that helped to facilitate personal growth, increase their self-acceptance and normalize their stuttering.

The pool of participants was limited to those already enrolled in the FRIENDS conference, making generalizability of the results challenging. The authors provided inclusion and exclusion criteria and some demographic information (age, sex, ethnic background) for the selected participants; however, demographics were not factored into their analysis. Maximum variation sampling was used to ensure diversity amongst those chosen for the interviews. In order to minimize interviewer bias, Gerlach et al. (2019) choose the author who had not attended the conference and who had no experience with the organization (FRIENDS).

The OASES is a well-established measure of the functional impact of stuttering, with excellent validity and reliability. Appropriate statistical analyses for the quantitative data were employed (Friedman test with poc hoc analysis, Cohen d's effect sizes). The authors outlined in detail the data analysis protocol they use for the qualitative data, including investigator triangulation and member-checking to increase credibility. A script of the structured interview questions was also provided, allowing for replicability of the study.

While appropriate for the authors' purposes, one inherent limitation of within-groups studies is that there is no control group for comparison. It should also be noted that the participants at the younger end of the age range could be psycho-emotionally less mature than those who were older, possibly skewing the results. Furthermore, the inclusion of family members and SLPs in the convention could also confound the results, as we cannot assume changes were due to peer interactions.

The longitudinal design of this study is a strength, as it begins to address whether the positive impact of support group participation is maintained long-term.

Overall, this study is suggestive that participation in conferences for young people who stutter can decrease some of the negative impacts of stuttering. However, this study does not closely examine those psychosocial variables that may be contributing to the component OASES scores. Since most of the participants were Caucasian, all of them were adolescents and none rated their stuttering

severity above moderate, generalization to other populations should be done with caution.

**Raj and Daniels (2017)** examined the differences in how PWS rate their self-esteem, feelings about being a PWS, and levels of support before and after involvement with online stuttering support groups. Forty-two adults who stutter completed an online questionnaire, providing ratings for each psychosocial variable on a 5-point Likert scale and then providing qualitative descriptions for each rating. The authors also sought to look at how online support differs from face-to-face support group participation.

The results of this study showed an increase in self-esteem ( $t=-4.965$ ,  $P=.000$ ) and levels of support ( $t=-2.284$ ,  $P=.029$ ) after participation in an online support group community. No statistically significant difference in feelings about being a person who stutters was found. Analysis of the qualitative data generated themes related to  $n$ ,  $n$ ,  $n$ ,  $n$ ,  $n$ ,  $n$  and  $n$  prior to online support community involvement. Themes post-involvement included  $n$ ,  $n$ ,  $n$ ,  $n$ , and  $n$ . Online community involvement was thought to be more  $n$  and provide better  $n$  when compared to face-to-face support groups.

Inclusion criteria was outlined, and demographic details on the age, sex, ethnicity and country of origin were provided for each participant. However, response rates were not known based on mass email recruitment, which could impact the statistical significance of the results.

The questionnaire was created only to address the purpose of the study and had never been trialed in previous studies. While the authors attempted to improve the validity of their measure by having three doctorate level experts in stuttering review the questions, no proof of validity and reliability was reported. Furthermore, it was unclear if definitions for the multidimension constructs (eg. self-esteem) were provided to participants, calling into question the consistency of how they were interpreted by the respondents (construct validity).

The quantitative data was analyzed appropriately, using paired samples t-tests. Analysis of the qualitative data was based on grounded theory. Raj and Daniels (2017) attempted to limit rater bias by discussing biases prior to analysis, by choosing investigators with varied backgrounds and through investigator triangulation.

One major limitation of this study is that the scores being compared were all made retrospectively, calling into question the accuracy of the respondent's



### *Discussion*

After analyzing the current literature, a moderately suggestive level of evidence exists that participation in support groups may positively impact

contribute to the available evidence and support clinical recommendations, SLPs should use well-established measures (such as the OASES) to measure client outcomes following support group experiences. SLPs should also have a thorough understanding of how stuttering can impact psychosocial well-being, and when a referral to other professionals may be warranted.

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