Impact of stuttering in Greek-speaking preschool-age children and their parents

Katerina Ntourou, Ph.D.¹, George Fourlas, M.Ed., M.Sc², Dimitris Marousos, M.Sc³, & Maria Paphiti, M.A.⁴

¹University of Oklahoma Health Sciences Center; ²Stuttering Research and Therapy Centre; ³Eu-Legein Centre; ⁴Turku University

Background

From a very young age, stuttering can have negative socioemotional consequences for children who stutter (CWS) and their family. Peers tend to appraise stuttering negatively and ignore, mock, and walk away from CWS (Ezrati-Vinacour, Platzky, & Yairi, 2001) and parents of young CWS often experience feelings of worry, anxiety, self-blame, concern, and frustration (Langevin, Packman, & Onslow, 2010). Also, there is ample evidence that preschool-age CWS exhibit more negative communication attitudes than their fluent peers (Guttormsen, Kefalianos, & Næss, 2015). To better understand the impact of stuttering on the parents of CWS, Millard and Davis (2016) developed the Palin Parent Rating Scale (Palin PRS). Palin PRS assesses parental perceptions of the impact of stuttering on their child, the severity of stuttering and the impact it has on them, and their knowledge and confidence in managing it. With the exception of a study conducted by Wheeler, Fenton, and Millard (2011), very little is known about factors that are associated with parents' ratings on the Palin PRS.

Wheeler and her colleagues found that parents report greater impact of stuttering on girls than boys and that those who stutter report greater impact of stuttering on their child than parents who do not stutter. Also, mothers rated their knowledge and confidence about stuttering higher than fathers, and parents of children with speech difficulties rated their knowledge and confidence in managing stuttering significantly higher than parents of children without concomitant speech difficulties.

This study was an effort to replicate elements of the Wheeler et al. in the Greek-speaking population and extend this line of work by assessing the (in)congruence between children's attitudes towards their communication and their parents' perceptions of the impact of stuttering on them. Thus the **goals** of this study were to:

- 1. Investigate maternal and paternal agreement on Palin PRS ratings.
- 2. Assess the role of different factors (e.g., family history of stuttering) on Palin PRS ratings.
- 3. Evaluate the agreement between children's attitude towards communication and their parents' rating of the impact of stuttering on them.

Method

Participants

56 CWS and their mothers and fathers

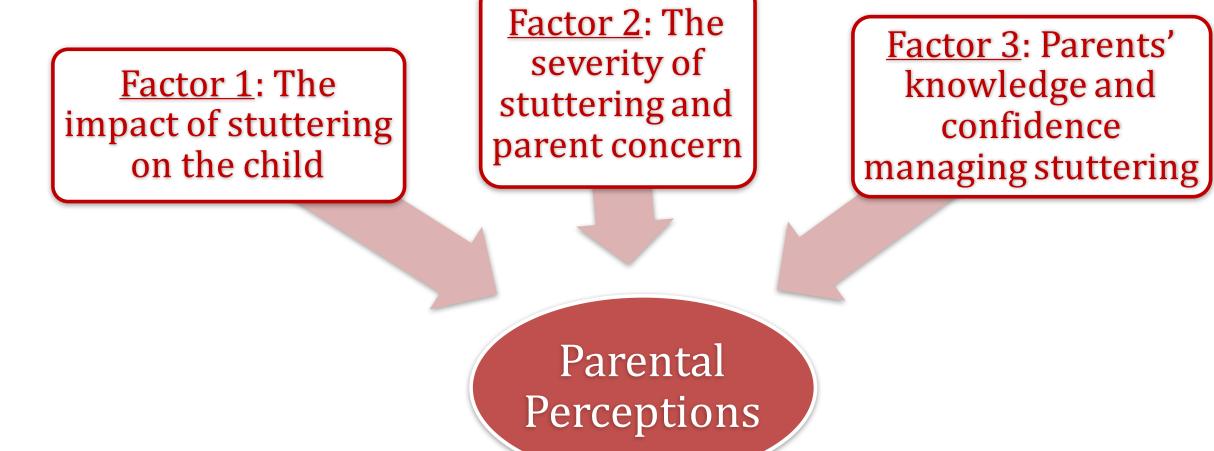
Gender: 43 ♂, 13 ♀

Age: between 3;0 – 6;4 years of age (M = 54.61, SD = 10.86). *Language:* Native speakers of Greek.

- * *Stuttering severity*: On a 0 to 10 rating scale (0 = very fluent; 10 = very disfluent. M = 4.05, SD = 2.03.
- * Time since stuttering onset (TSO; in months): M = 17.14, SD = 12.27.
- * Family hx of stuttering: 11 recovered, 10 persistent, 35 no family hx
- * Presence of concomitant speech and/or language disorder: 59%

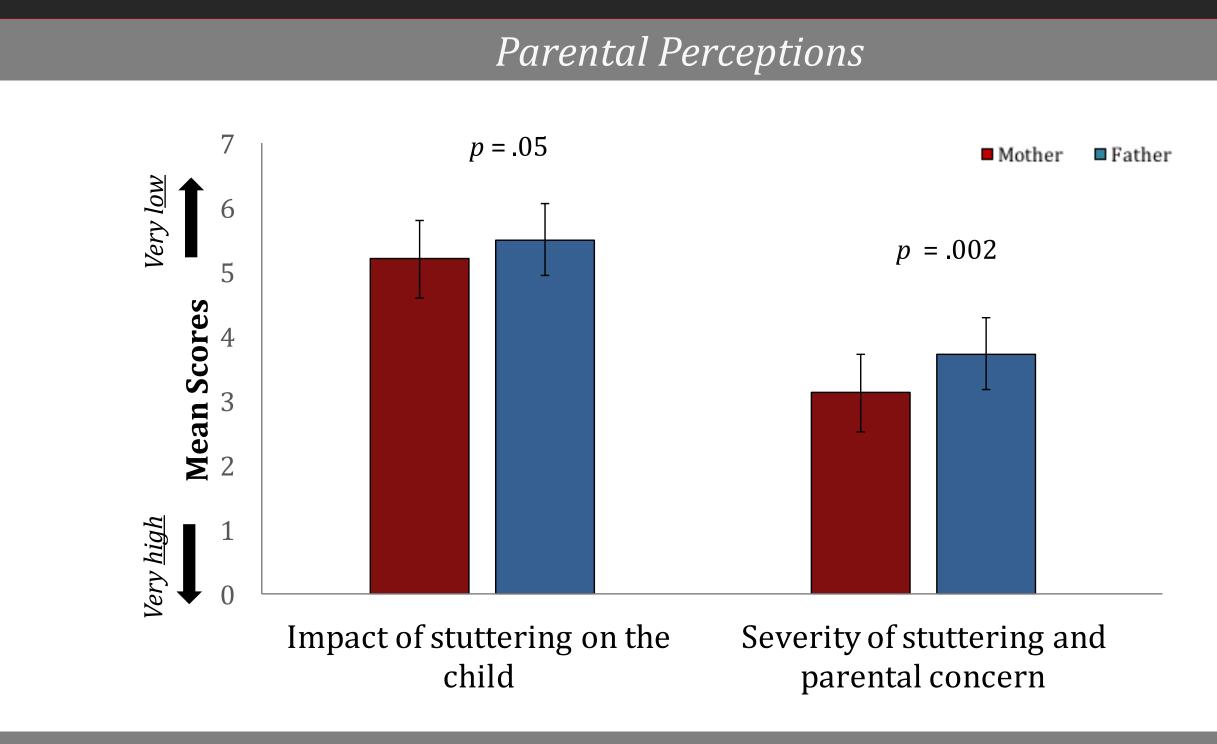
Measures

Measure 1: **Palin PRS** (Millard & Davis, 2016): A 19-item parent questionnaire that yields scores for the following 3 factors:

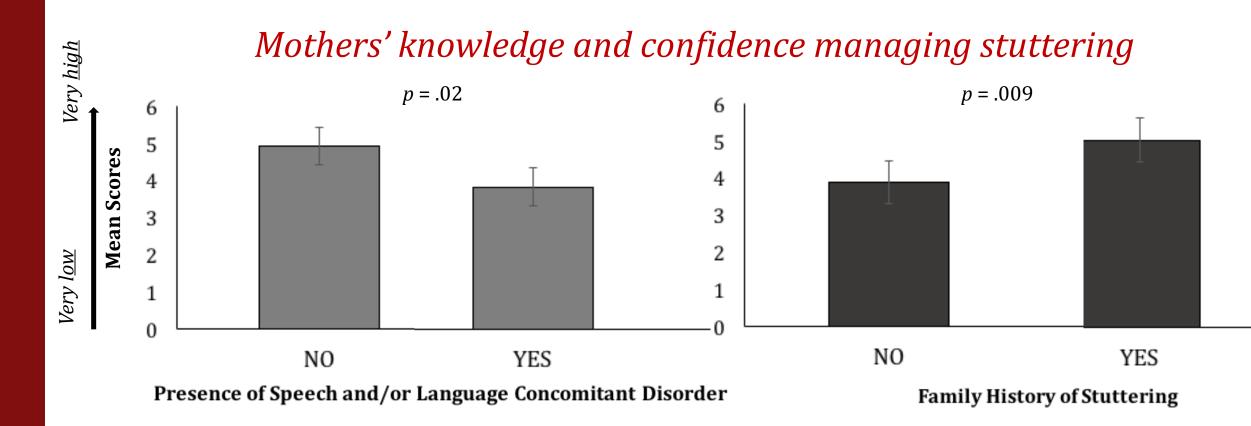


<u>Measure 2</u>: The *Communication Attitude Test for Preschool and Kindergarten Children Who Stutter – Greek version* (**KiddyCAT-G**; Ntourou, Marousos, Paphiti, Fourlas, & Vanryckeghem, 2016): a 12-item, binary (yes/no) questionnaire designed to assess communication attitudes in 3- to 6- year old CWS.

Results



Factors Associated with Parental Perceptions



		TSO (controlled for age)	Stuttering Severity
Mother	Impact of Stuttering on Child	r = .24, p = .05	r =29, p = .03
	Severity of Stuttering and Maternal Concern	r = .08, p = .54	r =38, p = .003
Father	Impact of Stuttering on Child	r = .31, p = .02	r =39, p = .003
	Severity of Stuttering and Paternal Concern	r = .16, $p = .24$	r =51, p < .001

Agreement between children and their parents

	Impact of Stuttering on the Child <i>Mother</i>	Impact of Stuttering on the Child <i>Father</i>
KiddyCAT	r =29, p = .03	r =13, p = .35

Discussion

Factor 1 – The impact of stuttering on the child

- Mothers perceived that stuttering has a greater impact on their child compared to fathers.
- According to both parents the impact of stuttering on their child decreased the longer the child stuttered.
- According to both parents the impact of stuttering on their child increased with an increase in stuttering severity.
- Children's attitude towards their communication was consistent with their mothers' ratings of the impact of stuttering on them.

Factor 2 – The severity of stuttering and parent concern

- Mothers rated the severity of their child's stuttering and their concern higher than fathers.
- Mothers' and fathers' concern and perceptions of their child's severity of stuttering was positively correlated with clinicians' ratings of stuttering severity.

Factor 3 – Parents' knowledge and confidence managing stuttering

- Mothers and fathers did not differ in their self-rated knowledge and confidence managing stuttering.
- Mothers of children with concomitant speech and/or language disorders rated their knowledge and confidence managing stuttering lower than mothers of children who only stutter (cf. Wheeler, Fenton, & Millard, 2011).
- Mothers of children with a positive family history of stuttering rated their knowledge and confidence managing stuttering higher than mothers of children without a family history of stuttering.

Conclusion: This study's results highlight the importance of involving both parents in the assessment process because their perceptions about the impact of stuttering might differ. Also, when working with preschool-age CWS, it is important to be cognizant of factors that might influence their parents' perceptions of stuttering.