**FACES - Statistical Consulting**

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Fostering Advocacy, Communication, Empowerment, and Support (FACES) is a 4 to 6 week parent training intervention program aimed at educating African American parents of children with Autism Spectrum Disorder (ASD), such that these parents feel confident in implementing ASD social solutions, accessing relevant information, and discussing options with medical professionals. The central goal is to improve empowerment and advocacy by improving parents’ knowledge of ASD and improving their use of communication and behavior management strategies. . The program is at a preliminary stage of inquiry, and aims to investigate a spanning array of research questions regarding the central pillars of empowerment as it relates to the outcomes of the FACES program. Therefore, data on the ability of FACES’s participants to advocate for their children, understand implementation of social communication strategies, manage characteristic ASD behavior, communicate with professionals, and generally feel confident was collected for analysis.

**Purpose**

The purpose of this statistical consultation is to examine if the FACES intervention had an effect on improving advocacy, communication, empowerment, and support for African American families with autistic children by comparing the survey results of the intervention group and the control group. The secondary aim of this consultation is to provide guidance on the participant size needed to answer the research questions. This will give Dr. Pearson a target size of participants to acquire in the next phases of the FACES program. Our goal is for this analysis to assist the FACES program with training as many families as possible and helping to improve the quality of life for those families.

**Research Questions**

The research questions were formally implemented into a study led by Dr. Pearson and formulated in her dissertation. As consultants our objectives are to analyze participant survey data collected from the study participants, build understanding of FACES’s impact on empowering African American families of children with ASD, and subsequently report our statistical analysis to be used for Dr. Pearson’s Institute of Education Sciences (IES) grant proposal submission as well as support for future FACES publications.. Specifically, our consultations goals are to examine the following questions[[1]](#footnote-0):

1. Does the FACES program increase empowerment in African American parents of children with ASD?
2. Does the FACES program increase parents’ knowledge of ASD?
3. Two part question related to confidence:
   1. Does the FACES program strengthen parents’ understanding of and confidence in their ability to implement social communication strategies?
   2. Does the FACES program strengthen parents’ understanding of and confidence in managing behavior?
4. Does the FACES program increase parent-professional communication as reported by parents?
5. In what ways and to what extent does the FACES program strengthen parents’ reported perceptions of their ability to advocate effectively for services for their children with ASD?

The immediate challenge presented by investigating these research questions is the inherent subjectivity in measuring dispositions of confidence, sense of being supported by professionals, and ability to advocate. As a result, previous literature will be leveraged as a benchmark of performance and measurement in these areas. Thus a coherent, as well as an illustrative narrative, of the background research is required to inform our statistical methodology. Difficult as this may be, an effort to align our methodology to previous work ensures that results can be reliably communicated by using common language and numerical summaries. Therefore, an additional objective of our consultation is to frame Dr. Pearson’s questions, our analysis and summary using adjacent and previous research.

While it is known that African American children with ASD are less likely to be identified, there are also no known parent-advocacy programs designed specifically to meet the needs of African American families. Additionally, according to Dr. Pearson, little is known about the experiences of African American parents affected by having children with ASD. In an effort to resolve the lack of public support and educational outreach to African American parents, FACES was implemented as “parent-training interventions that promote advocacy and empowerment” (Dr. Pearson), thereby stimulating community efforts to recognize ASD earlier and to provide early childhood social support.

1. Pearson, J. N. (2017) *Fostering Advocacy, Communication, Empowerment and Support (FACES) for African American Families of Children with Autism: A Pilot Study* [Unpublished Doctoral Dissertation], University of Illinois [↑](#footnote-ref-0)