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Best FACES Forward: Outcomes of an Advocacy Intervention for Black Parents Raising Autistic Youth

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ABSTRACT

Despite increased diagnostic prevalence, Black parents raising autistic youth still experience additional and unique barriers to accessing and using autism-related services compared to their non-Black peers. Increasing parent advocacy capacity may be one way to reduce these disparities. This efficacy study examined the effects of the FACES advocacy program on advocacy capacity for Black parents raising autistic youth. Authors used a quasi-experimental research design that compared pretest and posttest measures for 16 Black parents raising autistic youth. Intervention participants demonstrated increases in family empowerment, school communication, and perceptions of advocacy ability. Findings offer emergent evidence of advocacy programs for Black families raising autistic youth.

The autism diagnosis disparity between Black and non-Black children has recently narrowed, reducing chronic underrepresentation (e.g., Maenner et al., 2020; Nevison & Zahorodny, 2019). However, Black children are still diagnosed later than their white peers and are often presumed to have other disabilities first (e.g., intellectual disability; Constantino et al., 2020). Disparities also exist in service access for Black autistic youth and their families (e.g., Lovelace et al., 2018; Kim et al., 2020; Pearson et al., 2020; Smith et al., 2020; Strand & Lindorff, 2021). Given these disparities, Black autistic youth and their families experience subsequent, unique barriers to accessing autism-related services and supports compared to their non-Black peers. Such barriers include lack of social support and communal stigma (Pearson et al., 2020; Blanchett et al., 2009; Dababnah et al., 2018; Donohue et al., 2017; Howard et al., 2021; Laclair et al., 2019; Pearson et al., 2020). Consequently, (a) Black autistic youth experience delayed communication skills compared to their non-Black peers (Blanchett et al., 2009; Laclair et al., 2019; Pearson & Meadan, 2018) and (b) Black parents raising autistic youth reported higher levels of parenting stress compared to their non-Black peers (Williams et al., 2019).

Advocacy programs

One way to increase access to and use of autism-related services is by improving parents' capacity to advocate for their children (Dababnah et al., 2018, 2021; Jamison et al., 2017; Kim et al., 2020; Pearson et al., 2021; Stanley, 2015). While parents raising children with disabilities have historically been the strongest advocates for the strengths and needs of their children, advocacy groups typically comprised middle-class White parents (Turnbull et al., 2010). Simultaneously, Black parents raising autistic youth conveyed they did not possess adequate capacity to advocate for autism-related services (Dababnah et al., 2021; Jamison et al., 2017; Pearson & Meadan, 2018; Pearson et al., 2020; Stanley, 2015). Advocacy training programs for parents raising autistic youth, such as the Volunteer Advocacy

Project and the Latino Parent Leader Support Project have been associated with increased self-efficacy (Burke, Goldman et al., 2016; Burke et al., 2019; Burke, Magaña et al., 2016; Taylor et al., 2017). While special education intervention programs often address academic or social needs at the student level, family-level interventions and outcomes (e.g., advocacy capacity) may promote positive holistic outcomes for the child, parents, and siblings (Pearson & Meadan, 2021).

Advocacy capacity

Advocacy capacity refers to the knowledge and self-efficacy parents need to engage in activities designed to enrich their child's development (Pearson & Meadan, 2021; Burke, Goldman et al., 2016; Stanley, 2015; Taylor et al., 2017). Advocacy capacity requires: (a) knowledge of service systems (i.e., opportunities and barriers for obtaining support); (b) empowerment (i.e., viewing oneself as an authority); and (c) emancipation (i.e., experiencing freedom from social restrictions; Burke, Goldman et al., 2016; De Beauvoir, 1962; Koren et al., 1992; Mosko, 2018; Pearson & Meadan, 2021).

Advocacy in Black families

Existing advocacy programs contained two limitations to supporting Black parents. First, prior programs did not explicitly address barriers and experiences unique to Black families (e.g., being denied services because of their race; Dababnah et al., 2018; experiencing community stigma; Howard et al., 2021). Second, prior programs were not designed explicitly for and with Black parents, who may find advocacy training programs most helpful and salient when held exclusively with other Black families due to historic marginalization and experiences unique to Black families (Pearson et al., 2020; Pearson & Meadan, 2021; Avent Harris, 2021; Pearson & Meadan, 2018; Trainor, 2010). Black families' desire for more culturally tailored interventions reflects the importance and strength of interpersonal membership and support in the Black community (Pearson et al., 2021, 2020; Avent Harris et al., 2019; Fripp & Carlson, 2017). To address these limitations, (Pearson & Meadan, 2021) piloted an advocacy training program with 10 Black parents raising autistic youth entitled Fostering Advocacy, Communication, Empowerment, and Supports (FACES). The researchers measured the effects of the program through nonparametric statistical analyses of pre- and posttests paired with qualitative analysis of pre- and post-intervention focus groups. After completing the six sessions of FACES, participants demonstrated higher levels of: (a) family, service, and community/political empowerment; (b) knowledge of communication and behavior strategies; and (c) perceived advocacy abilities and strengths (Pearson & Meadan, 2021). Parents communicated a high degree of satisfaction with FACES and provided several suggestions for improvement. However, the small sample size and lack of statistical power limited generalizability of findings beyond the sample and allowed threats to internal validity. Further evaluation of the FACES program is necessary to demonstrate effectiveness. Therefore, the purpose of this study was to measure the outcomes of the FACES training on the advocacy capacity among a larger sample of Black parents raising autistic youth, using a quasi-experimental design. The following research questions (RQs) guided our study: (1) Does the FACES program increase empowerment and perceptions of advocacy ability in Black parents raising autistic youth? (2) Does the FACES program increase parents' understanding of autism, social communication, and behavior strategies? (3) Does the FACES program affect parent-professional communication?

Method

This study was conducted in one southeastern state in the United States starting in February 2019. We used a quasi experimental design to measure effectiveness of the FACES program (Gersten et al., 2005) and assigned participants to an experimental or waitlist control group. All participants completed a pre-intervention and post-intervention test. Only participants in the experimental group received the intervention in between the pre- and posttest.

Participants and setting

Following approval from the University Institutional Review Board, we asked several local autism service organizations to help recruit participants by distributing a recruitment flier and soliciting involvement from families that matched our inclusion criteria. We recruited parents or caregivers raising a child who: (a) had an autism diagnosis provided by a pediatrician or licensed psychologist according to criteria from the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) and/or (b) were deemed eligible for an autism (AU) classification according to the Individuals with Disabilities Education Improvement Act (Individuals with Disabilities Education Improvement Act, 2004). We required that at least one caregiver from each family attend all sessions in the FACES program. Both the caregiver and child had to identify as Black or African-American (i.e., Black persons in the United States from the African diaspora).

Eighteen participants provided informed consent and selected their preferred date (of two choices) to begin the FACES program. We assigned participants to the experimental or control group based on their selection. One participant consented but never enrolled, and one participant attended Session One but was unable to complete the study. Sixteen parents ultimately enrolled and completed all study requirements (see, Figure 1). The experimental group comprised eight mothers, one grandmother, and one father, while the control group comprised six mothers (see, Table 1 for demographics). Two family dyads participated in the experimental group: two parents were spouses and one participant was the mother of another participant (i.e., grandmother). Most participants were raising an autistic son ($n = 13$; 81%), were married ($n = 11$; 69%), and held at least a bachelor's degree ($n = 12$; 75%). The average annual family income was \$72,000. On average, participants' children were 12.8 years old (range 5.3–35.4 years) and were diagnosed with autism at 4 years (range 2.3–8 years; see, Table 1). Three participants were raising more than one child with autism. Two children had co-occurring diagnoses of intellectual disability and attention deficit hyperactivity disorder alongside autism, respectively. The mean age of participants was similar between groups (experimental group $M = 46.3$; control group $M = 46.0$), along with the age of children at diagnosis (experimental group $M = 3.78$; control group $M = 4.80$). Participants in the experimental group indicated higher family income ($M = \$81,250$ vs. $M = \$56,000$), while children of control group participants were older ($M = 9.6$ years vs. $M = 15.8$ years).

FACES sessions were held in an open meeting room adjacent to the principal investigator's (PI) institution. The meeting room was in close proximity to two bus routes and offered free and ample parking. We offered trained childcare during the sessions, breakfast, and a participation stipend for parents. These considerations were made to reduce logistical barriers that often prohibit under-represented families from participating in research (Bal & Trainor, 2016).

Procedures

All participants completed the pretest online via Google Forms (Google, n.d.) in January 2019 prior to the first FACES session. Next, participants in the experimental group began the intervention. The FACES training comprised four weekly 4-hour sessions held on concurrent Saturdays in February and March 2019 from 9:00 a.m. until 12:00 p.m. (i.e., 16 training hours). Each session followed the same format. First, participants recorded their attendance and their child's attendance (if they required childcare). Then, participants ate breakfast provided by the research team and engaged in an unstructured "meet-and-greet" interaction until all participants arrived. The structured training began at 9:15 a.m. each day. Training sessions were organized and led by the PI (i.e., first author) and an alternating second facilitator who served as a topic expert on the training content. The facilitators presented training content on a large screen using Microsoft PowerPoint and provided participants with a printed copy of the presentation on which to take notes. Each session provided training on a different topic and comprised lectures, reflective activities, and group discussions related to the session topic. All participants completed the posttest immediately after Session Four.

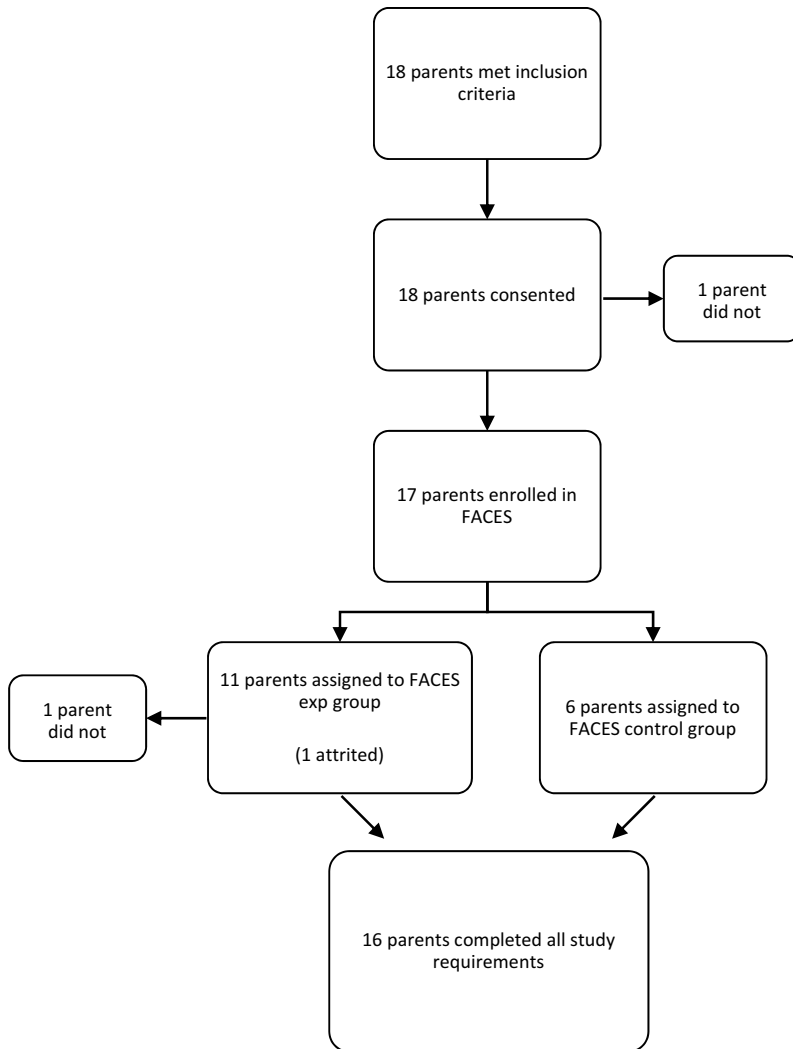


Figure 1. Participant enrollment and attrition.

Development of FACES sessions

In previous studies, Black parents raising autistic youth conveyed they did not possess adequate knowledge of: (a) autism characteristics, (b) their rights as parents, (b) the special education process, and (d) strategies for facilitating self-care and acceptance from their family (Jamison et al., 2017; Pearson & Meadan, 2018; Pearson et al., 2020; Stanley, 2015). Therefore, FACES development was guided by previous findings along with (a) the FACES theory of change (i.e., parent knowledge, parent perceptions, and parent and child outcomes); (b) a simple-to-complex sequence (Schmidt et al., 2007), and (c) adult learning theory characteristics (Trivette et al., 2009). The pilot of the FACES training (Pearson & Meadan, 2021) comprised six 4-hour sessions (i.e., 24 training hours). At the suggestion of participants following the pilot study, we revised the FACES training by: (a) condensing content within sessions to reduce the total number of sessions; (b) combining the session on autism characteristics with the session on family support; (c) combining the session on special education laws and procedures with the session on effective advocacy; and (d) creating a separate session on faith and coping.

Table 1. Participant demographics.

Experimental Group	Age	Relation to Child	Highest Degree	Family Income	Marital Status	Child Age	Child Age at Diagnosis
1	43	Mother	High School	\$54,000	Married	5	3
2	36	Mother	Masters	58,000	Divorced	–	2
3*	36	Mother	Associates	50,000	Single	5	4
4*	63	Grandmother	Bachelors	–	Married	5	4
5	40	Female	Bachelors	\$75,000	Married	9	3
6	38	Female	Doctorate	–	Married	12	7
7	56	Female	Masters	\$99,000	Married	–	–
8	52	Female	High School	\$120,000	Married	17	3
9**	49	Mother	Masters	\$97,000	Married	12	4
10**	50	Father	Bachelors	\$97,000	Married	12	4

Control Group	Age	Relation to Child	Highest Degree	Family Income	Marital Status	Child Age	Child Age at Diagnosis
11	–	Mother	Bachelors	\$53,000	Married	18	3
12	–	Mother	Masters	\$64,000	Single	11	2
13	38	Mother	Some college	\$47,000	Single	7	–
14	42	Mother	Masters	\$66,000	Married	15	8
15	44	Mother	Masters	–	Married	9	8
16	60	Mother	Masters	\$50,000	Single	35	3

** = Spouses; * = Mother/Grandmother dyad; – = not reported

Session one: autism overview & autism in Black communities. The first session comprised (a) characteristics of autism (adapted from Meadan et al., 2014, 2016) and (b) stigma and disability in the Black community (adapted from Lovelace et al., 2018; Pearson & Meadan, 2018). The first session was facilitated by the PI and a doctoral student in School Psychology who brought lived experience as a Black sibling of a person with autism and professional experience in clinical practice with persons with autism.

Session two: special education law and advocacy. The second session addressed (a) special education laws and the process of Individualized Education Program meetings (IEP; IDEA, 2004); (b) strategies for effective advocacy (adapted from Burke, Goldman et al., 2016; Goldman et al., 2017; Stanley, 2015); and (c) strategies for engaging in effective communication with professionals (adapted from Dababnah et al., 2018; Pearson & Meadan, 2018). The PI facilitated the second session with a second doctoral student in School Psychology with experience in autism diagnostics and assessments and IEP implementation.

Session three: bridging faith and FACES. The third session featured (a) characteristics of mental health and (b) the role of religious belief and practice in facilitating coping (adapted from Avent Haris et al., 2019; Avent Harris, 2021). This session was created and co-facilitated by an Assistant Professor of Counseling who was a Licensed Clinical Mental Health Counselor Associate and National Certified Counselor with expertise in religious coping in Black communities. We further described this session and accompanying perceptions in Pearson et al., 2021.

Session four: autism and family empowerment. The fourth session featured characteristics of empowerment (adapted from Koren et al., 1992) and included a panel of three Black mothers raising autistic youth who shared successful and unsuccessful advocacy experiences. This session concluded with a review of all sessions. The PI facilitated this session.

Treatment fidelity

A research assistant completed a treatment fidelity checklist during each FACES session of items scheduled to take place during the session (range 9–19; e.g., “Facilitator will lead discussion about parent advocacy efforts using ‘Think-Pair-Share’ method”). The research assistant scored each item as treatment fidelity if it took place at any point during the session.

Measures

Family empowerment scale (FES; Koren et al., 1992)

The FES measures family empowerment across family, community, and service subscales (Koren et al., 1992). Participants ranked their agreement with 34 statements on a 5-point Likert scale ranging from 1 (*not true at all*) to 5 (*very true*; e.g., “I feel I am a good parent”). The FES had high reliability with parents raising children with IDD ($\alpha = .85-.93$; Singh et al., 1995). We used the FES to measure overall family empowerment and answer RQ1.

Special education advocacy scale (SEAS; Burke, Goldman et al., 2016)

The SEAS measures participant perceptions of their advocacy capacity through 10 items on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*excellent*; e.g., “How able are you to effectively participate at IEP meetings?”). The SEAS demonstrated high reliability with parents raising autistic youth ($\alpha = .85$; Burke, Goldman et al., 2016; $\alpha = .76$; Pearson & Meadan, 2021). We used the SEAS to measure perceptions of advocacy capacity and answer RQ1.

Autism knowledge survey, revised (AKS; Gillespie et al., 2015)

The AKS measures agreement with 21 statements scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*; e.g., “People with autism show affection”). The revised AKS includes 10 statements from the original AKS (which included outdated perceptions; Stone, 1987) and 14 statements that reflect updated understandings of autism (Gillespie et al., 2015). Internal consistency was moderate for the original 10 statements ($\alpha = .50$) and additional 14 statements ($\alpha = .56$; Campbell et al., 1996; Gillespie et al., 2015). We used the AKS to measure parent autism knowledge and answer RQ2.

FACES scale (Pearson & Meadan, 2021)

School communication scale (SCS; Burke, Goldman et al., 2016)

The SCS measures the frequency of communication with school-based professionals. Parents responded to seven items via a 5-point Likert scale ranging from 1 (*never*) to 5 (*very often*; e.g., “I volunteer at my child’s school”). The SCS showed high reliability with families of autistic youth ($\alpha = .87$; Burke, Goldman et al., 2016; $\alpha = .90$; Authors, 2021). We used the SCS to measure parent-professional communication frequency and answer RQ3.

Family professional partnership scale (FPPS; Summers et al., 2007)

Social validity

Participants completed formative session evaluations via Google Forms (Google, n.d.) after Sessions One, Two, and Three. Formative evaluations featured five questions ranked on a five-point Likert scale that measured (a) satisfaction with the information covered in the session, (b) satisfaction with the way information was presented; (c) relevance of the session to advocacy; (d) relevance of the session to empowerment; and (e) overall satisfaction. Formative evaluations also asked participants to share (a) the most meaningful part of the session and (b) suggestions or feedback regarding the session. After Session Four, participants also completed a summative evaluation and provided feedback on the entire FACES training. We used data from formative and summative evaluations to measure social validity of the training.

Data analyses

We imported pre- and posttest data from Google Forms (Google, n.d.) into R version 4.0.0 (R Core Team, 2020) for analysis. We screened data to identify missing cases from each distinct grouping of time, group, and survey. There were 3,104 total observations and 172 missing data points (5.5%). Following guidance from McNeish (2017), if two or fewer missing values were observed within the aforementioned distinct grouping, we imputed missing values with the mean of the nonmissing responses. If more than two missing values were observed within the distinct grouping, we removed responses from that participant within the distinct grouping. We imputed six observations (<0.2%) and removed the remaining 166 missing observations.

Our small sample size and the missing data dictated the use of nonparametric statistics in analyses. We conducted a Wilcoxon Signed-Rank Test to evaluate the effective difference between pretest and posttest median scores for both groups (i.e., experimental, control) for each of the six measures (i.e., FES, AKS, FACES, SCS, FPPS, SEAS; (Whitley & Ball, 2002; Wilcoxon, 1945). The Wilcoxon Signed-Rank is a non-parametric test that can be used as an alternative to analysis of variance with small sample sizes and does not require assumptions of normality to be met (Whitley & Ball, 2002). We avoided Bayesian statistics as this method estimates probability, which is not ideal in underresearched populations (Hackenberger, 2019). For each of the six measures, we compared differences in: (a) pretest responses between groups (i.e., experimental, control); (b) posttest responses between groups (i.e., experimental, control); (c) pretest responses versus posttest responses for the experimental group; and (d) pretest responses versus posttest responses for the control group. The differences between pre- and posttest scores for all participants were standardized and graphed in a quantile-quantile (qq) plot. Potential outliers were identified by points that were far away from the line. We identified one outlier, ran the Wilcoxon Signed-Rank Test with and without the potential outlier, and compared results to determine if potential outliers should be removed from the analysis. Removing the potential outlier did not make a significant difference in results; thus, we did not remove this participant in the analysis. As suggested for clinical research, our predicted power level was 95% confidence ($p < .05$; Sim & Reid, 1999). We measured for a medium effect size ($r_{\text{equivalent}} = .05$), which is appropriate for clinical research measuring changes in attitudes, beliefs, and knowledge (Rosenthal & Rubin, 2004).

Results

Treatment fidelity

Fidelity to the curriculum across sessions averaged 90% (range 60–100%). Session 1, 2, and 4 featured 100% fidelity. Session 3 fidelity (60%) was impacted by participants' desire to spend more time discussing their experiences related to faith and coping strategies. Content scheduled for this session was discussed during the review in the fourth session.

Group Differences

Group medians and interquartile ranges are displayed in Table 2 along with the results of the Wilcoxon Signed-Rank Test for group differences at the pretest and posttest. Pretest results emphasized similar responses in the experimental and control group for all surveys except the pretest FPPS survey ($p = .05$; $r_{\text{equivalent}} = .05$) and allowed more confidence in using the control group as a comparison for the posttest responses.

RQ1: parents' perceptions of empowerment of advocacy capacity

The results of the Wilcoxon Signed-Rank Test are reported in Table 2. Posttest FES scores were significantly greater than pretest FES scores for the experimental group ($W = 1$; $p = .002$; $r_{\text{equivalent}} = .05$), but were not significantly greater for the control group ($W = 2$; $p = .089$; $r_{\text{equivalent}} = .05$). Posttest SEAS scores were significantly greater than pretest SEAS scores for the experimental group ($W = 3$; $p = .020$; $r_{\text{equivalent}} = .05$), but not for the control group ($W = 7$; $p = .500$; $r_{\text{equivalent}} = .05$). This suggested the FACES program increased FES and SEAS scores for the experimental group.

RQ2: parents' understanding of autism characteristics and social communication/behavior strategies

Posttest scores were not significantly greater than pretest scores for: (a) AKS scores in both the experimental group ($W = 14$; $p = .092$; $r_{\text{equivalent}} = .05$) and the control group ($W = 11$; $p = .584$; $r_{\text{equivalent}} = .05$) and (b) FACES scores for both the experimental group ($W = 18$; $p = .179$; $r_{\text{equivalent}} = .05$) and the control group ($W = 10$; $p = .791$; $r_{\text{equivalent}} = .05$). Findings provided no evidence the FACES program increased AKS or FACES scale scores for the experimental group.

RQ3: Parent-professional Communication

Posttest SCS scores were significantly greater than pretest SCS scores for the experimental group ($W = 0$; $p = .011$; $r_{\text{equivalent}} = .05$), but not for the control group ($W = 1$; $p = .099$; $r_{\text{equivalent}} = .05$). Posttest FPPS scores were not significantly greater than pretest FPPS scores for both the experimental group ($W = 8$; $p = .175$; $r_{\text{equivalent}} = .05$) and the control group ($W = 2$; $p = .188$; $r_{\text{equivalent}} = .05$). This suggested the FACES program increased SCS scores but not the FPPS scores for the experimental group.

Social validity

Social validity data are reported in Table 3. Participants conveyed a high overall level of satisfaction with Sessions One ($M = 4.92$; $SD = 0.28$), Two ($M = 4.88$; $SD = 0.50$), Three ($M = 4.83$; $SD = 0.39$), and FACES overall ($M = 5.00$; $SD = 0.0$). Participants provided similar qualitative feedback such as, "I want to continue to be empowered for advocating for [my] child and in [my] community," and "I learned a lot about the laws as well as IEPs; I think those were the missing pieces I needed to better advocate for my child." Participants articulated their appreciation for (a) the group discussion ($n = 23$; e.g., "Hearing ideas and thoughts from others helps me advocate for [child] in our meeting"); (b)

Table 2. Pretest and posttest group results.

Survey	Pretest			Posttest			Pretest/Posttest Comparison					
	W	p	$r_{\text{equivalent}}$	W	p	$r_{\text{equivalent}}$	Experimental Group			Control Group		
							W	p	$r_{\text{equivalent}}$	W	p	$r_{\text{equivalent}}$
FES	33.0	0.786	.05	43.0	0.174	.05	1	0.002	.05	2	0.09	.05
SEAS	22.5	0.897	.05	32.5	0.299	.05	3	0.020	.05	7	0.50	.05
AKS	20.0	0.290	.05	36.0	0.547	.05	14	0.092	.05	11	0.58	.05
FACES	30.0	1.000	.05	42.0	0.211	.05	18	0.179	.05	10	0.79	.05
SCS	21.5	0.395	.05	17.5	0.864	.05	0	0.011	.05	1	0.10	.05
FPPS	28.0	0.050	.05	27.5	0.060	.05	8	0.175	.05	2	0.19	.05
FPPS	28.0	0.050	.05	27.5	0.060	.05	8	0.175	.05	2	0.19	.05

M = median; H = Interquartile Range (H-spread); W = Wilcoxon Test statistic; p = p-value; $r_{\text{equivalent}}$ = effect size.

mental health and faith content ($n = 6$; “I got the most out of how to incorporate my Christianity with my mental health”); and (c) IEP information ($n = 5$; “I learned a lot of information about the IEP process as well as the laws around special needs supports”). Participants suggested adding family systems content ($n = 6$; e.g., coping with marital stress related to raising a child with autism) and adding one hour to each session ($n = 8$).

Discussion

The present study measured the outcomes of the FACES training on advocacy capacity with 16 Black parents raising autistic youth. Increasing advocacy capacity for Black parents raising autistic youth may help families overcome the additional, unique barriers Black families experience when seeking autism-related services (Pearson et al., 2020; Smith et al., 2020; Stanley, 2015). Findings from this study extend the pilot study (Pearson & Meadan, 2021), and contribute exploratory evidence suggesting the positive effects of FACES on parental advocacy capacity. We draw four conclusions from these results.

First, the study offers further evidence for the FACES training. Previous studies established the relevance of content discussed in FACES (e.g., Burke, Goldman et al., 2016; Lovelace et al., 2018; Pearson & Meadan, 2018) and salience of the FACES training (e.g., Pearson et al., 2020, Pearson & Meadan, 2021). In tandem with the pilot study, the present study adds additional evidence for the FACES training as an effective method to strengthen three dimensions of advocacy capacity for Black parents raising autistic youth: (a) perceptions of advocacy, (b) frequency of school communication, and (c) overall family empowerment. Of these dimensions, Wilcoxon Signed-Rank analyses in the present study indicate stronger effects than the pilot study in school communication frequency (i.e., SCS; $p = .011$ vs. $p = .35$) and overall family empowerment (i.e., FES; $p = .002$ vs. $p = .01$). Effects on perceptions of advocacy capacity mirrored the pilot study (i.e., SEAS; $p = .020$ vs. $p = .020$). The present study provided no evidence that FACES improved parents’ (a) knowledge of social communication and behavior strategies, (b) knowledge of autism, or (c) perception of family-professional communication.

Second, parents’ perceived advocacy capacity and overall empowerment increased despite no changes in their knowledge of autism characteristics and social communication/behavior strategies. This suggests that aspects of advocacy capacity (e.g., empowerment, confidence) may function independently of knowledge. This may be particularly true in the Black community, where family members experience additional social barriers to advocacy (e.g., stigma, ostracization; Dababnah et al., 2018; Pearson et al., 2021).

Third, implementation fidelity was negatively impacted by participants’ desire to continue discussing religion and coping in Session Three. Religion (and the Black Church specifically) continues to hold a prominent role in the Black community (Avent Harris, 2021; Pargament et al., 1998). This topic was included at the suggestion of prior FACES participants. The 40% difference in implementation fidelity for this session underscores both the extent to which participants expanded the discussion and the need to include this topic in future FACES sessions. In response to this extended discussion, authors condensed training on communication and behavior strategies and moved this content to Session Four. This may explain why participant scores on the FACES scale were not significantly different between pre- and

Table 3. Social validity data.

	Session 1 <i>M (SD)</i>	Session 2 <i>M (SD)</i>	Session 3 <i>M (SD)</i>	Overall <i>M (SD)</i>
To what extent were you satisfied with the information covered?	4.85 (0.38)	4.94 (0.25)	4.83 (0.39)	5.00 (0.0)
How satisfied were you with the way the information was delivered?	4.77 (0.44)	4.88 (0.34)	4.92 (0.29)	5.00 (0.0)
How relevant was this session/training in helping you become an advocate?	4.77 (0.44)	4.94 (0.25)	4.58 (0.67)	5.00 (0.0)
How relevant was this session/training in helping you feel more empowered?	4.69 (0.63)	4.81 (0.40)	4.75 (0.45)	5.00 (0.0)
Please indicate your overall satisfaction with the session/ FACES training.	4.92 (0.28)	4.88 (0.50)	4.83 (0.39)	5.00 (0.0)

posttest. In the exploratory FACES study (Pearson & Meadan, 2021), the researchers provided the full communication and behavior strategies training and participant FACES scores were significantly higher at posttest.

Fourth, experimental group participants showed tenable gains in SCS ($p = .011$) but not FPPS ($p = .175$). The SCS measures frequency of family involvement in school activities while the FPPS measures familial satisfaction with school support. These findings suggest that the FACES training is effective at increasing communication frequency between family and schools even if familial satisfaction does not increase to the same effect. At the pretest, intervention group medians fell in the *sometimes* range for total SCS scores ($M = 26.5$ out of 35 possible) and the *satisfied* range for total FPPS scores ($M = 75.0$ out of 90 possible). Although families may be satisfied with overall school support, they will still benefit from instruction in strategies to increase school involvement. Further, FACES alone cannot increase school satisfaction.

Limitations

Although findings of this study demonstrate emerging evidence for FACES, we note five primary limitations. First, we caution against using findings for statistical inference given the limited number of study participants ($N = 16$) and the composition of the sample (i.e., participant demographics). Similarly, our sample size did not provide enough power necessary to control for pretest measures when analyzing group differences. Second, there were observable but not significant differences between the control group and intervention group across several demographics. The experimental group featured parents with an overall higher family income and higher levels of formal education. Third, most participants held a bachelor's degree or higher and, for participants who shared their family income, all family incomes were above the federal poverty line (United States Census Bureau, 2021). Findings of the study cannot be transferred to parents with lower socioeconomic status and/or possessing less formal education, whose experiences may be drastically different (Dababnah et al., 2018). Fourth, we allowed participants to self-select the intervention start date as the criteria for group organization. It is possible that bias exists in group formation. For example, parents experiencing more urgency for services may have selected an earlier start date. Last, our selected confidence interval of 95% increases the chance of Type II error.

Implications for practice

Based on these findings, schools and agencies supporting Black parents raising autistic youth may consider using FACES as a method to build advocacy capacity. Teachers, school counselors, parent advocates, and other service providers could implement FACES as a support mechanism for Black parents raising autistic youth. Perceived inadequate parent support and participation is a longstanding frustration for school-based professionals (Herman & Reinke, 2016; Pearson et al., 2021, 2020). Despite these frustrations, parents are key stakeholders in navigating and facilitating access to and implementation of special education services for autistic youth. When parents are equipped to advocate for and access services, children demonstrate improved outcomes (Bruder, 2010; Irvin et al., 2012). Therefore, teachers can embed culturally responsive strategies to increase parental involvement by providing instruction for parents and caregivers in autism knowledge, advocacy, and empowerment (Pearson et al., 2021) or connecting families to community-based supports such as FACES which are designed to build advocacy capacity for parents raising autistic youth. Finally, because FACES cannot increase parents' school satisfaction alone, teachers and IEP team members must ensure they are supporting knowledge, empowerment, and advocacy for Black parents raising autistic youth.

Suggestions for research

The influence of culture on service access and utilization (e.g., Blanchett et al., 2009) is a two-way street involving children/family members and service providers (e.g., teachers, early interventionists). Researchers can intervene to mitigate this influence at the family level or the school level. Our suggestions for research are organized within these avenues. At both levels, researchers should explore intervention effects across cultural backgrounds, or, at minimum, include the cultural background of participants when determining intervention effectiveness (Steinbrenner et al., 2022).

Family level

Study findings contribute to our growing understanding of empowerment and advocacy of Black parents raising autistic youth, which is an under-researched area (e.g., Pearson et al., 2020; Stanley, 2015). Future research is needed to replicate the FACES intervention with: (a) a larger group of participants to establish more significant evidence with fewer threats to internal validity, (b) a remote, online delivery to further remove logistical barriers associated with autism-related service knowledge for under resourced communities (Pearson et al., 2020; Bal & Trainor, 2016; Burke, Goldman et al., 2016); and (c) other, non-maternal caregivers (e.g., fathers, siblings, grandparents; Hagiwara et al., 2018). To recruit more socioeconomically diverse participants, future research examining support programs such as FACES should (a) address transportation, childcare, and other accessibility challenges for under resourced participants, and (b) intentionally oversample participants from lower socioeconomic backgrounds. In addition, analysis of specific components within the FACES intervention is necessary to determine which topics and components are associated with increased advocacy capacity (i.e., mediation analyses). Several instruments we used measured constructs that typically change over longer time periods (e.g., FPPS, Summers et al., 2007; SEAS, Burke, Goldman et al., 2017). Parents who did not demonstrate significant gains in these constructs immediately after FACES may show gains over time. Future iterations of FACES or similar programs may consider measuring change over an extended period of time in addition to pre/post measures. Last, similar to parents, few studies have examined self-advocacy for Black youth with autism (J.N. Pearson et al., 2018). Research is needed to validate self-advocacy and empowerment interventions with Black youth with autism (e.g., TEAM model; Kramer et al., 2018) as another pathway to easing service inequities.

School level

Future research should investigate the effects of culturally responsive, nondiscriminatory, and anti-biased practice and pedagogical methods on (a) the capacity of education professionals and service providers to support and build trust with Black families raising autistic youth and (b) parents' and students' perceptions of these methods. Researchers may consider evaluating anti-bias professional development methods for education professionals that complement parent training (e.g., FACES). Additionally, research is needed to explore the capacity of service linkages between school and service agencies to support advocacy capacity for Black parents raising autistic youth (e.g., CIRCLES; Flowers et al., 2018).

Conclusion

The current study provides emerging evidence and implications for the efficacy of FACES as an advocacy training program for Black parents raising autistic youth. FACES may be one intervention used to reduce barriers Black parents experience to autism-related services and assist parents in feeling empowered to advocate for Black autistic youth.

Disclosure statement

We have no known conflict of interest to disclose.

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