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A Clinical Program for Transgender and Gender-Diverse Neurodiverse/Autistic Adolescents Developed through Community-Based Participatory Design

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ABSTRACT

Objective: A series of studies report elevated rates of autism and autistic characteristics among gender-diverse youth seeking gender services. Although youth with the co-occurrence present with complex care needs, existing studies have focused on co-occurrence rates. Further, clinical commentaries have emphasized provider-centered interpretations of clinical needs rather than key stakeholder-driven clinical approaches. This study aimed to employ community-based participatory research methodologies to develop a key stakeholder-driven clinical group program.



Method: Autistic/neurodiverse gender-diverse (A/ND-GD) youth ($N = 31$), parents of A/ND-GD youth ($N = 46$), A/ND-GD self-advocates ($N = 10$), and expert clinical providers ($N = 10$) participated in a multi-stage community-based participatory procedure. Needs assessment data were collected repeatedly over time from A/ND-GD youth and their parents as the youth interacted with one another through ongoing clinical groups, the curriculum of which was developed progressively through the iterative needs assessments.


Results: Separate adolescent and parent needs assessments revealed key priorities for youth (e.g., the importance of connecting with other A/ND-GD youth and the benefit of experiencing a range of gender-diverse role models to make gender exploration and/or gender affirmation more concrete) and parents (e.g., the need for A/ND-related supports for their children as well as provision of an A/ND-friendly environment that fosters exploration of a range of gender expressions/options). Integration and translation of youth and parent priorities resulted in 11 novel clinical techniques for this population.

Conclusions: With generally high acceptability ratings for each component of the group program, this study presents a community-driven clinical model to support broad care needs and preferences of A/ND-GD adolescents.

The co-occurrence of autism/neurodiversity (A/ND) and gender-diversity (GD) has been highlighted in a series of international studies (summarized in van der Miesen, Hurley, & de Vries, 2016), which have

identified an apparent over-occurrence of A/ND among gender-referred youth (6-23%; Nahata, Quinn, Caltabellotta, & Tishelman, 2017; Strauss et al., 2017), an apparent over-representation of GD among autistic

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individuals (up to 15% by adulthood; Walsh, Krabbendam, Dewinter, & Begeer, 2018), and a link between GD and A/ND traits in the general population (Nabbijohn et al., 2019). Community expressions of the co-occurrence abound (e.g., Allison, 2019; Autistic Self Advocacy Network, 2016). (See the Supplement for definitions of the gender- and neurodiversity-related terms used in this article.) Theories regarding the nature of the co-occurrence have been proposed largely without data and almost exclusively without consideration of the perspectives and voices of A/ND-GD individuals themselves (Strang et al., 2019). Youth with the co-occurrence may be at particular risk for being misunderstood and receiving poorly attuned care due to the complexity and alterity of being A/ND-GD and differences in communication and self-advocacy skills common among A/ND youth (Strang et al., 2018). For these reasons, this study, which represents the first attempt to develop a clinical support program for A/ND-GD adolescents, places the creation of this program in the hands of A/ND-GD youth, supportive parents of these youth, and a broad international self-advocate and key stakeholder team who contributed to the development of this new care model, assessed its utility, and contextualized the program within the current limited frameworks of care.

Limited Existing Guidelines for Clinical Practice with A/ND-GD Youth

Standards of care are available to inform gender-affirming medical care for GD youth (Coleman et al., 2012), and multi-disciplinary teams that include integrated gender-specific mental health services have been recommended as part of the delivery model (Chen et al., 2016). However, there is scant evidence regarding specific mental health support approaches for GD youth, and there is only one care-related document for A/ND-GD youth, created by clinician experts without the input of A/ND-GD individuals or broader key stakeholders (Strang et al., 2016). These initial clinical guidelines for A/ND-GD adolescents provide preliminary recommendations, including the following: 1) A/ND youth should not be precluded from gender-related services (including medical services) when diagnostic criteria are met, 2) gender assessments must often proceed in tandem with A/ND-related supports, and 3) A/ND-related factors that may impact gender-related exploration and broader needs should be understood and accommodated (Strang et al., 2016). The initial clinical guidelines cite as a critical future direction the development of A/ND-specific gender-related clinical approaches (Strang et al., 2016), which is

consistent with contemporary expert commentaries highlighting the importance of developing and tailoring psychosocial supports for key subgroups of GD adolescents (Spivey & Edwards-Leeper, 2019).

Emerging Themes of Risk and Challenge in This Population

Emerging evidence suggests a range of risks and unmet needs experienced by A/ND-GD youth. Striking levels of mental health problems have been reported (Mahouda et al., 2019). Common clinical care challenges have been identified, including: 1) difficulties self-advocating around gender dysphoria-related needs, 2) the experience of GD being question/doubted by some families/providers due to assumptions about A/ND, 3) unmet A/ND-related needs, and 4) the direct impact of A/ND differences on GD-related needs (Strang et al., 2018). Heterogeneous gender trajectories/outcomes have been reported, including a subset of A/ND-GD adolescents who show attenuation of gender diversity-related needs over time (de Vries, Noens, Cohen-Kettenis, van Berckelaer-onnes, & Doreleijers, 2010; Strang et al., 2018), making referrals for gender-affirming care complex (Strang et al., 2016). There are no clinical support techniques designed for A/ND-GD adolescents, and providers have expressed frustration with the lack of resources (Fuchs, Strang, & van der Miesen, 2019).

A Model for Developing A/ND-GD Support Approaches

Community-based participatory research (CBPR) offers a model to address the urgent needs for this understudied and underserved population by engaging patients and other key stakeholders as collaborators in intervention development to maximize both relevance and acceptability (Wallerstein & Duran, 2010). A CBPR-informed approach may be especially critical for this population as the lack of research partnering with the A/ND-GD community around clinical care needs creates the risk for insensitive and/or inappropriate care in this complex double-disparity group (Strang et al., 2019). There is little guidance available regarding the use of CBPR with A/ND youth, though initial qualitative work with A/ND-GD adolescents suggests that needs assessments may be more challenging and require supports (Strang et al., 2018). Autistic youth often benefit from concrete exemplars to understand more abstract concepts (Qian & Lipkin, 2011); for this reason, queries regarding targets and techniques in a *yet-to-be-developed intervention* could well result in limited participant responses. Autistic individuals may do best when they can react to what they are

experiencing in the immediate. Therefore, a CBPR design that gathers information over time, modifies the intervention techniques according to ongoing youth feedback, and then affords the young people opportunity to both respond in the moment and reflect back on concrete and specific experiences may best accommodate common autistic cognitive strengths and weaknesses.

Study Aims: The Development of a Clinical Support Group Program

The goal of this study was to identify care and support needs and develop clinical care techniques for A/ND-GD adolescents using a CBPR framework. A clinical group format was employed in response to youth and parent expressions of isolation and feeling excluded from existing support programs designed for A/ND or GD youth/families. A/ND-GD youth and their supportive parents participated in, co-created, and evaluated a novel clinical group program for A/ND-GD adolescents and families. The iterative CBPR procedure aimed to: 1) identify priorities for an A/ND-GD adolescent clinical group program through repeated needs assessments (i.e., after each group session), 2) develop intervention/support strategies based on the needs assessments, 3) vet intervention/support strategies through youth and parent feedback ratings, and 4) interpret and contextualize study findings with input from additional A/ND-GD key stakeholders (self-advocates and expert providers). The resulting clinical group approaches are explored in terms of real-world application and generalization to other care settings (e.g., rural communities). Including the complementary perspectives of parents *and* youth was central to this study's design to maximize the relevance of the clinical care model (see Keith, Jamieson, & Bennetto, 2019; Stadnick, Drahotka, & Brookman-Frazee, 2013).

Methods

Procedure

Clinical Groups

Clinical groups for A/ND-GD youth and their parents were offered through a large medical center outpatient neuropsychology program, which serves the broad and diverse Washington DC-metro area. Two same-evening back-to-back groups were offered, and youth could attend either group (or both) based on personal preference/convenience. Further, the second group was divided into two subgroups, each led by a different facilitator. Established A/ND-related accommodations

and learning methods informed the initial techniques used in the clinical groups, including visuals to support organization and engagement, routines for learning (Mesibov, Shea, & Schopler, 2004), and scripts (i.e., meaningful phrases used repeatedly until they become automatic) linked to skill-targets (e.g., Kenworthy et al., 2014). Techniques identified as helpful for GD clinical groups (Menvielle, 2012) were integrated: psychoeducation for both youth and parents around relevant gender-related topics and opportunities for safe and supported gender exploration and expression. Recommendations from the initial clinical guidelines for A/ND-GD adolescents (Strang et al., 2016) were also incorporated, including support for flexible gender exploration and future thinking skills, teaching about various gender options and expressions, and the use of concrete language to reduce the ambiguity of abstract gender-related concepts.

A/ND-GD adolescents attended the group program (no more than 10 youth in a single group cohort). Parents attended a parallel parent group program. After each clinical group session, 20 of the A/ND-GD youth and their parents ($n = 33$) completed needs assessments, responding to a set of open-ended prompts regarding needs and preferences for the program. After three months of participating, the adolescents completed more in-depth interviews regarding the program. Youth interviews were conducted in dyads to maximize dialogue. Interviews were transcribed verbatim. Please see the Supplement for needs assessment questions/interview protocols.

The weekly youth and parent needs assessment feedback, as well as the interviews at three months, shaped the content of subsequent group sessions. The needs assessment data were analyzed with framework analysis (described under Data Analytics below) to reveal broad themes across participant responses. The resulting thematic framework of the youth and parent needs assessment priorities was then translated into a set of clinical techniques, hereon referred to as the "resulting clinical approaches." At the conclusion of the study period, 29 A/ND-GD adolescents and their parents ($n = 44$) evaluated the resulting clinical approaches.

Key Stakeholder Collaborators Contextualize Study Findings

As part of the CBPR procedure key stakeholders (10 A/ND and/or GD self-advocates and 10 expert providers, hereon referred to as "key stakeholders") were invited to serve as collaborators in the interpretation and contextualization of the study findings. They collaborated through phone calls and group e-mail communication. These community-based research partners were selected to represent different

lived experiences and/or professional perspectives relevant to A/ND-GD youth. The GD self-advocates were diverse, with the following distribution of overlapping identity characteristics: six binary-transgender, two nonbinary-transgender, two with histories of attenuated gender dysphoria, and six self-identified autistic. Self-advocates with distinct histories of stable, fluid, or attenuated gender dysphoria were included to represent the diverse gender trajectories identified among A/ND-GD youth (see gender trajectories described in de Vries et al., 2010; Strang et al., 2018). Two self-advocates identified as Asian non-Hispanic/Latinx, one as Canadian Indigenous and Settler-culture, and seven as White non-Hispanic/Latinx.

The expert providers were highly experienced in A/ND-GD care, with four dedicating a majority of clinical and/or research effort to this population. Varied professions were represented: psychiatry ($n = 2$), clinical psychology ($n = 4$), general mental health ($n = 2$), and medical gender care (endocrinology or gynecology, $n = 2$). Five had academic research careers focused on GD youth. Five practiced gender care in socio-economically disadvantaged U.S. communities (high Medicaid usage) and two in rural settings (one using telehealth). Two practiced in The Netherlands and the other eight in the United States. One expert provider identified as Black non-Hispanic/Latinx, one as White Hispanic/Latinx, and eight as White non-Hispanic/Latinx.

The stakeholders reviewed and interpreted the thematic framework and resulting clinical approaches. These key stakeholder interpretations were elicited, evaluated, and summarized employing a multiple perspectives approach (see Data Analytics below) aimed to capture the broadest possible range of stakeholder viewpoints. This process produced this manuscript's *Discussion* section. Finally, all 20 key stakeholder collaborators contributed to and approved the full manuscript and are coauthors.

Participants

Youth Participants

Adolescents age 12–19 years old who met DSM-5 criteria for gender dysphoria and ASD or social communication disorder (SCD; American Psychiatric Association, 2013) were referred by clinic-based providers in the Gender and Autism Program at Children's National Medical Center to the group program and study if their parents were affirming of their gender needs (as determined from the initial parent interviews). The age span of 12–19 years was determined based on our pilot observations of A/ND-GD adolescents, which indicated a variety of maturity levels among these youth; chronological age often did not track with apparent maturity or types of social interests. For example,

we observed A/ND-GD 13-year-olds who were as or more mature than some of the 18-year-old A/ND-GD youth, and age among the adolescents was not an apparent determiner of social affiliation/interests. Parents' affirmation of their child's gender needs was determined by their response to the question, "Would you support your child if they do ultimately learn that they are transgender?" If parents answered, "No," they were excluded from the study. Families who would not support the ultimate gender needs of their children were excluded to ensure an affirming atmosphere for the participating youth; excluded families were offered alternative supports. Parents who had questions or doubts were welcomed so long as they reported they would ultimately support what their children required regarding gender. Participants were not excluded based on any demographic characteristics.

Assessments were conducted by doctoral-level licensed clinical psychologists expert in the diagnosis of gender dysphoria and ASD. DSM-5 gender dysphoria was assessed through independent youth and parent interviews. Autistic participants met DSM-5 ASD criteria and diagnostic standards established by the NICHD/NIDCD Collaborative Programs for Excellence in Autism (Lainhart et al., 2006): ASD criteria met on the Autism Diagnostic Observation Schedule-2 (ADOS; Lord et al., 2000) and/or the Autism Diagnostic Interview-Revised (ADI-R; Lord, Rutter, & Le Couteur, 1994). The Social Communication Questionnaire (SCQ; Rutter, Bailey, & Lord, 2003) was substituted for the ADI-R in some cases, supported by strong ADI-R and SCQ concordance (Lee et al., 2010). Regarding the ASD diagnostics, the ADOS is an autism observation measure with interrater reliability of .82-.92 and test-retest reliability of .59-.82 (Lord et al., 2000); its sensitivity ranges from 87.1-95% and its specificity from 77.3% to 92.9% (Hus & Lord, 2014). The ADI-R is a caregiver interview about a young person's developmental history that covers key developmental characteristics including communication, social development, and repetitive and restrictive behaviors (Lord et al., 1994). An interrater reliability of .94-.96 has been reported (Lord et al., 1994), and a test-retest reliability of .83 (Cicchetti, Lord, Koenig, Klin, & Volkmar, 2008). The ADI-R's sensitivity ranges from .94-.96% and its specificity from .85-.90% (Lord et al., 1997). The SCQ, derived from the ADI-R, is a validated ASD parent report with sensitivity ranging from .71% to .78% and specificity of .71% (Corsello et al., 2007).

Thirty-seven adolescents and families were interviewed. Three were not referred: Two families were unsupportive of gender exploration and one adolescent could not participate due to hospitalization. Of the 34 families referred, 31 elected to participate in the rolling-admission ongoing clinical group program ($n = 31$ adolescents; $n = 46$ parents). The study was approved by the

Children's National Institutional Review Board. Informed consent (and, for youth younger than 18, assent) was obtained following an explanation of the study. Families received no financial or other incentives for participating. No families withdrew from the study. Twenty-four of the participating adolescents met ASD criteria and seven SCD criteria. All were pubertal or post-pubertal based on self and parent responses to the question of whether puberty had started for the child. The average age of participants was 15.92 years ($SD = 1.85$). At the time of beginning the group, 16 were binary-trans-female (assumed male at birth), 11 binary-trans-male (assumed female at birth), and four nonbinary-transgender (assumed female at birth). By study close, gender had been fluid for four participants: Two moved from binary to nonbinary identities, one from binary-transgender to cisgender, and one from nonbinary-transgender to cisgender. Twenty-six youth identified as White non-Hispanic/Latinx, one as White Hispanic/Latinx, two as Asian non-Hispanic/Latinx, one as mixed-race non-Hispanic/Latinx, and one as mixed-race Hispanic/Latinx. The mean duration of participation in the research components of the group was 8.12 months and all participated for three months minimum in the study.

Parent Participants

The participating parents included 30 mothers and 16 fathers of the youth participants; 15 of these parents, all in heterosexual relationships, participated as couples. Mother's highest level of education was available for 29 mothers: 1 = high school, 4 = partial college, 6 = bachelor's, 18 = graduate school. This data was not collected for fathers. For the needs assessments and usefulness ratings (described below), parents who were couples worked together to complete a single questionnaire.

Data Analytics

Framework Analysis and Translation of Themes into Resulting Clinical Approaches

Ongoing needs assessments data (i.e., the feedback provided by youth and parents after each group session and from youth during interviews at three months) from 20 of the A/ND-GD adolescents and their parents (total individual parents: $n = 33$) was analyzed first using separate framework analyses for the adolescent and parent data to identify thematic areas within each group, and then the resulting youth and parent thematic areas were analyzed together to identify larger themes shared by or unique to parents and/or youth. Framework analysis is a rigorous applied, analytic method used in medical and health research to reveal

salient clinical themes and priorities of clinical groups by systematically analyzing qualitative data in a five-step, iterative process (Bargiela, Steward, & Mandy, 2016; Ritchie & Lewis, 2003): familiarization with the data, identification of the thematic framework, indexing of statements and related units into the thematic framework, graphic representation of the data and distributions of participant responses, and final interpretation/contextualization. In the current study, initial framework analyses were completed by the first two authors. The resulting draft frameworks were then reviewed by the key stakeholders, who provided interpretation and contextualization. The themes were translated into the set of resulting clinical approaches by the initial two analysts and study team members. A detailed description of the group techniques is available here: <https://childrensnational.org/genderautismgroup>.

Usefulness Assessment of the Resulting Clinical Approaches

At the conclusion of the study, each of the resulting clinical approaches was presented on a separate page for participants to rate with visual slider scales measuring 10 cm wide. Youth rated each resulting clinical approach for its usefulness by marking a vertical line on the band between two poles. Parents, using the same scale, rated each clinical approach's usefulness for their child. Scores were calculated by measuring in halves of millimeters from the left-most pole (i.e., "useless") and expressed as a rating from 0 to 100 ("extremely useful"). The following psychometrics were calculated (as presented in Figure 1):

- (1) The proportion of participants who found a resulting clinical approach overall useful was calculated as the percentage of participants with a rating above the midpoint on the slider-scale. These percentages appear in the right-most column of Figure 1 (youth usefulness, parent usefulness for my child).
- (2) Relatively more or less useful resulting clinical approaches were identified as follows. Standardized values of the ratings were used to capture the relative ratings (i.e., "profiles") of each participant, regardless of where the participant centered their responses on the scale. Each participant's ratings across all clinical approaches were standardized as z-scores. T-tests compared the participants' standardized scores for a clinical approach to the standardized mean (0). False discovery rate (FDR; Benjamini & Hochberg, 1995) was applied to p -values to account for multiple comparisons.

In the rightmost column of Figure 1, the “+” signs (“most useful”) represent items with significant FDR-adjusted p -values and positive t -scores; the “-” signs (“least useful”) represent items with significant FDR-adjusted p -values and negative t -scores.

- (3) Variability in the ratings of each resulting clinical approach was calculated using the mean and standard deviation of the raw 0–100 measurements. High variability among participant responses for a clinical approach (coefficients of variation ≥ 30) is represented in the rightmost column of Figure 1 with the letter, “V.”

Twenty-nine of the A/ND-GD youth and their parents completed usefulness ratings, including 18 of the 20 youth/families who were part of the needs assessment process and 11 additional adolescents and their parents who were part of the group and study, but who did not provide needs assessments ratings due to their later referral to the program.

Multiple Perspectives Approach to Contextualizing Findings and Creating the Study's Discussion

A multiple perspectives approach (MPA; Mitroff & Linstone, 1993) was employed with the stakeholder feedback to obtain the broadest possible interpretations of the study findings. These interpretations form the Discussion section of the manuscript, which was written using the following approach:

- (1) Each key stakeholder interpretation was cataloged.
- (2) Interpretations were ordered according to common elements and contrasting interpretations.
- (3) The resulting text is the manuscript's Discussion section, which underwent an iterative review process by the key stakeholder collaborators. Not every statement reflects the perspectives or opinions of every key stakeholder, but the full group was in consensus regarding the appropriateness and acceptability of the Discussion.

Subthemes	Youth Needs Assessment (% youth mentioned)	Parent Needs Assessment (% parents mentioned)	Resulting Clinical Approaches (RCAs) (youth useful %, parent useful for my child %) ^a
Theme 1: Youth Gender-Related Needs Should Be Supported/Targeted in Group			
Help youth navigate gender-related challenges	Help us learn how to deal with issues specific to GD/transgender youth (75%)	Help my child manage gender-related challenges/stressors (60%) Neurodiversity-related and gender-related needs are interrelated (60%)	---
Support gender expression/style	Teach specific skills for gender (e.g., makeup, voice) (50%) Give us a place to try out gender style (40%)	Help my child transition and present as their affirmed gender (45%)	RCA1: Provide opportunities to work on gender-related skills/style (if we want to) such as choosing clothing, makeup skills, voice and/or mannerism therapy, etc. (100%+, 93.1%) RCA2: Use the group to try out a new gender style. Members can come to group using a new name or pronoun, wearing new kinds of clothing or makeup, etc. (90%, 86.2%V)
Provide gender-diverse exemplars/role models	Help us meet people who are GD, including adult GD role models (85%)	---	RCA3: Invite different kinds of visitors who are gender-diverse and/or neurodiverse (e.g., transgender, nonbinary, gender fluid, cisgender, autistic, and non-autistic) to show the many different possible paths and outcomes. (93.1%+, 96.6%)
Provide gender exploration opportunities	Give us a place to explore gender (60%)	Help my child explore potential gender paths/outcomes (i.e., so they can figure out what fits them best) (75%) I wonder if my child's neurodiversity is affecting the way they think about their gender (45%)	RCA4: In a clear way welcome and include many different gender identities in group (including those with genders that may be fluid over time and those unsure about their gender). (93.1%-, 100%) RCA5: Use an accepting and flexible way of talking about gender. Talk about how gender can be fluid or stay the same. (86.2%V, 93.1%)
Be attentive to youth gender-related medical needs	Gender-related medical supports are important (40%)	---	RCA6: Save discussions of medical gender treatments for one-on-one meetings with clinical staff. Avoid talking about these topics in the group because they could be upsetting for group members who are not currently receiving these treatments because of their age, medical condition, etc. (86.2%+, 96.6%)

Figure 1. Needs assessment themes and resulting clinical approaches.

^aThe percentages within the parentheses represent the percentage of youth and parents who rated an RCA above halfway across the slider scale (i.e., overall useful). A “+” sign indicates RCAs rated as relatively more useful and a “-” indicates RCAs rated as relatively less useful. “V” indicates significant variability in ratings.

Theme 2: There Are Also Broader Support Needs/Targets for Group			
<i>Support/target executive function and social skills</i>	We need to work on social and organizational skills (75%)	My child's neurodiversity-related challenges are often more difficult to navigate than their gender needs (60%) My child needs executive function and social skills supports/interventions (90%)	RCA7: For some time during group work on: a. Social skills (62%-V, 96.6%+) b. Flexibility skills (69%-V, 100%) c. Organizational skills (55.2%-V, 89.7%)
<i>Support/target independence skills</i>	---	My child needs independence skills/transition to adulthood supports/interventions (65%)	RCA8: Work on future planning and transition to adulthood skills as part of the clinical group program. (82.8%V, 100%) RCA9: Discuss/explore the strengths/benefits as well as challenges of being both gender-diverse and neurodiverse or autistic: a. Strengths/benefits (79.3%-V, 100%) b. Challenges (82.8%V, 100%)
<i>Support/target self-awareness/self-advocacy</i>	---	My child needs supports targeting self-awareness and self-advocacy (50%)	
<i>Provide emotional and safety-related supports</i>	We need emotional support (40%)	My child needs emotional supports (55%) My child needs supports/interventions to help them protect themselves and stay safe (80%)	RCA10: Teach how to stay safe as A/ND-GD youth, including how to notice and avoid risky situations, learn to know better whom to trust, etc. (96.6%+, 100%+)
Theme 3: Youth Connections/Interactions in Group Are Important			
<i>The group community is important</i>	We have a special connection with one another (90%)	A group program specifically dedicated to neurodiverse gender-diverse youth is important for our children, as they have struggled to find communities in which they feel they fit. (65%)	RCA11: Provide opportunities for the group members to chat and connect during group. (65.5%, 82.8%)
<i>Social connection in group is important</i>	Group is a place where we have friends (35%) Just being together informally is important (80%)	---	
<i>We support each other</i>	We help and support one another (45%)	---	
<i>We have a range of feelings about who should be included in group</i>	"You'd have to be <i>trying</i> not to fit in" (45%) Questions about including LGBTQ and neurotypical youth – would this "normalize" the group too much (35%)	---	
<i>There are some challenges in group that need to be managed</i>	Our neurodiversity makes us similar, but there are also some big differences between us (60%) Our neurodiversity can interfere with interactions (85%) It can be challenging to balance educational and social activities in group (35%)		
Theme 4: Parents Need a Group Too			
<i>We need an expert-led parent group</i>	---	The parent group needs expert facilitation and specific teaching around a range of topics (85%)	---
<i>Meeting other parents is an important part of the program</i>	---	We learn from one another, sharing experiences, ideas, and resources (75%) We have learned we are not alone (60%)	---

Figure 1. Continued.

Results

Needs Assessments for a Clinical Program, and Resulting Clinical Approaches

Framework analyses identified four over-arching themes and 16 subthemes across youth and parent needs assessments (see Figure 1, leftmost column). Eleven resulting clinical approaches were identified in response to the needs assessment themes/subthemes (Figure 1, rightmost column). Examples of youth and

parent comments from the needs assessments are offered verbatim when possible, below. However, overly personal or identifying comments are omitted. The various A/ND communication styles are left unedited.

Theme 1: Youth Gender-related Needs Should Be Supported/Targeted in Group

Assistance managing real-world, everyday challenges associated with being GD was important to many youth, such as, "advice on name changes and gender identifiers" (18-

year-old trans-male). Many of the everyday gender-related needs described by the youth resulted from the interaction of GD and A/ND. For instance, a 14-year-old trans-female described social communication and self-advocacy needs: “help us to know how to let other people know we are trans.” The interrelatedness of A/ND and gender was also emphasized by many parents, as they noted their children required A/ND-GD-specific supports: “I want her to present accurately at the level she intends, though I’m not sure if she knows how to match her intentions with other people’s expectations. In other words, say she wants to ‘look’ seven out of 10 ‘girliness.’ I don’t know that she knows what that ‘looks’ like.”

Specific teaching/practice for achieving gender-style goals, such as applying makeup, practicing gender-related mannerisms, and gender-related voice therapy, was emphasized by many youth and some parents. Examples from youth include, “[I want to learn] how to pass” (18-year-old trans-male); “[teaching] makeup [is useful]” (15-year-old trans-female); and “[I want] more advice on voice” (15-year-old trans-female). Several youth described the need for gender-related teaching in the context of their A/ND-related difficulties (e.g., challenges with self and other awareness): “I’m not sure how I’m perceived” [regarding gender] (18-year-old trans-male). In the clinical setting these needs were supported with specific learning opportunities for youth to work on gender-related style with coaching from group leaders and consultants who accommodated/supported A/ND-related differences (e.g., with communication/self-advocacy, fine motor control, self-awareness skills, sensory sensitivities) that impact day-to-day gender-related self-care (e.g., applying makeup) (Resulting Clinical Approach #1 [RCA#1]). Youth were also invited to try out their new gender expressions and styles (e.g., name, pronoun, clothing) in group if they wished to do so (RCA#2).

Opportunities to meet invited guest teens and adults representing diverse gender journeys, identities, and outcomes provided a primary means for exploring different gender paths (RCA#3): “From a gender perspective, because if I talk about other things it would be getting off-topic, it’s been very helpful to have people come in and see adults in various stages of this and with various interaction with the trans and autistic communities” (18-year-old trans-male). The guest teen and adult role model visitors served as concrete exemplars to make the abstract concepts of various gender identities and gender trajectories tangible: [Group is] “like actually being able to ground things that you’ve read or talked to other people through a degree of separation to be able to talk to people one on one and who are in similar circumstances” (18-year-old trans-female).

In fact, more than half of the youth emphasized the importance of group as a place to learn about and explore gender identity: “[This program provides a] kind of field work into what my [gender] options are” (17-year-old trans-female). Many parents also hoped the program would afford opportunities for their children to explore a range of gender options. Some parents expressed a wish that such exploration might “keep doors open” so as to allow their children to carefully consider their gender-related options over time. Almost half of the parents wondered whether A/ND-related characteristics might be influencing their children’s experience of gender: “My child is a child on the [autism] spectrum, and the experience of not fitting in is typical for people on the spectrum. When we expand our discussion and their view of where they can fit in, where will that leave [my child] in terms of gender?” A few parents expressed a different sentiment – that their child’s gender identity was clear and unrelated to A/ND: “The one thing that has been crystal clear throughout is that my child is all girl, all the time.” There were also parent descriptions of how experiences in the group program helped their child clarify gender in the context of their A/ND: “My child learned that it is ok if you decide you are a girl [being cisgender]. It doesn’t mean you have to be a feminine girl – you can be masculine.”

In practice, gender exploration opportunities were supported with intentional and explicit welcoming of many different gender identities in the group (e.g., beginning each group by welcoming all “gender journeys and genders,” including people whose gender is constant or fluid over time and those unsure about their gender) (RCA#4). This inclusive welcome also addressed parent and clinician perspectives that youth in an exploratory phase with gender should experience group as accepting regardless of their gender trajectories or outcomes (e.g., binary-transgender, nonbinary-transgender, cisgender, fluid). Scripts and routines linked to flexible thinking (e.g., “gender can develop and be fluid over time or stay the same”) supported the youth priorities that group be a place where young people can freely and flexibly explore gender and experiment (RCA#5). These routines also addressed, by encouraging an atmosphere of openness, flexibility, and exploration over time, some parents’ questions regarding the impact their children’s A/ND-related flexibility differences may have on the gender exploration process.

Several youth discussed the centrality of medical gender needs, including hormones and surgical procedures, e.g., “will someone please just tell me how to get rid of this thing [genitals]?” (13-year-old nonbinary-trans

youth), “I am feeling better about my body since starting hormones” (17-year-old trans-female). Some youth expressed unrealistic expectations regarding medical supports, such as the belief that hormones would immediately transform their body so they would no longer be misgendered by others. Importantly, group discussions of medical supports were often challenging. Intense hurt, angry, and jealous feelings arose when, for example, one group member commenced gender-affirming hormones while another was not able to due to a co-occurring medical condition. Therefore, the group leaders and youth together developed a policy to save discussions of medically related gender supports for one-to-one meetings with clinical staff, which could be requested at any time (RCA#6). These discussions could address planning around medical supports, as well as coping when youth were faced with obstacles to progressing medically.

Theme 2: There Are Also Broader Support Needs/ Targets for Group

Most parents described A/ND-related challenges, and especially social and executive function differences, as a pressing concern for their child, and often more complex to support than gender: “We are on a good path with regards to gender. [My child] seems to know [her] way there. We need help on the social aspects and on helping [my child] to see that [her inflexible behavior] is driving everyone away ... It is heartbreaking that we are not in a better place now.” Although not always described by name, social and executive function skills were mentioned as key targets for intervention by many youth, and integrated as a component of the group teaching/intervention (RCA#7): “Beside the gender stuff, the autism information is more integral for day-to-day, like talking to someone without them getting freaked out or maintaining a relationship without someone getting pissed about you not calling for two months” (18-year-old trans-female).

Independence skill targets related to transition to adulthood were emphasized in the needs assessments, but only by parents. These skills were targeted in the group program (RCA#8), and as observed in the youth utility ratings (see Figure 1, rightmost column), many young people ultimately rated these interventions as helpful. Self-awareness and self-advocacy skills were also described by some parents as important, and targeted in the curriculum through discussions of both the strengths and challenges of neurodiversity, gender diversity, and the overlap of the two (RCA#9).

Some youth emphasized the importance of emotional support: “I ... come to get help – if I’m feeling down that day, it helps” (17-year-old trans-female). The

sense of grounding provided by the group was also described: “Being able to say in a substantive way that I went to this thing and it has a name and people behind it is useful for everyone involved. It’s good in a kind of referential way so you can say, ‘I’ve had this,’ and ‘it’s been a constant’” (18-year-old trans-female). Emotional supports for the youth were emphasized by some parents, as were specific supports around safety and self-harm. The importance of youth awareness of unsafe situations (e.g., bullying, hate crimes) and the skills to manage these situations were also parent priorities, and integrated as a key component of the teaching (RCA#10).

Theme 3: Youth Connections/Interactions in Group Are Important

Parents emphasized the importance of a group specifically for A/ND-GD youth. Some mentioned challenges their children had faced in LGBTQ or transgender community programs that were not A/ND-specific. Many parents highlighted the welcome and fit of a group program specifically tailored for A/ND-GD youth: “The ASD is the connecting factor of the group. If they were just gender-diverse, there is a path for them in the outside world. They are all here because of ASD.” Shared identities and experiences as A/ND-GD youth were highlighted as points of connection by the young people, which the youth discovered after becoming part of a clinical A/ND-GD group program: “What this group was for, to be perfectly blunt, I think it’s mostly because there’s the double wombo-combo of ASD and GD that makes people feel – generally we don’t end up talking to many people who are in similar or the same situations or wavelengths” (18-year-old trans-female). There were descriptions of feeling less alone after “meeting others with similar ‘journeys,’” such as: “[I’ve learned] there’s not just me in the world – I’m not the only one going through it – that is, transgender and autism” (17-year-old trans-female). Previous challenges connecting with peers outside of the A/ND-GD clinical program were also described: “I’ve been to other non-ASD trans groups ... and they are not the same. I didn’t get along with the other members or make any friends there” (17-year-old trans-male).

Many youth emphasized the importance of connecting and socializing with one another in the group setting. Informal connections, including “hanging out” and “chatting” with other group members, were among the most important components to the young people. Some described the clinical program as a place that fostered friendships: “It is good to have a space like this with people who are mostly guaranteed to accept me and be friends with me” (18-year-old trans-female). There were also many descriptions of youth connecting

by helping, supporting, and understanding one another, such as: “We’re here to offer support ... we want to help” (15-year-old trans-female) and “we get to understand each other or something” (15-year-old trans-female).

In terms of inclusion, almost half of the youth emphasized the importance of the group welcoming everyone (e.g., “I think we should invite everyone” [13-year-old trans-female] and “the group is basically a rag-tag bunch of misfits, so you’d basically have to be trying not to fit in” [17-year-old trans-female]). At the same time, there were mixed feelings regarding the inclusion of cisgender sexual minority (i.e., cisgender LGB) or neurotypical GD youth. Some highlighted the importance of the A/ND-GD connection specifically: “Gender-spectrum neurotypicals – they have plenty of groups for themselves!” (18-year-old trans-male). Of note, during the group sessions proper, there were no remarks or behaviors that would indicate anything but welcome for all other group members regardless of identities.

Clearly, the connections between the youth were meaningful for many. At the same time, some youth described the challenge of interacting with one another, including a wish that deeper and more successful social connections could develop: “This is likely ASD-related ... there was very little interaction between everybody [tonight]. If the intention was to get everyone in this little regime to talk, that’s great, but I sort of fear that I’m not seeing very many connections develop” (18-year-old trans-female). Youth also described challenges striking a balance between group educational activities and unstructured social time, observing the competing priorities of each.

Taken as a whole, the youth expressions regarding their connection with one another emphasize the importance of providing ample opportunities to chat and connect (RCA#11). These social interactions often required the support of autism specialists and A/ND-related accommodations. Such supports/accommodations included various techniques to enhance social communication (e.g., use of visuals, smaller break-out groups, social interactions supported by common interests, opportunities for breaks).

Theme 4: Parents Need a Group Too

Parents stressed the importance of programming specifically for parents, parallel to, but separate from the youth clinical groups. Teaching on a range of topics was considered an essential component of the parent groups, as was meeting with GD guest speakers/visitors and sharing information between parents (e.g., medical and legal resources). Parents sought advice regarding various gender-related topics (e.g., “coming out and the stresses of that experience,” children’s reluctance to

begin dressing as their affirmed gender for fear of judgment by others, managing less-supportive family members). Many parents described relief in meeting other families experiencing similar situations, which helped them feel less alone: “Learning that there are other people out there struggling with this situation – not only gender issues, but also potential ASD issues – my initial thought was, ‘thank God – other people with the same challenges!’”

Utility Ratings of the Resulting Clinical Approaches

Parent ratings of the utility of the resulting clinical approaches (RCAs) for their children were universally high (all RCAs were rated as overall important by more than 82% of parents). Social skill (RCA#7a) and safety skill (RCA#10) interventions received the highest priority ratings by parents on the slider scale. Through their slider ratings, youth identified the following as their highest priorities: opportunities to work on gender-related skills/style (RCA#1), inviting different kinds of visitors to group as role models (RCA#3), safety skills (RCA#10), and saving gender-related medical care discussions for one-on-one meetings with clinical staff (RCA#6). Youths’ ratings for many clinical approaches showed substantial inter-rater variability. Such variability was observed especially in ratings of social and executive function interventions (RCA#7), which the youth rated as relatively less useful than other components. Even so, nearly 70% of the youth reported that executive function flexibility skills were at least somewhat important to target in the program.

Discussion

This study addresses the call for the development of psychosocial support techniques for clinical subgroups of GD youth (Spivey & Edwards-Leeper, 2019), and specifically addresses the need for clinical approaches designed to support A/ND-GD adolescents (Strang et al., 2016). The extant literature for GD adolescent care is limited and focuses primarily on medical approaches (e.g., Hembree et al., 2017). However, A/ND-GD adolescents have complex care needs and varied gender trajectories (Strang et al., 2018), and autism alone predicts challenges with transition to adulthood (Anderson, Sosnowy, Kuo, & Shattuck, 2018). Care standards for A/ND adolescents focus on supports for adult readiness, and some emerging evidence indicates social skill interventions may be effective (Volkmar et al., 2014). Building on existing supports for GD (and more broadly LGBTQ) youth and A/ND youth, and based on feedback from A/ND-GD youth and parents (interpreted by self-

advocates and expert providers), this study's iterative design produced the first clinical program specifically for A/ND-GD adolescents.

This study represents one of the first efforts to engage A/ND adolescents through CBPR to develop new support/intervention strategies. CBPR methodology was employed with the aim of maximizing the feasibility and utility of the clinical model/curriculum. The following CBPR techniques were selected specifically for this population and study: 1) bringing together a "community" of A/ND-GD adolescents and capturing data on their experiences *over time* as their connections and self-awareness developed within that shared community of insight and 2) collecting and analyzing A/ND-GD youth and parent needs assessments separately and then together, to give voice to both perspectives.

Adolescent needs assessments from this study emphasized the meaningfulness of connecting with other A/ND-GD youth, the benefit of meeting and learning from a broad range of GD role models, the need for gender-related supports and teaching, the impact of A/ND on interactions, and the need for supports targeting organization and social abilities. Parent needs assessments emphasized the impact of A/ND and the need for A/ND-related interventions for flexible thinking and executive function more broadly, as well as the importance of providing a safe space for A/ND-GD youth to flexibly explore a range of gender paths.

The resulting group program includes the following key components. The group model links gender with flexible thinking strategies (RCA#5) to support A/ND-GD youths' flexible exploration of names, gender identities, and expressions, accommodating the common A/ND-related challenges with cognitive and behavioral flexibility (Kenworthy et al., 2014). Inviting to group diverse guests/visitor role models who reflect the full gender spectrum (e.g., binary-transgender, nonbinary-transgender, gender exploring, ultimately cisgender) as well as neurodiversity experiences (e.g., autistic transgender) makes various gender trajectories/outcomes and pride in gender diversity and neurodiversity concrete for the youth. Diverse guests/visitor role models may be especially valuable as A/ND youth often rely on concrete exemplars to internalize new concepts (Qian & Lipkin, 2011). Provision within group of optional specific teaching around gender expression, exploration, and affirmation techniques, with a focus on A/ND-sensitive accommodations and teaching, addresses the challenges many A/ND-GD youth describe knowing how to achieve their gender-related goals in the context of social awareness differences, executive function challenges, and sensory differences. And finally, as indicated by the comments/requests of nearly all parents, findings

emphasize the importance of a parallel parent group to support parents' psychoeducational and emotional support needs.

The youth needs assessments identified social and executive skills and challenges related to neurodiversity as among the most important targets for the group. Interestingly, when asked at the end of the curriculum to rate the usefulness of social and executive function interventions (e.g., targeting flexibility and organization skills), the adolescents rated them relatively lower than other aspects of the group. The apparent inconsistency between the weekly needs assessments and the final utility ratings suggests that A/ND youth may be more likely to see merit in social and executive function interventions when they grow out of their immediate concerns and goals (e.g., working on skills that help them to build social connections with others in group or plan the steps to move forward with gender affirmation) than when these skills are presented as *generic* intervention targets on a questionnaire. Overall, variable responses on many youth utility ratings highlight the importance of including a range of curricular experiences in the group to support and appeal to A/ND-GD adolescents' diverse needs and preferences.

The emphasis in the program on language highlighting potential constancy *or* fluidity of gender – that both are welcomed – supports youth experience of acceptance no matter where their gender journey ultimately leads. Modeling flexibility in group aims to provide the youth with an openness to explore – and this can go in many directions. A flexible and welcoming environment may be especially important for A/ND youth who have undergone behavioral compliance or social skill training, which may reinforce social and gender conformity (Jack, 2014). Consider the reluctant transgender autistic teen who, through flexibility scripts and exposure to the intentionally flexible/welcoming group environment, is helped to feel comfortable exploring a feminine name for the first time. Or consider the gender-exploring autistic teen who, if moved to do so, is supported to feel safe to flexibly explore a cisgender identity without experiencing pressure to conform to a "transgender only" group. Flexibility scripts may also work to reduce rigid stereotypes about binary genders, helping some youth to discover their most comfortable identity outside of the binary. The group model's support of a flexible approach to gender exploration and discovery, unfolding for some over time, may also help to allay parent concerns that their child's GD characteristics have not been adequately explored. In fact, fluidity of gender was observed among several group members, with acknowledgment by youth that experiences in group helped them to figure out what gender fit best.

There are also possible challenges with a focus on flexibility. A/ND self-advocates have raised the concern that compliance-based interventions common in ASD may result in over-compliance (Gardiner, 2017). Self-advocate stakeholders in *this* study noted that *too much* focus on flexibility might overly influence self-gender appraisals in highly compliant A/ND youth. Although the young people in this study reported that a flexible and intentional welcoming of all “gender journeys” was useful, future work should further articulate and test the optimal execution and quantity of such flexibility themes/scripts, as well as possible risks.

In addition to making gender trajectories and outcomes less abstract, the inclusion of a range of role model visitors who represent diverse genders, gender trajectories, and neurodiversity identities/experiences may also provide hope and optimism for the future as the A/ND-GD youth see that others have “made it” and are thriving. In fact, several of the young people in our study expressed profound relief when meeting GD adults (some of whom were A/ND) with expressions such as, “They are OK being themselves, so I can be too.” Further, by including both GD and A/ND visitors (and especially those with both experiences), there is the possibility of linking “pride” across both dimensions (e.g., “trans” or “gender-diversity” pride linked with “neurodiversity” pride). One of our self-advocates highlighted the potential power of this, noting that, “the transgender movement is picking up – role models and more inspiring ... something you can have pride about. But autism is still medicalized. It is not talked about in a way that is positive at all.” Interaction with diverse role models may also help A/ND young people to learn how to better accomplish their gender-related goals. For example, an autistic binary-trans young woman may wish to maximize feminine attributes, and meeting an adult person who has navigated these elements may provide concrete teaching. There are also challenges bringing adult role models into the clinical setting, including added logistical demands for screening non-clinician personnel. And although the inclusion of role models has as one of its aims increasing the breadth of possibilities for youth, exposure might also limit thinking for some adolescents. For example, some A/ND youth might expect that their gender affirmation process would be exactly the same as a visitor’s.

Opportunities in group for specific teaching around gender-related style were important to a subset of the young people. Some noted problems knowing how to, in their words, “present” as their affirmed gender, often because of difficulty picking up on social gender cues (e.g., mannerisms, hair style, clothing). Gender-style coaching accommodated executive function difficulties, such as planning the steps needed to obtain desired clothing; coaching also accommodated adaptive

skill differences (e.g., developing a routine for how to get ready in the morning). Coaching supports to manage the sensory and motor challenges associated with such activities as applying makeup or putting on a binder were important to some youth. Careful teaching of these skills could help youth to avoid unsafe gender-style techniques, such as stuffing or binding in improper ways. Embedding gender-style coaching opportunities within the group setting provided youth opportunities to try out different styles/techniques without the judgment of the neurotypical and gender-conforming world. Not all youth wanted these gender-style services, and their provision requires nuance and care. For example, it is possible that offering these options could be perceived as pressuring youth to focus more on aspects of gender style that are not important to them. Even worse, if only binary options are offered (male and female), youth may feel shamed into conforming. In our programs, nonbinary options were always offered, as was encouragement to try out as many styles as young people wanted to explore. Our gender-style coaches worked to de-emphasize traditional expectations around gender norms and encourage many ways of expressing femininity, masculinity, their combination, or nonbinary expressions. However, some of our self-advocate collaborators noted the importance of also including concrete teaching in “certain realities of our culture”: namely, that expressions that mix traditional cues from multiple genders may be unexpected to some people and might increase the risk for harassment or harm.

Clearly, this study represents only a first step in developing clinical supports for A/ND-GD youth and their families, and a model for a group program is just one component of a larger clinical service needed. In fact, some A/ND-GD youth may not be able to access a group program due to anxiety, social withdrawal, or family-related issues (e.g., distance, executive function differences in parents). Given the possible complexities of the A/ND-GD co-occurrence, supports provided individually (i.e., individual psychotherapy) may be a critical adjunct to a group program to support more personalized gender exploration/care as well as mental health.

A range of techniques emerged from the group program needs assessments, and their refinement and validation are critical next steps. For example, A/ND-related differences in self and social awareness and the impacts of these differences on a broad range of gender needs will likely require a more articulated and comprehensive set of support/intervention techniques. And given significant levels of anxiety experienced by both A/ND (Lecavalier et al., 2019) and GD youth (Connolly,

Zervos, Barone, Johnson, & Joseph, 2016), specific techniques addressing anxiety in A/ND-GD adolescents may need to be developed. There are also potential clinical challenges to the group model, which present unanswered questions. For example, given the deep bonding experienced by many group members, what, if any, limitations are necessary to maintain a positive therapeutic environment for all? Also, although youth with attenuating gender dysphoria are fully welcomed in the current model, would it be helpful for them to continue attending if they no longer consider themselves gender-diverse? Regarding this question, two of the 31 youth experienced attenuating gender diversity and ultimately stopped attending. However, they and their families wished to remain connected with the larger community of families. Finally, the solution for managing discussion of medical supports in group (i.e., saving these discussions for one-on-one conversations with group clinicians) presents a range of challenges. Self-advocate collaborators noted that although this technique appeared to work for these youth, other A/ND-GD adolescents might benefit from talking with peers about their medical experiences. Opportunities to do so in small selected break-out groups might be one possible solution.

Although evidence suggests a significant overrepresentation of A/ND among GD youth (e.g., de Vries et al., 2010), this remains a relatively small population. This study contains the largest published sample to date of well-characterized adolescents with the co-occurrence. Identifying and following 31 of these youth and their families over time required significant effort, and was only possible due to the national visibility of our program and the large metropolitan area we serve. The study took four years to complete. Balancing the pressing need for information about how to support these youth and their families with the importance of providing efficacy data for new clinical approaches, we present the current study as a first step with several key limitations. The group model remains untested, and although we provide utility ratings, there may be intrinsic bias to these ratings given that 18 of the 29 youth who provided final utility responses were part of the qualitative needs assessment group that drove the development of the curriculum. The ratings of the 11 youth and their parents who rated the program but who did not contribute to the NAs may hint at the potential for generalizability given that these ratings were uniformly high (psychometrics available from the corresponding author). However, the sample was primarily monocultural in terms of race, ethnicity, and socioeconomic status; a more diverse and representative sample is required to produce a truly generalizable

program for A/ND-GD youth across the full range of diversity characteristics. As noted by one of our key stakeholders, “trans African American women often need to pass for safety; with autism and not knowing how [to pass] creates extra risk.” Further, the study had selection bias in that only families with affirming parents were included in the study/groups: Few qualitative responses emerged regarding parent rejection. Employed in a general clinical setting, the curriculum would need to include strategies for helping less-accepting families to become more affirming. On a practical level, there are not enough clinicians with A/ND and GD expertise to run these groups in most locations. And finally, there were topics that did not come up through the needs assessments but that may be critical for this population, most notably information about romantic relationships and supports for trauma, commonly experienced by both GD individuals (Valentine & Shipherd, 2018) and autistic women (Bargiela et al., 2016). The absence of content in these areas may speak to the intersectionality of the A/ND and GD experience. Future inquiries should seek to understand why certain topics appear less immediately salient in these young people’s lives.

A critical future direction will be manualization of the program followed by efficacy and effectiveness testing, including assessment of longer-term outcomes, given the complex trajectories of some of these young people (de Vries et al., 2010; Strang et al., 2018). Testing of the support group model should consider not only the impact of the youth curriculum, but also whether providing supports and education for parents can improve parent-child interactions and support the wellbeing of the adolescent. Extrapolations of the techniques will be important to develop, such as for families in areas where there is not a critical mass of these youth to conveniently form groups. Development of an online group model could support more rural families, as might a group that meets less frequently and for longer duration (i.e., to save geographically distant families the burden of frequent lengthy commutes). Online materials might also help support youth with less-affirming families (i.e., youth who cannot access the groups due to parental refusal).

The techniques developed here may also have application for GD youth with broader co-occurring conditions. For example, these techniques may be tested in GD youth with social anxiety or major mental illness, both of which can present with social challenges similar to autism (Dudley, Kuyken, & Padesky, 2011). Some of the techniques may have application among GD youth in general: The role model visitors, in particular, might be of use for any adolescent in a more exploratory stage in terms of their gender.

Conclusions

With the largest sample to date of well-characterized A/ND-GD adolescents, this study accomplished separate youth and parent needs assessments, conducted over time while the group program unfolded, as opposed to cross-sectionally at one timepoint. In direct response to calls for the development of intervention and support approaches for this population, a new clinical group model was developed, including several novel techniques that emerged directly from the adolescents and their parents. Employing a CBPR methodology to develop the clinical group model, including rich input from 20 key stakeholder research partners/coauthors, responds to demands from the A/ND-GD community to include the voices and perspectives of individuals with the co-occurrence in the development of supports that aim to benefit them (Strang et al., 2019). Although this study takes an important first step to address the voiced needs of these youth and families, further research is needed to refine and elaborate the model and assess its impact on A/ND-GD youth outcomes.

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