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Extrafamilial stressors in families of transgender adolescents referred for gender-affirming medical care: a mixed-methods analysis

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ABSTRACT

Transgender and nonbinary (TNB) adolescents and their families often experience trans-specific, extrafamilial stressors, which may increase when adolescents come out and try to access gender-affirming medical care. While studies have described such stressors, it is unclear whether distinct underlying patterns of stressor experiences exist, shaping family experience. 159 adolescent–parent dyads attending an initial hormone appointment for gender-affirming medical care at any of 10 clinics in Canada reported on trans-specific, extrafamilial stressor experiences in *Trans Youth CAN!* Latent class analysis (LCA) assessed underlying patterns; parent and family characteristics were then described for each stressor class in the final model. LCA interpretation was supplemented with thematic analysis of qualitative interviews with 36 parents at 3 of the clinics from the *Stories of Care* study. The optimal model had four stressor classes: "Low Disruption, Some Advocacy" (estimated 30.4%); "Some Disruption, Some Advocacy" (9.8%); "Low Disruption, Low Advocacy" (55.7%); and "Major Disruption, High Advocacy" (4.1%). Family characteristics suggested a heterogeneous sample, with differing proportions of sociodemographic and family characteristics across stressor classes. Quotations from parent interviews in *Stories of Care* supported the four-class stressor model. Families of TNB adolescents accessing gender-affirming medical care may experience trans-specific, extrafamilial stressors according to four latent class groupings.

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Introduction

Referrals of transgender and nonbinary (TNB) adolescents to gender-affirming medical care providers are increasing internationally (Delahunt et al., 2018).

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Adolescents are usually pubertal or postpubertal, as recommended by World Professional Association for Transgender Health (WPATH) Standards of Care version 8 criteria for the use of hormonal suppression medications in adolescents (Coleman et al., 2022). Gender-affirming care, including hormonal suppression medications or hormones, appears to be safe for adolescents (Jarin et al., 2017; Olson-Kennedy et al., 2018) and is associated with improved mental health (de Vries et al., 2011, 2014; Pullen Sansfaçon et al., 2019) and a decrease in distress in both adolescents and their parents (Tollit et al., 2018). Stigma while undergoing clinical care has been studied in multiple populations of presumed cisgender (non-TNB) youth, including those receiving care for HIV (Barennes et al., 2014), sickle cell disease pain (Martin et al., 2018), and epilepsy (Benson et al., 2016). Youth experienced illness-related stigma and accompanying rejection (Barennes et al., 2014), pain, and loneliness (Martin et al., 2018). Children receiving epilepsy treatment may also perceive more illness-related stigma when their parents do (Benson et al., 2016). TNB adolescents and their parents experience similar trans-specific stigma and stressors in accessing gender-affirming care, in addition to stigma in nonclinical contexts.

While often based on community rather than clinical samples of TNB adolescents and families, qualitative research provides clear examples of trans-specific, extrafamilial stressors (Pullen Sansfaçon et al., 2015). Parents may face judgment (Kuvalanka et al., 2014) or disagreement (Pullen Sansfaçon et al., 2015) from local community members regarding their choices to affirm their child's gender identity. They may be rejected by peers and friends, internalize damaging societal beliefs about gender roles and associated behaviors, and experience anxiety from anticipating potential problematic or transphobic behavior from community members (Hidalgo & Chen, 2019). Families may also experience judgment regarding parenting practices from extended family members (Kuvalanka et al., 2014). Parents may lack support from their adolescent's school (Pullen Sansfaçon et al., 2015), be othered (Kuvalanka et al., 2014) or face conflict with teachers (Kuvalanka et al., 2018), who may echo messages blaming gender-affirming parents (Ehrensaft, 2011). Parents may even face harassment from other parents at school (Kuvalanka et al., 2014). Finally, parents may face adversity while navigating the healthcare system. Ehrensaft (2011) noted that gender-affirming parents can be pathologized with clinical diagnostic terms. Similarly, Lev (2004) described scenarios where clinical experts can harm families of TNB adolescents through attempting gender role-restrictive "treatment," or not recognizing how their professional role may disproportionately influence the course of treatment.

The well-being of TNB adolescents receiving gender-affirming hormonal care and their families are intertwined. Some may experience delays in receiving care due to unsupportive parents or legal barriers (Riggs et al.,

2020). Parents are sometimes unfairly blamed and stigmatized for their adolescent's gender identity and any mental health challenges they may experience (Ehrensaft, 2011, 2016). Both adolescents and parents face trans-specific, extrafamilial stressors in community, school, extended family, and healthcare settings (Ehrensaft, 2011; Kuvalanka et al., 2014; Pullen Sansfaçon et al., 2015). However, adolescents who socially transition to live in their gender, usually accompanied by some level of familial support, often experience good mental health outcomes (Durwood et al., 2017; Olson et al., 2016). Thus, support from family members can be an important resource for adolescents and other family members, especially when facing trans-specific stressors outside of the family unit.

Although research on TNB adolescents referred for gender-affirming medical care is increasing, quantitative research has focused on clinical rather than family outcomes. Previous publications using clinical cohorts of TNB youth in Canada relied on reviews of medical records (Chiniara et al., 2018; Khatchadourian et al., 2014), precluding assessment of experiences using consistent, standardized self-report measures; thus, it is not clear the extent to which trans-specific extrafamilial stressors are experienced by families of TNB adolescents referred for gender-affirming medical care and whether there are common patterns of stressors encountered. This study aims to fill these research gaps by: 1) describing patterns of stressor experiences using latent class analysis (LCA) and 2) contextualizing and elaborating patterns of stressor experiences using thematic analysis of interview data. To achieve this, we use a complementarity mixed methods approach (Greene et al., 1989) to clarify quantitative analyses of stressor experiences with analyses of rich qualitative data.

Materials and methods

Sequential explanatory (QUANT-qual) (Creswell & Plano Clark, 2018) mixed-method analysis was conducted using data from two companion projects in Canada: Trans Youth CAN! and Stories of Care.

The Trans Youth CAN! (TYCAN) cohort study recruited 174 pubertal or postpubertal TNB adolescents aged 15 or younger referred for hormonal suppression medications or gender-affirming hormones at medical clinics in 10 Canadian cities. Most adolescents agreed to include a parent in the study, and 160 matched parent or caregiver participants enrolled. The final TYCAN analytic sample included 159 adolescent–parent dyads with data on external stressors on the family collected at adolescent's initial hormone appointment during 2017–2019. Research Ethics Board approval was obtained for each clinical site or project-affiliated university.

Trained research assistants (RAs) obtained informed consent from participating adolescents and parents and informed assent from younger

adolescents for whom parents provided consent. The age at which adolescents were determined capable of consenting differed by site/province. Parent participants completed self-report questionnaires in the clinic using a study tablet, usually in a waiting room while the RA interviewed the adolescent.

The Stories of Care project, conducted between 2016 and 2019, studied the experiences of TNB children or adolescents age 17 or younger referred to specialty clinics for gender-affirming mental health or medical care and their parents/guardians. The sample was broader than the TYCAN sample and included pre-pubertal children not receiving hormonal suppression medications or hormones, as well as older adolescents. Participants were selected from three of the 10 clinics in Trans Youth CAN! 12 adolescent–caregiver dyads were recruited in Montréal, Ottawa, and Winnipeg, for a total of 36 adolescents and 37 caregivers (one couple answered together regarding their family experiences). The site RA collected information from participants who contacted them and selected a diverse sample according to diversity sampling principles, including age, stages of puberty, gender identity, and medical interventions received. Data were collected using a sociodemographic questionnaire and semi-structured qualitative interviews. Informed consent or assent was obtained from both parents and adolescents before participating.

Measures for Trans Youth CAN!

Sociodemographic characteristics

Parents and adolescents reported separately on individual and family characteristics. Parents reported their birth year, gender identity, caregiver role, and whether they had a partner living with them and/or a coparent living elsewhere. They could select all items that applied from checklists assessing ethnoracial background and sexual orientation. Income was reported in groupings of $10,000, and low-income status was derived using Statistics Canada's low-income measure (LIM) (Statistics Canada, n.d.). Family functioning was assessed by parent report using the validated 35-item Self-Report Family Inventory (SFI II) (Beavers & Hampson, 1990). In the TYCAN parent sample, the overall SFI II scale had strong internal consistency, with Cronbach's alpha of 0.91. Adolescents reported their age, gender identity (male/boy, female/girl, or nonbinary), whether they have siblings and how often they lived as their affirmed gender from day-to-day.

Trans-specific family stressors

Parents completed the Stressors on Families of Trans Youth Checklist (SFTYC) (Bauer et al., 2017), which contains 16 items with yes/no response options assessing trans-specific, extrafamilial stressors that families of TNB adolescents may experience, plus a write-in option. Items cover a variety of social domains including school, community, and extended familial

environments. Write-ins were recoded if they fit within specified response options but were excluded when they did not represent a single experience type. This checklist was developed by the TYCAN research team based on professional and community experience, following a consultation process, and appears to show content validity.

Measures for Stories of Care

Qualitative interview data from parents were used to illuminate experiences of extrafamilial stressors. A sociodemographic questionnaire completed by parents collected information about age, gender identity, family income, and included an open-ended item on ethnicity. Interviews with parents focused on their life situation, perception of their child's gender identity development and transition process, and support systems. We also explored their pathways to gender-affirming medical care and their overall experiences with medical interventions and other services received. Parents' or caregivers' interviews ranged from 24 to 105 min (average: 57 min).

Trans Youth CAN! statistical analyses

Analyses focused on parent self-report data of trans-specific extrafamilial stressor experiences and parent and family characteristics reported by parents. Some demographic information collected during adolescent interviews was included in descriptive analyses of family characteristics, but otherwise, adolescent interview data were not used in the current analyses. To better describe patterns of stressors experienced by families, we conducted LCA using SAS 9.4 (SAS 9.4., 2013) and the PROC LCA add-on procedure, version 1.3.2. (PROC LCA and PROC LTA (Version 1.3.2), 2015). LCA divides individuals into a specified number of classes and provides a set of item-response probabilities for each item in each class, allowing the user to assess the likelihood that someone in a given class may answer "yes" or "no" to each individual item. Item-response probabilities closer to 0.9 or 0.1 suggest stronger tendencies of members of a particular class to endorse or not endorse an item, while probabilities closer to 0.5 suggest that class members may be equally likely to endorse or not endorse that item. Therefore, large differences in item-response probability for the same item between classes can be informative (McCutcheon, 2002). Item-response probabilities are not a literal breakdown of how sample participants responded to an item, but a probabilistic estimate that anyone in a given class may answer yes, based on the overall response patterns of each class (Vermunt & Magidson, 2002).

We ran six models, ranging from two to seven classes each, and then selected the three most promising models based on fit statistics. We then

selected the final model after comparing improvements in information criteria such as AIC, BIC, and entropy across these models, alongside inspection of item-response probabilities to assess qualitative meaning of each class. We prioritized AIC due to limitations with using BIC in small samples and scaled AIC values to assess information loss between models (Burnham & Anderson, 2004). We restricted rho prior to "1" to resolve problems with boundary estimates (Lanza et al., 2015) and ran all LCA models and other quantitative analyses in this paper with weights to adjust for differing lengths of recruitment period across clinics to improve generalizability (see supplemental materials for Bauer et al. (2021) for calculation of these weights).

We also summarized sociodemographic characteristics by each LCA class to understand the parent and family-related characteristics of class members.

Stories of Care: thematic analysis

Each parent-adolescent dyad was assigned a unique, anonymous code to ensure response anonymity. Interviews with parents were tape-recorded, transcribed, and initially analyzed through thematic analysis procedures. Initial codes were generated at a semantic level (Braun & Clarke, 2006) by reading each line of the interview and then analyzed and categorized into themes. MAXQDA data analysis software facilitated this process. Theme development continued as we began to write articles, an integral part of thematic analysis (Braun & Clarke, 2006).

Mixed analysis

Our QUANT-qual analysis used the classes produced through LCA as a starting point for qualitative analysis. Parental qualitative data from the Stories of Care project were used to identify examples of extrafamilial stressors that may explain the LCA classes. We used keyword searches to identify thematic codes and quotations that were relevant to the content of the significant item responses from the LCA classes in the TYCAN dataset. This approach allowed us to highlight nuances in experience, strengthening and validating the results via weakness minimization legitimation (Onwuegbuzie & Johnson, 2006).

Results

Demographic characteristics

Sample counts and weighted frequencies describing adolescent-parent dyads and families from TYCAN! are presented in Table 1. Parent participants largely self-identified as female (85%), white (85%), heterosexual (84%),

Table 1. Characteristics of Trans Youth CAN! parent-participants, families, and adolescent participants.

	N (or Mean)	% (or SD)
Parent-participant characteristics		
Age ($N = 157$)		
30-39 years	30	18.5
40-49 years	90	57.0
50-59 years	32	21.6
60+ years	5	2.9
Gender ($N = 159$)		
Male	25	13.9
Female	132	85.4
Nonbinary	2	0.8
Sexual orientation ($N = 159$)		
Heterosexual	134	83.8
Sexual minority	25	16.3
Ethnoracial background ($N = 159$)		
Indigenous	15	7.7
Non-Indigenous racialized	9	7.2
White	135	85.1
Partner status ($N = 159$)		
Parent has partner	107	64.3
Single parent	52	35.7
Caregiver role ($N = 158$)		
Birth parent	140	87.4
Adoptive parent	12	8.7
Foster parent	1	0.5
Step-parent	3	2.5
Other main caregiver	2	1.0
Family characteristics		
Overall family functioning score	2.0	0.4
Low-income household ($N = 150$)		
Yes	40	27.2
No	110	72.8
Youth characteristics		
Age ($N = 159$)		
9-11 years	17	9.4
12-15 years	142	90.6
Gender ($N = 157$)		
Boys	116	76.1
Girls	29	16.4
Nonbinary	12	7.5
Living as preferred gender day-to-day ($N = 157$)		
All of the time	133	83.9
Some of the time	23	15.7
None of the time	1	0.4
Has co-parent living elsewhere (parent-reported)	59	38.5
Has siblings	124	78.6

and birth parents (87%), with a minority identifying as Indigenous (8%) and/or belonging to a sexual minority group (16%). Nearly two-thirds of parents reported having a partner, while close to 40% noted that there was a coparent in their adolescent's life living elsewhere. On average, parents reported favorable family functioning, with a mean score of 2.0 (SD: 0.4), well below the family dysfunction cutoff. Most adolescent participants identified as boys (76%) and were aged 12–15 (91%) as 15 years was the maximum age for study eligibility, with smaller proportions of

girls (16%) or nonbinary (8%) youth. Most adolescents reported that they lived as their affirmed gender all the time (84%).

Stories of Care parent participants included four fathers and 33 mothers. Among them, two self-described as a foster parent or a guardian. Most parents self-identified as white, Canadian, or Caucasian. Three self-identified as coming from a mixed cultural heritage or European background, and eight preferred not to answer. Roughly one quarter had only one child, the child who was attending the clinic. Half had two children, and another quarter had three to five children.

Extrafamilial stressors

Frequencies for extrafamilial stressors obtained from the TYCAN! study are presented in Table 2. Of parent participants, 30% reported that they did not experience any trans-specific, extrafamilial stressors. Stressor items common in this sample included friends or family members giving parents unwanted advice about their parenting (47%), parents having to get involved at school on their adolescent's behalf (41%), and parents defending their adolescent's washroom rights (27%).

Stories of Care parent participants mentioned various stressors and difficult situations, but because interviews focused on their experience in the clinic, these stressors were mostly related to access to care and gender-affirming care experiences. Such stressors experienced within the gender-affirming care setting are not included in the SFTYC measure. However, parents organically discussed some of the extrafamilial stressors examined in the TYCAN! study, such as receiving unwanted caregiving advice, or family, friends, or community members rejecting them or their adolescent.

Table 2. Extrafamilial stressors on families of trans adolescents as reported at their initial hormone appointment.

	N	%
Friends or family called you bad caregiver	30	18.1
Strangers called you bad caregiver	17	11.9
Friends or family gave unwanted caregiving advice	81	47.4
Strangers gave unwanted caregiving advice	24	14.8
Child welfare authorities investigated parenting	6	2.7
Family members don't speak to you	15	7.2
Community members don't speak to you	8	4.1
Other parents stopped letting kids come over	29	17.7
Others stopped letting your children come over	27	15.4
Had to get involved in school	67	41.1
Had to get involved regarding dress code	11	7.4
Had to defend washroom rights	47	26.9
Asked to not participate in religion	2	0.9
Had to defend right to participate in sports/ activities as identified gender	15	8.5
Asked to find other health care provider	3	1.3
Asked to find other mental health care provider	2	1.1
Something else	9	5.6
None of the above	40	29.7

They also discussed themes adjacent to the SFTYC measure, including fears for their child's security, lack of acceptance, and potential future struggles.

Latent classes of extrafamilial stressor experiences

The four-class LCA model of stressor experiences was chosen as it made the most sense qualitatively without too much AIC information loss (Table 3). Based on item-response probabilities, we named these groups as follows: Class 1: "Low Disruption, Some Advocacy"; Class 2: "Some Disruption, Some Advocacy"; Class 3: "Low Disruption, Low Advocacy"; and Class 4: "Major Disruption, High Advocacy". Posterior probabilities were used to assign parents to the membership class to which they were most likely to belong and mean posterior probability values indicated that these values were generally high, lending confidence to our class assignment choices (Table 4).

Family, adolescent, and parent characteristics are presented for each latent class in Table 5. Class 1 ("Low Disruption, Some Advocacy") was an estimated 30% of the sample, and was largely composed of female parents (92%) and adolescent boys (78%). Most parents in this group were birth parents, with 15% adoptive parents. While most parents were white

Table 3. Estimated latent class sizes and item-response probabilities.

	Class 1[a]	Class 2[b]	Class 3[c]	Class 4[d]
	30.4%	9.8%	55.7%	4.1%
Item: "Because of youth's gender…"	*N* = 50	*N* = 15	*N* = 86	*N* = 8
Friends or family called you bad caregiver	0.26	0.19	0.07	**0.97**
Strangers called you bad caregiver	0.15	0.27	0.03	**0.77**
Friends or family gave unwanted caregiving advice	**0.91**	0.50	0.19	**0.98**
Strangers gave unwanted caregiving advice	0.30	0.14	0.00	**0.97**
Child welfare authorities investigated parenting	0.03	0.00	0.01	0.31
Family members don't speak to you	0.07	0.10	0.01	**0.82**
Community members don't speak to you	0.00	0.05	0.00	**0.84**
Other parents stopped letting kids come over	0.13	**0.96**	0.01	**0.84**
Others stopped letting your children come over	0.07	**0.93**	0.02	**0.63**
Had to get involved in school	**0.69**	**0.85**	0.14	**0.98**
Had to get involved regarding dress code	0.11	0.32	0.00	0.18
Had to defend washroom rights	0.54	0.47	0.05	**0.72**
Asked to not participate in religion	0.00	0.00	0.00	0.20
Had to defend participation in activities in gender	0.20	0.06	0.01	0.40
Asked to find other health care provider	0.02	0.00	0.00	0.20
Asked to find other mental health care provider	0.02	0.00	0.01	0.00

[a]Class 1, "Low Disruption, Some Advocacy".
[b]Class 2, "Some Disruption, Some Advocacy".
[c]Class 3, "Low Disruption, Low Advocacy".
[d]Class 4, "Major Disruption, High Advocacy".
Note: item-response probabilities that suggest a higher likelihood of participant endorsement are bolded.

Table 4. Posterior probabilities of each latent class.

Class	Mean	SD	Minimum	Maximum
Class 1	0.89	0.14	0.62	1.00
Class 2	0.93	0.12	0.51	1.00
Class 3	0.94	0.11	0.55	1.00
Class 4	1.00	0.00	1.00	1.00

Table 5. Trans Youth CAN! parent-participant and adolescent characteristics by stressor latent class.

			Class 1 "Low Disruption, Some Advocacy"		Class 2 "Some Disruption, Some Advocacy"		Class 3 "Low Disruption, Low Advocacy"		Class 4 "Major Disruption, High Advocacy"	
Variable	Total N		*N* = 50		*N* = 15		*N* = 86		*N* = 8	
Parent gender	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**	**Freq**	**%**
Male	25	13.9	5	7.0	0	0.0	20	20.9	0	0.0
Female	132	85.4	44	91.7	15	100.0	65	78.5	8	100.0
Nonbinary	2	0.8	1	1.3	0	0.0	1	0.7	0	0.0
Parent sexual orientation										
Heterosexual	134	83.8	40	79.1	11	64.7	78	91.5	5	56.5
Sexual minority	25	16.3	10	20.9	4	35.3	8	8.5	3	43.5
Ethnoracial background										
Indigenous	15	7.7	6	12.1	1	3.8	4	2.9	4	52.7
Visible minority	9	7.2	2	2.5	2	20.1	5	7.9	0	0.0
White	135	85.1	42	85.4	12	76.1	77	89.2	4	47.3
Parent partner status										
Partnered	107	64.3	35	67.2	7	41.4	59	66.1	6	73.7
Single	52	35.7	15	32.8	8	58.6	27	33.9	2	26.3
Caregiver role										
Parent from birth	140	87.4	44	83.1	13	96.1	75	87.3	8	100.0
Adoptive parent	12	8.7	5	15.3	0	0.0	7	7.3	0	0.0
Foster parent	1	0.5	1	1.6	0	0.0	0	0.0	0	0.0
Step-parent	3	2.5	0	0.0	0	0.0	3	4.4	0	0.0
Other main caregiver	2	1.0	0	0.0	1	4.0	1	1.0	0	0.0
Family meets low-income status	40	27.2	7	17.9	8	51.7	23	27.5	2	23.6
Youth age group										
9–11 years	17	9.4	8	13.8	1	4.9	6	7.3	2	18.4
12–15 years	142	90.6	42	86.2	14	95.1	80	92.7	6	81.7
Youth gender										
Boy	116	76.1	36	77.5	12	84.1	62	73.4	6	81.7
Girl	29	16.4	9	13.9	2	11.1	16	18.6	2	18.4
Nonbinary	12	7.5	5	8.6	1	4.9	6	8.0	0	0.0
Youth lives as affirmed gender										
All of the time	133	83.9	46	93.0	13	88.9	66	76.9	8	100.0
Some of the time	23	15.7	4	7.0	2	11.1	17	22.5	0	0.0
None of the time	1	0.4	0	0.0	0	0.0	1	0.7	0	0.0
Youth has co-parent living elsewhere (parent-reported)	59	38.5	19	39.6	7	50.3	29	35.0	4	52.7
Youth has siblings	124	78.6	38	75.2	12	85.2	67	78.3	7	90.8

(85%), some self-identified as Indigenous (12%). Three-quarters of adolescents reported having siblings, and nearly 40% had a coparent in their lives, not living with the parent participating in the study. Members of this class were highly likely to report receiving unwanted parenting advice from friends and family members (91%). Jessie, mother of a 15-year-old transmasculine teenager, illustrated this extrafamilial stressor:

> [D]ad is accepting. He loves [Adolescent], but he doesn't understand. […] Early in the transition, […] he sent videos of information that he selected, which of course were biased with his opinion, and he wrote a letter to [Adolescent] and told him that he loved him but he was just concerned about him making physical changes to his body and the health risks.

Members of Class 1 were also likely to report needing to get involved at their adolescent's school (69%). Data from Stories of Care were rich in examples of this extrafamilial stressor, including scenarios where caregivers met with school administration to ensure their adolescent's name and pronouns would be respected, and they would have access to washrooms and locker rooms where they would feel comfortable.

Class 2 ("Some Disruption, Some Advocacy"; estimated 10% of sample) consisted entirely of female parents, more than one-third of whom belonged to a sexual minority group. Adolescents whose parents were in this class primarily identified as boys (84%) or girls (11%), and nearly all were 12 to 15 years old (95%). More than half of parents in this group were single parents (59%). Members of Class 2 were more likely than other classes to endorse items related to adolescent social disruption (96% and 93%), as well as the need to advocate for their child at school (85%). This was illustrated by Maria, mother to a 9-year-old trans daughter, who described a time when her then 5-year-old daughter went to day care wearing nail polish, prior to voicing that she was a girl. When the administrator commented that boys do not normally wear nail polish, Maria explained that nail polish was for everyone regardless of gender. Similarly, Amal, mother to a 17-year-old trans man, described visiting school to talk to another student who explicitly refused to call her son by his chosen name.

Class 3 ("Low Disruption, Low Advocacy"), the largest of the groups (estimated 56% of sample), had the largest proportion of male parent participants (21%) and participating step-parents (4%). Twenty-eight percent of families in this class were classified as low-income. This class also had several adolescent girls (19%) and nonbinary youth (8%), and the highest proportion across the groups of adolescents living in their affirmed gender some of the time (23%), rather than all of the time.

Parents in Class 3 ("Low Disruption, Low Advocacy") were not likely to endorse any of the stressor items. Based on the type of advocacy carried out by parents, no participants from the Stories of Care project seemed to fit this class. However, some parents described how their coparent seemed to experience no personal disruption and did not invest themselves in advocacy. For example, Jacques, father to a 15-year-old trans son, said that his son's mother—his ex-wife—"[D]oesn't really get it […] to the point of a few times saying there is only two genders, it's all in [their child's] head." His son now lives with him, and he takes him to all of his appointments.

Finally, an estimated 4% of the sample belonged to Class 4 ("Major Disruption, High Advocacy") and consisted entirely of female birth parents, most of whom were partnered (74%). This class also had relatively large proportions of Indigenous (53%) and sexual minority (44%) parents, and younger adolescents (18%), although the class itself was very small. Most

adolescents in this group were boys (82%). Parents in this class were likely to endorse stressors involving several social domains, including interference from family (97% and 98%) and strangers (77% and 97%), family (82%) and community (84%) rejection, and advocating for washroom rights (72%) and school issues (98%). Melania, whose trans daughter was 13 when she completed the interview, cut her own mother out of their life because she accused her of "putting stuff" on her and yelled at her. Melania also had to advocate for her daughter when buying a kid's meal in a fast-food chain because the restaurant employee saw her daughter's short hair and intended to give her a "boy's toy."

Discussion

Extrafamilial stressors experienced by families of transgender youth have been explored in qualitative studies (Ehrensaft, 2011; Kuvalanka et al., 2014; Kuvalanka et al., 2018; Pullen Sansfaçon et al., 2015) and to a lesser extent, in quantitative research (Lawlis et al., 2017). This study is the first to our knowledge to use LCA to describe the extent to which families of TNB adolescents referred for gender-affirming medical care experience a large range of trans-specific extrafamilial stressors. Combined with data collected through Stories of Care, this mixed methods paper provides insight into stressors experienced by caregivers accompanying their youth in clinics and assesses whether and how individual stressors cluster together into distinct classes, representing different patterns of family experience. Interestingly, the final four-class LCA model suggested that more than half (56%) of TYCAN parent participants were unlikely to report experiencing any stressors on the SFTYC checklist. This may be partially explained by the fact that other stressors families experience are not included on the checklist, such as those experienced directly within the clinic, which are also important. For example, the Stories of Care data have illustrated that not being able to receive the service when needed, along with scheduling issues and appointment organization, can create challenges for parents supporting their TNB adolescent (Pullen Sansfaçon et al., 2019). Also, 23% of adolescents whose parents were in this "Low Disruption, Low Advocacy" group lived in their gender only some of the time, and 1% none of the time. Therefore, some families may not experience trans-specific extrafamilial stressors because those outside the family are not aware of the adolescent's gender. Unfortunately, we did not have a measure ascertaining how "out" the adolescent and family were in their broader family and community.

This finding does not mean that most families are unlikely to ever experience any trans-specific extrafamilial stress, as only 30% actually reported experiencing "none of the above" (Pullen Sansfaçon et al., 2022).

Rather, the response patterns of those experiencing very few stressors may have been too dissimilar to fit into single groups, even in LCA models with a greater number of classes. The results may suggest that: 1) experiences are too diverse to be adequately captured in two to seven classes, particularly with a small sample size; 2) having 16 stressor items in the analysis provided opportunities for participants to express having many different experiences, and thus different response patterns; and 3) families accessing gender-affirming medical care may have more supportive families or communities than those in community-based qualitative studies. Finally, the Stories of Care data also suggest that members within the same family can experience different levels of trans-specific external stress, such as the father who reported experiencing more stress because he was more actively involved in his adolescent's care than the mother.

Other classes showed response patterns with stressors more likely to be endorsed than that of the "Low Disruption, Low Advocacy" (56%) class. Class 1 ("Low Disruption, Some Advocacy"; estimated 30% of sample) was highly likely to report receiving unwanted parenting advice from friends and family and having to get involved in their adolescent's school. While these two items reflect stressors occurring in different social spheres, they highlight how policy advocacy can lead to increased opinions from people outside of the immediate family. Despite potential family influence in parenting affairs, members of this stressor class were not very likely to report receiving unwanted advice from strangers or being called a bad parent by strangers or family. Similar situations described by parents in the Stories of Care data also support the implication that such parents may not be dealing with outright hostility around their parenting but still receive unwanted advice from well-meaning relatives. The likelihood of getting involved in the adolescent's school due to gender issues also serves as a reminder that even if parents do not perceive many stressors in other areas of their lives, there may still be environments where they need to intervene to advocate for their TNB adolescent.

The next largest class was Class 2, with an estimated 10% of the sample ("Some Disruption, Some Advocacy"). This class was highly likely to endorse items involving other children's parents ostracizing TNB adolescents from visiting with their peers, whether at another child's home or the TNB adolescent's home. As this class was the most likely to experience socially disruptive stressors in the adolescent's life, and also more likely to report needing to intervene at their school than Class 1, it is possible that the social disruption in peer relations could be linked to stressor experiences at school. Given that social disruption can directly impact an adolescent's life, it is not surprising that parents in this class would also be likely to intervene at school, where peer interactions happen frequently.

The smallest class was Class 4, representing an estimated 4% ("Major Disruption, High Advocacy"). This class was highly likely to endorse many checklist items, reflecting a tendency to experience major social disruption as well as strong advocacy efforts for their adolescent. This class was small, but is reflective of parents described in some studies (Manning et al., 2015; Pullen Sansfaçon et al., 2015) and in at least one participant in the Stories of Care data. Response patterns in this group suggested a high likelihood of experiencing parenting harassment or interference from strangers and family alike, ostracization by family and community members, some parental peers blocking their children from socializing with their TNB adolescent, and parents needing to advocate for school and washroom rights. Overall, there appears to be considerable variability in the pattern of extrafamilial stressors experienced by these families, with four distinct groups identified via the LCA.

Limitations

The challenges with achieving optimal model fit and qualitative information from the LCA models was likely due to the combination of small sample size and the high number of items, which increased the possibility of numerous different response patterns. Although Wurpts and Geiser (2014) stated that including more and better quality items in an LCA may improve models with small sample sizes ($70 < N < 500$), none of our models showed improvement on every fit statistic measured; the two-class model had 100% of seeds matching the model, but the two classes provided very little information about the sample. Other models had better AIC values but lower percentage of matching seeds. While weights improved overall model fit, the generalizability of our LCA models outside of this sample may be limited. Another limitation of the latent class analyses in this study is the statistical interpretability of LCA when weights are included in the model. The pseudo-log-likelihood function is used to calculate fit statistics in weighted data scenarios, but the literature on fit statistics generally assumes that the true log-likelihood is being measured (Lanza et al., 2015); true log-likelihood assumes all observations are equally weighted. Finally, we analyzed data collected from 2016 to 2019, and it is not clear how either transgender policy changes or COVID-19 pandemic social changes may have affected the ways that families of trans adolescents experience extrafamilial stressors. Since the TYCAN! and Stories of Care projects had different, complementary objectives and different samples, we also cannot neatly classify the Stories of Care participants in the four latent classes with the same degree of accuracy.

Implications for future research

This study may serve as a starting point to further examine quantitative patterns found within the stressor experiences of families of TNB adolescents referred for gender-affirming medical care. Future research might aim to replicate our latent class findings among families and to expand the study population to larger samples, larger age ranges, and community samples, where possible. The themes identified in the qualitative analyses of this study may also inform future interview guides and quantitative measures that assess the experiences of TNB adolescents and their families. More research, including with families of adolescents who have not yet sought gender-affirming medical care, is needed to better understand the diverse trans-specific stressors that families experience. Our study also adds to existing literature, drawing from quantitative data, about the importance of accounting for sociodemographic characteristics of parents when attempting to support parental mobilization and advocacy. In this sense, further research on parental advocacy and stressors experienced should draw from a more diverse sample where possible in order to gain a fuller understanding of parents' experience.

Finally, the TYCAN sample consisted of a disproportionately large number of trans boys, and future studies should explore whether stressor class experiences differ in families of trans girls and nonbinary youth. As per Bauer et al. (2021), the large proportion of trans boys in our sample may be related to 1) greater societal acceptance of nonconforming gender expression among prepubertal assigned female youth (Kane, 2006), 2) earlier age of female puberty, and 3) increased societal pressure to express femininity alongside the onset of puberty. The small proportion of trans girls in our study could also be related to barriers that trans girls face in coming out and seeking gender-affirming care, including risk of physical victimization (Grossman et al., 2006).

Overall, our findings highlight the complexity of parents' role in supporting their TNB adolescent. Parental support can encompass advocacy in different social contexts, but even among families who accompany their adolescent to clinic, the type of advocacy needed and in which contexts can differ from family to family. Therefore, our findings may inform the understanding of clinicians and mental health professionals who work with families of TNB adolescents by providing a framework to discuss extrafamilial stressor experiences with families in their care. The current study's results suggest considerable heterogeneity in the pattern of extrafamilial stressors experienced by families of TNB adolescents; understanding these patterns may help to identify families who may be at higher risk of experiencing such stressors. Future follow-up of both adolescents and their families can explore whether there is movement between classes and

whether trajectories of health and well-being differ for those who enter care with different patterns of extrafamilial stressor experiences.

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The authors report there are no competing interests to declare.

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