Trends in Psychology (2026) 34:358–374
https://doi.org/10.1007/s43076-025-00476-6

ORIGINAL ARTICLE

The Impact of Gender Dysphoria Diagnosis on Parents of Transgender Youth: The Role of Heteronormativity and Mentalization

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Accepted: 25 June 2025 / Published online: 17 July 2025

Abstract

The diagnosis of gender dysphoria (GD) can be a traumatic experience for parents of transgender youth, as it challenges the belief system of the entire family. The aim of this cross-sectional study was to examine the role of heteronormative beliefs and attitudes on the traumatic impact of GD diagnosis in mothers and fathers of transgender youth, as well as the mediating role of mentalization, i.e., the ability to psychologically understand one's own and others' behaviors and emotions. A total of 67 couples of mothers and fathers ($N = 134$) of adolescents who received a GD diagnosis answered questions about heteronormativity, mentalization, and the traumatic impact of diagnosis. Paired-samples *t*-tests were conducted to assess differences between variables in mothers and fathers, and mediation model analyses were performed to test the direct and mediating effects of heteronormative beliefs and attitudes and mentalization on the traumatic impact of the GD diagnosis. Results showed that heteronormative attitudes were significantly higher in fathers than in mothers. Moreover, heteronormative beliefs were positively associated with greater traumatic impact of GD diagnosis only in fathers, whereas heteronormative attitudes were associated with greater traumatic impact of GD diagnosis in both mothers and fathers. Finally, an impaired mentalizing functioning mediated the relationship between heteronormative attitudes (but not beliefs) and the traumatic impact of a child's GD diagnosis only in fathers, but not in mothers. Clinical recommendations are provided to support the family system in coping with the challenges that a GD diagnosis can bring forth.

Keywords Gender dysphoria · Transgender · Trauma · Parent · Heteronormativity · Mentalization

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Introduction

Nowadays, gender dysphoria (GD) is being diagnosed at progressively younger ages (Coleman et al., 2022), and the number of transgender people is increasing significantly (Zhang et al., 2020; Zucker, 2017). A diagnosis of GD is a significant life-transforming occurrence not only for the young person but for their whole family (Israel, 2005). Recent research has shown that parents are becoming more accepting of their children's gender nonconformity, partly due to the development of an affirming approach to transgender care (Ehrensaft et al., 2018; Keo-Meier & Ehrensaft, 2018; Pyne, 2016). Despite the relative increase in societal acceptance of gender diversity, a GD diagnosis in their child often represents a moment of crisis for parents (Grossman et al., 2021). Their reaction can be influenced by specific socio-cultural and relational processes such as hetero- and cis-normativity (Katz-Wise et al., 2016; Linander et al., 2024), which tend to be more strongly and frequently embraced by men than women, probably due to societal mechanisms such as hegemonic male identity and patriarchal values that are prevalent in our societies (Gupta et al., 2023; Yang, 2020). Parents often find it difficult to cope with their child's "transgender journey" (Gregor et al., 2016) while trying to keep the family functioning. They need support in creating an accepting and affirming environment (Rosenberg, 2002), and in letting go of the belief that it is "just a phase" (Möller et al., 2009). However, a period of adjustment accompanied by grief, shame and guilt may be required before parents can accept their child's transgender identity (Abreu et al., 2019).

Therefore, a fundamental hypothesis of the current study is that heteronormativity may increase the traumatic burden of a child's GD diagnosis on parents. In the present study, the term *traumatic burden (or impact)* refers to a form of psychological distress experienced by parents in response to their child's GD diagnosis, characterized by subjective feelings of shock, emotional disorientation, and perceived inability to cope, rather than indicating the presence of PTSD-like symptoms. In seeking the reason for the association between heteronormativity and traumatic impact of a child's GD diagnosis on parents, we thought it important to look at mentalization (i.e., reflective functioning), which refers to the ability to make sense of one's own and others' behaviors and emotions, in other words, to associate emotions and behaviors with certain mental states (Fonagy & Allison, 2012; Fonagy et al., 2016). This idea can be illustrated by the example of parents of a transgender youth who mentalize their child's repeated cross-gender behavior (e.g., wearing clothes of a gender other than the one assigned at birth) as the behavioral outcome of a mental state associated with the desire to belong to the opposite gender, rather than a passing whim, fashion, or provocation toward them.

A recent study has shown that mentalization is a resilience factor that helps transgender people to view stigma-related experiences from a psychological perspective and thus protect their mental health from negative consequences (Scandurra et al., 2020). Similarly, we believe that parents of transgender youth also need to address their own stigmatizing attitudes and behaviors towards gender

diversity in order to embrace their children's "new" identity through reflective work on their emotions and behaviors. In this regard, low levels of mentalization can be influenced by heteronormative beliefs (i.e., cognitive predispositions, namely, what we think about gender and sexual diversity) and attitudes (i.e., affective and behavioral predispositions, that is what we feel about gender and sexual diversity and how we behave based on those feelings). These two dimensions, taken together, can lead to negative psychological outcomes. One example is parents' perception of a child's GD diagnosis as traumatic. Conversely, even when parents hold high levels of heteronormative beliefs and/or attitudes, they may still give meaning to their children's cross-gender behavior by associating it with underlying mental states. In other words, parents can activate their reflective function (Lemma, 2013) so that they do not hold discriminatory attitudes (e.g., heteronormativity), but understand that behind their children's gender nonconforming behavior lies a deep suffering related to society's evaluation of gender incongruence. This is all the more important as parental acceptance is a protective factor that correlates with increased well-being in transgender youth (Bregman et al., 2013; Morgan et al., 2023). Furthermore, an adaptive reflective function, i.e., sufficient mentalizing ability, is associated with a higher likelihood of overcoming adversities and challenges in life (Fonagy & Bateman, 2016). Therefore, in the current study, we decided to include mentalization as a mediating variable, as it represents a psychological filter (Stein, 2006) that is known to promote resilience and can foster adaptive strategies to counteract the consequences of heteronormativity on the person's (traumatic) evaluation of events.

The Current Study

The aim of the current study was to investigate the role of heteronormative beliefs and attitudes on the potentially traumatic impact of GD diagnosis in mothers and fathers of transgender youth, as well as the mediating role of mentalization as a general psychological process that could explain the reason for the association between heteronormativity and the traumatic response to a GD diagnosis. We were also interested in exploring the possible differences between mothers and fathers in these contexts. Therefore, we first hypothesized that heteronormative beliefs and attitudes and the traumatic impact of GD diagnosis would be higher in fathers than in mothers because male identity has greater difficulties with gender-related norms. In contrast, we did not have a specific hypothesis regarding mentalization, as this is a general psychological process that is independent of gender roles. We then examined a series of hypotheses that combined heteronormativity, mentalization, and the traumatic effects of GD diagnosis in a mediation model (Fig. 1). Specifically, we hypothesized that for both mothers and fathers: (1) heteronormative beliefs and attitudes would be positively associated with the traumatic impact of the GD diagnosis; (2) genuine mentalizing would be negatively associated with the traumatic impact of the GD diagnosis; and (3) inadequate mentalization would mediate the relationship between heteronormative beliefs and attitudes and the traumatic impact of the GD diagnosis.

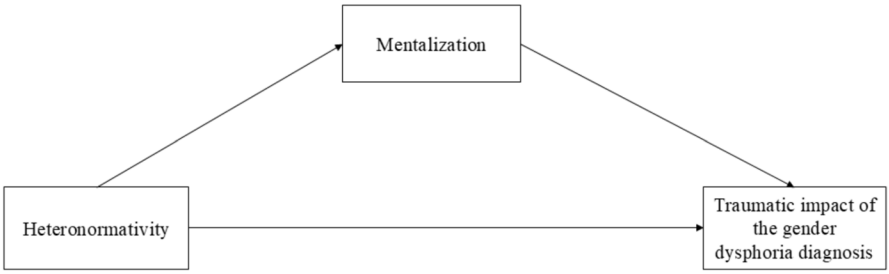

Fig. 1 The hypothesized mediation model

To our knowledge, this is the first study to explore the mediating role of mentalization in the association between heteronormative beliefs and attitudes and the psychological impact of a child's GD diagnosis, including both mothers and fathers. This dual focus allows for a more nuanced understanding of parental responses and potential gender-specific dynamics.

Methods

Participants and Procedures

A total of 67 couples of mothers and fathers ($N = 134$) of transgender adolescents participated in this study. The study was conducted in a tertiary center specialized in the care of transgender youths. The center follows the international guidelines of the Endocrine Society (Hembree et al., 2017) and the recommendations of the eighth edition of the Standards of Care of the World Professional Association for Transgender Health (Coleman et al., 2022). A psychodiagnostic assessment is first conducted by a clinical psychologist who is an expert in developmental age and GD. If a diagnosis of GD is confirmed, multidisciplinary care is offered.

Specifically, the initial evaluation includes an information session about psychological procedures (i.e., times, goals, informed consent, etc.). Then, a psychological assessment of the adolescent (psychological-clinical interviews and psychodiagnostic tests) of approximately six months is carried out. The diagnosis of GD is confirmed if there is a marked and persistent incongruence between the sex assigned at birth and the gender perceived as one's own, clinically significant distress, stability over time and a worsening of dysphoria as pubertal development progresses. Then, if requested by the adolescent and parents, the next step is a multidisciplinary approach to treat any associated psychopathology and to consider whether block puberty and/or gender affirming medical treatments can be initiated.

As for the current study, participants were informed about the aim, study design, benefits, and anonymity and had to give their consent. Parents were also informed that the results of this study could help them to understand how to provide psychological support to parents dealing with the diagnosis. Additionally, participants were informed that, should participation in the study elicit emotional distress or specific

psychological needs, the clinical psychologists involved in both the research and the clinical service were available to offer psychological support upon request.

The questionnaires used for the current study were administered to both parents, separately, exactly 7 days after they received their child's GD diagnosis. The administration took place at the clinical center, in a quiet and private room, in the absence of the adolescent, and under the supervision of a trained clinical psychologist. The 7-day interval was selected in accordance with the recommendations of the Impact of Event Scale-Revised (Pietrantonio et al., 2003; Weiss & Marmar, 1997), which proposes this time frame to capture the acute emotional impact of a potentially traumatic event. This choice also ensured consistency in the timing and setting of data collection across participants, thereby reducing contextual variability in the responses.

The consent form was handed out separately from the questionnaires in accordance with the Code of Ethics of the World Medical Association. The psychologist handing out the questionnaires assigned a sequential number to each couple to ensure anonymity of participants and the need to match partners. The study was approved by the Ethics Committee of the University of Naples Federico II (approval number 15/2022) and was designed in accordance with the Declaration of Helsinki and the EU General Data Protection Regulation.

Measures

Socio-demographic Characteristics

Participants were asked about their age, parental role (mother vs. father), education level ($\leq$ high school vs. $\geq$ university), child's age, and child's sex assigned at birth (assigned male at birth [AMAB] vs. assigned female at birth [AFAB]).

Heteronormativity

Heteronormativity was assessed using the Italian version of the Heteronormative Attitudes and Beliefs Scale (Habarth, 2015; Scandurra et al., 2021), a 16-item scale that assesses heteronormative beliefs and attitudes on a 7-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). The scale includes two subscales: (1) "Essential sex and gender" (i.e., heteronormative beliefs), which assesses the belief that there are only two genders corresponding to the two biological sexes (e.g., "All people are either male or female"); and (2) "Normative Behavior" (i.e., heteronormative attitudes) which assesses the extent of heteronormative attitudes and basic gender roles (e.g., "There are particular ways that men should act and particular ways that women should act in relationships"). Higher scores on each subscale indicate greater heteronormativity. In our sample, the Cronbach's alpha values were as follows: "Essential Sex and Gender" ($\alpha_{mothers} = 0.75$; $\alpha_{fathers} = 0.71$) and "Normative Behavior" ($\alpha_{mothers} = 0.84$; $\alpha_{fathers} = 0.81$).

Traumatic Impact of Gender Dysphoria Diagnosis

The traumatic impact of the GD diagnosis was assessed using the Italian version of the Impact of Event Scale-Revised (Pietrantonio et al., 2003; Weiss & Marmar, 1997), a 22-item questionnaire to assess traumatic symptomatology related to a specific event. In this study, we specifically asked parents to answer questions that made them think of the GD diagnosis their children had received 7 days earlier, as follows: "The following is a list of difficulties that people sometimes have after stressful life events. Please read each item and then indicate how distressing each difficulty has been for you in the past 7 days in relation to your child's gender dysphoria diagnosis made 7 days ago". The questionnaire assesses three aspects of stressful events, namely avoidance, intrusiveness, and hyperarousal (e.g., "Any reminder brought back feelings about it" or "Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart"). The answer options range from 0 ('not at all') to 4 ('extremely'). High scores indicate severe traumatic stress. The Cronbach's alpha in the study sample for the overall scale was 0.88 and 0.94 for mothers and fathers, respectively.

Mentalization

Mentalization was measured using the Italian version of the Reflective Functioning Questionnaire (Fonagy et al., 2016; Morandotti et al., 2018), an 8-item questionnaire evaluating the quality of mentalization on a 7-point Likert scale from 1 ("strongly disagree") to 7 ("strongly agree"). An example item is "People's thoughts are a mystery to me" or "Sometimes I do things without really knowing why." To obtain an overall score for mentalization, the items are rescored so that negative scores would indicate impaired mentalization and positive scores would indicate genuine mentalization. The Cronbach's alpha in the study sample for the overall scale was 0.74 and 0.76 for mothers and fathers, respectively.

Statistical Analyses

Statistical analyses were carried out using the Statistical Package for the Social Sciences (SPSS 27).

First, participants' sociodemographic characteristics, descriptive statistics, and bivariate correlations between heteronormativity, mentalization, and the degree of traumatic impact of the GD diagnosis were assessed.

Second, differences between heteronormativity, mentalization, and the extent of traumatic impact of GD diagnosis in mothers and fathers were calculated using paired-samples *t*-test. The effect size was calculated using Cohen's *d*, according to which 0.20, 0.50 and 0.80 represent a small, medium and large effect, respectively.

Third, as the HABS consists of two subscales and we were interested in analyzing associations between heteronormativity, mentalization and the level of traumatic impact of the GD diagnosis in both mothers and fathers, four mediation model

analyses were then conducted to test the direct and mediating effects of heteronormative beliefs and attitudes and mentalization on the traumatic impact of the GD diagnosis. In this model, age, education level, child's age, and child's sex assigned at birth were included as control variables. In this analysis, the SPSS Process macro was used to assess the statistical significance of the direct and mediating effects with bias-corrected bootstrapping (10,000 samples) and 95% confidence intervals (*CI*). In particular, we used model 4, which is specifically suited for mediation. According to Hayes (2017), the indirect effect can be considered significant if the upper and lower boundaries of the bias-corrected 95%*CI* do not contain zero. Before the analyses were conducted, the continuous variables were centered.

Results

Socio-demographic Characteristics of Participants

Regarding socio-demographic characteristics of the sample, the mean age of the mothers ($n=67$) was 46.45 ($SD=5.33$) and that of the fathers ($n=67$) was 50.01 ($SD=5.68$). Most of the parents, i.e., 52 mothers (77.6%) and 51 fathers (76.1%), had a low level of education (< university). The mean age of their child was 16.31 ($SD=1.10$) and ranged from 12 to 17 years. Finally, 37 adolescents (55.2%) were assigned male at birth (AMAB) and 30 (44.8%) were assigned female at birth (AFAB). In other words, the sample included 67 parent–child dyads, with 37 trans girls and 30 trans boys.

Correlations between Heteronormativity, Mentalization, and Traumatic Impact of Gender Dysphoria Diagnosis and Differences between Fathers and Mothers

The correlations between the main variables of the current study (i.e., heteronormativity, mentalization, and the extent of traumatic impact of the GD diagnosis) are shown in Table 1, separately for mothers and fathers.

For mothers, heteronormative attitudes correlated positively with heteronormative beliefs and the traumatic impact of GD diagnosis, but not with mentalization. For fathers, heteronormative attitudes correlated positively with heteronormative

Table 1 Correlations between heteronormativity, mentalization, and traumatic impact of the GD diagnosis in mothers and fathers

	1	2	3	4
1. Heteronormative beliefs (ESG)	-	0.63***	−0.11	0.23
2. Heteronormative attitudes (NB)	0.28*	-	−0.30*	0.31*
3. Mentalization	0.05	−0.55	-	−0.37**
4. Traumatic impact of GD diagnosis	0.10	0.38**	−0.13	-

Note. Mothers scores are below diagonal, and fathers scores are above diagonal. *ESG*, Essential Sex and Gender; *NB*, Normative Behavior. *** $p<0.001$; ** $p<0.01$; * $p<0.05$

beliefs and the traumatic effects of GD diagnosis, similar to mothers. In contrast to the mothers, the fathers' heteronormative attitudes also correlated negatively with mentalization and mentalization correlated negatively with the traumatic impact of GD diagnosis.

The results of the paired-samples *t*-test for differences between heteronormativity, mentalization, and the extent of traumatic effects of GD diagnosis in mothers and fathers are shown in Table 2. The only difference between mothers and fathers concerned heteronormative attitudes, which were significantly higher in fathers than in mothers, with a small effect size.

Direct and Indirect Effects of Heteronormativity and Mentalization on Impact of Children's Gender Dysphoria Diagnosis in Mothers and Fathers

The results of the mediation models are shown in Table 3 and Table 4, according to the specific dimension of heteronormativity (i.e., heteronormative beliefs and heteronormative attitudes) and differentiated by parental role (mothers vs. fathers).

In support of our first hypothesis (i.e., the association between heteronormativity and the traumatic impact of GD diagnosis), heteronormative beliefs were positively associated with greater traumatic impact of GD diagnosis for fathers only, whereas heteronormative attitudes were associated with greater traumatic impact of GD diagnosis for both mothers and fathers.

In support of our second hypothesis (i.e., the association between mentalization and the traumatic impact of the GD diagnosis), with the exception of the model with heteronormative beliefs tested with mothers, impaired mentalizing was associated with higher levels of traumatic impact of the GD diagnosis that adolescents received on their parents in all other models.

Finally, the indirect effect of mentalization on the relationship between heteronormativity and traumatic impact of the GD diagnosis was significant only for fathers and only for heteronormative attitudes, explaining 37.5% of the variance in the outcome ($R^2 = 0.37$).

In all models, none of the control variables showed a significant association neither with the outcome nor with the predictors.

Table 2 Mean differences between heteronormativity, mentalization, and traumatic impact of the GD diagnosis among mothers and fathers

	Mothers *M*(*SD*)	Fathers *M*(*SD*)	*t*	*p*	*d*
1. Heteronormative beliefs (ESG)	3.20(0.73)	3.28(0.89)	−0.74	0.463	0.09
2. Heteronormative attitudes (NB)	2.91(0.76)	3.22(0.97)	−2.77	0.007	0.36
3. Mentalization	0.11(0.85)	0.02(0.85)	0.70	0.488	0.10
4. Traumatic impact of GD diagnosis	5.07(2.33)	5.08(2.91)	−0.03	0.974	0.01

ESG, Essential Sex and Gender; *NB*, Normative Behavior; *M*, Mean; *SD*, Standard Deviation; *t*, *t*-test; *p*, *p*-value; *d*, Cohen's d

Table 3 Direct and indirect effects of heteronormative beliefs and mentalization on the impact of children's gender dysphoria diagnosis in mothers and fathers

	Mothers					Fathers				
	β	*BootSE*	*t*	*BootLLCI*	*BootULCI*	*β*	*BootSE*	*t*	*BootLLCI*	*BootULCI*
Outcome: Impact of GD diagnosis										
Heteronormative beliefs (ESG)	0.25	0.42	0.59	−0.59	1.09	0.74*	0.38	1.95	−0.02	1.50
Mentalization	−0.33	0.36	−0.93	−1.05	0.38	−1.33**	0.40	−3.31	−2.13	−0.52
Outcome: Mentalization										
Heteronormative beliefs (ESG)	0.12	0.16	0.83	−0.18	0.43	−0.07	0.12	−0.60	−0.32	0.17
Indirect effects	−0.04	0.10	–	−0.29	0.13	0.09	0.16	–	−0.22	0.45
Total effect	0.21	0.42	0.49	−0.63	1.05	0.84*	0.41	2.05	0.02	1.65

β, standardized regression coefficient; *BootSE*, Bootstrap Standard Error; *t*, *t*-value; *p*, *p*-value; *BootLLCI*, Lower Bootstrap Confidence Interval; *BootULCI*, Upper Bootstrap Confidence Interval; *ESG*, Essential Sex and Gender; *GD*, Gender Dysphoria; *Indirect effect*, heteronormative beliefs → mentalization → traumatic impact of GD diagnosis. The analysis was controlled for parent's age, education level, child's age, and child's sex assigned at birth. Coefficients of the control variables were not reported as none of them resulted significant. *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Table 4 Direct and indirect effects of heteronormative attitudes and mentalization on the impact of children's gender dysphoria diagnosis in mothers and fathers

	Mothers					Fathers				
	β	*BootSE*	*t*	*BootLLCI*	*BootULCI*	*β*	*BootSE*	*t*	*BootLLCI*	*BootULCI*
Outcome: Impact of GD diagnosis										
Heteronormative attitudes (NB)	1.17**	0.38	3.09	0.42	1.94	0.72**	0.36	1.99	−0.01	1.45
Mentalization	−0.28*	0.33	−0.85	−0.94	0.38	−1.12*	0.43	−2.66	−1.96	−0.28
Outcome: Mentalization										
Heteronormative attitudes (NB)	−0.04	0.15	−0.23	−0.33	0.26	−0.27*	0.10	−2.62	−0.48	−0.06
Indirect effects	0.01	0.07	–	−0.13	0.16	0.31	0.18	–	0.01	0.69
Total effect	1.19**	0.38	3.13	0.43	1.94	1.03**	0.36	2.85	0.31	1.75

β, standardized regression coefficient; *BootSE*, Bootstrap Standard Error; *t*, *t*-value; *p*, *p*-value; *BootLLCI*, Lower Bootstrap Confidence Interval; *BootULCI*, Upper Bootstrap Confidence Interval; *NB*, Normative Behavior; *GD*, Gender dysphoria; *Indirect effect*, heteronormative attitudes → mentalization → traumatic impact of GD diagnosis. The analysis was controlled for parent's age, education level, child's age, and child's sex assigned at birth. Coefficients of the control variables were not reported as none of them resulted significant. *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Discussion

The aim of the current study was to examine: (a) the relationship between heteronormative beliefs and attitudes, (b) the traumatic impact of adolescents' GD diagnosis on their parents, and (c) the potential mediating role of a third variable, namely mentalization (i.e., reflective functioning). The main finding was that both heteronormativity and low reflective functioning independently increased the traumatic impact of GD diagnosis for both mothers and fathers, although mentalization mediated the relationship between heteronormativity and traumatic impact of GD diagnosis only for fathers. By including both parents and investigating the role of reflective functioning, the present study contributes a novel perspective to the literature on parental responses to gender nonconformity, shedding light on the internal psychological processes that may shape how heteronormative beliefs translate into emotional distress.

Among the variables in the current study, the only difference between mothers and fathers concerned heteronormative attitudes, which were significantly higher for fathers than for mothers. This could be explained by the prevalence of patriarchal values in our society, which are associated with higher levels of heteronormative attitudes in men than in women (Scandurra et al., 2021), confirming previous findings (Bochicchio et al., 2024; Walls, 2008).

As to our first hypothesis (i.e., the association between heteronormativity and the traumatic impact of GD diagnosis), our findings showed that heteronormative beliefs were positively associated with greater traumatic impact of GD diagnosis only for fathers, whereas heteronormative attitudes were associated with greater traumatic impact of GD diagnosis for both mothers and fathers. These results suggest that heteronormativity plays a key role in shaping how parents process and respond to their child's GD diagnosis. In particular, heteronormative attitudes may reduce parents' psychological flexibility and coping resources, increasing the likelihood that the diagnosis is experienced as distressing or traumatic. In line with the minority stress framework (Meyer, 2003), this dynamic may reflect how parents internalize broader societal pressures that stigmatize gender nonconformity. Just as sexual and gender minority individuals are affected by external and internalized stigma, parents may also experience stress, emotional conflict, and a sense of disorientation when their child's identity challenges cis- and heteronormative norms (e.g., Hidalgo & Chen, 2019; Siegel et al., 2022). This tension between personal belief systems and dominant cultural expectations may amplify their emotional response to the diagnosis. Therefore, heteronormativity may not only predispose parents to negative interpretations of their child's identity but also intensify the psychological burden of confronting a reality that deviates from societal definitions of what is "normal" or acceptable (Roy & Singh, 2024).

Regarding the association between mentalization and the traumatic impact of the GD diagnosis, the second hypothesis was also confirmed, as impaired mentalization was found to be associated with higher levels of traumatic impact of the child's GD diagnosis on the parents in all models except the model with heteronormative beliefs, which was tested with the mothers. This finding highlights

the importance of mentalization when trying to understand the way in which heteronormative attitudes affect the potential trauma of a GD diagnosis for a child's parents. In this regard, it is plausible to argue that an adaptive mentalizing capacity may protect parents from being traumatized by the child's GD diagnosis. This complements previous research showing that higher levels of mentalization are associated with better overall resilience (Fonagy & Bateman, 2016). In this regard, higher levels of mentalization would mean that individuals are more likely to be able to effectively face adversity and stressful events such as a child's GD diagnosis and cope with them in a less traumatic way.

Finally, regarding the third hypothesis, we found that lower levels of mentalization mediated the relationship between heteronormative attitudes (but not beliefs) and the traumatic impact of a child's GD diagnosis only in fathers, but not in mothers, suggesting that lower levels of mentalization may explain the effect that heteronormative attitudes, albeit only in fathers, have on the traumatic impact of a child's GD diagnosis. Heteronormative attitudes predispose people to reject any non-heterosexual (and non-cisgender) form of identity. In this sense, mentalization can act as a mediator between heteronormative attitudes and the traumatic consequences of a child's GD diagnosis for the parents.

The fact that mentalization mediates the relationship between heteronormative attitudes and the traumatic impact of a child's GD diagnosis only in fathers (and not in mothers) invites further reflection. Since the levels of mentalization did not differ between mothers and fathers, and only the level of heteronormativity was significantly higher in fathers, we could argue that mentalization may serve as an explanatory factor especially when the level of heteronormativity is high. In other words, higher levels of heteronormativity would impair the individual's ability to reflect, which in turn would exacerbate the traumatic experiences associated with a GD diagnosis. Furthermore, research has shown that an individual's ability to reflect decreases in stressful situations (Luyten et al., 2012) and a GD diagnosis forces the trans adolescent's parents to also confront their internalized heteronormativity, which in itself is a stressful experience. Therefore, it is plausible to hypothesize that it is more difficult for fathers to use their reflective capacity under these stressful conditions.

Additional explanations for the absence of a significant mediation effect in mothers may involve factors such as social desirability, affective regulation strategies, and gendered expectations. For instance, mothers may experience greater social pressure to conform to caregiving norms that emphasize emotional closeness, understanding, and acceptance. This could lead to a minimization of internal conflict or distress when responding to questionnaires, especially in the context of perceived judgment or evaluation (Krumpal, 2013). In this sense, social desirability bias may have dampened the expression of traumatic reactions or heteronormative attitudes in self-reports. Furthermore, previous research has shown that women are more likely to rely on relational and co-regulatory forms of affective regulation, particularly in the context of parenting (Morelen et al., 2016). Such strategies may buffer the psychological impact of their child's GD diagnosis, thereby reducing the mediating role of mentalization in this process. Finally, culturally shaped maternal roles often include expectations of emotional resilience and supportiveness (Arendell, 2000),

which could influence how mothers interpret and narrate the experience, potentially masking the depth of their emotional responses.

These hypotheses remain speculative and underscore the need for future qualitative research to better understand the psychological dynamics underlying maternal responses to a child's GD diagnosis.

Limitations

We acknowledge that the study has some limitations. First, our study used a cross-sectional design that did not allow us to determine the relationship between variables over time and especially after the implementation of a support intervention for professionals working with adolescents with a GD diagnosis. Therefore, future studies should replicate the present study and longitudinally examine the relationship between the variables over time and during and after intervention programs targeting medical and psychological equipes. In particular, longitudinal studies could complement our findings by examining parental traumatization by GD diagnosis in children long after diagnosis (Mezzalira et al., 2023a, 2023b). Second, our study could not assess the presence of adolescents who persisted or desisted in their gender incongruence. Therefore, it is important that future longitudinal studies assess this relevant issue by observing the possible persistence of gender incongruence in adolescents with a GD diagnosis. Third, the sample consisted of parents belonging to a specific sociocultural context, namely southern Italy, where the level of heteronormativity is still moderately high in the general population (Scandurra et al., 2021). As heteronormative beliefs and attitudes may change depending on the context, it is important that future studies expand their sample to other and more diverse sociocultural environments.

Clinical Implications

The results of the current study allow us to make the following clinical recommendations. When transgender youth enter the health care system because of their gender incongruence, their entire family must be supported to create an accepting and affirming environment in which gender-related stress and negative emotions can be effectively processed. In this context, it is worth noting that healthcare professionals should be prepared to address the specific health needs of transgender people (Santamaria et al., 2024), as these people are often unprepared for their specific health issues (Cruciani et al., 2024). Empowering people with a GD diagnosis and their families is crucial to enable them to effectively cope with the cis and heteronormative beliefs and attitudes that are prevalent in our society. In this regard, improving the mentalization skills of those affected seems essential to equip them with the personal and relational skills that allow them to recognize the stigmatizing attitudes that influence society's perception of their gender identity, which in turn can help them gain the strength to express themselves freely.

Conclusions

The results of the current study point to the complexity of GD as a diagnosis that is intertwined with societal cis- and heteronormative assumptions about the "normal" (and normative) gender identity of individuals. For the families of young people with GD, the healthcare system should strive to be a safe and supportive place — one that is responsive to the diverse emotional, relational, and informational needs of each family — where they can be welcomed and accompanied in taking a positive approach to their child's gender identity. A non-judgmental environment is important for young people with GD (and their families) to feel accepted and better integrated into society. The implications of these findings clearly show the importance of training health care providers such as psychologists, endocrinologists and pediatric endocrinologists to gain a comprehensive knowledge of the specific health needs of transgender youth.

Data Availability The data that support the findings of this study are not publicly available because they contain information that could compromise the privacy of research participants but are available from the corresponding author [Cristiano Scandurra] upon reasonable request.

Declarations

Ethics Approval This study was approved by the ethics committee of the University of Naples Federico II, approval number 15/2022. Written informed consent was obtained from participants in accordance with The Code of Ethics of the World Medical Association.

Conflict of Interest The authors declare no competing interests.

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