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## Mental Health of Transgender and Gender Diverse Youth

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### Keywords

transgender, adolescents, children, youth, mental health

### Abstract

Transgender and gender diverse (TGD) children and adolescents are an increasingly visible yet highly stigmatized group. These youth experience more psychological distress than not only their cisgender, heterosexual peers but also their cisgender, sexual minority peers. In this review, we document these mental health disparities and discuss potential explanations for them using a minority stress framework. We also discuss factors that may increase and decrease TGD youth's vulnerability to psychological distress. Further, we review interventions, including gender-affirming medical care, that may improve mental health in TGD youth. We conclude by discussing limitations of current research and suggestions for the future.

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1. INTRODUCTION

Awareness of and attention to transgender and gender diverse (TGD)<sup>1</sup> youth—by the media, government officials, psychologists, and the general public—have risen in recent years. Depictions of transgender individuals, including children and adolescents, have been increasingly featured in television shows (Townsend et al. 2022), and issues affecting transgender people have been increasingly covered by news outlets (Pang et al. 2020). Along with this increased representation has come an increase in policies that affect transgender youth’s rights,

<sup>1</sup>The terms transgender and trans are used sometimes to refer to anyone whose gender identity does not correspond with their sex assigned at birth, sometimes to refer only to the subset who identify as girls/women and boys/men, and sometimes as umbrella terms that can include people who are gender nonconforming. Because of this ambiguity and because not all studies are clear about whether people self-identify with these terms, we instead use the term transgender and gender diverse (TGD) throughout this review. Specifically, we use TGD as an umbrella term to refer, broadly, to transgender and nonbinary individuals, as well as those who have visited a gender clinic or received a gender-related diagnosis (e.g., “gender identity disorder,” “gender dysphoria,” or “gender incongruence”).

ranging from banning the provision of gender-affirming medical care to minors and barring transgender youth from participating on sports teams that correspond with their gender identity (High Court of Justice 2020, Richgels et al. 2021) to banning gender identity–based conversion “therapy” ([https://www.lgbtmap.org/equality-maps/conversion\\_therapy](https://www.lgbtmap.org/equality-maps/conversion_therapy)) and protecting TGD individuals’ right to use bathrooms that correspond with their gender identity ([https://www.lgbtmap.org/equality-maps/safe\\_school\\_laws/discrimination](https://www.lgbtmap.org/equality-maps/safe_school_laws/discrimination)).

Estimates of the percentage of adolescents who are transgender have also increased in recent years. A report that used adult survey data from 2014–2015 to extrapolate to teens estimated that 0.73% of US youth aged 13–17 self-identified as transgender (Herman et al. 2017). More recent (2017 and 2019) surveys of US adolescents, however, have estimated that the actual percentage is higher—ranging from 1.4%–1.8% (Herman et al. 2022, Johns et al. 2019) to 2.7%–3.4% when more inclusive criteria (including those who are unsure if they are transgender) are used (Johns et al. 2019, Rider et al. 2018).

Until recently, minimal research on the mental health of TGD youth had been conducted. Indeed, a 2016 *Annual Review of Clinical Psychology* review on mental health in lesbian, gay, bisexual, and transgender (LGBT)<sup>2</sup> youth highlighted the need for a greater focus on transgender youth given that the vast majority of work at that point had focused on sexual minority youth (Russell & Fish 2016). Since 2016, research on transgender youth has proliferated, such that the number of Google Scholar results for “transgender children” nearly tripled from 2012–2016 to 2017–2021, and the number of results for “transgender adolescents” more than quadrupled.

Researchers’ growing attention to transgender children and adolescents likely reflects, at least in part, awareness of the importance of understanding their psychological well-being. High levels of psychological distress have been documented in transgender youth, and gaining a comprehensive picture of likely contributors to this distress is vital to addressing them. Additionally, parents, clinicians, and policy makers around the world are actively making decisions about medical care, gender-segregated spaces and activities, and school curricula, all of which have major consequences for the lives of TGD children and adolescents. Using empirical research to inform these decisions can help ensure that they can improve—rather than worsen—the mental health of TGD youth.

The goal of this review is to provide an overview of what is known about the mental health of TGD children and adolescents (i.e., TGD youth). We aim to (a) document mental health disparities between TGD and cisgender youth, (b) begin to explain these disparities using psychological theory and research, (c) describe identities and experiences associated with levels of psychological distress among TGD youth, (d) explore interventions designed to improve the well-being of TGD youth, and (e) highlight limitations and gaps in the existing literature and provide suggestions for future research on this topic.

In this review, we present research on TGD youth with a variety of gender identities, but all groups are not equally represented in all sections. In recent years, most adolescents presenting at gender clinics and participating in research have been transmasculine (i.e., transgender boys and others who were assigned female at birth and who identify on the masculine spectrum) (Aitken et al. 2015), so our review of adolescents is skewed accordingly. In contrast, research with young children tends to include more transfeminine individuals, who often present at gender clinics at earlier ages (Khadr et al. 2022), so our review of children is skewed in that direction. Additionally,

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**Gender-affirming medical care:**

hormonal and surgical interventions (including puberty blockers) to pause puberty or increase gender diverse adolescents’ and adults’ experienced alignment between their bodies and their identities; receiving gender-affirming medical care often constitutes medically transitioning

**Gender identity:**

a person’s internal sense of belonging to one or more gender categories, such as girl, boy, woman, man, female, male, and/or nonbinary

**Cisgender:** a term generally used to refer to anyone whose gender identity corresponds with their sex assigned at birth

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<sup>2</sup>Several acronyms are used to refer, collectively, to sexual and gender minorities—for example, LGBT, LGBTQ (which explicitly includes queer and/or questioning), and LGBTQ+ (which explicitly includes people with other identities). In this review, we use whichever acronym was used by the authors to whose work we are referring.

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**Nonbinary:**

identifying outside of the gender binary (e.g., as nonbinary, gender fluid, genderqueer, two-spirit); sometimes people who are agender (who do not identify with any gender or who see themselves as gender neutral) are also considered nonbinary

**Stigma:** the marking, stereotyping, and “othering” of a disempowered social group, such that that group is demeaned and discriminated against

**Gender dysphoria:**

distress resulting from a noncorrespondence between one’s assigned sex and gender identity (when placed within quotation marks, we are referring to the diagnostic term)

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only recently have researchers begun to pay more attention to nonbinary youth, so they are relatively underrepresented in this review.

Finally, in this review, we focus primarily on individuals aged 19 or younger (or studies with a mean age of 19 or lower), whom we describe using the term youth. When describing specific samples, we provide mean age (as well as age range, sample size, and majority racial/ethnic group) when possible. We further divide youth into two subgroups: youth who have likely not yet begun any puberty or who are 12 and under, when pubertal status is unknown (whom we refer to as children), and youth who have begun puberty or are 13+ (whom we refer to as adolescents). More studies focus on adolescents, so they are overrepresented here.

## 2. INSTITUTIONAL (DE)PATHOLOGIZATION OF GENDER DIVERSITY IN YOUTH

Within the field of psychology, prevailing understandings of the relationship between gender diversity and mental health have shifted in recent decades. Previously, TGD identities were considered pathological (e.g., Coates & Person 1985). Indeed, to our knowledge, this journal’s last review of the literature on TGD youth used the term “gender identity disorder” (Zucker 2005), in line with the categorization at the time in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders* (DSM). The general consensus among psychologists today, however, is that having a gender identity that differs from one’s assigned sex is not pathological but rather a healthy form of human variation (Coleman et al. 2022). Changes in the way researchers and clinicians understand gender identity have been reflected in and influenced by revisions to the DSM, the ICD (the World Health Organization’s *International Statistical Classification of Diseases and Related Health Problems*), and the World Professional Association for Transgender Health’s Standards of Care for the Health of Transgender and Gender Diverse People (Am. Psychiatr. Assoc. 2022, Coleman et al. 2022, Reed et al. 2016, World Health Organ. 2022).

Revisions to these documents, however, have not alleviated all concerns about the pathologization of TGD identities. Critics have asserted, for example, that the DSM fails to distinguish between the distress some (but not all) TGD people experience as a direct result of the noncorrespondence between their assigned sex and/or body and their gender identity and the distress some TGD people experience as a result of the stigma (Link & Phelan 2001) associated with being TGD (Reed et al. 2016). They have also suggested that the very inclusion of “gender incongruence” and “gender dysphoria” in the ICD and DSM, respectively, is inherently pathologizing and promotes stigma against TGD people (Castro-Peraza et al. 2019, Suess Schwend et al. 2018). Indeed, as detailed in this review, a preponderance of research suggests that stigma plays a major role in contributing to psychological distress in TGD youth.

## 3. DESCRIBING MENTAL HEALTH DISPARITIES

TGD youth experience heightened levels of psychological distress and heightened rates of mental health concerns. Because very little research has made use of representative samples, the exact burden of psychological distress and mental health concerns among TGD youth remains elusive. Still, the existing literature provides a meaningful, albeit inexact, picture of the mental health of TGD youth and how it compares to that of cisgender youth. Here, we focus on the most commonly studied (and most common) mental health phenomena.

### 3.1. Depression and Anxiety

Levels of depression and anxiety, both of which are considered internalizing (i.e., internally directed) manifestations of psychological distress (Kotov et al. 2017), are frequently elevated in

TGD youth compared to their cisgender peers (Clark et al. 2014, Eisenberg et al. 2017, Guz et al. 2021)—including their sexual minority cisgender peers (Price-Feeney et al. 2020)—as well as reference samples (Röder et al. 2018) and clinical cut points (Skagerberg et al. 2013a). This pattern has emerged among adolescents from various racial and ethnic groups (Vance et al. 2021) and is not limited to Western contexts (e.g., Wang et al. 2020). Rates of clinically elevated levels of depression and anxiety in TGD youth also tend to be quite high (de Graaf et al. 2018), as evidenced by over half (55.2%) of 12- to 18-year-olds at a US gender clinic ( $M_{\text{age}} = 15.3$ ,  $n = 149$ , majority non-Hispanic white) reporting clinically elevated levels of internalizing distress (Kuper et al. 2019b). Additionally, TGD youth often have high rates of internalizing disorders, such as major depressive disorder and generalized anxiety disorder (Chodzen et al. 2019, Nahata et al. 2017, Sorbara et al. 2020; cf. Wallien et al. 2007).

Despite these well-documented disparities, several recent studies of youth with supportive parents—most of which have been conducted with a single United States– and Canada-based sample of transgender youth and their cisgender siblings and unrelated cisgender peers (e.g., Gibson et al. 2021)—have observed levels of depression in TGD children and young adolescents that are comparable or nearly comparable to those in cisgender children and young adolescents [Gibson et al. 2021 (ages 8–14,  $M_{\text{age}} \approx 10$ , transgender  $n = 148$ , cisgender siblings  $n = 88$ , unrelated cisgender peers  $n = 139$ , majority non-Hispanic white), Kusalanka et al. 2017 (ages 6–12,  $M_{\text{age}} = 8.5$ ,  $n = 45$ , majority non-Hispanic white)]. These data suggest that TGD youth can thrive under conditions of considerable support. Still, these studies have continued to reveal that levels of anxiety in transgender youth, at least as reported by their parents, are slightly higher than they are in cisgender youth (Gibson et al. 2021).

### 3.2. Suicidality and Nonsuicidal Self-Injury

TGD youth also report high levels of suicidal ideation, suicide attempts, and nonsuicidal self-injury. A meta-analysis of studies published through 2018 about TGD children, adolescents, and young adults, the majority of which were conducted with gender clinic–based samples, estimated that 28.2% of these youth had a lifetime history of nonsuicidal self-injury, 28% had a lifetime history of suicidal ideation, and 14.8% had a lifetime history of suicide attempts (Surace et al. 2021). Research published since then has continued to report high rates (Leon et al. 2021, Sorbara et al. 2020). For example, in one study conducted across gender clinics in Canada, the Netherlands, and the United Kingdom (ages 13+,  $M_{\text{age}} = 15.99$ ,  $n = 2,771$ ), combined rates of suicidality and self-harm in transgender adolescents were higher than they were in a nonclinical reference sample but similar to that of a sample of cisgender adolescents who were seeking or receiving mental health services (de Graaf et al. 2022). Studies conducted in general medical facilities (Reisner et al. 2015) and secondary schools (Clark et al. 2014, Eisenberg et al. 2017, Jackman et al. 2021, Ross-Reed et al. 2019, Wang et al. 2020) and with community samples (Veale et al. 2017b) and even 9- to 10-year-olds (Potter et al. 2021) have also revealed similar disparities in suicidality, thoughts of death, and self-harm. These disparities arise even when comparing TGD youth and cisgender lesbian, gay, bisexual, and queer youth (Price-Feeney et al. 2020). Further, studies using gender clinic samples have estimated that rates of death by suicide among TGD youth are substantially elevated compared to rates within the general population (e.g., Van Cauwenberg et al. 2021). Together, these results suggest that rates of self-harm and suicidality (ideation, attempt, and death) among TGD adolescents are quite high.

### 3.3. Disordered Eating

TGD youth tend to report high levels of disordered eating, sometimes in attempts to halt the development of secondary sex characteristics during puberty or to change their body shape

(Coelho et al. 2019, Romito et al. 2021). In a sample of 12- to 23-year-olds at a US gender clinic ( $M_{\text{age}} = 17.04$ ,  $n = 164$ ), for example, over a quarter (28.0%) screened positive for features of anorexia nervosa or bulimia nervosa, and three-quarters screened positive for features of avoidant/restrictive food intake disorder (Linsenmeyer et al. 2021). Furthermore, in a sample of 13- to 22-year-olds at a US gender clinic ( $M_{\text{age}} = 16.5$ ,  $n = 106$ ), 63% reported engaging in weight manipulation to affirm their gender, and 11% of those who were assigned female at birth reported manipulating their weight to suppress menstruation (Avila et al. 2019). Studies of nonclinical samples of TGD youth also suggest that rates of disordered eating may be elevated compared to rates among cisgender youth (Coelho et al. 2019). In a survey of ninth- through twelfth-grade students in the United States ( $M_{\text{age}} = 16$ , majority non-Hispanic white), for example, transgender youth ( $n = 67$ ) were more likely than cisgender boys ( $n = 1,117$ ) but not cisgender girls ( $n = 1,289$ ) to have fasted, used diet pills, and used laxatives in the past 30 days (Guss et al. 2017).

### 3.4. Substance Use

TGD youth may also be particularly likely to use substances. In a sample of high school students in several US states and cities, for example, transgender adolescents ( $n = 2,845$ ) were more likely than both cisgender girls and cisgender boys ( $n = 118,803$ ) to have ever used alcohol, cigarettes, and a variety of other substances (Johns et al. 2019). Similarly, in a majority Hispanic sample of middle and high school students in the United States ( $M_{\text{age}} = 15.74$ ), transgender students ( $n = 335$ ) were more likely than students who did not report being transgender ( $n = 31,737$ ) to have ever used alcohol, cigarettes, and marijuana (Day et al. 2017). Additionally, on average, transgender students used all three substances at earlier ages than students who did not report being transgender (Day et al. 2017). TGD youth are particularly likely to have used substances not only ever—but also recently. In a school-based sample of ninth- and eleventh-grade students in the United States, for example, TGD youth (including those who were unsure about their gender identity) ( $n = 2,168$ ) reported higher rates of drinking alcohol, binge drinking, smoking cigarettes, and smoking marijuana in the past 30 days than their cisgender peers ( $n = 78,761$ ) (Eisenberg et al. 2017).

### 3.5. Autism

Although not always considered a component of mental health, autism—and potential differences in rates of autism between TGD and cisgender youth—has received a great deal of attention in recent years. A number of studies, primarily from clinic-based samples, have suggested that TGD youth are more likely to be autistic—or to have autistic traits (e.g., difficulties with social communication)—than their cisgender peers (Akgül et al. 2018, Nahata et al. 2017). At a gender clinic in Australia ( $n = 104$ ,  $M_{\text{age}} = 15.49$ ), for example, 22.1% of youth were thought to meet criteria for autism spectrum disorder and 9.62% reported a formal diagnosis, compared to 1.7%–2.47% in the general population (Mahfouda et al. 2019). Additionally, in a study of youth at a hospital in Turkey, those who were referred for reasons related to their gender (ages 6–18,  $M_{\text{age}} = 11.56$ ) had higher levels of autistic traits than those who were at the hospital for other reasons (ages 5–17,  $M_{\text{age}} = 11.42$ ) (Akgül et al. 2018). Although there are several theories about why autism and autistic traits might be more common in TGD than in cisgender youth (e.g., Jacobs et al. 2014), no data definitively address this question. Further, some have suggested that the relationship between gender diversity and autism may be overstated in the literature (Fortunato et al. 2022, Turban & van Schalkwyk 2018), whereas others reject that interpretation (Strang et al. 2018). Notably, although both the DSM-5 and ICD-11 classify autism as a “neurodevelopmental disorder,” a growing neurodiversity movement suggests that it is a healthy aspect of human variation rather than a disorder in need of correction.



## 4. EXPLAINING MENTAL HEALTH DISPARITIES

Some early psychological theories of gender diversity pointed to the high levels of psychological distress in TGD children as support for their assertion that being TGD was part of a “pervasive disorder” of emotional and behavioral problems (Coates & Person 1985). Today, however, the prevailing explanation for mental health disparities between TGD and cisgender individuals comes from minority stress theory (Brooks 1981, Meyer 1995, Testa et al. 2015, Toomey 2021), which asserts that on top of the stressors that all individuals experience, members of many minority groups experience a host of unique stressors, which can harm their mental health. TGD youth experience both distal (i.e., external) stressors, such as victimization, rejection, discrimination, and nonaffirmation, and proximal (i.e., internal) stressors, such as expecting discrimination, not disclosing aspects of their identity to avoid such discrimination, and internalizing the stigma associated with their identity or group membership. In this section we describe factors that have been implicated in the higher rates of mental health concerns among TGD youth compared with cisgender youth. Many of these factors also help to explain variations in mental health within the TGD youth population and thus are also discussed in the subsequent section on risk and protective factors (Section 5.2).

### 4.1. Distal Minority Stressors

TGD youth experience several external manifestations of stigma, which, per minority stress theory, can help to explain their heightened levels of psychological distress.

**4.1.1. Family rejection.** TGD youth experience higher rates of family rejection than their cisgender counterparts, and these disparate experiences may contribute to disparate mental health outcomes (Price-Feeney et al. 2020; cf. Röder et al. 2018). In an online survey of 14- to 21-year-old TGD ( $n = 91$ ) and cisgender, sexual minority ( $n = 3,043$ ) youth in Australia, for example, TGD youth were more likely to experience rejection after disclosing their identity to their mothers (Jones & Hillier 2013). In a sample of US high school students, TGD youth (including those who were unsure about their gender identity) reported lower levels of family connectedness than their cisgender peers (Eisenberg et al. 2017). And in a New Zealand high school sample, transgender students were less likely than cisgender students to report that at least one parent cares a lot for them (76.1% versus 93.6%) (Clark et al. 2014). Additionally, TGD youth are at increased risk of abuse—both verbal and physical (Thoma et al. 2021)—compared to cisgender youth.

**4.1.2. Peer victimization.** Interpersonal minority stressors also extend beyond the family unit. TGD youth experience higher rates of peer victimization than their cisgender counterparts, and this victimization is often related to how they identify, act, or look (Chavanduka et al. 2021, Hatchel et al. 2019, Peng et al. 2019). Research with high school samples has shown that TGD students are more likely than cisgender students to be bullied, including physically (Clark et al. 2014, Eisenberg et al. 2017, Jackman et al. 2021, Johns et al. 2019, Wang et al. 2020). They are also more likely to be threatened or injured with a weapon at school (Jackman et al. 2021, Johns et al. 2019), to be sexually assaulted (Johns et al. 2019, Ross-Reed et al. 2019), and to experience physical and sexual dating violence (Jackman et al. 2021, Johns et al. 2019, Ross-Reed et al. 2019).

**4.1.3. Discrimination.** In addition to being teased and bullied for their gender identity and gender expression (Taliaferro et al. 2019) and being referred to with antitrans slurs (Price et al. 2021), TGD youth report experiencing difficulty accessing resources, such as public bathrooms and identity documents that match their gender identity, that are readily available to cisgender individuals (Chavanduka et al. 2021). TGD youth report more discrimination than their cisgender, sexual

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**Minority stress:** the stress associated with being a member of a stigmatized minority group; also a theoretical framework for understanding the negative health outcomes that members of these groups often experience

**Gender expression:** how one communicates or presents their gender to others—for example, through their body (e.g., voice and body shape), appearance (e.g., clothing and hairstyle), and behavior (e.g., mannerisms)

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**Social dysphoria:**

distress associated with nonaffirmation of one's gender identity by others (also known as interpersonal gender dysphoria)

**Physical dysphoria:**

distress associated with an experienced incongruence between one's body and one's gender identity (also known as intrapersonal gender dysphoria)

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minority peers. In a US sample of LGBTQ 13- to 24-year-olds recruited through social media ( $M_{\text{age}} = 18$ , majority non-Hispanic white), for example, TGD individuals ( $n = 8,380$ ) reported higher rates of discrimination and threats and/or harm related to their sexual orientation or gender identity than did cisgender youth ( $n = 26,428$ ), though these differences were not tested for statistical significance (Price-Feeney et al. 2020). TGD individuals' higher rates of discrimination helped to explain their higher rates of depressive mood, suicidal ideation, and suicide attempts (Price-Feeney et al. 2020). Similarly, in a sample of LGBTQ+ sixth through twelfth graders in the United States ( $M_{\text{age}} = 15.5$ ), transgender students ( $n \approx 4,690$ ) were more likely than cisgender students ( $n \approx 8,549$ ) to report being discriminated against (77.3% versus 46.1%) (Kosciw et al. 2020).

**4.1.4. Nonaffirmation.** TGD youth also experience nonaffirmation, wherein their gender identity is denied by others (Chavanduka et al. 2021, Price et al. 2021). In a US sample of TGD 13- to 24-year-olds recruited through social media (55% under 18,  $n = 7,370$ , majority non-Hispanic white), for example, over half (58%) reported that at least once in their life, someone had told them not to use the bathroom corresponding with their gender identity (Price-Feeney et al. 2021). Additionally, among youth at a US gender clinic (ages 6–17,  $M_{\text{age}} = 14.7$ ,  $n = 224$ , majority non-Hispanic white), high percentages reported using bathrooms corresponding with the sex they were assigned at birth (35% of trans boys and 54.4% of trans girls) or gender-neutral bathrooms (29.0% of trans boys and 35.5% of trans girls)—often despite wanting to use a different bathroom (Kuper et al. 2019a). In the same sample, 6.6% of trans boys and 13.9% of trans girls also reported that their teacher(s) used the name they had been given at birth rather than their current name, and similar percentages (7.4% of trans boys and 13.9% of trans girls) reported that their teacher(s) used the pronouns they had been given at birth rather than gender-affirming pronouns (Kuper et al. 2019a). Experiences with nonaffirmation can result in a unique form of psychological distress among TGD youth known as social dysphoria or interpersonal gender dysphoria (Toomey 2021).

## 4.2. Proximal Minority Stressors

Although limited (Toomey 2021), the research that exists on proximal minority stressors in TGD youth suggests that societal, cultural, and community stigma can negatively affect TGD youth's mental health through effects on their thoughts, including expectations about their futures and beliefs about themselves. TGD youth and their caregivers report not only past experiences but also concerns about future experiences of rejection, victimization, and discrimination (Chodzen et al. 2019, Katz-Wise et al. 2017). Similarly, TGD adolescents are not only more likely than cisgender adolescents to report being bullied and physically harmed by another person but also more likely to report being afraid that someone at school would hurt or bother them (53.5% versus 39.8%) (Clark et al. 2014). TGD adolescents also report internalized transphobia—that is, endorsement of stigmatizing beliefs and attitudes about transgender people (Chodzen et al. 2019, Testa et al. 2015). Finally, although minimal research has explored nondisclosure, qualitative work suggests that some TGD youth may choose not to tell others that they are trans for fear that they will be verbally or physically victimized (Johns et al. 2021, Price et al. 2021).

## 4.3. Physical Dysphoria

The incongruence many TGD youth experience between their body and their gender identity likely also contributes to the high levels of mental health concerns among TGD youth. Prior to puberty, the bodies of children of all assigned sexes are fairly similar (Rogol et al. 2002). Therefore, physical dysphoria often increases—or emerges—at the beginning of puberty, when TGD individuals begin experiencing physical changes associated with their assigned sex (Pulice-Farrow



et al. 2020, Pullen Sansfaçon et al. 2019, Romito et al. 2021). Indeed, TGD youth frequently describe gender-incongruent puberty as feeling like a betrayal (Pulice-Farrow et al. 2020). The more puberty progresses, the more distress these youth often experience (Peng et al. 2019).

Physical dysphoria cannot necessarily be entirely separated from social dysphoria or from minority stress. The nonaffirmation that TGD youth experience is often grounded in others' judgments that they do not look as they should given their gender identity, and thus one contributor to physical dysphoria may be a lack of affirmation from others (Pulice-Farrow et al. 2020). An internal sense of incongruence between one's identity and appearance (Kozee et al. 2012), however, itself seems to be a major contributor to psychological distress in TGD youth, as discussed in more depth in Section 5.2.2.2.

## 5. DESCRIBING AND EXPLAINING VARIATION AMONG TRANSGENDER AND GENDER DIVERSE YOUTH

There is a great deal of variability in levels of psychological distress among TGD youth. Variables associated with more or less psychological distress can be broken down into two major categories: (a) demographic variables and (b) experiential variables (i.e., risk and protective factors).

### 5.1. Demographic Differences

Understanding variability in mental health among TGD youth requires an understanding of intersectionality theory, which asserts that axes of power and oppression—and therefore social group membership and identity—do not exist in isolation and must be understood as intersecting with one another to create unique societal positions and experiences (Crenshaw 1991). By not attending to TGD youth's intersecting identities, research runs the risk of documenting the experiences of some TGD youth and incorrectly extrapolating to other TGD youth.

**5.1.1. Gender identity.** TGD youth with different gender identities often differ in their levels of psychological distress and overall mental health.<sup>3</sup> Several studies have revealed that transmasculine and other gender diverse youth who were assigned female at birth experience more depression (Eisenberg et al. 2017, Price-Feeney et al. 2020), anxiety (Kuper et al. 2019b), and suicidality (Peterson et al. 2017, Toomey et al. 2018) and also self-harm more than transfeminine youth and other youth who were assigned male at birth (Holt et al. 2016, Rimes et al. 2019, Sorbara et al. 2020, Veale et al. 2017b). Causes of these disparities have not been sufficiently explored, but in at least some samples, transmasculine youth and other youth who were assigned female at birth have reported feeling less connected to their families (Eisenberg et al. 2017) and more unsafe at home (Peterson et al. 2017). They have also reported more discrimination and nonaffirmation (Chen et al. 2021; Price-Feeney et al. 2020, 2021) as well as higher rates of nondisclosure (Chen et al. 2021). Finally, some research suggests that TGD youth who were assigned female at birth report less pride in their identity (Chen et al. 2021).

Not all studies, however, have observed these differences. Some have found no differences based on assigned sex or gender identity (Nahata et al. 2017, Reisner et al. 2015, Röder et al. 2018, Surace et al. 2021), others have observed more distress in youth assigned male at birth (de Graaf et al. 2018, de Vries et al. 2011a), and still others have observed mixed results across different

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<sup>3</sup>Some research has described gender diverse youth in terms of their assigned sex rather than their gender identity. Referring to gender diverse people this way is a form of nonaffirmation and is not considered best practice (Bouman et al. 2017). Given that there is no way for the current authors to determine the gender identities of these youth, however, in this section, we describe them according to their assigned sex at birth.

indicators of mental health (Chen et al. 2021; Holt et al. 2016; Linsenmeyer et al. 2021; Skagerberg et al. 2013a,b).

**5.1.2. Age.** TGD youth of different ages may also differ in their mental health. Although few studies have examined the mental health trajectories of TGD youth, research on the relationship between age and mental health in gender diverse youth suggests that psychological distress may increase over time—and may be particularly heightened during puberty and adolescence (Skagerberg et al. 2013b). In a sample of 5- to 18-year-old, majority white British youth referred to a UK gender clinic ( $M_{\text{age}} = 14$ ), for example, adolescents (ages 12–18,  $n = 218$ ) experienced higher rates of low mood/depression (49.7%), self-harm (44.1%), thoughts of self-harm (48.1%), suicidal ideation (39.5%), and suicide attempts (15.8%) than children (5–11) (7.3%, 14.6%, 19.5%, 14.6%, and 2.4%, respectively) (Holt et al. 2016). Additionally, a chart review of 10- to 17-year-old patients at a gender clinic in Canada (median age = 15.4, plurality white) revealed that older youth (15–17,  $n = 184$ ) reported higher rates of depressive disorders (46%) than younger youth (<15,  $n = 116$ , 30%) (Sorbara et al. 2020). Older youth's worse mental health seemed to be driven by being at later stages of gender-incongruent puberty than younger youth (Sorbara et al. 2020). Not all studies, however, have observed a negative relationship between age and mental health (e.g., Linsenmeyer et al. 2021), suggesting that it is not inevitable.

**5.1.3. Other identities.** Other dimensions of social identity and group membership, such as sexual orientation and race/ethnicity, have also been explored. School-based studies of TGD adolescents in the United States have found that sexual minority TGD adolescents are more likely to have experienced recent depression, engaged in nonsuicidal self-injury, and attempted suicide than heterosexual TGD adolescents (Atteberry-Ash et al. 2021, Toomey et al. 2018). Comparisons between TGD youth of different races/ethnicities have yielded mixed results, with some studies (Atteberry-Ash et al. 2021) but not others (Toomey et al. 2018, Vance et al. 2021) reporting that youth of color are at higher risk of suicidality and depression than white youth.

## 5.2. Risk and Protective Factors

Experiences associated with increased or decreased psychological distress not only systematically vary between different demographic subgroups but also vary among individuals.

**5.2.1. Interpersonal risk factors.** How TGD youth are treated by the people in their lives can make them more or less prone to experiencing psychological distress. In general, poor-quality relations—and relationships marked by rejection and victimization in particular—may increase the likelihood that TGD youth will struggle emotionally.

**5.2.1.1. Families.** The way TGD youth's families function—including the way family members treat TGD individuals and their identities—has been linked to mental health outcomes. The worse a family's general functioning (i.e., the less understanding, supportive, open, communicative, and accepting a family is, in general), the more emotional and behavioral problems TGD children (Sievvert et al. 2021) and adolescents (Leviton et al. 2019) tend to experience. Parental rejection of a child's gender identity in particular has been tied to depression and anxiety [e.g., in Thailand (Yadegarfar et al. 2014) and the United States (Pariseau et al. 2019)], and gender-based rejection from a sibling has been linked to increased likelihood of suicidal ideation (Pariseau et al. 2019). Adolescents in qualitative studies report that their parents' rejecting behaviors—including misgendering them, denying that they are truly transgender, criticizing them, and cutting them off from crucial resources (Johnson et al. 2020b, Newhook et al. 2018)—are psychologically detrimental and can exacerbate their existing mental health issues (Johnson et al. 2020b). Additionally,

parental abuse has been linked to negative mental health outcomes, such as suicide attempts, among TGD youth (e.g., Grossman & D'Augelli 2007).

**5.2.1.2. Peers and school.** Peer relations also strongly predict mental health in TGD children (Kualanka et al. 2017, Sievert et al. 2021) and adolescents (Hatchel et al. 2019, Levitan et al. 2019, Van Cauwenberg et al. 2021). One limitation of some studies is that they do not disentangle the effects of generally negative peer relations and peer relations that involve victimization (i.e., bullying, harassment, and/or violence). Other studies, however, have found that among TGD youth, higher levels of peer victimization in particular are associated with poorer mental health outcomes, including higher levels or likelihood of distress, depression, anxiety, suicidal ideation, and nonsuicidal self-injury (Hatchel et al. 2019, Taliaferro et al. 2018, Witcomb et al. 2019). Peer victimization may influence mental health indirectly, by reducing individuals' sense of belonging at school (Hatchel et al. 2019). The victimization that TGD youth experience is often specific to their gender identity, expression, or perceived sexual orientation (Eisenberg et al. 2017), and such victimization has been tied to increased psychological distress (e.g., Price-Feeney et al. 2021), including depression and anxiety (Chodzen et al. 2019) and lifetime history of suicide attempts (Austin et al. 2022).

**5.2.2. Intrapersonal risk factors.** Although interpersonal relationships and interactions seem to play a major role in shaping TGD youth's mental health, intrapersonal experiences may also contribute.

**5.2.2.1. Proximal minority stressors.** Negative thoughts and feelings about being gender diverse may increase TGD youth's vulnerability to psychological distress and mental health concerns. Among 12- to 18-year-olds at a US gender clinic ( $M_{\text{age}} = 15.46$ ,  $n = 109$ , majority non-Hispanic white), for example, higher levels of internalized transphobia were associated with increased odds of meeting criteria for generalized anxiety disorder and major depressive disorder (Chodzen et al. 2019). And in a community sample of transgender 14- to 18-year-olds in the United States and Canada, more internalized anti-LGBTQ stigma was associated with increased odds of having considered suicide in the past 6 months (Austin et al. 2022).

**5.2.2.2. Physical dysphoria.** A sense of incongruence between one's identity and one's body and/or appearance (Kozee et al. 2012) has also been connected to mental health in TGD youth. In a US gender clinic sample, for example, this felt incongruence predicted increased odds of meeting criteria for major depressive disorder (Chodzen et al. 2019). Additionally, in a majority non-Hispanic white sample of 12- to 18-year-olds who were assigned female at birth at a US gender clinic ( $M_{\text{age}} = 15.3$ ,  $n = 156$ ), chest dysphoria predicted higher levels of anxiety and depression (Sood et al. 2021). For some, the physical changes that occur during gender-incongruent puberty and/or changes in how others view them are so intolerable that they are associated with increased likelihood of contemplating suicide. In a sample of 12- to 18-year-old TGD individuals (including those who were uncertain about their gender identity) in China ( $M_{\text{age}} = 16.7$ ,  $n = 385$ ), for example, rates of lifetime suicidal ideation were higher in those who felt pain and depressed mood at the onset of puberty than in those who did not (Peng et al. 2019), and in a convenience sample of 15- to 21-year-old, binary-identified transgender youth in the United States ( $M_{\text{age}} = 18.37$ ,  $n = 55$ , majority white), those who had attempted suicide had more negative beliefs about others' evaluations of their bodies/appearances than those who had not (Grossman & D'Augelli 2007).

**5.2.3. Interpersonal protective factors.** Several factors also have the potential to protect against psychological distress, promote resilience in TGD youth, and buffer the effects of negative experiences (Testa et al. 2015).

**5.2.3.1. Families.** Family connectedness and support may help to boost psychological well-being in TGD youth (e.g., Weinhardt et al. 2019). In a majority white community sample of TGD 14- to 18-year-olds in Canada ( $n = 323$ ), for example, greater family connectedness, including a sense that an adolescent's parents cared about them, was associated with reduced odds of past-year nonsuicidal self-injury and past-month despair (Veale et al. 2017a). Similarly, in a majority non-Hispanic white, school-based sample of TGD adolescents in the United States ( $n = 2,168$ ), having caring parents who teens felt they could talk to was associated with lower levels of depressive symptoms, suicidal ideation, suicide attempts, and substance use, even when controlling for other forms of connectedness (e.g., with peers and other adults) (Gower et al. 2018). Qualitatively, transgender adolescents also report that parental support helps them to feel more hopeful and connected—and improves their mental health (Johnson et al. 2020b).

**5.2.3.2. Peers and school.** Connectedness to and support from one's peers and school community may also play a protective role (Austin et al. 2022). In a community sample in Canada, for example, having caring friends was associated with reduced odds of having attempted suicide in the past year (Veale et al. 2017b), and greater school connectedness and belonging were associated with reduced odds of past-month stress and past-year despair (Veale et al. 2017a). Similarly, in a school-based sample of TGD adolescents in Minnesota, connectedness to friends and teachers was associated with reduced psychological distress (Gower et al. 2018). Social support may also buffer the negative effects of victimization. A community-based study of transgender youth in the United States and Canada (ages 3–15,  $M_{\text{age}} = 9.41$ ,  $n = 265$ , majority non-Hispanic white), for example, found that although experiences of victimization were generally associated with internalizing symptoms, this association did not exist among youth with very high levels of support from their peers or their schools (Durwood et al. 2021).

Qualitatively, youth report that finding community, especially with other TGD individuals, can promote resilience, and they often find such community outside of their school and home—and frequently online (Evans et al. 2017). Although TGD individuals often experience harassment online, they also find support and build connections with similar others there (Austin et al. 2020, Selkie et al. 2020). They report that in online spaces, they can be their authentic selves, find a sense of safety and belonging, and experience hope (Austin et al. 2020).

**5.2.3.3. Affirmation.** One critical avenue for enhancing resilience in the face of minority stress is through gender affirmation. The more TGD youth's parents use their chosen name, the less depression and anxiety they experience (Fontanari et al. 2020). And more broadly, the more adolescents with a chosen name are able to go by that name (rather than their given name or, as it is sometimes called, their "dead name"), the better off their mental health tends to be (Russell et al. 2018). Indeed, in one large US survey of TGD adolescents, rates of suicide attempts were lower among those who reported that most or all people in their lives used affirming pronouns (12%) than among those who reported that a lot (19%), some (24%), a few (25%), or no (28%) people used affirming pronouns (Trevor Proj. 2020). Additionally, adolescents who had access to gender-affirming undergarments and clothing had lower rates of suicide attempts (14%) than those who did not (26%) (Trevor Proj. 2020).

**5.2.4. Intrapersonal protective factors.** In addition to their relationships with other people, TGD youth's relationship with themselves can enhance their resilience. In particular, pride—or acceptance and celebration of their own identity—may help them to cope with minority stressors and protect them from the potential negative consequences of stigma (Hidalgo et al. 2019, Testa et al. 2015). One study of adolescents at a US gender clinic, for example, found that increased pride was associated with reduced symptoms of depression and social anxiety (Hidalgo et al. 2019).

Seeing positive news about trans people—including actors, politicians, and athletes—may contribute to a sense of pride (Pham et al. 2020). Although pride is considered a key protective factor in models of gender minority stress and resilience (Hidalgo et al. 2019, Testa et al. 2015), its protective effects, and the effects of other positive intrapersonal factors, have not been sufficiently explored.

## 6. INTERVENTIONS

Interventions that target predictors of distress and/or leverage resiliency factors have the potential to improve mental health in TGD youth. Most interventions that show evidence of potential effectiveness are grounded in the gender affirmative model, meaning they support youth in expressing and living in accordance with their gender identity “without experiencing restriction, criticism, or ostracism” (Keo-Meier & Ehrensaft 2018, p. 13). The gender affirmative model is rooted in an understanding that TGD youth know better than anyone else who they are and that a key part of supporting these youth is enabling them to live in line with their gender identity safely and comfortably (Ehrensaft 2017).

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**Social transition:** the process of taking nonmedical steps to live in accordance with one's gender identity; can include changing one's pronouns, appearance, and/or name

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### 6.1. Psychosocial Interventions for Families

Psychosocial interventions often focus on TGD youth's family members. Interventions recommended by professional societies (e.g., Coleman et al. 2022) and expert clinician reports (Malpas et al. 2022) often aim to increase factors associated with increased resilience and reduced risk for mental health challenges among TGD youth, such as parental awareness, acceptance, and support. Specifically, clinicians recommend educating caregivers about gender diversity and the importance of supporting their child; providing space for caregivers to share their thoughts, feelings, and questions and receive support; working with caregivers and youth separately and together; working with families' broader communities; prioritizing consideration of intersectional identities; and connecting caregivers and youth to others with similar experiences (Malpas et al. 2022). Few specific, psychosocial interventions have been published (Malpas et al. 2022). The programs that have been written about in the literature (e.g., Dangaltcheva et al. 2021, Matsuno & Israel 2021), however, focus on reducing antitransgender prejudice and increasing knowledge and support. Parents report interest in participating in support groups (Lawlis et al. 2020), and those who have participated report having positive experiences (Hillier & Torg 2019).

### 6.2. Psychotherapeutic Interventions for Youth

Other interventions focus on TGD youth themselves. Such interventions can be conducted in person or virtually. Indeed, TGD adolescents report that online game-based interventions can provide them with relatively safe spaces to explore and affirm their gender identity—for example, by using avatars, names, and pronouns that correspond with their gender identity even before they have socially transitioned (Strauss et al. 2019). TGD youth also express interest in in-person interventions (Lawlis et al. 2020), and interventions that connect them with other TGD youth face-to-face have shown preliminary evidence of effectiveness at increasing social support and feelings of inclusion (Davidson et al. 2019).

Additionally, when classic psychotherapeutic interventions, like CBT, are tailored to the needs of TGD youth, they may reduce psychological distress. After participating in a CBT intervention designed to help TGD adolescents develop skills to cope with minority stressors, for example, youth (ages 16–18,  $M_{\text{age}} = 17.6$ ,  $n = 8$ , majority non-Hispanic white) experienced reductions in depression (though surprisingly, not changes in their use of coping strategies), and these improvements held up 3 months later (Austin et al. 2018). When such interventions are not tailored to TGD youth, however, they may end up invalidating youth's identities (e.g., by asking them to

**Gender euphoria:**  
“a joyful feeling of  
rightness in one’s  
gender/sex” (W.J.  
Beischel et al.)

identify their gender as exclusively male, female, transgender, or intersex or by giving them only two choices—female and male—for an avatar) (Lucassen et al. 2021). Consequently, they may be less effective than they are in cisgender youth or not effective at all (Lucassen et al. 2021). Even when interventions are designed with TGD youth in mind, a one-size-fits-all approach to intervention development may not be effective. Theoretical work notes that different subgroups of TGD youth (e.g., those in supportive versus unsupportive environments and those with different levels of psychological distress) have different needs, and different approaches to psychotherapeutic interventions with these different subgroups are likely needed (Coyne et al. 2020).

### 6.3. Medical Interventions

A third type of intervention for TGD youth is gender-affirming medical care. For TGD youth who have not completed puberty, gender-affirming medical care may begin with puberty suppression (i.e., blockers) to halt gender-incongruent puberty. For peripubertal or postpubertal youth, gender-affirming medical care may continue—or begin—with gender-affirming hormone therapy (e.g., estrogen for transfeminine youth and testosterone for transmasculine youth) to initiate gender-congruent puberty. Gender-affirming medical care may also include menstrual suppression. Whereas gender-incongruent puberty often produces distress in TGD youth (Pulice-Farrow et al. 2020, Pullen Sansfaçon et al. 2019), halting gender-incongruent puberty, as well as facilitating gender-congruent puberty, can often relieve this distress and even produce feelings of gender euphoria—“a joyful feeling of rightness in one’s gender/sex” (Beischel et al. 2022, p. 281).

Notably, not all TGD youth seek gender-affirming medical care. However, for those who do, both cross-sectional and longitudinal research suggest that receiving it can be psychologically beneficial and even life-saving. In a majority non-Hispanic white, US online sample, for example, those who were taking gender-affirming hormones were less likely to have experienced depression in the last 2 weeks and to have attempted suicide in the last year than those who wanted to take but were not taking hormones (Green et al. 2022). Additionally, the majority of longitudinal studies that have compared mental health before and after initiation of gender-affirming medical care have observed improvements in mental health (Achille et al. 2020, Arnoldussen et al. 2022, Costa et al. 2015, Kaltiala et al. 2020, Kuper et al. 2020; cf. Carmichael et al. 2021, Hisle-Gorman et al. 2021; see **Supplemental Table 1** for an overview of all of the known studies reporting on mental health before and after receipt of gender-affirming medical care). Adolescents at a gender clinic in the Netherlands, for example, showed decreases in levels of depression after an average of approximately 2 years of puberty suppression ( $M_{\text{age}} = 13.65, n = 70$ ) (de Vries et al. 2011b). Adolescents at a gender clinic in the United States ( $M_{\text{age}} = 16.59, n = 47$ , majority non-Hispanic white) showed reductions in suicidality after an average of just under a year of gender-affirming hormone therapy (Allen et al. 2019). Similarly, adolescents at a gender clinic in Spain ( $M_{\text{age}} = 16, n = 23$ , majority “Caucasian of Spanish descent”) showed reductions in anxiety and depression after a year of gender-affirming hormone therapy (López de Lara et al. 2020).

Still, puberty suppression and hormones are unlikely to fully eliminate physical dysphoria. Given that puberty suppression does not produce any physical changes and only prevents further gender-incongruent changes, its effects may be limited (de Vries et al. 2011b, Carmichael et al. 2021). And though gender-affirming hormone therapy does produce noticeable bodily changes, it may not produce all of the changes that TGD youth desire or require (Romito et al. 2021), and it cannot undo certain changes that may have already occurred (e.g., breast development, voice deepening, facial hair growth). For some TGD youth who have begun—or completed—gender-incongruent puberty, certain aspects of physical dysphoria may only be able to be resolved through surgical intervention (Mehring et al. 2021). In a sample of adolescents at a gender clinic in Hamburg, Germany, for example, only after gender-affirming surgery (primarily chest

Supplemental Material >



surgery)—and not after puberty suppression or gender-affirming hormone therapy alone—were levels of internalizing symptoms comparable to those of the general population (Becker-Hebly et al. 2021).

Notably, many TGD youth who report a need for gender-affirming medical care face barriers to accessing this care. For example, in a majority non-Hispanic white, US online sample of transgender and nonbinary 13- to 17-year-olds who wanted gender-affirming hormone therapy ( $M_{\text{age}} = 15.17, n = 3,235$ ), less than 9% were currently receiving it (Green et al. 2022).

## 7. CHALLENGES, LIMITATIONS, AND FUTURE RESEARCH DIRECTIONS

Although research on the mental health of TGD youth has grown in recent years, certain subgroups remain underconsidered, certain topics underexamined, and certain methods underused. To gain a fuller understanding of the mental health of TGD youth, more research—and different research—is needed.

### 7.1. Understudied Subgroups

The majority of research on TGD youth has recruited samples through gender clinics or LGBTQ+ community organizations or obtained data from school surveys. Accordingly, several groups of TGD youth—including youth of color, youth from low-socioeconomic-status backgrounds, rural youth, prepubescent children, and nonbinary youth—have been underrepresented.

Because accessing gender-affirming medical care often requires medical insurance and/or other financial resources, youth whose families do not have these resources—who are disproportionately from minoritized racial groups—are often underrepresented in clinic-based samples. This underrepresentation is particularly notable given that higher percentages of Latinx, American Indian and Alaskan Native, Hawaiian/Pacific Islander, and multiracial youth than white youth identify as TGD (Eisenberg et al. 2017, Herman et al. 2022). Additionally, TGD youth are overrepresented in the foster care system and among homeless youth (Baams et al. 2021), and these youth are also unlikely to be well represented in clinic-based samples. Because gender clinics are often located within large hospitals in urban areas, youth who live in rural areas and small towns (which TGD may experience as particularly hostile; Pacey et al. 2017) are also likely underrepresented in clinic-based samples. As intersectionality theory makes clear, being transgender does not exist in isolation from other social identities, group memberships, or axes of oppression, and the experiences of TGD youth with different intersecting identities and group memberships differ from one another. Having multiple, intersecting marginalized identities can make TGD youth particularly vulnerable to stigma and minority stress and may therefore increase vulnerability to psychological distress. As an example, TGD youth of color—and American Indian/Alaska Native/Native Hawaiian/Pacific Islander TGD youth in particular—have been reported to have higher rates of suicidality than non-Hispanic white TGD youth (Atteberry-Ash et al. 2021).

Prepubescent children are also underrepresented in the literature. Because gender-affirming medical care does not begin until the onset of puberty, prepubertal children are often missing from clinic-based samples. Further, school-based surveys typically do not ask about both assigned sex and gender identity until secondary school. As a result, relatively little is known about the mental health of TGD children—or even about the percentage of youth who identify as TGD at earlier ages. Furthermore, since prepubertal children are typically recruited for research through their parents, recruiting children whose parents are unsupportive and nonaffirming is particularly challenging.

Finally, although research has begun to consider the needs of nonbinary individuals, relatively little is known about their mental health and how it compares to that of transgender girls and boys. The experiences of nonbinary and binary transgender individuals have similarities, but they also differ in critical ways—with binary individuals tending to experience nonaffirmation (i.e., others' refusal to recognize that they are part of a certain gender group) and nonbinary individuals tending to experience invalidation (e.g., others' dismissal of the very legitimacy or realness of their gender identity) (Johnson et al. 2020a). Nonbinary adolescents report not being exposed to other nonbinary people, being misgendered by people who are dismissive of nonbinary or gender-neutral pronouns (like they and them), and being concerned that other people do not see them as “really trans” or “trans enough” (Johnson et al. 2020a). Research has begun to compare the mental health of binary transgender and nonbinary youth, with some studies finding that nonbinary youth tend to have particularly poor mental health, at least when compared to transgender girls (Toomey et al. 2018, Veale et al. 2017b; cf. Rimes et al. 2019). More research on the mental health of nonbinary youth is needed.

## 7.2. Underexamined Topics

In addition to looking beyond convenience samples and recruiting understudied subgroups of TGD youth, future research would benefit from looking beyond negative interpersonal experiences and considering the wide range of experiences in TGD youth's lives.

**7.2.1. Structural risk and protective factors.** As reviewed here, a great deal of research has explored interpersonal—and, to some extent, intrapersonal—factors associated with increased or decreased levels of psychological distress in TGD youth. Structural factors, however, have not been sufficiently explored. In recent years, several governmental bodies have taken steps to restrict TGD youth's access to gender-affirming medical care and/or single-gender spaces and groups that align with their gender identity. Although the effects of these actions have not yet been systematically examined, research on the importance of affirmation, including gender-affirming medical care (described previously and in **Supplemental Table 1**), as well as on the relationship between structural stigma and mental health more broadly (e.g., Hatzenbuehler 2017), suggests that these actions are likely detrimental to the psychological well-being of TGD youth (Barbee et al. 2022). Indeed, parents express deep fear and concern about the consequences of legal restrictions on their children's access to gender-affirming medical care (e.g., Kidd et al. 2021). Understanding the effects of these policies on the mental health of TGD youth is critical (Paceley et al. 2023), as is examining the potentially protective effects of other policies, such as nondiscrimination laws, that support TGD youth.

**7.2.2. Positive psychological experiences.** Much research on mental health in TGD youth has focused on negative psychological experiences. These youth, however, often demonstrate resilience in the face of minority stress. Support, affirmation, community, connection, and belonging may not only reduce negative psychological experiences but also boost positive ones. Researchers have only recently begun to consider gender euphoria in TGD adults (e.g., Beischel et al. 2022), and to our knowledge, published research has yet to explore this phenomenon in TGD youth. At least one study, however, explored the related concept of gender positivity and found that it was connected to affirmation in the form of both chosen name use by mothers and gender-affirming hormone therapy (Fontanari et al. 2020). Consideration of gender euphoria and other positive psychological phenomena is vital to understanding the full range of mental health–related experiences in TGD youth as well as to moving away from pathologizing and deficit-based understandings of gender diversity.

**7.2.3. Psychosocial interventions.** Although much has been written on interventions for TGD youth and their families (Malpas et al. 2022), little of this writing is grounded in published empirical work that examines the effectiveness of such interventions. Given that family support, connectedness, and affirmation are linked to psychological well-being in TGD youth (Gower et al. 2018, Veale et al. 2017a, Weinhardt et al. 2019), interventions that promote these protective factors would likely be effective at improving mental health. Causal relationships between these variables, however, have not been established, and methods for increasing family support, connectedness, and affirmation have not been thoroughly assessed. Additionally, research on interventions to directly promote resilience in TGD youth is lacking. Although there is some evidence that pride is associated with reduced depression and anxiety in TGD youth (Hidalgo et al. 2019), neither this relationship nor strategies for promoting pride have been investigated extensively. Finally, given how much time TGD youth spend at school and how robust the link between peer victimization and psychological distress in TGD youth is (Austin et al. 2022, Chodzen et al. 2019, Hatchel et al. 2019, Price-Feeney et al. 2021, Taliaferro et al. 2018, Witcomb et al. 2019), it is notable that minimal research has been published on the potential effectiveness of school-based interventions. Some research has suggested that the more students hear transphobic language, the less likely they are to intervene when they witness antitransgender harassment and that the more they see others intervening, the more likely they are to intervene themselves (Wernick et al. 2014). Future research to develop interventions might capitalize on these findings.

### 7.3. Underused Methods

The methods that can be used to evaluate the effectiveness of interventions, particularly medical interventions, for TGD youth are limited given that conducting experimental research (and thus withholding or delaying care for some youth) is generally considered highly unethical. That being said, several other underused methods could enhance the quality of research being conducted on mental health in TGD youth.

**7.3.1. Longitudinal research.** The bulk of the research on mental health in TGD youth has been cross-sectional. To understand the trajectories of mental health within this group—as well as the long-term effects of interventions (and noninterventions)—more longitudinal work is needed. Longitudinal studies would also benefit from comparing the mental health trajectories of TGD youth who are socially and medically transitioning to those of their cisgender counterparts, as well as from exploring the mechanisms by which social and medical transition might improve mental health in TGD youth (e.g., through reduced physical dysphoria, reduced experiences with misgendering, and increased hope for the future).

**7.3.2. Community-based participatory research.** Another key way to improve the quality of research on TGD youth's mental health is through community-based participatory research, in which community members (in this case, TGD youth) serve as collaborators who contribute to knowledge creation rather than as subjects from whom knowledge is extracted. TGD youth can be included at every step of the research process—from inception to data collection to analysis, contextualization, and interpretation and finally dissemination (Adams et al. 2017, DeChants et al. 2020). To date, most research on TGD youth's mental health has been conducted largely by cisgender academics and health care providers, sometimes using nonaffirming frameworks—for example, by defining youth by the sex they were assigned at birth rather than by their gender identity and by describing TGD youth as having psychological disorders like “gender identity disorder.” The field would benefit from highlighting and funding the work of TGD researchers, facilitating training of future TGD researchers, and involving TGD youth in the research process (e.g., by creating Community Advisory Boards).

TGD and cisgender researchers, with input from TGD youth, can work to ensure that research uses appropriate and nonstigmatizing frameworks, focuses on questions that are relevant to TGD youth's lives, and has the potential to enhance their well-being.

## 8. CONCLUSIONS

TGD children and adolescents, who constitute an increasingly visible yet highly stigmatized group, have elevated levels and rates of psychological distress and mental health concerns compared to their cisgender peers. Manifestations of stigma (i.e., rejection, victimization, discrimination, and nonaffirmation), which function as minority stressors, can help to explain why these youth experience more depression, anxiety, suicidality, and nonsuicidal self-injury than their cisgender counterparts. Minority stressors also help to explain variability in mental health among TGD youth—that is, why some subgroups (with different intersectional identities) and some individuals fare better or worse than others. Despite the stark contrasts in mental health outcomes between TGD and cisgender youth, recent research indicates that these disparities can be reduced or eliminated and that with social support, affirmation, and appropriate medical care, TGD youth can thrive. Additional research is needed to gain a fuller understanding of the experiences and mental health of multiply marginalized TGD youth as well as prepubertal children, to develop evidence-based psychosocial interventions for TGD youth and their families, and to examine the potential consequences of policies that target TGD adolescents' access to gender-affirming medical care and single-gender spaces and groups that align with their identity. Longitudinal research can help to explore trajectories of TGD youth's mental health over time and the mechanisms by which gender-affirming medical care may improve mental health. At a time when TGD youth are both highly visible and highly stigmatized, this research is more important than ever.

### SUMMARY POINTS

1. Although within the field of psychology, gender diversity itself has been increasingly depathologized in recent years, transgender and gender diverse (TGD) youth still experience more psychological distress and mental health concerns than their cisgender peers, including their cisgender, sexual minority peers.
2. TGD youth experience family rejection, peer victimization, discrimination, and nonaffirmation, which, per minority stress theory, can help to explain these mental health disparities, as well as variation in psychological distress among TGD youth.
3. TGD youth may experience both social dysphoria (interpersonal gender dysphoria) (i.e., distress associated with others' nonaffirmation of their gender identities) and physical dysphoria (intrapersonal gender dysphoria) (i.e., distress associated with an experienced incongruence between their bodies and their gender identities), though not all TGD youth experience gender dysphoria.
4. Both social affirmation and medical affirmation are associated with lower levels of psychological distress in TGD youth, yet many youth experience barriers to accessing gender-affirming medical care.
5. Limitations of the work to date include few studies focused on youth of color and nonbinary youth, limited research on psychosocial interventions, and minimal longitudinal and community-based participatory research studies.

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