Lesbian, gay, bisexual, transgender and queer/questioning youth have experienced stigma in the form of stressors including rejection by parents and peers, discrimination, harassment and violence. The prevalence has ranged from 18% to 67% in different samples. The disparities they have experienced include sexual and mental health, substance use and suicide risk. Since they spend much of their time in school, gay straight alliances have been created and have helped reduce these problems. Despite the limitations of this recent literature, the research highlights the ongoing problems of LGBTQ youth and the need for continuing research and interventions.

This narrative review involved entering the terms LGBTQ and youth into PubMed and PsycINFO. The search yielded 541 papers for the last five years. However, following exclusion criteria including case studies and non-English papers, this review is a summary of the research reported in 66 papers. The recent literature on LGBTQ and youth is predominantly focused on negative effects of belonging to a sexual or gender minority group along with some studies on comorbidities, buffers and interventions. This narrative review is accordingly divided into sections on prevalence, effects/ correlates, comorbidities, buffers and interventions.

**Prevalence of LGBTQ Youth**

The prevalence of LGBTQ in this recent literature has ranged widely from 18% in one study to 67% in another. In a logistic regression study on 13-to 22-year-olds (N = 1475), for example, 18% reported being LGBTQ [1]. In this sample, 30% of the LGBTQ versus 13% of the non-LGBTQ youth had high anxiety scores, 28 versus 15% had high depression scores and 5 versus 2% had high PTSD scores. No group differences were noted for conduct disorder or ADHD. The sampling here was non-probabilistic and it included only urban areas, suggesting that the data may not generalize to different populations.

In a sample with a significantly higher number of gender minorities (67%), 14- to 24-year-olds comprised the sample (N= 711) [2]. Only 14% had disclosed to everyone, 2% had disclosed to no one, 27% never had romantic or sexual attraction and 21% were never sexually active. Disclosure was not prevalent in this sample which was not surprising given that most of the sample was adolescents who would have had to receive permission from their parents to participate in the study for institutional review purposes.

**Effects of LGBTQ**

In this section, several effects of being LGBTQ are reviewed. These include sexuality problems such as asexuality, fluidity and conversion therapy. In addition, family rejection and peer rejection studies are reviewed as negative effects of experiencing LGBTQ. For the family rejection studies, variables such as abusive childhood experiences and COVID-19 effects of being isolated with family are summarized. And homelessness, which may have resulted from family rejection, has also been researched. Other issues reviewed in this section include health care discrimination and parenting doubts that LGBTQ youth have experienced. For the peer rejection studies, discrimination/harassment has been researched as well as bullying/cyberbullying and victimization and violence (Table 1).
Sexuality problems

The problems considered here include asexuality, fluidity and attempts to convert sexuality. In a study entitled “Contextualizing the well-being of asexual youth”, asexual youth were more often transgender [3]. Transgender youth had worse scores than cisgender youth on health, family support and school safety. And cisgender asexual youth had worse scores than cisgender non-asexual youth.

In a paper called “Developmental patterns of sexual identity, romantic attraction and sexual behavior among adolescents over three years”, adolescents from three low-income high schools in rural southeastern US (N=744) reported on their sexual identity and attraction [4]. 26% of the girls and 11% of the boys reported fluidity in identity. 31% of the girls and 10% of the boys reported fluidity in attraction. At each time point across the three years, 20% of the girls and 67% of the boys reported sexual minority identity labels and concurrent same-sex attraction and behavior. 66% of the girls and 10% of the boys reported same sex behavior. These data highlight the fluidity of sexual and gender identity that occurs across adolescence when longitudinal studies are conducted. The data, however, might not be generalizable given that the sample was comprised of low-income adolescents from schools in rural southeastern United States.

Conversion therapy has been designed to change sexual orientation to heterosexual or gender identity to cisgender so that the sexual attraction and behavior expression aligns with the birth sex or gender identity [5]. In this sample, conversion therapy was more likely experienced by LGBTQ, Hispanic, less educated, and less religious adolescents. In that LGBTQ Institute Southern Survey, conversion therapy was happening to 76% of the sample and was correlated with negative mental health outcomes. In another study, self–reported conversion efforts by psychologists, counselors and religious leaders were notably practiced on 350,000 adolescents which lead to suicide rates four times the rate of those who did not receive conversion therapy [6]. The sample who received conversion therapy were two times more likely to have attempted suicide and to have had multiple suicide attempts. These data from a 2018 cross-sectional study of 13-24-year-olds

<table>
<thead>
<tr>
<th>Effects</th>
<th>First Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexuality Problems</td>
<td></td>
</tr>
<tr>
<td>Asexuality</td>
<td>Simon</td>
</tr>
<tr>
<td>Fluidity</td>
<td>Stewart</td>
</tr>
<tr>
<td>Conversion therapy</td>
<td>Higbee, Green, Forsythe</td>
</tr>
<tr>
<td>Parental Rejection</td>
<td></td>
</tr>
<tr>
<td>Being “Out”</td>
<td>Gonzales, Meaney</td>
</tr>
<tr>
<td>Low acceptance</td>
<td>Grossman, Fish</td>
</tr>
<tr>
<td>Adverse childhood experiences</td>
<td>Craig, Scharrs</td>
</tr>
<tr>
<td>Homelessness</td>
<td>McCann</td>
</tr>
<tr>
<td>Healthcare provider discrimination</td>
<td>Diana</td>
</tr>
<tr>
<td>Doubts about being parents</td>
<td>Simon</td>
</tr>
<tr>
<td>Peer Rejection</td>
<td></td>
</tr>
<tr>
<td>Bullying</td>
<td>Gower</td>
</tr>
<tr>
<td>Cyberbullying</td>
<td>Lett, Abreu, Englander</td>
</tr>
<tr>
<td>Victimization</td>
<td>Williams, Baams, Gorse, Scheer, Kiperman</td>
</tr>
<tr>
<td>Violence</td>
<td>Murchison, Anderson, Wichaidit</td>
</tr>
</tbody>
</table>

Table 1: Stressors for LGBTQ and first authors.
highlight the mental health problems of conversion efforts.

In a paper entitled “Humanistic and economic burden of conversion therapy”, SOGICE or sexual orientation and gender identity change efforts were compared with affirmative therapy and no therapy [7]. Across 28 studies on 190,695 LGBTQ adolescents, 12% experienced SOGICE for a mean of 26 months. Following SOGICE the prevalence was greater for distress (47 versus 34%), substance use (67 versus 50%) and attempted suicides (58 versus 39%). The annual cost of $650 million was associated with a harm-economic burden of $9.2 billion. These data highlight not only the mental health burden but the economic costs of conversion therapy.

**Parental Rejection**

Parental rejection has been a significant problem for LGBTQ adolescents and has been reported in a number of studies. In a study on 477 students who were recruited by contacting LGBTQ serving organizations on 254 campuses, 46% had immediate families that did not support or know their adolescents’ LGBTQ identity [8]. Of these adolescents, 60% were experiencing psychological distress, anxiety and depression.

In another study that highlighted the importance of “being out”, family rejection moderated the relationship between family warmth and self-esteem in a sample of 8774 adolescents [9]. In a survey on 129 adolescents, less positive initial feelings were noted for trans masculine than trans feminine adolescents by mothers and fathers at 25% vs 36% averaged across parents, although the increase in acceptance was greater for trans masculine adolescents [10]. Mothers were generally more accepting. Greater parent support was associated with less parent abuse as well as less depression and disclosure distress by the adolescents. Nonetheless, 50% of the minority youth continued to experience stress related to parental rejection. These data are old, however, as they were collected in 2011 to 2012. Hopefully parental acceptance of transgender and gender nonconforming youth has increased in more recent years.

The problem of unsupportive parents has been exacerbated during COVID-19. For example, in a paper entitled I’m kinda stuck at home with unsupportive parents right now”, 31 synchronous text-based chats revealed this isolation problem during a COVID-19 lockdown [11].

Aces or adverse childhood events may have contributed to difficult parent-adolescent relationships in LGBTQ youth samples. For example, in an online survey of 3508 14-18-year-old LGBTQ youth, multiple aces (M= 3.14) were reported [12]. Emotional neglect had been experienced by 58%, emotional abuse by 56% and living with a family member with mental illness by 51%. 43% reported 4+ aces. Those who had highly educated parents, lived with a parent and in Canada reported fewer aces. In another study, transgender and cisgender adolescents were compared on aces (N=477) [13]. In that study, transgender youth reported more emotional abuse, physical neglect and emotional neglect than cisgender adolescents. In this sample, aces explained 18% of the variance in mental health problems.

Other factors associated with parental rejection include homelessness, healthcare discrimination and parenting doubts by LGBTQ youth. Although homelessness has rarely been studied, it is a common sequelae of parental rejection. In a study entitled “Homelessness among youth who identify as LGBTQ”, four main themes emerged including stigma, discrimination/ exclusion, mental health issues and substance use [14]. Discrimination by healthcare providers has also been a problem for LGBTQ youth [15]. Pediatricians reputedly have limited information. Family rejection accompanied by stigma and bullying has increased the risk of psychosocial suffering, isolation and mental health issues for these youth. Discrimination and challenges have also related to doubts about becoming parents by LGBTQ youth [16]. These have included legal and/or practical barriers to adoption or biological parenthood.

**Peer Rejection**

Peer rejection which is also a serious problem for LGBTQ youth has come in several forms. These include discrimination/ harassment, bullying/cyberbullying and victimization/violence. Discrimination/harassment has been a preface to virtually every introduction of the studies reviewed here. That there are no studies focused on discrimination/harassment in this recent literature suggests that they were prominent in an earlier literature and provided departures into more specific forms of discrimination/ harassment such as bullying/cyberbullying in this more recent literature. For example, in a paper entitled “Bullying victimization among LGBTQ youth: current and future directions”, biased-based bullying was noted to be rooted in stigma [17].

**Cyberbullying**

Online bullying or cyberbullying has been the focus of several studies in this literature perhaps because there has been more opportunity for cyberbullying than bullying given the closure of schools during COVID-19. In a study on 2680 youth from a Youth risk behavior surveillance system, a latent class analysis suggested that online bullying and housing insecurity were associated with increased odds of suicidal ideation in transgender youth [18].

In a systematic review called “Cyberbullying in LGBTQ youth”, 27 empirical studies were reviewed [19]. Cyberbullying ranged from 11-71% prevalence. Psychological and emotional effects included suicidal ideation and attempts, depression, and lower self-esteem. Behavioral effects included physical aggression, body image problems and isolation. And, academic performance, which has rarely been reported, was negatively affected, especially GPAs.
As for most problems experienced by LGBTQ youth, COVID-19 exacerbated cyberbullying. In a study on 240 youth, there was a small increase in bullying but a greater increase in cyberbullying, anxiety and depression, especially in females and LGBTQ youth [20]. In contrast, a positive effect of COVID-19 appears to be more suicide help-seeking behavior was noted for LGBTQ youth [21]. This was a much larger sample at 179,497 youth with greater prevalence of mental health problems including 52% stress, 10% depression, 18% anxiety, and 19% suicidal thoughts.

Victimization

Victimization is a common phenomenon among LGBTQ youth. For example, in a paper entitled “A systematic review and meta-analysis of victimization and mental health prevalence among LGBTQ+ young people” 12 to 25 years old, a pooled prevalence suggested that 36% had experienced victimization and 39% had mental health problems [22]. The methodology of this literature is limited as is suggested by only 40 of 2457 papers being selected and an inconsistency of reporting across studies.

Polyvictimization has been noted in most of these studies and in very large samples. For example, in a sample of 81,885 9th to 11th grade students at 348 schools in Minnesota, more polyvictimization was noted for LGBTQ and gender nonconforming adolescents [23]. Notably, more psychological and physical child abuse was also reported by this sample.

Cross-cultural differences in victimization have been highlighted in heterogeneous samples of LGBTQ youth. For example, in the California healthy kids survey on an extremely large sample (N=326,124), victimization was more prevalent among Cambodian youth (41%) than among white youth (27%) [24]. Victimization was experienced in decreasing order among Cambodian, Hmong, Japanese, Korean, Laotian, Chinese, Filipino, Vietnamese and white youth. This decreasing prevalence would appear to be a function of how minor the minority of the group was.

Different types of victimization have been noted in several studies. For example, in a study entitled “Victimization typologies among a large national sample of sexual and gender minority adolescents” (N=17,112 13-17-year-olds), the typology was based on the LGBTQ National Teen Survey [25]. Three classes emerged in this survey including 1) no victimization; 2) sexual harassment and bullying; and 3) polyvictimization (sexual victimization, sexual harassment, bullying). Risk factors included being transgender and other gender minority, stigma–related stress, family rejection, and disclosure to family members/parents. The polyvictimized were more likely to experience depression, stress and substance use. A diversity of strengths was a protective factor.

In a mixed methods study that involved a quantitative component (N=349) and a qualitative sample (N=39), the relationship between victimization and stigma sensitivity and concealment motivation was moderated by “outness” and social support. And a mediator was explored in the significantly larger sample from the LGBTQ National Teen Survey (N=17,112) [25]. In this sample, 37% were gay or lesbian, 43% cisgender women and 60% white. Victimization was positively related to substance use and mental health problems and negatively related to self-concept factors including mastery, control and self-esteem. The victimization effect on mental health was mediated by self–concept which explained 74% of the variance in mental health and 28% of the variance in substance use. The selection of moderator or mediator variables seems to have been arbitrary as a reflection of the authors’ interests.

Violence

Extreme forms of victimization such as rape have been referred to as violence in the literature on LGBTQ youth. Not surprisingly, it’s less often the focus of research especially given the need for youth to have parental permission for participating in research. In a study on intimate partner violence, the prevalence was lower for females but greater for males in schools with an LGBTQ affirming climate [26]. The underlying mechanism for this surprising finding is not clear. Another surprising finding relating to school climate was that greater sexual assault was noted in schools that had restroom and locker room restrictions [27].

In another paper on sexual assault entitled “Differences in rape acknowledgment and mental health outcomes across transgender, non-binary and cisgender bisexual youth”, rape acknowledgment was greater among gender non-binary than among trans and cisgender youth [28]. “Outness” was significantly associated with greater rape acknowledgment and lack of rape acknowledgment was associated with greater anxiety, depression and PTSD.

Further, disparities have been noted on exposure to violence in a study on transgender versus cisgender Thai adolescents [26]. In this sample of 31,898 adolescents from grades 7, 9 and 11, 2.5% were transgender. Of these, transgender females were more exposed to violence while the transgender experienced more depression and substance use.

Comorbidities of LGBTQ

Several comorbidities have been the focus of research on LGBTQ. These include depression, anxiety, PTSD, eating disorders, substance use and suicide (Table 2).

<table>
<thead>
<tr>
<th>Comorbidities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
</tr>
<tr>
<td>Anxiety</td>
</tr>
<tr>
<td>PTSD</td>
</tr>
<tr>
<td>Eating disorders</td>
</tr>
<tr>
<td>Substance use</td>
</tr>
<tr>
<td>Suicide</td>
</tr>
</tbody>
</table>
Comorbidities of LGBTQ depression and substance use. In this sample of 31,898 adolescents from grades 7, 9 and in a study on transgender versus cisgender Thai adolescents and PTSD. Acknowledgment was associated with greater anxiety, depression associated with greater rape acknowledgment and lack of rape among trans and cisgender youth [28]. “Outness” was significantly LGBTQ affirming climate [26]. The underlying mechanism for was lower for females but greater for males in schools with an surprisingly, it’s less often the focus of research especially given disparities have been noted on exposure to violence in the literature on LGBTQ youth. Not of the authors’ interests.

28% of the variance in substance use. The selection of moderator concept which explained 74% of the variance in mental health and the victimization effect on mental health was mediated by self–concept factors including mastery, control and self-esteem. Depression, Anxiety and PTSD

Depression, Anxiety and PTSD has been prevalent in minority groups including LGBTQ. For example, in a study on 14- to 20-year-olds (N=946), three profiles emerged from a cluster analysis including 24% LGBTQ, 31% heterosexual youth of color and 39% heterosexual white [29]. The two minority groups experienced more depression as well as lower GPAs. Discrimination mediated the association between victimization and depression. Similarly, in a sample of 13-to 17-year-old adolescents (N=6,837), non-monosexual, transgender and queer minority groups experienced more depression [19]. Latinx and Native American adolescents also experienced more depression. All of these minority groups reported receiving less parental support which likely mediated the greater depression.

More frequently, depression has been comorbid with anxiety [8] and with anxiety and PTSD [1] in studies already reviewed for other problems.

Eating Disorders

High levels of food insecurity have also been reported as comorbidities of depression and anxiety in LGBTQ samples. For example, in a study entitled “Results of an online survey about food insecurity and eating disorder behaviors administered to a volunteer sample of self-described LGBTQ”, food insecurity was reported by 54% and was significantly greater in trans males at 65% [30]. In this sample, high levels of depression were noted in the males at 68%, in the females at 90%, and in 91% of trans males and 96% of gender nonconforming youth. High anxiety levels were also reported in 21% of the LGBTQ youth.

In a sample comprised of sexual minority females, greater BMIs, greater body dissatisfaction and greater eating pathology was noted in these females [31].

Substance Use

Substance use has also been highly associated with LGBTQ in several samples. For example, in the Youth risk behavior study (N= 31,279), synthetic cannabinoid use was linked to lesbian, gay, bisexual and questioning adolescents [32]. Both sexual orientation and gender identity were related to synthetic cannabinoid use.

In the Healthy kids survey in California (N=634,454), sexual minority girls had the greatest use followed by sexual minority guys including combustible and E-smoking use [33]. Wider disparities were noted in late adolescence. And in the Youth risk behavior surveillance system 2015 to 2019 (N=41,377), disparities were noted amongst sexual minority adolescents [34]. Cigarette use was greater at 15 versus 8%, E-cigarette use at 27 versus 23%, inhalants at 14 versus 5%, cocaine at 8 versus 4%, marijuana at 31 versus 20%, alcohol at 37 versus 30%, steroids at 6 versus 2%, heroin at 4 versus 1% and injectable drugs at 4 versus 1%. Not surprisingly, there was a greater prevalence of sadness or hopelessness in the sexual minority youth at 63 versus 29%, more youth were considering suicide at 46 versus 14% and planning suicide at 39 versus 12%.

Suicide

Suicide has been the focus of more studies than any other topic in the recent literature on LGBTQ and from several different countries. For example, in a study on Chinese students (N=1032 LGBTQ and N=72819 non–LGBTQ), the prevalence of attempted suicide was 4% with LGBTQ youth having four times the prevalence especially amongst 19-22-year-olds who were at greater risk [35]. The most common form of suicide attempts were cutting wrists and jumping from high heights. Both groups had similar risk factors including psychological problems, being from a rural area and having a history of non-fatal self-injurious behavior. This study is limited, as are most studies in this literature, by being cross-sectional and not analyzing the separate sexuality groups. Despite being cross-sectional, recall data were analyzed on childhood trauma with emotional and sexual abuse occurring more frequently in LGBTQ groups.

In a systematic review and meta-analysis of research on LGBTQ youth, 44 studies were included from the past 20 years [36]. Across these studies, suicide was noted to be the leading cause of death for 15- to 24-year-olds. LGBTQ youth had the greatest risk based on 234 correlation analyses. However, the variability of correlates and the lack of theoretically driven analyses limits these findings. In a paper entitled “Depression and suicide risk at the

<table>
<thead>
<tr>
<th>Depression, anxiety and PTSD</th>
<th>Price, Abreu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating disorders</td>
<td>Arikawa, Jones</td>
</tr>
<tr>
<td>Substance use</td>
<td>Stogner, Fish, Depa</td>
</tr>
<tr>
<td>Suicide</td>
<td>Wang, Hatchell, Branstrom, Price-Feenal, VanBronkhurst, Ream, Semborski, Chang, Fulginiti</td>
</tr>
</tbody>
</table>

Table 2: Comorbidities of LGBTQ and first authors.
cross-section of sexual orientation and gender identity for youth”, all youth but especially 14-to-18 years old were at heightened risk [37]. In this sample, transgender and youth questioning their sexuality or gender were especially high risk for depression and suicidality.

In a paper entitled “Transgender–based disparities in suicidality”, 533 transgender youth were compared to 104,757 cisgender youth [38]. The transgender youth had a greater lifetime and past 12-month suicidality rate. Mediators for suicidality were depression, a lack of social support as well as exposure to discrimination.

In still another paper focused on transgender and suicidality, 25,000 youth 13 to 24 years -old comprised the sample of cisgender and LGBTQ youth [39]. As compared to cisgender youth, LGBTQ youth had a greater risk for depressed mood, suicidal thinking and suicide attempts. Risk was particularly greater for transgender males and non-binary youth assigned female at birth.

Suicidality has also been studied in psychiatrically hospitalized LGBTQ and questioning youth [40]. In this sample of 334 youth from a Midwestern psychiatric hospital during the years 2016 and 2017 one third of the patients were LGBTQ. 70% had made suicide attempts versus 44% in the non-LGBTQ group. All the risk factors were greater in the LGBTQ group especially for those of color (black/Latinx/other). 91% of the group of color youth were LGBTQ versus 62% of the white youth. The study variables did not fully explain the greater prevalence in this group except that they had two risk factors versus one risk factor. The groups with adult support did not differ.

In a paper entitled “Trends in death by suicide 2014-2019 among LGBTQ youth”, 4086 were listed in the National violent death reporting system [41]. Of this sample, 678 were LGBTQ. The death by suicide prevalence was 13% before 2016 with an increase to 20% after that year. The authors suggested that the increase was largely driven by a growing prevalence of suicide among transgender and questioning youth. Asian bisexual females and gay males were especially over-represented in this particular sample.

Interpersonal Theory has been advanced as an underlying mechanism for suicide behavior in LGBTQ youth. For example, in one study entitled “Burden, belonging and homelessness”, a sample of 462 12-to 24-year-olds were surveyed from 2015 to 2017 [42]. Those who were not disclosing to their parents had greater perceived burdensomeness and thwarted belongingness as was predicted based on interpersonal theory. The more family members and peers in the youths’ network, the lower their interpersonal theory scores. Thus, the absence of disclosure was a risk factor.

In a longitudinal examination of Interpersonal Theory predicting suicidal ideation among LGBTQ youth, a national crisis hotline was sampled for 592 12-to-24-year old youth [43]. Perceived burdensomeness and thwarted belongingness independently predicted greater suicidal ideation one month later. Both were associated with greater suicidal ideation one month later for sexual minority cisgender women and transgender/gender queer youth. When both factors were entered into the model, only perceived burdensomeness remained significant.

In still another study assessing this theory, an attempt was made to integrate Interpersonal Theory with Minority Stress Theory in a sample of sexual minority youth (12–24-year-olds) who were recruited from an LGBTQ youth suicide prevention provider [44]. In a structural equations analysis, sexual minority status was associated with both perceived burdensomeness and thwarted belongingness models predicting suicide ideation and attempts. Minority stress had a direct effect on suicide attempts and an indirect effect for both suicide ideation and attempts through burdensomeness.

Suicide notes have been studied in a project entitled “Investigation of LGBTQ+ youth suicide disparity using national violent death reporting system narrative data” [41]. For deaths between 2013 and 2016, 394 cases of LGBTQ were compared with an equal number of cases of non-LGBTQ cases. 59% of youth between 12 and 17 years of age mentioned LGBTQ circumstances while only 30% of 18-to -29 year-olds mentioned those circumstances. Gay males, bisexual males and bisexual females suggested family/peer rejection and bullying. Lesbians more often reported romantic breakups.

Buffers

Buffers that have been reported in this literature include forms of acceptance and support. Specifically, the literature has focused on “outness”, updating documents, social support and connecting through technology/the Internet (Table 3).

<table>
<thead>
<tr>
<th>Buffers</th>
<th>First Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Outness”</td>
<td>Feinstein, Caba, Allen, Busby, DeChants</td>
</tr>
<tr>
<td>Acceptance/support</td>
<td>Green, Lytle, Fish, Montagno, Flanders</td>
</tr>
<tr>
<td>School climate</td>
<td>Ancheta, Shattuck</td>
</tr>
</tbody>
</table>

Table 3: Buffers for LGBTQ and first authors.

“Outness”

Outness effects have been both negative and positive. They have varied as a function of age, patterns of revealing to parents/teachers/peers and as a moderator variable. In a study on age differences in the association between outness and suicidality among LGBTQ+ youth, two different age groups were compared (N=475) [45]. These included a group of 12 to 17-year-olds versus
a group of 18 to 24-year-olds. Age significantly moderated the association between outness and suicidal ideation. The moderator effect suggested that for adolescents, greater outness was associated with greater suicidal ideation. Greater outness was also associated with more previous and future suicide attempts.

Others have also noted complex outness patterns among sexual minority youth [46]. Based on a latent class analysis, the patterns included 1) out to all but teachers, 2) out to siblings and peers, 3) out to siblings and LGBTQ peers, 4) out to LGBTQ peers, and 5) mostly not out. These groups also varied by age, sexual identity, gender identity, race and ethnicity, geography and well-being outcome. The complexity of the findings make these data difficult to interpret.

Similar data were noted when comparing transgender non-binary with binary youth [47]. In this sample of 287 transgender young people in Wisconsin, more than 40% identified as non-binary. The non-binary youth were less likely to be “out” to teachers but more likely to use supportive staff.

In another assessment of outness as a moderator, affirmation of LGBTQ identity moderated the link between victimization and depression [48]. This buffering effect was noted in an online screening survey of 868 sexual minority students.

The association between updating identification documents and suicidal ideation has also been assessed [49]. In this study on 6581 transgender and non-binary youth, a multivariate logistic regression revealed that the adjusted odds of attempting suicide during the last year were less for those who updated their identification documents.

Acceptance and Support

Sexual orientation acceptance by parents and peers has been the focus of a few studies in the recent literature and, not surprisingly with opposite effects to studies on parent and peer rejection. Acceptance has typically been assessed as the independent measure and suicidality as the dependent measure. In a study entitled “Association of sexual orientation acceptance with reduced suicide attempts among LGBTQ youth”, 40% fewer suicide attempts during the previous year were associated with sexual orientation acceptance by parents [50]. Acceptance by peers was also associated with fewer suicide attempts.

Family support has also been associated with fewer suicidal behaviors in a sample of LGBTQ youth who were meeting on a social network called TrevorSpace [51]. Although reaching out to a friend was more common, a large percent of the sample (N=203) did not seek help. No help-seeking was noted in 73% of gay males, 33% of bisexual males, 43% of bisexual females, 14% of lesbian women and 41% of queer youth. Others have analyzed the chat transcripts that have appeared on adult facilitated chat-based Internet programs for LGBTQ youth [33]. These authors concluded that based on this analysis of transcripts from 13-to-19-year-olds that chat-based programs were not only feasible but also accepted by youth.

Positive Identity

Others have noted the importance of engagement with the LGBTQ community for positive identity. Engagement in activism was reportedly effective at connecting with the LGBTQ community in a study on 1999 youth [52]. Still others have focused on positive identity experiences of young bisexual and other non-monosexual youth related to community support. For example, in a 28-day daily diary study, the most positive sexual identity experiences occurred at the interpersonal level [53]. And, in an interview study on 46 youth 14-to-17-years-old, the eight reasons given for positive experiences were a sense of community, acceptance and visibility in the community, support, discussing shared experiences, promoting authenticity, celebrating one’s identity, experiencing positive growth and not feeling limited by gender for romantic and sexual experiences. Similar research on resilience suggested the importance of managing conflicting family messages, navigating personal safety at schools, connecting through technology, confronting negative sentiment and demonstrating individual and collective resilience [54].

School Climate

School climate has been frequently noted for its positive effects in this recent literature on LGBTQ youth. In a systematic review of this literature, positive school climate was noted to significantly reduce mental health problems and suicidality [55], although this review was based on only six studies. In a paper entitled “Positive trends in school best practices to support LGBTQ youth in the US between 2010 and 2018”, an increase was noted between 2010 at 6% of schools implementing programs to 15% in 2018 [56]. This increase occurred in more than half of the states.

Interventions

School Programs

Interventions for LGBTQ students have primarily occurred in the schools. As was recently suggested, since adolescents spend so much time in school, how can the time there be leveraged to serve gender and sexuality alliances [57]. These interventions have been designed by teachers, parents and youth. An example of a youth-designed intervention was a randomized controlled trial that assigned students to education and interactive sessions (10 sessions at 45 minutes each)[58]. This program moderated the relationship between minority stress and PTSD, depression and suicidality (Table 4).
in those receiving gender–affirming hormone therapy. Revealed lower odds of depression and past year suicide attempts of gender identity. In an adjusted logistic regression, the results were receiving hormone therapy had had one parent supportive therapy but would like to, 36% were not interested and 14% who on hormone therapy in this literature, 34,759 13–24 year old as in conversion therapy but also In a positive way as in gender–

Hormone Therapy

Hormones have not only been manipulated in a negative way as in conversion therapy but also In a positive way as in gender–affirming hormone therapy. In the only study that could be found on hormone therapy in this literature, 34,759 13–24 year old LGBTQ youth were surveyed [63]. 50% were not using hormone therapy but would like to, 36% were not interested and 14% who were receiving hormone therapy had had one parent supportive of gender identity. In an adjusted logistic regression, the results revealed lower odds of depression and past year suicide attempts in those receiving gender–affirming hormone therapy.

Legislation

Legislation may ultimately be the only way to safeguard the rights of LGBTQ youth. In an article entitled “Assessing variations in sexual orientation –gender identity – related US state laws – 19 96–2016’, progress was noted in some domains as in same-sex marriage, adoption and employment discrimination [64]. However, as these authors suggested, significant challenges remain for sexual and gender minority rights especially transgender rights, discrimination in healthcare settings and the notable variability across states on state laws.

Limitations of this Literature

The recent research reviewed here has clearly focused on the negative experiences of LGBTQ youth. And some of the expected negative experiences like sleep disorders and romantic relationship break ups don’t even appear in this literature except for the one reference to minority females on the suicide registry leaving notes referring to romantic relationship breakups [41]. It may be that because of the problem of obtaining parental permission for engaging in research, most of the youth reporting have revealed their identity at least to their parents. And then engaging in anonymous surveys, which is the bulk of this literature, gives them leeway to express their negative experiences.

The problem of revealing identity for the purposes of research was the focus of a study entitled “Obtaining waivers of parental consent: a strategy endorsed by gay, bisexual and queer adolescent males for health prevention research” The adolescents in this study suggested that standard consent policies put sexual minority youth at risk for forced disclosure of sexual orientation to parents [65].

This suggests that perhaps only those who have disclosed their sexual orientation to their parents are participating in this research. Parents support the idea of their youth who at least have identified as LGBTQ participating in research. In at least one study, parents were in favor of their LGBTQ youth participating in research. For example, in a study on 31 parents of LGBTQ youth entitled “Parent perspectives about sexual minority adolescent participation in research and requirements of parental permission”, parents were presented a vignette describing an HIV behavior surveillance protocol [66]. 74% of the parents reported that parental permission should not be required for a minimal risk study.

Despite these positive views about participation in research, the recent literature has been limited to anonymous surveys, possibly because youth may not want to reveal their identity to others outside of their family and immediate circle of friends. That has significantly limited the ability to perform observational research and explore the relationships of LGBTQ youth.

Table 4: Interventions for LGBTQ stressors and first authors.

<table>
<thead>
<tr>
<th>Interventions</th>
<th>First Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth-designed intervention</td>
<td>Goldbach</td>
</tr>
<tr>
<td>Gay Straight Alliance</td>
<td>Poteat, Day, Kaczkowski, Lessaro</td>
</tr>
</tbody>
</table>

Several Gay Straight Alliance (GSA) programs have been created in all 50 states. An example appeared in a paper entitled “Gender-sexuality alliances as a moderator of the association between victimization, depressive symptoms and drinking behavior among LGBTQ youth”[59]. In this study, GSAs (school clubs) for 13-to-17-year-old students (N=5776) moderated the extent to which victimization and depression were associated with greater odds of recent heavy episodic drinking, highlighting the positive effects of GSAs.

In another study with a similar protocol, GSAs led to less bullying in a sample of 1061 youth [60]. The Youth Risk Behavior Survey was analyzed for the effects of gay straight alliance or similar clubs for connecting LGBTQ and non-LGBTQ youth (N=75,638) [61]. The data suggested that the GSAs were helpful for both the LGBTQ and non-LGBTQ youth for reducing suicide-related behavior and illicit drug use.

GSAs were assessed in still another study entitled “Membership experiences and gender-sexuality alliances (GSAs) predict increased hope and attenuate the effects of victimization” [62]. This sample was comprised of 366 students of 38 GSAs in which 85% were sexual minority youth and 78% were white students. And in another study entitled “Gay – straight alliances: a mechanism of health risk reduction among LGBTQ adolescents”, the National Teen Survey database was explored for GSA effects (N=17,112). In this sample as many as 73% had been bullied for stigmatized identities other than those related to their gender/sexual orientation. Bullying was lower in the GSA schools which attenuated adverse health outcomes including stress, sleep problems, depression and unhealthy weight control problems.
Many confounding variables have been apparent in this literature. Those variables include psychological problems, for example, depression as the primary comorbidity. The measures have typically been self or parent-reported and they have been so highly variable across studies that meta-analysis could not be conducted. Perhaps more problematically, regression analyses have rarely been conducted to determine the relative variance that the predictor variables have contributed to the effects of LGBTQ but also the contributing factors for LGBTQ. Longitudinal studies are needed to determine directionality of these variables. In addition, potential underlying mechanism research is needed for understanding the contributing factors to changing sexual orientation and gender identity and intervention research on supporting those changes.

The most significant problem may be that cross-sectional versus longitudinal studies have been the norm so that causality could not be determined.

Nonetheless, the recent literature on LGBTQ in youth has been informative, and several intervention studies have been mounted that have yielded positive effects. Even surprising effects have been noted such as the positive effects of GSAs for both LGBTQ and non-LGBTQ youth. Surprisingly, therapies such as cognitive behavior therapy and dialectical behavior therapy have not appeared in the recent literature, but the alliances and the support of peers may have been more effective in alleviating problems in this group of youth with LGBTQ.

Conclusions

Lesbian, gay, bisexual, transgender and queer/questioning youth have experienced stigma in the form of minority stressors including discrimination, harassment and violence. The disparities they have experienced include sexual and mental health, substance use and suicide risk. Since they spend much of their time in school, gay straight alliances have been created and have helped reduce these problems. Despite the limitations of this recent literature, the research highlights the ongoing problems of LGBTQ youth and the need for continuing research and interventions.

References


50. Green AE, Price-Feeney M, Dorison SH (2021) Association of Sexual Orientation Acceptance with Reduced Suicide Attempts Among Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning Youth. LGBT Health 8: 26-31


---

**Glossary**

L stands for lesbian: a woman who is physically, emotionally or romantically attracted to other women.

G stands for gay: a person who is physically, emotionally or romantically attracted to people within the same gender.

B stands for bisexual: a person who is physically, emotionally or romantically attracted to people within more than one sex, gender or gender identity.

T stands for transgender: a term for a person whose gender identity or expression is different than their sex assigned at birth.

Q stands for queer: an adjective used by some people whose sexual orientation is not exclusively heterosexual or straight. It's an umbrella term that includes people who have non-binary or gender-fluid identities. Non-binary describes a person whose gender identity falls outside strictly male or female. Gender-fluid describes a person whose gender identity or expression changes over time.

Q can also stand for questioning. Questioning is a term used to describe a person who is exploring their sexual orientation or gender identity.

I A + has been added: I stands for intersex: a term used to describe a person who was born with differences in their sex traits or reproductive anatomy that don't fit typical definitions of female or male. There may be differences in regards to genitalia, chromosomes, hormones, internal sex organs and/or secondary sex characteristics (e.g., pubic hair, breast, facial hair, etc).

A stands for asexual: a term used to describe a person who lacks sexual attraction or desire for other people. It's different from celibacy, in which people make a choice to abstain from sexual activity.
+ stands for plus: the + is a symbol that represents members of the community who identify with the sexual orientation or gender identity that isn't included within the LGBTQIA acronym it's an inclusive way of representing gender and sexual identities that letters and words cannot yet fully describe.

LGBTQ 2S+: 2S stands for two- spirit: A term that traditionally originated from Native American culture that describes people who are male, female or intersex I have both a male and female spirit within them. It’s sometimes referred to as a third gender.

LGBTQQIP2SAA

P stands for pansexual: a term that describes a person who may have a physical, emotional or romantic attraction to people of any gender. They may not experience these feelings at the same time or in the same way or level.

The second A stands for ally: A term that describes a person who actively supports the LGBTQ community. It includes people who are straight or cisgender (a term used to describe a person whose gender identity aligns with their sex at birth) and those within the LGBTQ community.