HHS Public Access

Author manuscript

LGBTQ Fam. Author manuscript; available in PMC 2023 June 29.

Published in final edited form as:

LGBTQ Fam. 2022 ; 18(4): 305–318. doi:10.1080/27703371.2022.2083041.

Family Rejection During COVID-19: Effects on Sexual and Gender Minority Stress and Mental Health Among LGBTQ University Students

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Abstract

This study examines the relationship between family rejection and moderate to severe psychological distress during COVID-19 among LGBTQ university students. Data were obtained from a national cross-sectional electronic survey of LGBTQ university students ($N = 565$) collected in the summer of 2020. Hierarchical logistic regression models were used to examine the predictive association between increased family rejection and moderate to severe psychological distress. Respondents who reported increased rejection were more than twice as likely to report moderate to severe psychological distress, with social isolation and LGBTQ identity concealment being significant covariate predictors in the model. These results demonstrate the importance of public health, medical, mental health, and higher education stakeholders understanding the significance of LGBTQ-identity related family rejection when addressing the mental health and well-being of LGBTQ young people.

Keywords

COVID-19; LGBTQ young adults; mental health; LGBTQ stressors

Introduction

Studies conducted during COVID-19 have shown a detrimental impact to mental health among young adults, including increases in post-traumatic stress, depression, and anxiety (Czeisler et al., 2020; Horigian et al., 2021; Liu et al., 2020). Prior to the pandemic, lesbian,

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Author Disclosure Statement

The authors declare no competing financial interests.

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gay, bisexual, transgender, and queer (LGBTQ) young people were already at increased risk for depression, anxiety, suicidality, and substance abuse (Plöderl & Tremblay, 2015; Price-Feeney et al., 2020; Russell & Fish, 2016; Valentine & Shipherd, 2018). Amid the ongoing COVID-19 pandemic, these trends are exacerbated among LGBTQ young people (Fish et al., 2021; Gato et al., 2021; Hawke et al., 2021; Kamal et al., 2021; Kidd et al., 2021; Moore et al., 2021). For example, one study by Li and Samp (2022) reported that adverse COVID-19 experiences increased internalized homophobia and negatively impacted mental health. Therefore, it is important to investigate intervenable psychosocial factors of mental health burden among LGBTQ young people amid the ongoing COVID-19 pandemic.

At the start of the pandemic (spring 2020), stay-at-home orders were implemented in various states to slow the spread of COVID-19. As a result, university campuses were closed, forcing many students to leave their campuses and return to potentially unsafe homes with unsupportive parents (Algarin et al., 2022; Gonzales et al., 2020), which is concerning given that universities often serve as safe havens for LGBTQ people who are not out at home or accepted by family (Hill et al., 2020; Parra et al., 2017; Woodford et al., 2018). As of Fall 2020 and Spring 2021, the majority of university campuses remained either completely (adopting fully online instruction) or partially (adopting hybrid in-person/online instruction) closed. (Smalley, 2021). The interruption of LGBTQ support such as resources, university-sanctioned clubs, and affirming individuals in the university setting (Hill et al., 2020; Pitcher et al., 2018; Woodford et al., 2018) perpetuated feelings of loneliness/social isolation and depression for students forced to return home as a result of the pandemic (Change et al., 2021; Gonzales et al., 2020; Hunt et al., 2021; Salerno, Devadas, et al., 2020; Scroggs et al., 2020). According to one study conducted by Conron et al. (2021), one-third of LGBTQ college students reported housing disruptions compared to 17% of non-LGBTQ respondents during COVID-19. Among those who returned home due to COVID-19-related housing disruptions, nearly half reported that they were not out to their parents (Conron et al., 2021). Thus, during the evolving COVID-19 pandemic, it is important to consider how living arrangement changes, social isolation, and outness to parents relate to mental health among LGBTQ young people.

Additionally, factors unique to LGBTQ persons, such as family rejection of LGBTQ identities, may have worsened mental health outcomes for LGBTQ people. For instance, LGBTQ young people may be confined to their parents' homes where they could face increased risk for psychological distress as a result of family rejection of their LGBTQ identities (Algarin et al., 2022; Gato et al., 2021; Salerno, Doan, et al., 2021). Family rejection of LGBTQ identities (Schmitz & Tyler, 2017; Taylor & Neppl, 2021), as well as other forms of internalized (e.g., internalized homophobia and transphobia and identity concealment; Brennan et al., 2021; Cramer et al., 2021; Newcomb & Mustanski, 2010; Pachankis et al., 2020; Puckett et al., 2018) and externalized (e.g., LGBTQ-related victimization; Para et al., 2017) LGBTQ-related minority stress have strong potential to negatively impact mental health (Clark et al., 2021; Klein & Golub, 2016; Pachankis et al., 2018; Salerno & Boekeloo, 2022).

Since the onset of the COVID-19 pandemic in early 2020, colleges and universities in the U.S. have resorted to switching classes from in-person to fully online or hybrid formats

respective to the severity and risk of transmission (AHCA, 2020). As COVID-19 continues to be a major disruptor and variants emerge, colleges and universities continue to adjust safety guidelines to mitigate COVID-19 transmission risk among students, faculty, and staff (ACHA, 2021; Smalley, 2021). As new waves of COVID-19 occur, access to affirming resources and mental health services may be affected. During these uncertain times, efforts to gain a better understanding of family rejection and its impact on LGBTQ university students and young people are critical for establishing interventions and prevention practices that may reduce the unique effects of the current mental health crisis affecting this population (Algarin et al., 2022; Salerno, Gattamorta, et al., 2022).

Current Study

The current study is guided by the Minority Stress Theory (Brooks, 1981; Meyer, 2003; Testa et al., 2015), which focuses on externalized (e.g., discrimination-related aggressions due to LGBTQ identities), and internalized (e.g. negative feelings associated with LGBTQ identities) minority stressors among LGBTQ persons. The broader mental health consequences of minority stressors that LGBTQ youth experience, including family rejection, have been documented (Dürrbaum & Sattler, 2019; Fish, Baams, et al., 2020; Newcomb et al., 2019; Newcomb & Mustanski, 2010; Pachankis et al., 2020). However, researchers have yet to examine specifically how family rejection during COVID-19 affects the mental health of LGBTQ young people and university students during this time.

This study examines the relationship between family rejection and psychological distress during COVID-19 among LGBTQ university students/young people. The authors hypothesize that increased family rejection since the start of COVID-19 will be significantly associated with moderate to severe psychological distress (adjusting for sociodemographic, social isolation, outness, and other SGM stress covariates). Producing such knowledge could improve understanding of the role family rejection plays in the mental health of LGBTQ university students/young people. Consequently, this new knowledge could be used to inform public health, mental health, and higher education research, practice, and policies to address the needs of LGBTTQ students both during the current pandemic and following its containment.

Methods

Participants and Procedures

The data analyzed in this study were derived from nonprobability cross-sectional data collected from a sample of LGBTQ students (N=565) to explore the effect of the pandemic on LGBTQ university students. Eligibility criteria for the parent study included being at least 18 years of age, identifying as a LGBTQ person, and being a university student. Data were collected between May 27-August 14, 2020, via online survey. Participants were recruited using an electronic study flyer distributed via multiple social media platforms (i.e., Facebook, LinkedIn, Twitter, Instagram) that included a link to an online Qualtrics survey. We also recruited through email campaigns within our internal and external professional networks, and at historically Black colleges and universities, Hispanic-serving institutions, and lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ) student centers

across the U.S. The recruitment flyer read, "*Are you an LGBTQ+ college student? Is COVID-19 impacting you? We need to hear from you*!" Upon clicking the link to the survey, participants immediately underwent a self-administered electronic informed consent process. Survey duration was approximately 20–25 minutes. Participants were incentivized with a raffle for a $50 Amazon gift card. The University of Maryland College Park Institutional Review Board granted approval for the study.

Measures

LGBTQ identity-related family rejection—Family rejection of LGBTQ identity was measured using 10 family rejection subscale items from the Sexual Minority Adolescent Stress Inventory (SMASI; my family does not want to talk to me about being LGBTQ") (Schrager et al., 2018) and 7 family rejection subscale items from the Daily Heterosexist Experiences Questionnaire (DHEQ; "being rejected by my mother for being LGBTQ") (Balsam et al., 2013). The SMASI has been previously validated in previous studies with youth and young adults (Chang et al, 2020; Fulginiti et al., 2020; Fulginiti et al., 2021). The DHEQ has been validated in previous studies with young adults (Balsam et al., 2013; Michaels et al, 2019). To capture increased frequency of LGBTQ identity-related family rejection since the start of the COVID-19 pandemic (based on participants' own perceptions), students were asked to indicate whether they experienced each item more often since the start of the pandemic (0=no, 1=yes). Specifically, participants responded either 1=*yes* or 0=*no* to the following question: 1) "Have you felt this way more often since the start of the COVID-19 pandemic?" for each individual item. A composite score was calculated by summing responses across the 17 items (range = 0–17, $M = 2.67$, $SD = 3.54$, $\alpha = .889$). However, due to the positive skew of the distribution, scores were dichotomized to reflect either no change in family rejection during the pandemic or any increase in family rejection during the pandemic.

Covariates—Living with parents was a dichotomous variable that captured whether respondents were living with their parents during the COVID-19 pandemic. Respondents who were living with their parents prior to the pandemic and whose living arrangements did not change during the pandemic, as well as respondents who were not living with their parents prior to the pandemic but moved back in with their parents during the COVID-19 pandemic were coded affirmatively (1). Those who were not currently living with their parents at the time the survey was completed were coded as zero.

Returned to parents' home was a dichotomous variable that captured whether respondents returned home to live with their parents during the COVID-19 pandemic. Only respondents who were not living with their parents prior to the pandemic but moved back in with their parents during the COVID-19 pandemic were coded affirmatively (1).

Social isolation was measured using the 3-item loneliness scale (Hughes et al., 2004). The 3-item measure uses a 3-point ordinal-level scale (1=hardly ever, 2=some of the time, 3=often) to assess current level of social isolation. A composite score (range=3–9) was calculated by summing responses across the three items; a greater score indicated more

social isolation. The measure demonstrated strong internal consistency in the current sample (α=.760).

Outness to parents was a dichotomous variable. Respondents that who indicated that they were not out to either parent, as well as those who indicated that they did not have parents were coded as not being out to their parents (0). Respondents who indicated that they were out to at least one parent were coded as being out to their parents (1).

LGBTQ identity concealment was measured using 3 items from the LGBT Minority Stress Measure (LMSM; Outland, 2016) and 4 items from the Daily Heterosexist Experiences Questionnaire (DHEQ; Balsam et al., 2013) about LGBTQ-related identity concealment. Sample items included whether they had "avoided talking about my romantic life because I do not want others to know I am LGBTQ" and "Pretended that I had an opposite-sex partner". To capture increased frequency of identity concealment since the start of the COVID-19 pandemic (based on participants own perceptions), students were asked to indicate whether they experienced each item more often since the start of the pandemic (0=no, 1=yes). Specifically, participants responded either 1=*yes* or 0=*no* to the following question: 1) "Have you felt this way more often since the start of the COVID-19 pandemic?" for each individual item. A composite score was calculated by summing responses across the 7 items (range = 0–7, $M = 1.89$, $SD = 2.17$). The measure showed strong internal consistency in the current sample (α=.852). However, due to the positive skew of the distribution, scores were dichotomized to reflect no change in identity concealment during the pandemic or any increase in identity concealment during the pandemic.

LGBTQ identity-related victimization was measured using 4 items from the DHEQ (Balsam et al., 2013) and 2 items from the LMSM (Outland, 2016) about LGBTQ identity-related victimization. Sample items included "Being threatened with harm because I am LGBTQ" and "Having objects thrown at me because I am LGBTQ". To capture increased frequency of victimization since the start of the COVID-19 pandemic (based on participants' own perceptions), students were asked to indicate whether they experienced each item more often since the start of the pandemic (0=no, 1=yes). Specifically, participants responded either 1=*yes* or 0=*no* to the following question: 1) "Have you felt this way more often since the start of the COVID-19 pandemic?" for each individual item. A composite score was calculated by summing responses across the 6 items (range = 0–6, $M = 0.13$, $SD = 0.59$). The measure showed strong internal consistency in the current sample (α=.775). However, due to the positive skew of the distribution, scores were dichotomized to reflect no change in victimization during the pandemic or any increase in victimization during the pandemic.

Internalized Homophobia was measured using 7 items from the LMSM (Outland, 2016). Sample items included: "I wish I wasn't LGBTQ" and "I feel that being LGBTQ is a personal flaw in me". To capture increased frequency of internalized homophobia since the start of the COVID-19 pandemic (based on participants' own perceptions), students were asked to indicate whether they experienced each item more often since the start of the pandemic (0=no, 1=yes). Specifically, participants responded either 1=*yes* or 0=*no* to the following question: 1) "Have you felt this way more often since the start of the COVID-19 pandemic?" for each individual item. A composite score was calculated by summing

responses across the 7 items (range 0 – 7, $M = 0.94$, $SD = 1.76$). The measure showed strong internal consistency in the current sample (α=.864). However, due to the positive skew of the distribution, scores were dichotomized to reflect no change in internalized homophobia during the pandemic or any increase in internalized homophobia during the pandemic.

Among the participants with a non-cisgender identity, Internalized Transphobia was measured using 10 items from the Gender Minority Stress and Resilience Scale (Testa et al., 2015). Sample items included: "I resent my gender identity or expression" and "When I think of my gender identity or expression, I feel unhappy". To capture increased frequency of internalized transphobia since the start of the COVID-19 pandemic (based on participants' own perceptions), students were asked to indicate whether they experienced each item more often since the start of the pandemic (0=no, 1=yes). Specifically, participants responded either 1=*yes* or 0=*no* to the following question: 1) "Have you felt this way more often since the start of the COVID-19 pandemic?" for each individual item. A composite score was calculated by summing responses across the 10 items (range = 0 – 10, $M = 2.69$, $SD = 3.08$). The measure showed strong internal consistency in the current sample (α=.880). However, due to the positive skew of the distribution, scores were dichotomized to reflect no change in internalized transphobia during the pandemic or any increase in internalized transphobia during the pandemic.

Psychological Distress—Psychological distress was measured using the Kessler-10 (K10) (Kessler et al., 2002), a previously validated measure of current psychological distress. This 10-item scale uses a 5-point Likert scale (1 = none of the time and 5 = all of the time) to assess distress within the past 30 days. Respondents were asked about feelings of distress including feeling tired, nervous, hopeless, restless, and depressed, among others. The measure showed strong internal consistency in the current sample (α=.907). Scores on the K10 were dichotomized to reflect moderate to severe psychological distress compared to mild to no distress.

Data Analysis

Data management and analyses were conducted using IBM SPSS Statistics for Mac, Version 26. Following descriptive statistics, a series of hierarchical logistic regressions were used to examine the associations between increased family rejection and current moderate to severe psychological distress. Three nested models were compared; the first model included four covariates (living with parents during COVID, returning home to parents during COVID-19, being out to parents, and current social isolation), the second model added increased LGBTQ identity concealment, increased LGBTQ-related victimization, increased internalized homophobia, and increased internalized transphobia since the start of the pandemic, and the third model added increased LGBTQ identity-related family rejection. This approach allowed us to determine whether the addition of increased LGBTQ identity-related family rejection significantly improved model fit above and beyond what was accounted for by study covariates and by other SGM stressors.

Results

Table 1 includes a summary of key demographic characteristics for the sample. The sample consisted mostly of students who were assigned female at birth (78.5%) and cisgender (68.7%), White (75.7%), and non-Hispanic (85.7%). Sexual orientation varied, with bisexual identity having the highest frequency (32.5%), followed by lesbian (17.6%), queer (15.5%), and gay (13.7%). Respondents ranged in age from 18 to 50 years old with an average age of 21.97 years (*SD*=3.94) and included mostly undergraduates (68.6%). Lastly, most students reported being financially dependent on their parents (83.5%), and more than half were out to (65.8%) and currently living with (57.8%) their parents.

Logistic regression results are displayed in Table 2. The inclusion of family rejection as a predictor along with the covariates and other SGM stressors improved model fit χ^2 (1, N = 501) = 10.60, p =.001. LGBTQ university students who reported increased family rejection since the start of COVID-19 were more than twice as likely to report moderate to severe psychological distress compared to those who did not report an increase in family rejection (*OR* = 2.14. p = .001), $-2LL$ = 581.05, χ^2 (8, N = 501) = 69.71, p <.001 after adjusting for living with parents (*aOR* = 0.88, p = .703), returning home (*aOR* = 1.05, p = .886), out to parents (*aOR* = 1.21, p = .426), social isolation (*aOR* = 1.08, p = .026), increased LGBTQ identity concealment (*aOR* = 2.21, p = .001), increased LGBTQ victimization (*aOR* = 2.21, p = .129), and increased homophobia (*aOR* = 1.22, p = .420). It should be noted that in addition to increased family rejection, social isolation and increased LGBTQ identity concealment were also independently significant predictors of moderate to severe psychological distress.

For the subset of respondents who identified as transgender or another nonbinary identity, the inclusion of LGBTQ identity-related family rejection as a predictor along with the covariates and other SGM stressors did not significantly improve model fit χ^2 (1, N = 152) = 0.09, p =.770. However, the inclusion of other SGM stressors did improve model fit above and beyond the covariates χ^2 (1, N = 152) = 9.94, p =.041. The only significant predictor of moderate to severe psychological distress was increased transphobia (*aOR* = 2.68, p = .045), with LGBTQ students who reported an increase in transphobia being 2.68 times more likely to report moderate to severe psychological distress after controlling for the covariates and other SGM stressors. Living with parents (*aOR* = 1.66, p = .419), returning to parents' home (*aOR* = 1.29, p = .715), out to parents (*aOR* = 1.57, p = .421), social isolation (*aOR* = 1.12, p = .193), increased LGBTQ identity concealment (*aOR* = 1.64, p = .331), increased LGBTQ victimization (*aOR* = 1.93, p = .564), and increased homophobia (*aOR* = 1.29, p = .656) were not significant predictors of moderate to severe psychological distress among transgender/nonbinary students.

Discussion

The findings of this study highlight the critical and unique role family rejection plays in relation to mental health. Indeed, after adjusting analyses for study covariates and other SGM stressors, respondents who reported an increase in the frequency of LGBTQ identity-related family rejection since the start of COVID-19 were more likely to suffer

from moderate to severe psychological distress, confirming our study hypotheses. Findings are consistent with Minority Stress Theory (Brooks, 1981; Meyer, 2003; Testa et al., 2015), which explains that family rejection of LGBTQ identities has strong potential to negatively impact mental health, and with recent theorizations that risk for such LGBTQ identity-related family rejection and consequent mental health burden could be exacerbated during the ongoing COVID-19 pandemic (Fish et al., 2020; Gato et al., 2021; Gonzales et al., 2020). Study results extend these recent COVID-19 related theorizations by demonstrating that LGBTQ identity-related family rejection negatively impacts mental health above and beyond the impact of other SGM stress experiences and sociodemographic/social isolation covariates amid the ongoing COVID-19 pandemic. Results highlight the importance of addressing LGBTQ identity-related family rejection in order to mitigate mental health burden among LGBTQ young people and university students in the context of the COVID-19 pandemic and thereafter.

Also of importance were the findings related to increased social isolation and LGBTQ identity concealment during COVID-19. Both social isolation and increased LGBTQ identity concealment were found to be positively associated with moderate to severe psychological distress. Findings emphasize the unique impacts of LGBTQ identity-related family rejection, social isolation, and LGBTQ identity concealment toward the mental health of LGBTQ young people amid COVID-19. Study results have important public health implications for the mental health and well-being of LGBTQ young people in and out of the context of COVID-19.

Limitations

The findings of this study should be interpreted with caution due to some limitations, including the anonymous nature of the study. Because of the cross-sectional nature of the study, temporality and causality cannot be established; for instance, we cannot examine how our findings would compare/contrast to data that were gathered before or after summer 2020. This is particularly important given the long-lasting and evolving nature of the COVID-19 pandemic and the importance of examining the impact of the pandemic over time. Ongoing longitudinal studies may be able to shed light to address this limitation in the near future. A non-probability sampling strategy further impacts our ability to generalize findings to broader populations. Additionally, selection bias is possible owing to the fact that internet access was required to access and complete the survey. However, given that the target population was university students - many of whom were involved with online learning at the time - the population targeted for this study was likely to have regular internet access. Another important limitation to note was the dichotomous nature of LGBTQ identity-related family rejection and the outcome variables, including psychological distress and other SGM stressors. Although the measures of these constructs initially yielded continuous scores, the positively skewed nature of the distribution did now allow us to treat the variables continuously; consequently, a decision was made to dichotomize them. This has implications for interpretability, as these constructs are continuous in nature but treated as binary for analysis. The decision to dichotomize a continuous variable impacts variance and statistical power. Nevertheless, statistical significance was still observed with most outcome variables. Additionally, respondents were asked to retrospectively recall whether

their experiences of LGBTQ identity-related family rejection and other SGM stressors increased since the start of the pandemic, which are subject to recall and social desirability biases. Despite these limitations, this study has important public health implications for LGBTQ young people that are particularly timely and relevant to consider amid the ongoing COVID-19 pandemic.

Implications

There are several public health and practice-related implications from the current study findings. First, previous findings have emphasized that compared to before the pandemic (Dunbar et al., 2017), LGBTQ university students are experiencing greater levels of severe psychological distress amid COVID-19 (Gonzales et al., 2020). The current study adds to these findings by demonstrating the impact of LGBTQ-related family rejection on psychological distress among LGBTQ university students/young people, particularly amid the COVID-19 pandemic. Given that LGBTQ people are already more likely to utilize mental health services compared to their heterosexual and cisgender counterparts (Bourdon et al., 2020; Dunbar et al., 2017; Filice & Meyer, 2018; Progovac et al., 2018), amid the ongoing COVID-19 pandemic, it is imperative to prepare a mental health workforce that is able to address the mental health concerns of LGBTQ young people (Phillips et al., 2020; Williams & Fish, 2020), especially concerns related to family rejection.

Similarly, it is imperative for medical and higher education stakeholders to implement affirming and competent practices that address family rejection among LGBTQ young people and university students. Based on our findings, higher education, mental health, and medical practice stakeholders are encouraged to draw on various resources to promote family and parental acceptance to address mental health concerns among LGBTQ young people (Cohen et al., 2018; Diamond & Shpigel, 2014; Katz-Wise et al., 2016; Ryan, 2009; SAMHSA, 2014). Given the important role of parental and family acceptance (and rejection) in pathways toward LGBTQ mental health burden, it would be beneficial and important to implement primary prevention practices that are inclusive of parents, family members, and LGBTQ youth, including provision of educational resources and implementation of affirmative responses for supporting LGBTQ young people and their non-heterosexual/cisgender identities. One example of an important resource is Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) for LGBTQ Youth and their Caregivers (Cohen et al., 2018) a manual that provides strategies for implementing an evidence-based youth trauma treatment for LGBTQ youth and their parents or caregivers. This work was informed by Caitlin Ryan's family support model and the Family Acceptance Project ® (FAP; Ryan, 2009). Both TF-CBT and FAP are strength-based approaches that build resiliency by integrating parents as sources of support for the youth. In addition, both approaches share some core assumptions, including that most parents love their children and ultimately desire their health and happiness. These two approaches also utilize cultural values as strengths that can be incorporated into treatment.

Future Research

As previously noted, it is important to examine the role of living arrangements and how they may influence the mental and physical health of LGBTQ young people amid the

ongoing COVID-19 pandemic. Also of importance is the need to examine the effect of the COVID-19 pandemic over time given its long-lasting and ever-evolving nature. Both retrospective and longitudinal studies could help shed light on this while simultaneously exploring the effects of family rejection and other SGM stressors on mental health among LGBTQ young people.

Conclusions

The COVID-19 pandemic is a global and historical crisis that will have long-term negative physical and mental health impacts across youth and young adults in general. However, there are stressful circumstances related to the context of the pandemic that are unique to LGBTQ young people, such as family rejection of LGBTQ identities, which can cause differential mental health impacts among LGBTQ young people. Given the current study results and the previously established life course mental and physical health impacts of family rejection, acceptance, and support among LGBTQ youth (Clark et al., 2021; McConnell et al., 2016; Needham & Austin, 2010; Pachankis et al., 2018), it is imperative for public health, medical, mental health, and higher education stakeholders to address family rejection of LGBTQ young people in the context of the COVID-19 pandemic and beyond.

Acknowledgements

The authors are grateful to the study participants for taking the time to complete the survey and share their experiences. The authors are thankful to the various LGBTQ student centers, student affairs and diversity offices, and professors and colleagues across the U.S. who disseminated information about this study and do valuable work for marginalized individuals in their communities.

Funding Information

This work was supported by the University of Maryland Prevention Research Center, cooperative agreement #U48 DP006382 from the Centers for Disease Control and Prevention (CDC). Salerno acknowledges support from the National Institute of Mental Health (Award Number 1R36MH123043) of the National Institutes of Health (NIH).

References

ACHA. (2020). Supporting vulnerable campus populations during the COVID-19 pandemic. American College Health Association. https://www.acha.org/documents/resources/guidelines/ACHA_Supporting_Vulnerable_Populations_During_the_COVID-19_Pandemic_August2020.pdf

ACHA. (2021). Considerations for reopening institutions of higher education for the fall semester 2021. American College Health Association. https://www.acha.org/documents/resources/guidelines/ACHA_Considerations_for_Reopening_IHEs_for_Fall_2021_5.25.21.pdf

Algarin A, Salerno JP, Shrader C, Lee J, & Fish JN (2022). Associations between Living Arrangement and Sexual and Gender Minority Stressors among University Students Since the Start of the COVID-19 Pandemic. Journal of American College Health (in press). 10.1080/07448481.2022.2076560

Balsam KF, Beadnell B, & Molina Y (2013). The Daily Heterosexist Experiences Questionnaire: Measuring minority stress among lesbian, gay, bisexual, and transgender adults. Measurement and Evaluation in Counseling and Development, 46(1), 3–25. 10.1177/0748175612449743 [PubMed: 24058262]

Bourdon JL, Liadis A, Tingle KM, & Saunders TR (2020). Trends in mental health service utilization among LGB+ college students. Journal of American College Health, 1–9. 10.1080/07448481.2019.1706537

Brennan JM, Dunham KJ, Bowlen M, Davis K, Ji G, & Cochran BN (2021). Inconcealable: A cognitive–behavioral model of concealment of gender and sexual identity and associations with

physical and mental health. Psychology of Sexual Orientation and Gender Diversity, 8(1), 80–93. 10.1037/sgd0000424

Brooks VR (1981). Minority Stress and Lesbian Women. Lexington Books.

Chang CJ, Kellerman J, Feinstein BA, Selby E, & Goldbach J (2020). Greater minority stress is associated with lower intentions to disclose suicidal thoughts among LGBTQ + youth. Archives of Suicide Research, 1–15. 10.1080/13811118.2020.1818656

Chang CJ, Feinstein BA, Chu BC, & Selby EA (2021). The negative impact of COVID-19 on sexual minority young adults: Demographic differences and prospective associations with depression. Psychology of Sexual Orientation and Gender Diversity, 8(2), 220–227. 10.1037/sgd0000494

Clark KA, Dougherty LR, & Pachankis JE (2021). A study of parents of sexual and gender minority children: Linking parental reactions with child mental health. Psychology of Sexual Orientation and Gender Diversity. 10.1037/sgd0000456

Cohen J, Mannarino A, Wilson K, & Zinny A (2018). Trauma-focused cognitive behavioral therapy LGBTQ implementation manual. Allegheny Health Network. https://familyproject.sfsu.edu/sites/default/files/TF-CBT LGBT Implementation Manual_v1.pdf

Conron KJ, O'Neill K, & Sears B (2021). COVID-19 and students in higher education: A 2021 stuy of the impact of the COVID-19 pandemic on the educational experiences of LGBTQ and non-LGBTQ U.S. adults aged 18–40. The Williams Institute, UCLA, Los Angeles, CA. https://williamsinstitute.law.ucla.edu/wp-content/uploads/LGBTQ-College-Student-COVID-May-2021.pdf

Cramer RJ, Kaniuka AR, Yada FN, Diaz-Garelli F, Hill RM, Bowling J, Macchia JM, & Tucker RP (2021). An analysis of suicidal thoughts and behaviors among transgender and gender diverse adults. Social Psychiatry and Psychiatric Epidemiology, 57(1), 195–205. 10.1007/s00127-021-02115-8 [PubMed: 34106286]

Czeisler MÉ, Lane RI, Petrosky E, Wiley JF, Christensen A, Njai R, Weaver MD, Robbins R, Facer-Childs ER, Barger LK, Czeisler CA, Howard ME, & Rajaratnam SMW (2020). Mental health, substance use, and suicidal ideation during the Covid-19 pandemic - United States, June 24–30, 2020. MMWR. Morbidity and Mortality Weekly Report, 69(32), 1049–1057. 10.15585/MMWR.MM6932A1 [PubMed: 32790653]

Diamond GM, & Shpigel MS (2014). Attachment-based family therapy for lesbian and gay young adults and their persistently nonaccepting parents. Professional Psychology, Research and Practice, 45(4), 258–268. 10.1037/a0035394

Dunbar MS, Sontag-Padilla L, Ramchand R, Seelam R, & Stein BD (2017). Mental health service utilization among lesbian, gay, bisexual, and questioning or queer college students. The Journal of Adolescent Health, 61(3), 294–301. 10.1016/j.jadohealth.2017.03.008 [PubMed: 28549595]

Dürrbaum T, & Sattler FA (2019). Minority stress and mental health in lesbian, gay male, and bisexual youths: A meta-analysis. Journal of LGBT Youth, 17(3), 298–314. 10.1080/19361653.2019.1586615

Filice E, & Meyer SB (2018). Patterns, predictors, and outcomes of mental health service utilization among lesbians, gay men, and bisexuals: A scoping review. Journal of Gay & Lesbian Mental Health, 22(2), 162–195. 10.1080/19359705.2017.1418468

Fish JN, Baams L, & McGuire J (2020). Sexual and gender minority mental health among children and youth. The Oxford Handbook of Sexual and Gender Minority Mental Health, 228–244. 10.1093/oxfordhb/9780190067991.013.21

Fish JN, McInroy LB, Paceley MS, Williams ND, Henderson S, Levine DS, & Edsall RN (2020). "I'm kinda stuck at home with unsupportive parents right now": LGBTQ youths' experiences with COVID-19 and the importance of online support. The Journal of Adolescent Health, 67(3), 450–452. 10.1016/j.jadohealth.2020.06.002 [PubMed: 32591304]

Fish JN, Salerno JP, Williams ND, Rinderknecht RG, Drotning KJ, Sayer L, & Doan L (2021). Sexual minority disparities in health and well-being as a consequence of the COVID-19 pandemic differ by sexual identity. LGBT Health, 8(4), 263–272. 10.1089/lgbt.2020.0489 [PubMed: 33887160]

Fulginiti A, Goldbach JT, & Marshal MP (2020). Integrating minority stress theory and the interpersonal theory of suicide among sexual minority youth who engage crisis services. Suicide and Life-Threatening Behavior, 50(3), 601–616. 10.1111/sltb.12623 [PubMed: 32048340]

Fulginiti A, Rhoades H, Mamey MR, Klemmer C, Srivastava A, Weskamp G, & Goldbach JT (2021). Sexual minority stress, mental health symptoms, and suicidality among LGBTQ youth accessing crisis services. Journal of Youth and Adolescence, 50(5), 893–905. 10.1007/s10964-020-01354-3 [PubMed: 33206318]

Gato J, Barrientos J, Tasker F, Miscioscia M, Cerqueira-Santos E, Malmquist A, Seabra D, Leal D, Houghton M, Poli M, Gubello A, Ramos MM, Guzman M, Urzua A, Ulloa F, & Wurm M (2021). Psychosocial effects of the COVID-19 pandemic and mental health among LGBTQ+ young adults: A cross-cultural comparison across six nations. Journal of Homosexuality, 68(4), 612–630. 10.1080/00918369.2020.1868186 [PubMed: 33480823]

Gonzales G, Loret de Mola E, Gavulic KA, McKay T, & Purcell C (2020). Mental health needs among lesbian, gay, bisexual, and transgender college students during the COVID-19 pandemic. The Journal of Adolescent Health, 67(5), 645–648. 10.1016/j.jadohealth.2020.08.006 [PubMed: 32933837]

Hawke LD, Hayes E, Darnay K, & Henderson J (2021). Mental health among transgender and gender diverse youth: An exploration of effects during the COVID-19 pandemic. Psychology of Sexual Orientation and Gender Diversity. 10.1037/sgd0000467

Hill RL, Nguyen DJ, Kilgo CA, Lange AC, Shea HD, Renn KA, & Woodford MR (2020). How LGBTQ+ students thrive in college. Journal of Student Affairs Research and Practice, 58(3), 267–281. 10.1080/19496591.2020.1738241

Horigian VE, Schmidt RD, & Feaster DJ (2021). Loneliness, mental health, and substance use among US young adults during COVID-19. Journal of Psychoactive Drugs, 53(1), 1–9. 10.1080/02791072.2020.1836435 [PubMed: 33111650]

Hughes ME, Waite LJ, Hawkley LC, & Cacioppo JT (2004). A short scale for measuring loneliness in large surveys: Results from two population-based studies. Research on Aging, 26(6), 655–672. 10.1177/0164027504268574 [PubMed: 18504506]

Hunt C, Gibson GC, Vander Horst A, Cleveland KA, Wawrosch C, Granot M, Kuhn T, Woolverton CJ, & Hughes JW (2021). Gender diverse college students exhibit higher psychological distress than male and female peers during the novel coronavirus (COVID-19) pandemic. Psychology of Sexual Orientation and Gender Diversity. 10.1037/sgd0000461

Kamal K, Li JJ, Hahm HC, & Liu CH (2021). Psychiatric impacts of the COVID-19 global pandemic on U.S. sexual and gender minority young adults. Psychiatry Research, 299, 113855. 10.1016/j.psychres.2021.113855 [PubMed: 33721788]

Katz-Wise SL, Rosario M, & Tsappis M (2016). Lesbian, gay, bisexual, and transgender youth and family acceptance. Pediatric Clinics of North America, 63(6), 1011–1025. 10.1016/j.pcl.2016.07.005 [PubMed: 27865331]

Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL, Walters EE, & Zaslavsky AM (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine, 32(6), 959–976. 10.1017/s0033291702006074 [PubMed: 12214795]

Kidd JD, Jackman KB, Barucco R, Dworkin JD, Dolezal C, Navalta TV, Belloir J, & Bockting WO (2021). Understanding the impact of the COVID-19 pandemic on the mental health of transgender and gender nonbinary individuals engaged in a longitudinal cohort study. Journal of Homosexuality, 68(4), 592–611. 10.1080/00918369.2020.1868185 [PubMed: 33502286]

Klein A, & Golub SA (2016, Jun). Family rejection as a predictor of suicide attempts and substance misuse among transgender and gender nonconforming adults. LGBT Health, 3(3), 193–199. 10.1089/lgbt.2015.0111 [PubMed: 27046450]

Li Y, & Samp JA (2022). The impact of the COVID-19 pandemic on sexual orientation disclosure and post-disclosure depression among U.S. LGBQ individuals. Journal of Applied Communication Research, 1–18. 10.1080/00909882.2022.2044503

Liu CH, Zhang E, Wong GTF, Hyun S, & Hahm HC (2020). Factors associated with depression, anxiety, and PTSD symptomatology during the COVID-19 pandemic: Clinical implications for U.S. young adult mental health. Psychiatry Research, 290, 113172–113172. 10.1016/j.psychres.2020.113172 [PubMed: 32512357]

McConnell EA, Birkett M, & Mustanski B (2016). Families matter: Social support and mental health trajectories among lesbian, gay, bisexual, and transgender youth. The Journal of Adolescent Health, 59(6), 674–680. 10.1016/j.jadohealth.2016.07.026 [PubMed: 27707515]

McLean LL (2021). Internalized homophobia and transphobia. In Lund EM, Burgess C, & Johnson A (Eds.), Violence Against LGBTQ+ Persons (1 ed.). Springer International Publishing. 10.1007/978-3-030-52612-2_3

Meyer IH (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. Psychological Bulletin, 129(5), 674–697. 10.1037/0033-2909.129.5.674 [PubMed: 12956539]

Michaels Choi, N.-Y., Adams EM, & Hitter TL (2019). Testing a new model of sexual minority stress to assess the roles of meaning in life and internalized heterosexism on stress-related growth and life satisfaction. Psychology of Sexual Orientation and Gender Diversity, 6(2), 204–216. 10.1037/sgd0000320

Moore SE, Wierenga KL, Prince DM, Gillani B, & Mintz LJ (2021). Disproportionate impact of the COVID-19 pandemic on perceived social support, mental health and somatic symptoms in sexual and gender minority populations. Journal of Homosexuality, 68(4), 577–591. 10.1080/00918369.2020.1868184 [PubMed: 33399504]

Needham BL, & Austin EL (2010). Sexual orientation, parental support, and health during the transition to young adulthood. Journal of Youth and Adolescence, 39(10), 1189–1198. 10.1007/s10964-010-9533-6 [PubMed: 20383570]

Newcomb ME, LaSala MC, Bouris A, Mustanski B, Prado G, Schrager SM, & Huebner DM (2019, May/Jun). The influence of families on LGBTQ youth health: A call to action for innovation in research and intervention development. LGBT health, 6(4), 139–145. 10.1089/lgbt.2018.0157 [PubMed: 30844341]

Newcomb ME, & Mustanski B (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. Clinical Psychology Review, 30(8), 1019–1029. 10.1016/j.cpr.2010.07.003 [PubMed: 20708315]

Outland PL (2016). Developing the LGBT Minority Stress Measure. [Masters theses, Colorado State University]. Colorado State University. Libraries. https://mountainscholar.org/handle/10217/176760

Pachankis JE, Mahon CP, Jackson SD, Fetzner BK, & Bränström R (2020). Sexual orientation concealment and mental health: A conceptual and meta-analytic review. Psychological Bulletin, 146(10), 831–871. 10.1037/bul0000271 [PubMed: 32700941]

Pachankis JE, Sullivan TJ, & Moore NF (2018). A 7-year longitudinal study of sexual minority young men's parental relationships and mental health. Journal of Family Psychology, 32(8), 1068–1077. 10.1037/fam0000427 [PubMed: 29927284]

Parra LA, Bell TS, Benibgui M, Helm JL, & Hastings PD (2017). The buffering effect of peer support on the links between family rejection and psychosocial adjustment in LGB emerging adults. Journal of Social and Personal Relationships, 35(6), 854–871. 10.1177/0265407517699713

Phillips II G, Felt D, Ruprecht MM, Wang X, Xu J, Perez-Bill E, Bagnarol RM, Roth J, Curry CW, & Beach LB (2020). Addressing the disproportionate impacts of the COVID-19 pandemic on sexual and gender minority populations in the United States: Actions toward equity. LGBT Health, 7(6), 279–282. 10.1089/lgbt.2020.0187 [PubMed: 32790495]

Pitcher EN, Camacho TP, Renn KA, & Woodford MR (2018). Affirming policies, programs, and supportive services: Using an organizational perspective to understand LGBTQ+ college student success. Journal of Diversity in Higher Education, 11(2), 117–132. 10.1037/dhe0000048

Plöderl M, & Tremblay P (2015). Mental health of sexual minorities. A systematic review. International Review of Psychiatry, 27(5), 367–385. 10.3109/09540261.2015.1083949 [PubMed: 26552495]

Price-Feeney M, Green AE, & Dorison S (2020). Understanding the mental health of transgender and nonbinary youth. The Journal of Adolescent Health, 66(6), 684–690. 10.1016/j.jadohealth.2019.11.314 [PubMed: 31992489]

Progovac AM, Cook BL, Mullin BO, McDowell A, Sanchez RM, Wang Y, Creedon TB, & Schuster MA (2018). Identifying gender minority patients' health and health care needs in administrative claims data. Health Affairs (Millwood), 37(3), 413–420. 10.1377/hlthaff.2017.1295

Puckett Wolff, J. R., Gunn HA, Woodward EN, & Pantalone DW (2018). An investigation of religion and spirituality of sexual minorities in the United States: Exploring perceptions, intrinsic religiosity, and outness to religious communities. The International Journal for the Psychology of Religion, 28(3), 145–161. 10.1080/10508619.2018.1464858

Russell ST, & Fish JN (2016). Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. Annual Review of Clinical Psychology, 12(1), 465–487. 10.1146/annurev-clinpsy-021815-093153

Ryan C (2009). Supportive families, healthy children: Helping families with lesbian, gay, bisexual & transgender children. Family Acceptance Project, Marian Wright Edelman Institute, San Francisco State University. https://familyproject.sfsu.edu/sites/default/files/FAP_EnglishBooklet_pst.pdf

Ryan C, Huebner D, Diaz RM, & Sanchez J (2009). Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay, and bisexual young adults. Pediatrics, 123(1), 346–352. 10.1542/peds.2007-3524 [PubMed: 19117902]

Salerno JP, & Boekeloo BO (2022). LGBTQ Identity-Related Victimization During COVID-19 Is Associated with Moderate to Severe Psychological Distress Among Young Adults. LGBT Health (in press). 10.1089/lgbt.2021.0280

Salerno JP, Devadas J, Pease M, Nketia B, & Fish JN (2020). Sexual and gender minority stress amid the COVID-19 pandemic: Implications for LGBTQ young persons' mental health and well-being. Public Health Reports, 135(6), 721–727. 10.1177/0033354920954511 [PubMed: 33026972]

Salerno JP, Doan L, Sayer LC, Drotning KJ, Rinderknecht RG, & Fish JN (2021). Changes in mental health and wellbeing are associated with living arrangements with parents during COVID-19 among sexual minority young persons in the U.S. Psychology of Sexual Orientation and Gender Diversity (in press). 10.1037/sgd0000520

Salerno JP, Gattamorta KA, & Williams ND (2022). Impact of family rejection and racism on sexual and gender minority stress among LGBTQ young people of color during COVID-19. Psychological Trauma: Theory, Research, Practice, and Policy (in press). 10.1037/tra0001254

SAMHSA. (2014). A practitioner's resource guide: Helping families to support their LGBT children. HHS publication No. PEP14-LGBTKIDS. Substance Abuse and Mental Health Services Administration. https://store.samhsa.gov/sites/default/files/d7/priv/pep14-lgbtkids.pdf

Schmitz RM, & Tyler KA (2017). The complexity of family reactions to identity among homeless and college lesbian, gay, bisexual, transgender, and queer young adults. Archives of Sexual Behavior, 47(4), 1195–1207. 10.1007/s10508-017-1014-5 [PubMed: 28687895]

Schrager SM, Goldbach JT, & Mamey MR (2018). Development of the Sexual Minority Adolescent Stress Inventory. Frontiers in Psychology, 9, 319. 10.3389/fpsyg.2018.00319 [PubMed: 29599737]

Scroggs B, Love HA, & Torgerson C (2020). COVID-19 and LGBTQ emerging adults: Risk in the face of social distancing. Emerging Adulthood. 10.1177/2167696820968699

Smalley A (2021). Higher education responses to Coronavirus (COVID-19). National Conference of State Legislatures. https://www.ncsl.org/research/education/higher-education-responses-to-coronavirus-covid-19.aspx

Taylor AB, & Neppl TK (2021). Sexual identity in lesbian, gay, bisexual, transgender, and queer or questioning emerging adults: The role of parental rejection, and sexuality specific family support. Journal of Family Issues, 192513. 10.1177/0192513X211050063

Testa RJ, Habarth J, Peta J, Balsam K, & Bockting W (2015). Development of the Gender Minority Stress and Resilience Measure. Psychology of Sexual Orientation and Gender Diversity, 2(1), 65–77. 10.1037/sgd0000081

Valentine SE, & Shipherd JC (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. Clinical Psychology Review, 66, 24–38. 10.1016/j.cpr.2018.03.003 [PubMed: 29627104]

Vasquez AL (2019). Victimization and help-seeking experiences of LGBTQ+ individuals. Illinois Criminal Justice Information Authority. https://icjia.illinois.gov/researchhub/articles/victimization-and-help-seeking-experiences-of-lgbtq-individuals

Williams ND, & Fish JN (2020). The availability of LGBT-specific mental health and substance abuse treatment in the United States. Health Services Research, 55(6), 932–943. 10.1111/1475-6773.13559 [PubMed: 32970327]

Woodford MR, Kulick A, Garvey JC, Sinco BR, & Hong JS (2018). LGBTQ policies and resources on campus and the experiences and psychological well-being of sexual minority college students: Advancing research on structural inclusion. Psychology of Sexual Orientation and Gender Diversity, 5(4), 445–456. 10.1037/sgd0000289

Table 1

Sociodemographic characteristics among sexual and gender minority (LGBTQ) students (N=547)

Demographic Variable	*N* (%)
Sex assigned at birth	
Female	428 (78.5)
Male	117 (21.5)
Gender Identity	
Cisgender	376 (68.7)
Transgender	50 (9.1)
Non-binary	66 (12.1)
Another non-cisgender identity	55 (10.1)
Sexual Orientation	
Bisexual	178 (32.5)
Gay	75 (13.7)
Lesbian	96 (17.6)
Queer	85 (15.5)
Another non-heterosexual identity	109 (19.9)
Heterosexual/straight	4 (0.7)
Age [*M*, (*SD*)]	21.97 (3.94)
Hispanic or Latinx	
Yes	78 (14.3)
No	469 (85.7)
Race[a]	
Asian	76 (13.9)
White	414 (75.7)
Black or African American	60 (11.0)
Another non-white race or ethnicity	38 (6.9)
Nativity	
United States-born	502 (91.8)
Foreign-born	43 (7.8)
Parental Financial Dependence	
Yes	457 (83.5)
No	88 (16.1)
Living with Parents	
Yes	316 (57.8)
No	192 (35.1)
Out to Parents	
Yes	360 (65.8)
No	146 (26.7)
Educational Program	
Undergraduate	375 (68.6)

Demographic Variable	***N* (%)**
Graduate	158 (28.9)
Social Isolation [*M*, (*SD*)]	6.50 (1.71)

[a]Total percent in this category will not add up to 100, as participants were instructed to select all that apply

Table 2

Hierarchical logistic regression models with family rejection and covariates

	Model with Covariates only					Model with Covariates and Family Rejection					
	B	***SE***	***OR***	**95% *CI***	***p***	***B***	***SE***	***OR***	**95% *CI***	***p***	**Model *p***
Moderate to Severe Psychological Distress											< .001
Increased family rejection						1.18	0.21	3.24	2.15 – 4.89	< .001	
Living with parents	0.17	0.20	1.19	0.81 – 1.74	.380	−0.09	0.21	0.91	0.61 – 1.37	.656	
Out to parents	−0.13	0.21	0.88	0.58 – 1.33	.544	0.12	0.23	1.13	0.72 – 1.75	.598	
Increased isolation	0.14	0.03	1.15	1.08 – 1.23	<.001	0.11	0.03	1.11	1.04 – 1.19	.002	
Increased Identity Concealment											< .001
Increased family rejection						1.98	0.22	7.24	4.70 – 11.14	< .001	
Living with parents	0.67	0.20	1.95	1.32 – 2.88	.001	0.29	0.22	1.33	0.86 – 2.06	.202	
Out to parents	−1.05	0.22	0.35	0.23 – 0.54	<.001	−0.80	0.25	0.45	0.28 – 0.73	.001	
Increased isolation	0.18	0.03	1.20	1.12 – 1.28	<.001	0.14	0.04	1.15	1.07 – 1.24	< .001	
Increased LGBTQ Victimization											.001
Increased family rejection						1.12	0.42	3.08	1.34 – 7.05	.008	
Living with parents	−0.85	0.36	0.43	0.21 – 0.87	.018	−1.10	0.37	0.33	0.16 – 0.69	.003	
Out to parents	0.73	0.47	2.08	0.84 – 5.18	.114	0.94	0.47	2.56	1.01 – 6.45	.047	
Increased isolation	0.11	0.06	1.11	0.99 – 1.25	.077	0.08	0.06	1.08	0.96 – 1.22	.194	
Increased Internalized Homophobia											< .001
Increased family rejection						1.36	0.24	3.88	2.43 – 6.20	< .001	
Living with parents	0.31	0.21	1.36	0.91 – 2.05	.138	0.00	0.22	1.00	0.65 – 1.55	.996	
Out to parents	−0.29	0.21	0.75	0.49 – 1.14	.176	−0.05	0.22	0.96	0.62 – 1.48	.839	
Increased isolation	0.22	0.04	1.24	1.16 – 1.33	<.001	0.19	0.37	1.21	1.13 – 1.30	<.001	
Increased Internalized Transphobia											< .001
Increased family rejection						1.57	0.40	4.80	2.18 – 10.54	< .001	
Living with parents	0.79	0.36	2.20	1.08 – 4.46	.030	0.36	0.40	1.44	0.66 – 3.14	.365	
Out to parents	0.17	0.45	1.19	0.49 – 2.87	.705	0.42	0.49	1.52	0.59 – 3.95	.389	
Increased isolation	0.20	0.65	1.22	1.08 – 1.39	.002	0.15	0.07	1.16	1.02 – 1.33	.027	