

**What's Lost and What's Found: The Prevalence of Posttraumatic Growth in
Undergraduate College Students as a Result of the COVID-19 Pandemic**

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Abstract

The present study examined the prevalence of posttraumatic growth in college students, whether there was lingering distress related to living through a pandemic, and investigated what factors contributed to the development of posttraumatic growth. Undergraduate college students (n=198) participated in an online survey that aimed to gather information regarding their pandemic experience, and that measured loneliness, social connectedness, family connectedness, social support, distress tolerance, COVID-specific distress, and PTSD symptoms. Participants also completed a series of questions that measured posttraumatic growth experienced directly due to the pandemic, which included 5 subcategories of growth: relating to others, new possibilities, personal strength, spiritual change, and appreciation for life. Individuals that had experienced COVID-19 infection and those that had close personal relationships with individuals that experienced infection received an additional set of questions to measure growth related to the experience of illness. Social connectedness and PTSD symptoms significantly predicted posttraumatic growth in participants. Across all subcategories of posttraumatic growth, participants indicated experiencing growth as a result of the COVID-19 pandemic, with the most growth occurring in the “personal strength” and “appreciation of life” categories.

What's Lost and What's Found: The Prevalence of Posttraumatic Growth in Undergraduate College Students as a Result of the COVID-19 Pandemic

The COVID-19 pandemic began in the year 2020 (Hyun et al., 2021). At this time, the lives of citizens worldwide began to face dramatic and unexpected changes, from government-mandated quarantine periods and social distancing to the mass closing of businesses, locations used for social gatherings and recreational activities, and in-person workplaces. In the United States, college students in particular were faced with a set of unique challenges, including forced evacuation from physical campus locations and the beginning of remote learning, loss of employment opportunities, and dramatic shifts in social environments and connectedness to peers (Hyun et al., 2021). These shifts created significant mental health challenges in this population. Students that were forced to relocate reported significantly more grief, loneliness, and generalized anxiety symptoms than those that remained within their campus environment (Conrad et al., 2021). These feelings of grief also extended into feelings of loss of resources and loss of significant life events. For example, students could not access on-campus offices or mental health services if they were physically located out-of-state due to licensure restrictions. Many graduation ceremonies were also canceled, resulting in college seniors concluding their education without a once in a lifetime celebration. Students that relocated also reported feeling less social support (Conrad et al., 2021). However, because of this distress there was also potential for meaning making and more general experiences of growth. This was due to enduring the trauma that occurred due to pandemic conditions.

Defining Posttraumatic Growth

Originally coined by Tedeschi & Calhoun (1996), the term Posttraumatic Growth (PTG) refers to important positive changes that occur in someone after the experience of a crisis or

other traumatic event. This concept has emerged through literature investigating the impacts of trauma under different names, many of which lack a positive connotation, emphasizing anything from stress, to the disruption to “positive illusions,” which refers to our base assumptions that the world is just and good, or “shattered assumptions,” which is where these perceptions of the world are broken based on the experience of trauma (Taylor, 1989; Janoff-Bulman & Berg, 1998). The term posttraumatic growth captures this phenomenon better than others in several ways. PTG is not simply a reactionary coping mechanism to traumatic events, it is an ongoing process that consists of concrete life changes that go beyond illusion, or beyond changes in perception of the world (Tedeschi & Calhoun, 2004). For this reason, the PTG model identifies the positive feelings that individuals typically experience after a traumatic event to be a byproduct of enduring a major life disruption combined by adequate coping (Janoff-Bulman, 2004).

In order for PTG to occur, a significant life disruption must occur accompanied by significant psychological distress. There are several potential explanations for this association. Strength through suffering allows individuals to understand a new dimension of their own abilities and resilience while simultaneously developing new coping skills. Additionally, existential reevaluation can account for additional growth as survivors of traumatic events are forced to comprehend the disruption and strong emotional response caused by the event. Throughout processing, survivors will come away from their experiences with new conceptualizations of what it means to live within our world. Many will develop a new appreciation for life and what it means to be alive, some will become more spiritual or religious, and others will come away with better relationships or tolerance for others. This is conceptualized within three of the five subcategories of PTG: ‘appreciation of life,’ ‘relating to

others,' and 'spiritual change' (Janoff-Bulman, 2004). The two remaining subcategories are 'new possibilities' and 'personal strength,' which include resilience and openness to new experiences (Tedeschi & Calhoun, 2004)

There are several factors that contribute to the development of PTG. Some of the strongest indicators of the development of PTG is the accessibility of emotional support and the ability to create meaning. Using the framework of Self-Determination Theory, which states that the satisfaction of the needs for autonomy, competence, and relatedness are necessary for the facilitation of growth and development, Yeung et al. (2016) investigated the role of needs satisfaction among other predictive factors of PTG (Yeung et al. 2016). Using the framework of the Stress and Coping Model, which states that individuals evaluate stressors and available coping resources when impacted by a stressful situation, they also worked to clarify the role of emotional coping strategies in the facilitation of PTG. The study concluded that satisfaction of all three basic psychological needs (autonomy, competence, and relatedness) was positively correlated with PTG, but a hierarchical regression analysis revealed that only relatedness was significantly and positively associated with PTG after accounting for intercorrelation, reflective of the particular importance of emotional support. Yeung et al. (2016) also found that positive reframing of events, which occurs when an individual changes their interpretation of a negative event into a more positive perspective, led to emotional acceptance, which was significantly positively associated with PTG. Additionally, it was found that the processing of traumatic events with a challenge appraisal, in which individuals viewed negative events as challenges to overcome rather than inherently stressful, utilized cognitive processes that were associated with growth such as emotional and cognitive processing (Yeung et al., 2016).

Personality and type of trauma also play an important role in the development of PTG due to how personality dynamics interact with stress, influencing distress tolerance based on how individuals cope with and perceive potentially traumatic events (Shuwiekh et al., 2018). Shuwiekh et al. (2018) studied how the personality dynamic of perfectionism, which was defined as striving for “high standards” and “order”, and self-discrepancy, which details an individual’s aspirations in comparison to their actions, related to the development of PTG. They also investigated how this relationship differed based on the types of trauma experienced by participants. The study included 620 undergraduate college students enrolled in two Egyptian universities. The study considered the three main types of trauma: Type I, which included experiencing a single traumatic event or witnessing a traumatic event; Type II, which included experiencing a repeated sequence of events that happened and stopped; and Type III, which involved experiencing continuous traumatic events (Shuwiekh et al., 2018). The study found that different personality dynamics contributed to the promotion of PTG or impeded its development. Perfectionistic strivings contributed to meaning making and therefore predicted higher PTG while the opposite was true for self-discrepancy, where high levels of conflict between aspirations and actions predicted lower levels of PTG (Shuwiekh et al., 2018). This is particularly important to acknowledge due to the aforementioned need of present psychological distress to facilitate the development of PTG. Additionally, it was found that PTG occurs more frequently after the experience of type I traumas, which result in moderate stress, rather than type II and type III traumas, which create extreme stress conditions. Types II and III traumas also indirectly decreased potential for PTG as they reduced individual aspirations to order, and therefore decreased meaning making (Shuwiekh et al., 2018).

The COVID-19 Pandemic and Increased Exposure to Potentially Traumatic Events

As one of the key elements of PTG is significant distress, in order to determine if PTG applies to COVID-19 we have to establish that the COVID-19 pandemic was in fact a source of that distress in those that directly experienced its impacts. In addition to the direct experience of contracting a life threatening and newly emerging disease, the COVID-19 pandemic functioned as a catalyst for exposure to a variety of other potentially traumatic events. This has led to an indisputable psychological impact in the general population. In a study of 456 Irish and American adults (mean age = 41.2 years, SD = 11.7), most participants indicated that they felt “normal” levels of traumatic distress (75.9%), anxiety (74.6%), and depression (62.9%), small percentages reported severe levels of traumatic distress (7.7%), severe and extremely severe depression (4.6%), and severe and extremely severe anxiety (4.4% and 4.2% respectively) (Nearchou & Douglas, 2021). The study was able to conclude that traumatic distress from COVID-19 was a predictor of depression and anxiety. Anxiety as an individual factor was found to be the strongest mediator of the relationship between distress and depression, increasing the likelihood of the development of depression from traumatic distress when present (Nearchou & Douglas, 2021). Consistent with previous research, resilience and hope acted as buffers against negative mental health effects in the general public (Nearchou & Douglas, 2021).

COVID-19 was not a single event, but it was so pervasive as a traumatic event that individuals identified trauma through psychological and behavioral differences, such as dissociation or difficulty regulating emotions, rather than by identifying an individual event that created trauma (Masiero et al., 2020). This indicates that the pandemic as a whole can be categorized as a Type III trauma, as the traumatic events occurred continuously. There were also additional traumas that fell closer to the definition of Type II and Type I traumas. These sources of trauma include high-stakes decision fatigue, specifically in those that worked in healthcare

settings as they were repeatedly tasked with literal life-or-death decisions (although this may be classified as a Type III trauma for those that worked ceaselessly in this environment); forced non-experience of grief and changes to bereavement characterized by the inability to have funerals and inability to gather in public spaces for religious and mourning purposes, the inability to follow the trajectory of disease in loved ones; and loss of roles (both social and individual) which contributes to a loss of self. These impacts were mediated by social status, meaning that the more wealth, security, and privileged identities people held, the less likely they were to experience these negative impacts of COVID-19 (Masiero et al., 2020). This exemplifies the pandemic's role in expanding different aspects of social and systemic inequality.

Understanding the relationship between infection rates and social vulnerability can further clarify the effects of social inequality on U.S. residents during the COVID-19 pandemic (Karaye & Horney, 2020). Karaye and Horney (2020) found that so-called minority statuses, language, household composition, access to transportation, housing, and disability predicted COVID-19 infection rates (Karaye & Horney, 2020). This is directly related to the concrete effects of social inequity. Forty-four million U.S. adults are underinsured and individuals that earn lower wages have little access to paid sick leave. Nearly two million lack running water in their homes, with indigenous people having 19 times and Black or African and Hispanic or Latinx Americans twice the rate of white Americans, making basic infection-preventing behaviors inaccessible. Fear of deportation also contributes to a lack of undocumented Americans seeking testing when symptoms arise (Karaye & Horney, 2020). While there have been several legal actions on both federal and state levels in attempt to alleviate some of these disparities such as the Families First Coronavirus Response Act, the impact of these actions is not sweeping and inequality is still incredibly prevalent throughout the United States.

Based on societal values surrounding health and healthcare, those that contracted COVID-19 were automatically stigmatized. The disease itself was framed as something that was avoidable, however not everyone was able to easily avoid it. The United States took an approach of ‘rugged individualism’ in terms of national policy during the pandemic, promoting the false assumptions that everyone has the same chances to maintain their health, resulting in people of color being held individually responsible for the results of racism and classism and in white supremacist groups rejecting lockdown and other safety policies (Watson et al., 2020). It is also important to recognize how police brutality, anti-Asian rhetoric, and other forms of violence on oppressed people contributed to stress, trauma, and health outcomes. Essentially, the violence of oppression not only created trauma, but magnified existing impacts of systemic inequality resulting in more exposure to potentially traumatic events for oppressed individuals. Since the start of the pandemic, Asian Americans and Asian immigrants have experienced higher rates of mental disorders than white Americans (Wu et al., 2021). This is directly linked to experiences of increased discrimination related to the COVID-19 pandemic (Wu et al., 2021). President Trump frequently referred to the COVID-19 virus as the “China Virus,” which perpetuated and excused xenophobic and racism-fueled attacks on Asian people and communities in America (Zheng et al., 2020). Additionally, disability ethics were often disregarded during triage and emergency medical situations where health care professionals based their assessments for resource allocation on individuals’ subjective quality of life, rather than protecting vulnerable populations (Singh, 2020).

Even attempts to minimize disease spread through the use of telemedicine showcases inequity of access to healthcare, which further induced trauma as the most vulnerable populations, which needed these services most, did not have access to necessary technology. In a

letter to the editor of the Journal of the American Academy of Child and Adolescent Psychiatry, Smith-East and Starks (2021) identify approximately 11 million youth without access to the internet. Physically having technology doesn't necessarily solve this issue, either, as video interruption or poor quality can occur with inadequate cell service or lack of broadband internet. Among these children and adolescents, those most at risk were low income and of socially marginalized racial/ethnic groups—likely some of the individuals that need access to telehealth care (especially mental health care) the most as they are likely to be experiencing the brunt of the inequities perpetuated by pandemic conditions. Despite this, there is little research into other effective means of care delivery (Smith-East & Starks, 2021). These discriminatory practices, policies, and structures led to increased experiences of trauma for individuals who hold historically marginalized identities.

The Presence of Posttraumatic Growth within the Experience of Illness

Beyond sociocultural and individual experiences facilitating the development of PTG during the COVID-19 pandemic, the experience of illness itself has been shown to produce PTG as well. Hefferon et al (2009) investigated this phenomenon through a review of 57 international studies with qualitative components, including populations from the USA ($n=35$), Finland ($n=5$), UK ($n=3$), Australia ($n=3$), Sweden ($n=3$), Canada ($n=2$), Norway ($n=2$), New Zealand ($n=1$), Iran ($n=1$), and India ($n=1$). The majority of studies reviewed investigated the impacts of cancer. While two-thirds of the researchers behind these works did not specifically aim to study PTG, they were still able to uncover the phenomena in their research participants. This systematic review identified four core themes: reappraisal of life and priorities, trauma equals development of self, existential re-evaluation, and new awareness of the body, which is unique to the

development of PTG in terms of illness as opposed to other traumatic events and includes positive health elements such as improving health behaviors (Hefferon et al., 2009).

There are several key factors that contribute to the development of PTG from chronic and serious illness. Zeligman et al. measured social support, meaning making, and PTG in relation to chronic illness in a study of 110 racially diverse undergraduate students. It was found that the presence of social support was predictive of PTG, however when meaning making was taken into account, social support was no longer significant which illustrates the powerful psychological impact of creating meaning. Twenty-one percent of the variance in Posttraumatic-Growth Index scores in participants was the result of the interaction between these two variables (Zeligman et al., 2018). There was also a significant interaction between gender (female gender increases likelihood of experiencing PTG) and meaning making, which accounted for 22% of the variance in PTG scores (Zeligman et al., 2018).

Social support also contributes to the development of PTG in those that are in the process of serious illness recovery. In a longitudinal study of cancer survivors, the impact of emotional support at the time of diagnosis on the facilitation of long-term PTG was investigated through surveys administered at three months and eight years post-diagnosis. Regression analysis illustrated the significance of emotional support early after diagnosis, as it was found that more support received by participants three months post-diagnosis predicted more positive consequences of illness at the eight-year mark. This remained consistent even when controlling for levels of emotional support at the time of the eight-year survey. The authors concluded that emotional support consisting of reassuring, comforting, and problem-solving behaviors in the period after diagnosis may contribute to survivors finding positive meaning in their battles with cancer (Schroevers et al., 2010). With both the chronic nature of COVID-19 symptoms as well as

the potential severity of infection, it is highly likely that living through pandemic conditions will result in similar instances of PTG when these conditions are met.

While instances of COVID-19 infection are incredibly widespread, college students were among an age group where it may be rare to experience severe infection. However, there were two instances in which COVID-negative college students would be exposed to the conditions that facilitate the development of PTG: the infection of family members and other loved ones and experiencing the social-political impacts of the pandemic. Loiselle et al. (2011) determined that the development of PTG in those that are close to someone with a serious illness was an interaction between the experience of posttraumatic stress symptoms (PTSS) and relative's illness status. Consistent with Tedeschi and Calhoun's theory, this demonstrates the role of the experience of distress in the development of PTG. In Loiselle et al. (2011), ongoing distress in relation to ongoing illness allowed for continued processing, which created opportunities for positive outcomes to develop. This allowed the authors to conclude that PTSS may be most salient while the relative's illness remained unresolved (Loiselle et al., 2011).

When resulting from illness, PTG has been shown to lead to positive physical and psychological health effects beyond the mindset changes that classify it. Sawyer et al. (2010) conducted a meta-analysis of 38 studies that examined PTG following diagnoses of cancer or HIV/AIDS. While effect sizes varied based on ethnicity, with ethnic minorities experiencing more positive change, and age, with younger participants demonstrating a stronger positive relationship between PTG and positive mental health, the study found an overall positive relationship between PTG and positive mental health and a negative relationship between PTG and negative mental health (Sawyer et al., 2010). Therefore, participants that experienced PTG symptoms also experienced enhanced psychological wellbeing. Additionally, there was a positive

relationship between PTG and some measures of subjective physical health, suggesting that PTG results in positive adaptive consequences. These effects were moderated by time since diagnosis, with stronger relationships within the short term, and subcategories of negative mental health, with PTSD conditions resulting in more of a negative relationship with the development of PTG than depression (Sawyer et al., 2010).

Prevalence of Posttraumatic Growth Throughout the COVID-19 Pandemic

Even prior to the beginning of the COVID-19 pandemic, college students were considered to be at higher risk for psychological distress with instances of anxiety, depressive symptoms, low self-esteem, substance abuse, and suicidality increasing worldwide (Browning et al., 2021). Due to their unique position as adults with emerging independence needing to juggle uncertainty about academic success, careers, and other elements of future adult life, college students are also among the demographics most affected by COVID-19 (Browning et al., 2021). Browning et al. (2021) identified the psychological impacts that COVID-19 had on college students by surveying 14,174 undergraduate and graduate students enrolled in seven large (over 10,000 students enrolled) U.S. state universities. Based on responses, nearly half (45%) of the sample reported experiencing high levels of psychological impacts and 40% experienced moderate impact. Through multivariate modeling, predictive factors for high psychological impact were found, including identity as a woman, having fair/poor general health, being 18-24 years old, and experiencing an average of 8+ hours of daily screen time (Browning et al., 2021). Due to high levels of distress, Hyun et al (2021) attempted to measure PTG in college students from COVID-19 through survey data collection that occurred in two waves between April 13, 2020 and March 15, 2021. Overall, participants indicated a low level of PTG on average (1.66; $SD = 1.03$), which describes a level between the statements “I did not experience this change at

all” and “I did experience this change to a very small degree,” suggesting that between the two waves of data collection, young adults have not seen themselves as having experienced positive growth outcomes from the pandemic situation. Of the little PTG that was identified, data remained consistent with previous studies as higher amounts of PTSD symptoms and COVID-19 related worry predicted higher levels of PTG (Hyun et al., 2021). Understanding the importance of social support in the development of PTG, it is likely that changes in social behaviors are linked to the lack of findings. The most common behavioral changes in college students due to COVID-19 were social distancing, education changes, and going out less, in addition to the third most commonly reported psychological impact being feelings of isolation (Browning et al., 2021).

Current Study

At the time the current study was conducted, we find ourselves two years into the pandemic yet surrounded with a push for normalcy due to high vaccination rates, where social distancing and mask mandates have begun to be lifted. The present study investigated college students’ current attitudes regarding the pandemic and its impact on their lives. The aims of this study were to (1) measure the prevalence of pandemic-related distress and PTG in current undergraduate college students, (2) understand what social, cognitive, and demographic factors predict the development of PTG, and (3) understand the degree of impact that COVID-19 has had on the lives of the participants so that we might have more insight to assess the impact of remote learning, quarantine, and infection on the development of PTG. It was hypothesized that there would be high degrees of distress and PTG. In line with previous research that women and historically marginalized racial groups experienced more pandemic-related distress, it was predicted that gender and race will predict PTG. Additionally, due to previous findings that

social support, anxiety, and traumatic stress facilitated the development of PTG, it was predicted that level of social support, pandemic-specific concerns, distress tolerance, and PTSD symptoms would impact the level of PTG experienced by participants. Lastly, it was thought that students that have reported having the experiences of remote learning, quarantine, and COVID-19 infection personally would experience PTG due to the higher levels of distress that they likely experienced due to these events.

Methods

Participants

Data collection occurred from February 14, 2022 to March 2, 2022 in which 246 people participated in the survey. Inclusion criteria required a minimum of 35% of the survey to be completed, eliminating 48 responses and leaving 198 participants for analysis. Survey participants were recruited through online advertisements posted on survey exchange and college-related Reddit and Facebook pages, as well as through the researcher's personal and professional network via Instagram and Facebook posts (personal and Wheaton College pages) as well as email distribution at Wheaton College. The survey was described as "a survey about the impact of COVID-19 on college students." All initial social media posts, emails, and other contacts were completed on the first day of distribution. Follow-up posts were made on a biweekly basis until data collection was complete. Participants were able to select a charity to receive a \$5 donation on their behalf upon survey completion.

Overall, participants recorded that they resided in 21 different US states/territories while attending their colleges, with the majority ($n = 153$) residing in Massachusetts. By Census region divisions of the United States, participants were located in the Northeast ($n = 179$), the Midwest ($n = 3$), the South ($n = 8$), and the West ($n = 8$). All class years were represented, with 20.7% of

participants listing 2022 as their year of graduation ($n = 41$), 22.2% listing 2023 ($n = 44$), 25.8% listing 2024 ($n = 51$), and 31.3% listing 2025 ($n = 62$). The average age of participants was 20.31 years old ($SD = 2.27$). The majority of participants were assigned female at birth ($n = 170$) with the remainder of participants assigned male at birth ($n = 28$). The gender identities of participants included female ($n = 139$), male ($n = 30$), non-binary ($n = 17$), gender queer ($n = 5$), gender fluid ($n = 2$), and questioning ($n = 2$) with 3 individuals not elaborating on their gender identity. Participants estimated their family incomes to be \$49,999 or below (15.0%), \$50,000-\$74,999 (30.1%), \$75,000-\$124,999 (30.6%), and \$125,000 or above (24.4%). Participants also estimated their health to be poor (4.5%), fair (25.8%), good (57.8%), or excellent (12.1%).

Materials

In addition to demographic questions, the distributed survey consisted of measures seeking to quantify perceived social support, lingering distress from COVID-19, and posttraumatic growth.

Social Support. Three modified scales were utilized to measure social support experienced by participants. The UCLA Loneliness Scale (Version 3) (Russell, 1996) was designed to measure individuals' sense of isolation. Participants were presented with statements and asked to rate how often they experience those feelings on a 4-point scale ranging from 1 ("never") to 4 ("always"), with higher scores indicating a higher degree of loneliness. The current study used 4 of 20 statements, with two statements being reverse-scored. Statements that were selected were used due to the variety of their content. Each statement highlighted different aspects of and feelings associated with loneliness. Shortened versions of this scale have been deemed reliable by other researchers, and the scale has been tested for both reliability and validity on college students (Russell, 1996). Ten questions used to measure social connectedness

were utilized to understand participants' social relationships. These questions fell into three subcategories: family connectedness, teacher caring, and other adult caring. Participants were asked to rate their answers to each question on a 10-point scale which ranged from 1 ("not at all") to 10 ("very much"). These questions were created for a study of the mental health of LGB teens in 9th-12th grade (Eisenberg & Resnick, 2006). Language was adapted for the current study to be more appropriate for adults in a college setting. The Social Support List of Interactions (SSL 12-I) (Kempen & Van Eijk, 1995) scale was created to measure social support in three subareas: everyday support, social support in problem situations, and esteem support. The current study utilized two questions from the "everyday support" subarea and three questions from the social support in problem situations subarea, with language adapted to be more general. Participants were asked to rate the frequency of occurrence of each statement in terms of their experience on a 4-point scale ranging from 1 ("seldom or never") to 4 ("very often") (Kempen & Van Eijk, 1995).

Distress. Three modified scales were used to measure the level of distress experienced by participants. The Distress Tolerance Scale (Simons & Gaher, 2005) is a sixteen item scale created to measure emotional distress tolerance based on perceived ability to tolerate emotional distress, appraisal of distress, attention occupied by negative emotions, and self-regulation to alleviate distress. Participants ranked how much they agree or disagree with statements on a 5-point scale from 1 ("strongly agree") to 5 ("strongly disagree"). The current study utilized four statements from this scale. The PTSD Checklist— Civilian Version (PCL-C) (Weathers, Litz, Herman, Juska, & Keane, 1993) is a diagnostic tool to identify cases of PTSD in civilian populations. Individuals were asked to reflect on the past month of their life and indicate how much they have been bothered by the problem outlined in the statements on a 5-point scale, spanning from 1

(“not at all”) to 5 (“extremely”). The current study utilized five of the seventeen statements, with language adapted to more specifically relate to the pandemic. Lastly, the Covid-Specific Distress Scale (Feng et al., 2020) was created to measure anxiety and fear, and suspicion surrounding Covid-19 infection. The 14-item scale asked participants to indicate how much they agree or disagree with the statements on a 5-point ranking system, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”) (Feng et al., 2020). The current study utilized three items that measure Covid-related anxiety and fear, and two items that measure suspicion.

Posttraumatic Growth. Two modified scales were utilized to measure posttraumatic growth in participants. The Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) was created to measure growth from traumatic events, and consists of twenty-one items broken into five “factors”: relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. Participants were asked to what extent they have experienced a specific change as a direct result of their crisis, ranked on a 6-point scale ranging from 0 (“I did not experience this change as a result of my crisis”) to 5 (“I experienced this change to a very great degree as a result of my crisis”). The current study used four items from the ‘relating to others’ subcategory, two from ‘new possibilities,’ three from ‘personal strength,’ one from ‘spiritual change,’ and two from ‘appreciation of life.’ The language was also adjusted to reflect the pandemic as the crisis in reference.

The Silver Lining Questionnaire was created to measure the positive impacts of experiencing an illness (Bride, Dunwoody, Lowe-Strong, & Kennedy, 2008). The questionnaire consists of thirty-eight statements, and participants are asked to indicate how much they agree or disagree with each statement on a 5-point scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The current study used thirteen statements from this scale. Questions selected

from the Silver Lining Questionnaire captures growth experiences that are unique to the experience of illness such as illness causing a person to face problem areas of their lives, illness causing an individual to prioritize themselves, and realizing that an individual matters as a person. All participants were given the Posttraumatic Growth Inventory, while only participants that indicated that they themselves or a relative had been infected with Covid-19 received the Silver Lining Questionnaire.

Open-ended questions. Three open-ended questions were included within the survey to provide participants with the opportunity to elaborate on their experiences and to provide greater context for the results. The first open-ended question, “if you were quarantined, please describe your experience,” was included after the demographic questions, which included questions relating to exposure to the virus. This question was only shown to individuals who indicated that they had quarantined. The second question, “if you agree with any of the above statements, please describe how these beliefs/thoughts impact your day-to-day life,” was included after the COVID-specific distress measures, at the conclusion of the section measuring distress and trauma. Lastly, the third open-ended question, “we are interested in the positive ways that the COVID-19 pandemic has changed how you feel and behave. What are the first three ways that come to mind?” concluded the survey, and was shown to participants after the questions relating to PTG. The responses to these questions were analyzed by an independent investigator that was blinded to the study hypotheses and the questions that were asked for common themes. Additionally, open-ended question responses were utilized to provide context for quantitative results.

Procedure

The survey was administered to participants online via Qualtrics. All participants gave informed consent prior to the start of the survey. The informed consent explained to participants that, "This research experiment is a study regarding your experiences throughout the coronavirus (COVID-19) pandemic and how they have impacted your attitudes and beliefs about yourself, others, and life. The goal of this research is to measure the impacts of living through the COVID-19 pandemic. You will be asked questions about your health, social connectedness, feelings of distress, changes in attitudes/beliefs over time, and finally about your background including your age, gender, etc." Completion of the survey took approximately ten to fifteen minutes on average, and all participants were debriefed at the survey's conclusion.

Results

There was no significant difference between PTG in Wheaton students ($n = 170$) and non-Wheaton students ($n = 28$), $t(168) = 1.039$, $p = .300$, therefore all analyses were conducted without separating the groups.

Experience of COVID-19

Participants experienced many direct impacts of COVID-19. Nearly all participants (98.5%) experienced changes in the composition of their education. The majority of participants completed at least some classes in a hybrid format as a result of the pandemic (42.4%), followed by the completion of more than one semester fully remote (35.9%), or the completion of only one semester fully remote (20.2%). Only a handful of students experienced no changes to the composition of their education as a result of COVID-19 (1.5%).

Of the individuals that participated in the survey, 30.8% participants tested positive for COVID-19 over the course of the pandemic, 67.2% did not, and 2.0% were unsure of their infection status. The vast majority (89.4%) of participants reported that someone close to them has tested positive for COVID-19 over the course of the pandemic, with the remaining

participants reporting that individuals close to them have not tested positive (9.6%) or that they were unsure of infection status of others (1.0%).

Those that stated they had either been infected themselves or were close to someone that had been infected ($n = 177$, 89.4% of the total sample) were asked a series of questions about the severity of infection. Of those that had experienced infection, 42 experienced “serious medical complications” and 27 were hospitalized. At the time of survey administration, the majority of infected individuals had fully recovered from the virus ($n = 143$, 80.8%).

The majority of participants (67.2%) had also been quarantined due to exposure to COVID-19 or infection. Of these quarantine periods, 48.1% were voluntary, 46.6% were mandated by the participant’s educational institution, and 5.3% individuals were unsure or did not know. Responses ($n = 99$) to an open-ended question asking participants “if you were quarantined, please describe your experience” were analyzed for themes by an independent investigator. This resulted in 7 key themes: affected mental health ($n = 35$), was not bad/no complaints ($n = 34$), affected education ($n = 9$), affected physical health ($n = 8$), general negative experience ($n = 7$), relaxing/positive ($n = 3$), and affected finances ($n = 3$). Additionally, across categories, a large amount of responses mentioned feelings of loneliness and/or isolation ($n = 26$).

Within the affected mental health category, responses included feelings of depression and sadness, fear and anxiety, and worsening mental health conditions. Some of this appeared to be tied to the isolation that came with being quarantined. One participant stated, “being alone in the same room all day in an empty building triggered some of my mental health issues.” Another source of this distress was stress associated with potentially transmitting the virus to others: “the entire time my stress was extremely high to the point where I had trouble sleeping and eating because I didn’t know if I had the virus or if I had put my family in danger.” Some individuals had severely negative mental health consequences. One participant noted that “I felt like my life was dangling on a rope and I was thinking if at all I would make it,” and another described the isolation as “dangerous for my mental health.”

For those whose quarantine affected education, the adjustment impacted individual's ability to complete their academic work and attend classes. One participant wrote, "Was during exam week of Fall 2021 semester so it was difficult to make arrangements for all assignments/exams to be online." Other academic concerns included poor internet connection and/or a lack of access to technology, difficulty paying attention to online classes, and struggling with motivation.

Statements within the affected physical health category included concerns regarding feeling physically ill and experiencing physical discomfort or pain. Many of these comments came from individuals that had tested positive for COVID-19. One wrote "the symptoms I experienced were so similar to pms/period symptoms... our symptoms mimicked a bad cold or almost a flu."

The general negative experience category contained responses with complaints about housing, food access, the need to be isolated, and poor communication with authorities. One individual stated that "The food was horrible, and I was going insane not being able to do anything." Another cited the unpredictability of the situation, "I wasn't ready for it, I didn't see it coming. Being behind closed doors just because of a pandemic. It was hell for me."

Responses within the affected finances category described loss of access to employment for the quarantine period as a source of stress. One participant stated that it "was nice to spend time home with my boyfriends, but missed out on three paychecks."

A few responses fell into the category of relaxing/positive. These individuals were able to quarantine with others or experienced no symptoms throughout their quarantine period, as stated by one participant: "It was sometimes boring and sometimes relaxing. I was not fully isolated from my dad while in quarantine because he was exposed as well so I wasn't fully alone."

Responses within the "was not bad/no complaints" category were often very short. They did not include many details of the quarantine experience, and many simply stated that the period was uneventful or boring.

Prevalence of Trauma

In accordance with the scoring guidelines for the PTSD checklist, response categories 3-5 (“moderately,” “quite a bit,” and “extremely”) are considered symptomatic responses. Approximately one-third of participants indicated that they have experienced repeated, disturbing memories, thoughts, images, or dreams related to the COVID-19 pandemic (30.6%) and reported experiencing physical reactions when something reminded them of the COVID-19 pandemic (31.5%). Over half of the participants (59.1%) reported having trouble remembering important parts of events that occurred during the COVID-19 pandemic. Nearly two-thirds of participants (64.6%) have experienced being “super alert,” watchful, or on guard. Finally, four out of five participants (80.1%) have had difficulty concentrating. Over 50% of participants (57.5%) have reported experiencing this symptom “quite a bit” or more, and approximately one quarter of participants (23.8%) have experienced this symptom at the highest degree, “extremely.”

Narratives of the trauma that participants experienced were also evident within responses to open-ended questions. Some participants described their experiences as traumatic themselves, “it was horrible, quarantine at Wheaton was traumatic.” These experiences were often accompanied by isolation, lack of access to quality food, and high levels of anxiety. The trauma of quarantining has also transferred to day-to-day life: “it's exhausting, especially because I am not afraid of getting covid-19 anymore, I just do not want to quarantine. These thoughts have become involuntary and anxiety-inducing.” This has also impacted individuals’ ability to seek medical care, as one participant stated “I even get scared to go see a doctor because I feel they have contact with COVID patients and might be infected unknowingly too.” Some participants described having debilitating intrusive thoughts: “I already deal with obsessive and intrusive thoughts so some days I am fine but other days I am too afraid to leave my bed.” Some

individuals' fear has translated into long-term changes in social behavior, as one participant described: "I noticed at the beginning of the pandemic that I started holding my breath a little bit when in public and now I can't stop it unless I'm actively thinking about it." Many participants indicated that they experienced hyperarousal and irritability as well. Some participants linked this directly to their experiences of anxiety, with one stating that "I feel extra alert/anxious and am more guarded and stand-offish as a result."

Prevalence of PTG

Posttraumatic growth was measured in two ways: through one scale given to all participants and through one given only to those that personally experienced COVID-19 infection and/or are close to someone that experienced infection. Scores of the first scale, the modified Posttraumatic Growth Inventory, are summarized in Table 1. Across all categories, participants indicated experiencing growth as a result of the COVID-19 pandemic, with the most growth occurring in the "personal strength" and "appreciation of life" categories. A one-way repeated measures ANOVA with Bonferoni post-hoc analysis was conducted to compare the effect of COVID-19 on each subcategory of PTG. There was a significant difference between at least two categories, $F(4, 105) = 43.384, p < .001$. Differences between categories are indicated by differing subscripts in Table 1.

Table 1.

Dimensions of PTG measured by the modified Posttraumatic Growth Inventory.

	<u>Possible Range</u>	<u>Actual Range</u>	<u>M</u>	<u>SD</u>
<i>PTG Total</i>	0.00-5.00	0.08-4.92	2.98	.99
<i>Relating to Others</i>	0.00-5.00	0.00-5.00	2.94 _a	1.17
<i>New Possibilities</i>	0.00-5.00	0.00-5.00	2.79 _a	1.29

<i>Personal Strength</i>	0.00-5.00	0.00-5.00	3.16 _{a,b}	1.23
<i>Spiritual Change</i>	0.00-5.00	0.00-5.00	1.59 _c	1.82
<i>Appreciation of Life</i>	0.00-5.00	0.00-5.00	3.39 _{b,d}	1.28

Note: Means with differing subscripts are significantly different, $p \leq .05$, according to a one-way repeated measures ANOVA

Of the individuals that received the second scale, the modified Silver Lining Questionnaire, scores represented the full range of the scale from 1.00 (least growth) to 5.00 (most growth), with a mean score of 3.25 ($SD = .75$). This average score is in between the “not sure” and “agree” categories. When divided by whether or not participants themselves experienced illness, the 51 participants that personally experienced illness ($M = 3.47$, $SD = .83$) compared to the 61 that did not personally experience illness ($M = 3.07$, $SD = .59$) had significantly higher growth scores, $t(87.36) = 2.87$, $p = .003$. Therefore, while the scores are still between the “not sure” and “agree” categories, those that experienced illness themselves experienced more growth than those that did not.

Participants were asked the open-ended question “We are interested in the positive ways that the COVID-19 pandemic has changed how you feel and behave. What are the first three ways that come to mind?” Responses ($n = 134$) were analyzed by an independent investigator for themes. Eight categories were identified: appreciation of self/self-improvement ($n = 87$), appreciation of others ($n = 74$), change of habits ($n = 18$), no answer/negative answer ($n = 14$), appreciation of school ($n = 10$), appreciation of physical health ($n = 6$), change of politics/beliefs ($n = 5$), and improved mental health ($n = 4$).

“Appreciation of self/self improvement” closely resembled the person strength and appreciation of life subcategories of PTG. Resilience was commonly named or described, as reflected in one individual’s description of “rolling with the punches.” Individuals gained a

sense of appreciation for themselves, “Now, I find happiness in winding down at night and spending time with myself.” People also described themselves as more “independent” or “self dependent.” Self care was also mentioned by many, with one participant pointing out that they have “put more emphasis on taking breaks” and another mentioning “realizing it’s okay to need time alone.” Some responses within this category also detail self-discovery, with individuals indicating that they began therapy, took time to better understand their priorities, and realized their gender identities and sexual orientations.

“Appreciation of others” resembles the subcategory of relating to others. Participants mention that technology has provided easier access to communication with people that are far away. Many people directly stated that the pandemic served to strengthen their relationships. And, due to less social access, individuals stated that they value the time spent with friends more. One participant reported that “I value my friends and the time I get to spend with them more, I spent more time with fewer people which has some downsides but overall those relationships are stronger.” Most responses in this category also specifically mentioned either family or friends. Individuals report being more accepting of others, which has professional implications “I am more open-minded about others’ situations and how they might be different than mine and have given everyone that I encounter some more wiggle room in the sense of taking their time to get things done when I am out in the world.”

The “change of habit” category reflects how individuals reported changing behaviors or attitudes. Cleanliness was a key theme, with individuals noting that they are more hygienic. People have also reported being more intentional about their time, with one participant stating “lockdown showed me that being extremely busy is not really necessary; so much of the errands

etc. that I used to do were not really needed” and another wrote “I’ve started focusing on the future, professionalism, and my career even more than before.”

“No answer/negative answer” included individuals that did not experience growth. Some individuals in this category only experienced life-altering negative events due to the pandemic. One individual stated, “honestly not applicable to me, I am now chronically ill and it has really messed up my life and future plans.”

Responses in the “appreciation of school” category reflected individuals being able to focus more on academic work and goals throughout the course of the pandemic. One stated “I am more willing to take good career/academic risks.” Some also reported improvements to academic performance, with one participant mentioning that “I liked having online exams because of testing anxiety” and another stating that “It [the pandemic] gave me extra time to study for the SAT before applying to college which massively impacted the amount of scholarship funds I received.”

“Appreciation of physical health” included a sense of gratefulness for their health status and the ability to allocate additional time to caring for physical health. There was also a general appreciativeness of access to opportunities to physically exercise. One individual stated that “you can find ways to appreciate your sport/exercise when it gets shut down.”

“Change of politics/beliefs” included strengthened political beliefs, including education on social justice and other societal issues. One participant recalled that “It [COVID-19] has gotten me to think about some of the problems in our society on a more structural level instead of just being the failures of individuals.”

Lastly, “improved mental health” was the least observed categorization, but included great shifts. One participant recalled that “Covid 19 had me kicked out of my abusive god

parents house” and another stated that “the pandemic made it so that I didn’t have to attend my final semester of high school in person, which prevented me from killing myself.” Others became more open about their mental health with loved ones, and became medicated and began treatment for mental health concerns.

Factors Contributing to PTG

The demographic factors of race, geographical location, year of graduation, annual family income, health, and sex assigned at birth were analyzed for impact on PTG. There was no significant impact of race, $F(9, 158) = 1.080, p = .381$, geographic location, $F(17, 152) = 1.151, p = .312$, year of graduation, $F(3, 166) = .471, p = .703$, annual income, $F(3, 164) = 1.043, p = .375$, health, $F(3, 166) = 2.209, p = .089$, or sex assigned at birth, $t(168) = -1.058, p = .292$.

Loneliness, social connectedness, family connectedness, social support, covid-specific distress, distress tolerance, and PTSD symptoms were assessed (Table 2).

Table 2.

Descriptive Statistics for Factors Contributing to PTG.

	<u>Possible Range</u>	<u>Actual Range</u>	<u>M</u>	<u>SD</u>
<i>Loneliness</i>	1.00-4.00	1.00-3.25	2.22	.50
<i>Social Connectedness</i>	1.00-10.00	2.33-10.00	7.16	1.58
<i>Family Connectedness</i>	1.00-10.00	1.00-10.00	7.39	2.03
<i>Social Support</i>	1.00-4.00	1.00-4.00	2.73	.60
<i>COVID-19 Anxiety</i>	1.00-5.00	1.00-5.00	2.82	.90
<i>COVID-19 Suspicion</i>	1.00-5.00	1.00-5.00	2.98	1.16
<i>Distress Tolerance</i>	1.00-5.00	2.25-5.00	3.49	.53
<i>PTSD Symptoms</i>	1.00-5.00	1.00-5.00	2.70	.88

The relationship between these variables and PTG (as measured by the modified Posttraumatic Growth Inventory) was analyzed using Pearson correlation. PTSD symptoms were significantly positively correlated with PTG, $r(168) = .220, p = .004$. Additionally, social connectedness significantly positively correlated with PTG, $r(168) = .275, p < .001$. There was also a significant positive correlation between family connectedness and PTG, $r(168) = .203, p = .008$. Finally, social support was also positively correlated with PTG, $r(168) = .192, p = .012$. There was also a significant positive correlation between distress tolerance and PTG, $r(167) = .156, p = .43$. Neither loneliness, $r(168) = -.058, p = .454$, nor either COVID-19 specific distress measures ($r(168) = .097, p = .210, r(168) = -.030, p = .693$) were significantly correlated with PTG.

A multiple linear regression was used to test for relationship strength while accounting for covariance between the predictor variables. The results indicated that the model was a significant predictor of PTG, $R^2 = .184, F(8,160) = 4.514, p < .001$. It was found that PTSD symptoms significantly predicted total PTG ($\beta = .286, p = .002$). Social connectedness also significantly predicted total PTG ($\beta = .340, p = .004$). Family connectedness ($\beta = -.157, p = .074$), social support ($\beta = .145, p = .269$), and distress tolerance ($\beta = .187, p = .189$) did not significantly predict total PTG. The final predictive model was:

$$\text{Total PTG} = .251 + (.340 * \text{Social Connectedness}) + (.286 * \text{PTSD})$$

An additional PTG score was collected for individuals that experienced illness either firsthand or secondhand using the modified Silver Lining Questionnaire. The relationship between the predictor variables and modified Silver Lining Questionnaire scores was analyzed using Pearson correlation. Consistent with the results for general PTG, PTSD symptoms were significantly positively correlated with PTG from illness, $r(113) = .346, p < .001$. Social

connectedness was also significantly positively correlated with PTG from illness, $r(113) = .183$, $p = .050$. Lastly, family connectedness was significantly positively correlated with PTG from illness, $r(113) = .187$, $p = .046$. Loneliness, social support, distress tolerance, both COVID-19 specific distress measures were not significantly correlated with PTG from illness.

Discussion

Our findings demonstrated the lingering impact of the COVID-19 pandemic on undergraduate college students in the U.S. Despite the common narrative that young people are unaffected by the COVID-19 virus, the majority of participants indicated that they had been infected themselves. In addition, this narrative serves to undermine the very real and prevalent trauma that individuals have sustained through prevention measures such as social distancing and quarantining. Most participants of the survey were required to quarantine due to exposure to the virus, many of which were mandated by educational institutions. And, while many did not end up contracting the virus themselves, they were subjected to social isolation for an extended period of time, in addition to other unfavorable conditions such as poor food access. Some individuals that underwent these quarantine experiences reported that they were so traumatic that their main source of anxiety surrounding COVID-19 was not contracting the virus, but being forced to quarantine again. The prevalence of lingering pandemic-related trauma and traumatic distress this far into the pandemic is important to note, as it is important to consider how this may be perpetuated by the idea that everything is as it was prior to the start of the pandemic, or that we are moving back to normal. Without proper acknowledgement of the trauma sustained, especially the trauma sustained by young people, there is a lack of resources allocated to addressing that trauma and a lack of acknowledgement of their experiences. This creates a gap in

social support and support resources, which may prevent growth from continuing and may contribute to poor mental health outcomes.

The current research found that, while the majority of students are still experiencing traumatic stress symptoms, on average, they are also experiencing growth directly related to their pandemic experiences. This is consistent with previous research that indicated that PTG was not able to be achieved without simultaneously experiencing the impacts of trauma. Additionally, the requirement for social connectedness to be present in participants to facilitate the development of PTG has also been shown in previous studies. Participants of the study indicated experiencing all areas of PTG, with appreciation of life being the most experienced factor. Of the individuals with direct experience with the virus, those that contracted the virus themselves experienced more growth than those whose loved ones were ill. This is likely a result of having experienced greater trauma. In general, this demonstrates that college students are beginning to experience growth from the pandemic. This is inconsistent with previous research that occurred earlier into the pandemic, suggesting that enough time had not passed when that research had been conducted in order for students to begin to create meaning from their experiences, and illustrating how meaning making will change throughout one's life (Hyun et al., 2021). The current study took place after key developments in limiting the spread of the virus, such as mass vaccination efforts and the development of vaccine boosters. Additionally, much more is known about the COVID-19 virus at the time of this study than at earlier points of the pandemic. This provided individuals with more safety as opposed to the constant uncertainty that the beginning of the pandemic supplied, and this safety may have given individuals the capacity to dedicate more time to processing the events of the pandemic as opposed to worrying about the future.

Interestingly, demographic factors had no significant impact on the development of PTG. This is inconsistent with previous research, which suggests that female individuals, individuals with lower socioeconomic status, and individuals from historically marginalized racial groups all have experienced higher levels of traumatic distress from COVID-19 with less social support. For this reason, it was thought that individuals holding these identities would have experienced less growth than others. One possible explanation for the lack of findings in this area may lie within the lack of diversity within the sample. The majority of participants were assigned female at birth and were white. Additionally, the majority of participants were students at Wheaton College (MA).

Wheaton is a small liberal arts college which emphasizes the importance of a close community as a core value. Students that attend Wheaton are typically politically left-leaning, and the institution prioritizes diversity, equity, and inclusion efforts as a result. Additionally, Wheaton is a nonreligious institution, and therefore does not have a large population of students that regularly participate in religious services/activities. This may specifically account for the lack of spiritual growth seen in the sample data, however there are a variety of experiences that remain unaccounted for throughout. For example, very few participants attended college outside of the northeastern United States, and pandemic response varies highly in different regions of the U.S. This also limits the generalizability of the data. Additionally, many individuals holding historically marginalized identities do not have equal access to higher education and, therefore, individuals experiencing the highest levels of trauma were excluded from the sample by default.

There are other limitations to this research in relation to the methodology as well. Due to the nature of survey research, all data was self-reported. Individual perceptions of events are often skewed, and due to the nature of questions asking participants to recall information that

spanned over the course of a year, there is a lot of room for error. Additionally, over half of the participants in the study indicated that they have had difficulty remembering important events from the past year as a part of the PTSD Checklist, which adds to the difficulty of self-reporting accurate information.

It is evident that the majority of college students are still experiencing traumatic impacts of pandemic life and living conditions. Despite continuous new strains of the COVID-19 virus being discovered with increasingly higher transmission rates, many state and local governments and institutional regulations do not prioritize minimizing the spread of infection—a goal that has been shown to be incredibly challenging if not impossible in some areas. Rather, these policy choices focus on transitioning back to ‘normal’ operation and pre-pandemic life. On a more microscopic level, these decisions at educational institutions have resulted in the lifting of mask mandates, less access to testing, and large social gatherings. Most importantly, educational institutions have stopped offering accommodations and other amendments to academic curriculum that were introduced as a result of the pandemic, often leaving students who do contract the virus unable to keep up with their studies. It is likely that these decisions are contributing to increased levels of trauma or distress for these students. For example, classes are no longer offered in hybrid formats, so if a student is forced to quarantine due to exposure, it is up to the student and their professor to organize an alternative method to complete assignments and to participate in classwork.

Future directions for research should take into consideration the continued unpredictability of the COVID-19 virus and diversity in societal response. Study recruitment should focus on regions of the U.S. that have lower vaccination rates and that have removed masking and social distancing policies at earlier times. It is likely that individuals attending

college in these areas will have significantly different perceptions of the danger of the virus, and therefore would be experiencing different levels of distress and trauma. Additionally, recruitment should specifically seek out participants that hold identities that would result in more exposure to trauma, such as first generation college students, students of lower socioeconomic status, and students of color. It is also unknown when college students began to experience PTG from the pandemic. Follow-up research can be conducted to measure whether or not levels of PTG increase over time, meaning that individuals are likely beginning to experience it at the time of the current study, or if the levels remain consistent, suggesting that the results of this study highlight the highest level of growth that students will achieve.

It is recommended that individuals working within higher educational health systems looking to facilitate increased levels of PTG in their student populations remain mindful of the importance of social connectedness in the development of PTG. These individuals should prioritize creating social opportunities for students and should limit times of isolation as much as possible. One possible method of ensuring that proper quarentining procedures are conducted while the promotion of social connectedness is prioritized is utilizing virtual programming and events for students that cannot attend in-person social gatherings. In other words, the necessity of physical distance should not translate into social isolation for students. While it may be impossible to prevent the acquisition of trauma while living through a global pandemic, ensuring that we remain connected to one another throughout can transform the devastating experience into one of growth and positivity.

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