CAREGIVERS’ ROLE IN YOUTH FUNCTIONING AMONG BEREAVED CAREGIVER-CHILD DYADS

by

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ABSTRACT

TAYLOR GRACE CARTER. Caregivers’ Role in Youth Functioning Among
Bereaved Caregiver-Child Dyads.
(Under the direction of DR. RYAN KILMER)

This study explored indicators of caregiver functioning, the caregiver-child relationship, and child functioning among bereaved youth (aged 6 to 13 years) and their caregivers attending peer support programming at two grief centers (*n* = 56 caregiver-child dyads). Limited research to date has examined bereaved caregiver-child dyads, peer support programming for grief, or posttraumatic growth (PTG) among this population. The present analyses focused on caregiver psychological distress, strain, availability, coping advice, and PTG, as well as youth psychological functioning, coping resources, and PTG, which were assessed via questionnaires administered to children and their caregivers at the grief centers. Findings suggest that child-reported caregiver distress was associated with poorer youth psychological functioning, and several dimensions of caregiver coping advice (i.e., active coping, planning, positive reframing, emotional support, and religious coping) related to higher youth PTG. There were no other significant associations between the caregiver- and child-related variables. The lack of significant findings might be attributable to study limitations (e.g., small sample size, homogenous population, measurement issues). Overall, the study highlights that caregivers can positively and negatively influence youth adaptation to loss via their own functioning (as reported by children) and their interactions with children. Attending to these factors in the context of peer support programming may promote healthy adaptation and the development of PTG. Study implications and needed future directions are discussed.

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Caregivers' Role in Youth Functioning Among Bereaved Caregiver-Child Dyads

Youth bereavement, defined by the loss of a parent, caregiver, or sibling, impacts a significant number of children and adolescents. A statistical model developed using data from 2016 to 2020 estimates that 7.7% of U.S. youth—approximately 5.6 million—will face the death of a parent or sibling by age 18 (Judi's House, 2022). Further, in light of the ongoing pandemic, more recent data suggest that over 120,000 children under age 18 lost a primary caregiver to COVID-19 in a 15-month period across 2020 and 2021 alone, indicating that rates may ultimately be higher than predicted (Hillis et al., 2021). However, the topic of youth bereavement has received relatively limited research attention. Considering the notable, and likely increasing, prevalence of childhood bereavement, additional focus is warranted (Howell et al., 2016).

Impact of Bereavement on Children

Contributions to Child Psychosocial Functioning

Childhood bereavement can significantly disrupt youths' lives and developmental trajectories and is shown to increase risk of impaired psychological, social, academic, and occupational functioning (Brent et al., 2012; Burns et al., 2020). While most bereaved youth return to pre-loss functioning within a year after the death (Melhem et al., 2011), research also suggests that mental health difficulties persist for approximately 20% of youth (Cipriano & Cipriano, 2019). The potential psychological impacts of bereavement are far-reaching, as research indicates that bereaved youth present with elevated risk of depression (Melhem et al., 2008), anxiety (Kaplow et al., 2010), conduct issues (Kaplow et al., 2010), posttraumatic stress disorder (PTSD; McClatchy et al., 2009), suicide attempts (Jakobsen & Christiansen, 2011), self-injury (Grenklo et al., 2013), and substance abuse (Hamdan et al., 2013). Broadly, longitudinal data suggest that bereaved youth exhibit higher rates of functional impairment over time compared to non-bereaved peers (Pham et al., 2018).

Additionally, there may be social impacts of bereavement, as bereaved youth are shown to experience lower-quality attachment to peers and poorer family functioning over time compared to non-bereaved peers (Brent et al., 2012). Some grieving youth exhibit social withdrawal (Cerel et al., 2006), perhaps driven by feelings of interpersonal inadequacy and inferiority (Servaty & Hayslip, 2001). Alternately, youth may lose contact with peers and important adults due to bereavement-related family relocation (Wolchik et al., 2008). Moreover, bereaved families face the disruption of intra-family relationships and must engage in reorganization of the family system following the loss (Servaty & Hayslip, 2001), which may result in reduced family cohesion (Haine et al., 2008).

These findings hold particular salience for bereaved youth, because research indicates that there is an interplay between their experiences of psychological distress and social disruption, such that psychopathology may both trigger and be triggered by social dysfunction (Brent et al., 2012). Further, it has been shown that the increased risk of psychological and social impairment faced by bereaved youth may extend into adulthood, highlighting the importance of a thorough consideration of the potentially detrimental impacts of youth bereavement (Luecken, 2008).

Contributions to Child Posttraumatic Growth

Given that most youth do not face significant impairment in the years following their loss (Dowdney, 2000), it is also essential to acknowledge ways in which youth can grow in the face of tragedy and death, such as via posttraumatic growth (PTG; Kilmer & Gil-Rivas, 2010). PTG – “positive change experienced as a result of the struggle with a major loss or trauma” (Kilmer, 2006, p. 264) – goes beyond focusing on the presence or absence of negative outcomes, or a return to baseline functioning (Bernstein & Pfefferbaum, 2018). Instead, it highlights individuals’ capacity to transform in the wake of highly stressful and/or traumatic events (Calhoun & Tedeschi, 2006). Although PTG research has largely focused on adults, research does indicate that youth are capable of experiencing PTG (e.g., Andrades et al., 2018; Armstrong et al., 2018; Kilmer et al., 2014; Meyerson et al., 2011). PTG-like changes have been reported in parentally bereaved youth (e.g., Arslan et al., 2020; Brewer & Sparkes, 2011; Hirooka et al., 2016; Salloum et al., 2017; Wolchik et al., 2009) and youth exposed to the death of a loved one (e.g., Ickovics et al., 2006; Milam et al., 2004; Oltjenbruns, 1991), as well as to parental cancer (e.g., Wong et al., 2009), childhood cancer (e.g., Barakat et al., 2016; Howard Sharp et al., 2017), COVID-19 (Zhen et al., 2022), natural disasters (e.g., Andrades et al., 2018; Cryder et al., 2006; Felix et al., 2015; Hafstad et al., 2010), terrorism (e.g., Laufer & Solomon, 2006; Milam et al., 2005), traffic accidents (e.g., Salter & Stallard, 2004), and more (see, e.g., Kilmer et al., 2014; Meyerson et al., 2011). Although PTG has been described in samples of bereaved children and youth, there is acknowledgment within the bereavement field that additional research is warranted to examine PTG and understand the factors that contribute to the growth process in bereaved youth (Griese et al., 2017).

Grieving Within the Family System

As there are many possible variations in adaptation to youth bereavement, it is important to consider multiple potential influences on outcomes, including the role of the family system (Cipriano & Cipriano, 2019). Children experience grief within the context of their environment, among family members also grieving (Griese et al., 2017). Surviving caregivers and children face challenges individually, but they also are shown to exhibit bidirectional influences (i.e., transactions) on one another’s responses and adjustment to their shared grief (Jiao et al., 2021). Accordingly, we sought to address gaps in the literature by collecting data from both children and their caregivers (Breen et al., 2019). We examined the impacts of bereavement on children and caregivers individually, as well as the relational factors via which caregivers and children influence one another’s functioning (Stroebe & Schut, 2015).

Conceptual Models of Relevance

Used widely in youth risk and resilience research, the transitional events model helped frame our study of the influence that caregivers, and the family context more broadly, have on child adjustment in bereaved families (Felner et al., 1988; Haine et al., 2008). It suggests that children’s adaptation in response to a significant stressful event (e.g., the death of a loved one) is influenced by the series of smaller stressors, challenges, and transitions that often follow the loss (e.g., caregiver distress, parenting strain, social disconnection, economic concerns); the youth’s protective resources (e.g., caregiver support, caregiver responsiveness, coping skills); and the dynamic interactions between these factors (Felner et al., 1988). Aligning with this model are our measures of stressors and transitions following the loss (e.g., caregiver distress and strain) and of potentially protective resources (e.g., caregiver coping advice and availability, child coping resources).

Also useful in informing our conceptualization, Jiao et al. (2021) constructed a framework for parent-child dyadic relationships in parentally bereaved families based on their comprehensive review of the topic. They assert that “state, interdependence (correlation and causality), and contextual factors” are all elements of the relationship between the parent and child (Jiao et al., 2021, pp. 898-899). In their view, state factors include the closeness of the parent-child bond (e.g., relationship quality) and the interactions between parent and child (e.g., communication patterns), both of which influence the adaptation (e.g., mental health outcomes, behavior) of the two individuals. Additionally, they describe adjustment as interdependent, such that there is a bidirectional relationship between parent and child adaptation. These dynamics are influenced by contextual factors (e.g., age, gender; Jiao et al., 2021). Accordingly, the present effort examined the interplay of indicators of caregiver and child adjustment (e.g., psychological functioning and distress, PTG) and caregiver-child relationship status (e.g., caregiver strain, availability, and coping advice), as well as the influence of contextual factors such as age, household income, and time since death.

Child Psychological Functioning in the Bereaved Family System

Associations with Caregiver Psychological Distress

Surviving caregivers often experience psychological distress in the wake of a loved one's death (Jiao et al., 2021). Consistent with the patterns observed with bereaved youth, most bereaved caregivers do not exhibit long-term impairment (Li et al., 2021); however, compared to non-bereaved controls, higher levels of depression, anxiety, PTSD, suicidal ideation, and functional impairment have been reported among caregivers assessed a median of nine months after their loss (Melhem et al., 2008). Estimated prevalence rates vary, with incidence of caregiver depression in the year following the loss ranging from 15 to 50%, a reflection of the difficulties distinguishing between clinical depression and normative grief reactions (Worden & Silverman, 1993). According to Park et al. (2021), "the few studies of bereaved adults with minor children primarily rely on qualitative data and are now decades old" (p. 1924). Neither Park et al. (2021) nor the other studies they cite, with the exception of Worden and Silverman (1993), report the prevalence rates of the disorder in this population. While more recent prevalence rates of depression may not be clear, many caregivers experience meaningful distress, as well as other mental health symptoms, subsequent to a loss.

In general, caregivers’ psychological distress has important implications for children, as caregiver-reported mental health problems are shown to contribute to poorer psychological outcomes among youth. For example, studies suggest that children with a parent who is depressed exhibit elevated internalizing and externalizing symptoms (Gruhn et al., 2016). This link is also found in bereaved families, a finding that is consistent with the transitional events model (Felner et al., 1988; Haine et al., 2008). For instance, research indicates that bereaved parents’ distress is significantly associated with parent-reported internalizing and externalizing symptomatology in children (Kwok et al., 2005; Zhang et al., 2022). Further, bereaved parents’ general psychological functioning is shown to relate to their children’s mental health, such that children whose caregivers exhibit more symptomatology subsequent to a loss tend to evidence higher levels of symptoms (Dowdney et al., 1999; Lin et al., 2004; Pfeffer et al., 1997).

Alternately, favorable caregiver mental health appears to be associated with improved child functioning. In their review of the interdependence of caregiver and child adaptation in the face of a death, Jiao et al. (2021) highlighted nine relevant studies consistently documenting that caregivers who reported fewer mental health challenges also tended to have children with lower levels of depression, anxiety, and externalizing symptomatology. Additionally, positive caregiver functioning was shown to protect against child depression (Melhem et al., 2008).

Associations with Caregiver Strain

Death in the family unit is often followed by a series of stressors (Haine et al., 2008). For one, surviving caregivers who lost a partner are faced with additional responsibilities and expectations as they take on familial roles formerly held by the deceased caregiver (Weltner, 1982; Wolchik et al., 2006). They are left to manage many demands on their time and energy (e.g., parenting, housekeeping, working), which leaves limited time for meeting their own needs (Gass-Sternas, 1995). Caregivers are supporting their struggling families while concurrently coping with their own grief (Park et al., 2021), a dynamic that can result in role overload, wherein surviving caregivers struggle to meet the demands placed on them and feel guilty about their inability to do so (Gass-Sternas, 1995). Correspondingly, in a survey of 845 bereaved caregivers, 79.3% of respondents endorsed that they “worry about their ability to care for their children on a daily basis,” and 87.8% reported being “overwhelmed with parenting alone” (Park et al., 2021, p. 1926). Broadly, research indicates that single parenthood places significant emotional and physical strain on caregivers (Meier et al., 2016; Weltner, 1982).

Bereaved families also face a variety of other disruptions to their lives. Surviving caregivers may encounter financial difficulties associated with the loss of their deceased partner’s financial contributions (Wolchik et al., 2008). Accordingly, they may be required to change jobs or re-enter the job market, or, alternately, be unable to return to work due to the high cost of childcare. Because of such changes, it may be necessary for families to move to another home, which may disrupt their social network and require them to adjust to a new environment (Gass-Sternas, 1995). Even if they do not move, research indicates that bereavement can result in fewer interactions with neighbors and friends (Wolchik et al., 2008). For instance, their responsibilities as a single parent can make it challenging to maintain a social life or, when they are ready, to date (Kitson et al., 1989). Additionally, bereaved caregivers are more likely to report feeling tired and are at elevated risk for sleep problems compared to non-bereaved controls (Amato & Partridge, 1987; Lancel et al., 2020).

Over 50 years ago, Brown (1966) was one of the first researchers to infer that mental illness among bereaved youth is not a consequence of the death itself, but rather of how the family manages and responds to the loss. Families are likely to face many stressors that may impact their response, which collectively may alter caregivers' ability to provide the stable, supportive environment important for cultivating youth well-being (e.g., Kilmer et al., 2001; Wyman et al., 1999), the importance of which is highlighted in Jiao et al.'s (2021) framework of parent-child relationships in widowed families. Instead, task overload may result in increased negativity and impatience in caregivers' responses to their children (Wolchik et al., 2006). Accordingly, post-bereavement negative life events (e.g., intrafamilial conflict, separation from extended family) are shown to be associated with increased child mental health problems (Haine et al., 2008; Sandler et al., 1992). For example, in a study of children bereaved by suicide, stressful life events were positively associated with children's total mental health symptoms, internalizing symptoms, depression, anxiety, and posttraumatic stress, although there may also be a strong genetic component to this association among children bereaved by suicide (Pfeffer et al., 1997). Further, among girls participating in an intervention designed for parentally bereaved youth, improvement in their mental health was partially explained by program-related reductions in their exposure to negative life events (Tein et al., 2006). This relation between parenting strain in response to adversities and youth outcomes is emphasized in the transitional events model (Felner et al., 1988).

Associations with Child-Reported Caregiver Distress and Availability

Caregivers may face both psychological distress and stressful events in response to the death of their loved one, which together can negatively impact their capacity to engage in responsive parenting and facilitate open, supportive conversations with children about their shared loss (Pynoos et al., 1995; Wolchik et al., 2006). Youth may be perceptive of this dynamic and thus choose not to share their distress with caregivers to avoid burdening them. This can leave children feeling lonely and unsupported (Sveen et al., 2016).

In turn, children's perceptions of their caregivers' distress can contribute to poorer youth mental health (Dyregrov & Yule, 2006), which aligns with expectations based on the transitional events model (Felner et al., 1988). For instance, children's belief that their caregiver is too distressed to talk to them about a potentially traumatic event is correlated with increased symptomatology, as is the awareness that their caregiver seems unavailable for support when they particularly need them (Gil-Rivas et al., 2007). While these associations have been found in the face of other studied adversities, including among families affected by the 9/11 terrorist attacks (Gil-Rivas et al., 2007), we are not aware of previous research examining such relationships in bereaved families. However, research with bereaved families indicates that children who report open communication by caregivers also endorse fewer depression and anxiety symptoms (Raveis et al., 1999). Such findings are reflected in the consideration of the impact of parent-child communication on youth outcomes by Jiao et al.'s (2021) framework of parent-child relationships in widowed families. Further, positive adjustment among bereaved youth is shown to be promoted when caregivers establish an environment in which children feel comfortable expressing their distressing thoughts and feelings (Saler & Skolnick, 1992). In the transitional events model (Felner et al., 1988) and other frameworks, such supportive environments can serve as a protective resource. Broadly, additional research is warranted to examine associations between child psychological functioning, caregiver psychological distress, caregiver strain, and child-reported caregiver distress and availability in bereaved families.

Coping in the Bereaved Family System

Impact of Children's Coping Approaches

The coping strategies children employ also impact their responses to grief. There is a wide array of strategies youth may use to cope with major stressful events, with various potential implications (Raccanello et al., 2022). Bereaved children who report using more expressive coping strategies – wherein children clearly and accurately communicate their emotions with others – endorse lower depression, anxiety, and posttraumatic stress symptomatology than bereaved youth who do not utilize such coping approaches (Howell et al., 2016). Additionally, the use of approach-oriented coping skills (e.g., acceptance, cognitive restructuring, social support seeking, problem solving) is associated with positive adjustment in children whose parents have cancer and in youth exposed to natural disasters (Krattenmacher et al., 2013; Raccanello et al., 2022). Such strategies may function as protective resources, as suggested by the transitional events model and other frameworks (Felner et al., 1988). Further, children's use of adaptive coping strategies may reflect qualities of family functioning and the caregiver-child relationship, including the specific strategies that caregivers are guiding their children to employ, a factor assessed in this study.

By contrast, avoidance-oriented approaches (e.g., wishful thinking, distraction, escape, social isolation) are associated with poorer functioning in youth who experienced parental cancer or natural disasters (Krattenmacher et al. 2013; Raccanello et al., 2022). While avoidant coping strategies can be effective and adaptive in some circumstances, the use of such strategies has also been shown to correlate with elevated depression, anxiety, and posttraumatic stress in bereaved youth (Kaplow et al., 2013), as has children's belief that they must suppress their grief reactions (Haine et al., 2008).

Associations Between Caregiver Coping Advice and Child Psychosocial Functioning

Caregivers are shown to play an important role in children's coping, as they typically support youth in interpreting situations and emotions associated with potentially traumatic events, as well as guide children's coping behaviors (Bernstein & Pfefferbaum, 2018; Kliewer et al., 1994). Notably, studies suggest that there are associations between caregivers' suggestions of coping strategies and children's use of them (Kliewer et al., 2006), but further research is warranted to illuminate the connection between caregiver-reported coping advice and child-reported coping resources.

Caregivers' recommendations for coping may have positive or negative impacts on youth functioning, depending on the nature of the response. For example, research on families exposed to the 9/11 terrorist attacks indicated that caregivers' coping advice reduced youth distress when adults suggested emotional expression, positive reframing, and acceptance coping strategies, which might have promoted youths' feelings of safety and security (Gil-Rivas et al., 2007). Advice contributed to increased distress when suggestions encouraged children to engage in planning or seek help from others, which youth might have interpreted as indications that the threat was greater than they initially perceived and that their caregivers were unable to keep them safe in the future (Gil-Rivas et al., 2007). However, these findings may be reflective of the unique impact of 9/11 as an unprecedented, unpredictable, ongoing stressor with large-scale, international implications, and may thus be less applicable for bereaved families (though the loss of a parent or sibling can also meet some of these criteria; Gil-Rivas et al., 2007). Among bereaved youth, studies show that psychological functioning is improved when children are encouraged to engage in active, approach-oriented coping (Wolchik et al., 2006) and worsened when caregivers avoid or discourage communication about the loss (Raveis et al., 1999).

Accordingly, when viewed within the theories guiding the present work, coping advice may be seen as a potential protective resource that can promote positive outcomes per the transitional events model (Felner et al., 1988), as well as be an indicator of the impact of parent-child interactions on outcomes, as described by Jiao et al.'s (2021) framework of parent-child relationships in widowed families. Additional research is necessary to further elucidate the relationship between caregiver coping advice and psychosocial functioning in bereaved children.

Child PTG in the Bereaved Family System

Research suggests that PTG can emerge from struggle in the aftermath of potentially traumatic events, as individuals process the event and associated implications for their life moving forward (Calhoun & Tedeschi, 2006). While research indicates that youth experience PTG (e.g., Kilmer et al., 2014; Meyerson et al., 2011), there does appear to be variation in the degree to which children are capable of the cognitive and affective processes thought necessary to yield PTG (e.g., psychological mindedness, emotion regulation, self-awareness, productive rumination, cognitive reappraisal), given that youth experience ongoing development and maturation impacting their cognitive and emotional capacities throughout childhood and adolescence (Kilmer & Gil-Rivas, 2010). Further, children's schemas, mental models, and assumptions about themselves, others, and the world are not yet firmly established and thus may be significantly disrupted by major stressful events (Janoff-Bulman, 1992).

It is thought to be via their influence on these evolving processes and frameworks that caregivers may affect youth PTG (Kilmer et al., 2014). There is evidence of caregivers' impact on child PTG following other studied adversities (e.g., natural disasters; Felix et al., 2015; Hafstad et al., 2010; Kilmer & Gil-Rivas, 2010), but research in this area is limited, and we are not aware of previous studies examining the role caregivers serve in bereaved youths' development of PTG (Arslan et al., 2020). Accordingly, we sought to address this gap in the literature regarding potentially positive outcomes for children who have experienced bereavement (Eisma et al., 2019).

Associations with Caregiver PTG

As is the case for their children, bereaved caregivers are shown to exhibit PTG in response to the death of a family member (e.g., Albuquerque et al., 2018; Dias et al., 2021; Jenewein et al., 2008). Conceptually, it follows that caregivers' development of PTG might be associated with children's PTG, as caregivers may help their child increase awareness of, craft narratives about, and adapt schemas regarding changes following their loss, PTG-promoting processes that caregivers may concurrently be undertaking themselves (Kilmer & Gil-Rivas, 2010). However, research evidence is mixed as to the relationship between caregiver and child PTG. In a study of families impacted by the 2004 tsunami in Thailand, significant positive correlations were observed between parental and youth PTG (Hafstad et al., 2010), yet no associations between these variables were found in studies of families impacted by wildfires or Hurricane Katrina (Felix et al., 2015; Kilmer & Gil-Rivas, 2010). Similarly, in research on pediatric cancer survivors, associations were observed to be significant and positive between caregiver PTG and youth benefit finding – a concept denoting positive impacts experienced as a result of coping with a major stressful event, which is conceptually similar to PTG and often used interchangeably in research on this population (Koutná et al., 2021) – or, alternately, associations were nonsignificant (Michel et al., 2010; Wurz et al., 2022). Accordingly, conclusions are challenging to draw at this time. The present effort sought to contribute to the emerging research literature by examining the relationship between caregiver PTG and youth PTG among bereaved families.

Associations with Caregiver Psychological Distress

Previous research has also sought to examine the impact of caregiver psychological distress on child PTG. Researchers have postulated that caregiver distress may promote youth PTG, as caregivers who themselves have struggled are especially well-suited to help their children process challenges. However, it is also possible that caregiver distress may instead reduce the likelihood that youth report PTG, as mental health challenges may inhibit caregivers' ability to support children in PTG-promoting processes, such as productive rumination and positive reappraisal (Hafstad et al., 2010). Despite multiple theorized connections between caregiver psychological distress and child PTG, research to date has found that associations with child PTG are not significant for caregiver-reported posttraumatic stress symptoms (Hafstad et al., 2010) or for symptoms of depression or anxiety (Felix et al., 2015; Kilmer & Gil-Rivas, 2010). Non-significant correlations were also documented between pediatric cancer survivors' benefit finding and parents' symptoms of posttraumatic stress (Wurz et al., 2022) and depression or anxiety (Wilson et al., 2016). However, further investigation is warranted because, to our knowledge, these relationships have not been examined in bereaved families.

Associations with Child-Reported Caregiver Distress and Availability

Researchers reporting nonsignificant relationships between caregiver-reported psychological distress and child PTG have suggested that caregiver distress may only impact youth PTG to the degree that children are aware of the distress and its impacts on caregivers' availability for support (Kilmer & Gil-Rivas, 2010), which may be supported by the emphasis on the impact of parent-child relationship quality on youth outcomes within Jiao et al.'s (2021) framework of parent-child relationships in widowed families. Accordingly, per Kilmer and Gil-Rivas' recommendation, we sought to investigate correlations of child-reported caregiver distress and availability with youth PTG. We are not aware of previous studies examining these associations, either in the grief context or more generally.

Associations with Caregiver Strain

Additionally, we sought to explore the relationship between the strain experienced by bereaved caregivers and child PTG, which is unclear based on the existing research. On one hand, life stressors following potentially traumatic events were shown to be significantly and positively associated with youth PTG among families impacted by wildfires (Felix et al., 2015). Similarly, PTG was lower among tsunami-affected youth contending with fewer secondary stressors (Hafstad et al., 2011), and children with cancer who endorsed low levels of benefit finding also reported fewer stressful life events than did youth endorsing high benefit finding (Tillery et al., 2016). These findings align with the theory that PTG emerges from struggle in the wake of potentially traumatic events (Calhoun & Tedeschi, 2006).

Alternately, researchers examining associations between child PTG and parental sick leave related to the 2004 Thailand tsunami, as an indicator of post-disaster caregiver functioning, found that parents taking 14+ days of sick leave predicted lower levels of youth PTG (Hafstad et al., 2010). These investigators hypothesized that caregivers experiencing difficulties significant enough to warrant missing work may also have been strained in their capacity to reestablish routines and support their children, including through PTG-promoting processes (Hafstad et al., 2010). The current study's caregiver strain measure may serve as a useful means for illuminating caregivers' impacts on child PTG via their perceptions of both life stressors (e.g., financial difficulties, work adjustments, routine change, social disconnection) and burden (e.g., feeling overwhelmed, confined, physically strained, or upset by their child's behavior; Luescher et al., 1999). The importance of these components is emphasized within the conceptual models guiding this effort, as bereaved youths' outcomes are shown to be impacted by life stressors following loss per the transitional events model (Felner et al., 1988) and by caregiving strain (as an indicator of parent-child relationship quality) per Jiao et al.'s (2021) framework of parent-child relationships in widowed families.

Associations with Children's Coping Behaviors and Caregiver Coping Advice

Bereaved children's coping behaviors are also shown to be implicated in their development of PTG, as research indicates that PTG among parentally bereaved youth is positively associated with their use of active, avoidant, and caregiver support-seeking coping strategies (Wolchik et al., 2009). Additionally, youths' coping strategies appear to impact PTG in other stressor-affected populations. For example, youth exposed to wildfires who employed positive reappraisal coping endorsed higher PTG (Felix et al., 2015), and adolescent cancer survivors who coped using acceptance strategies (e.g., positive reinterpretation, acceptance of situations, restraint, mental disengagement) reported higher levels of benefit finding (Turner-Sack et al., 2012). Moreover, stress-related growth in samples of racial/ethnic minority adolescents was associated with their use of positive reinterpretation, acceptance, and religious coping strategies (Vaughn et al., 2009), as well as active coping methods (e.g., planning, instrumental social support; Aldridge & Roesch, 2008).

Further, studies indicate that caregivers' influence on youth coping may contribute to child PTG. For example, pediatric cancer survivors' benefit finding was reportedly higher when caregivers utilized positive religious coping strategies, suggesting that youth in an environment characterized by spirituality and hope may be optimally equipped to develop PTG (Wilson et al., 2016). In a study with a more specific examination of caregiver coping guidance, caregivers' advice that children engage in positive reframing coping was significantly and positively associated with youth PTG among families impacted by Hurricane Katrina (Kilmer & Gil-Rivas, 2010). These researchers affirmed that the process of encouraging children to find the good in their new situation is of close conceptual relation to PTG (Kilmer & Gil-Rivas, 2010). Given that we are not aware of other research examining these associations, further research is warranted to elucidate broader connections between caregiver coping advice and youth PTG, including in bereaved families.

Grief Interventions for Bereaved Families

Because the loss of a loved one can cause significant upheaval in families' lives, bereaved families may need to pursue professional services or supportive programming to promote resilience and maintain healthy developmental trajectories in the aftermath of the death. However, as outlined by Brook Griese and colleagues (2017), many bereaved families have difficulty securing resources to meet their needs. In attempting to address behavioral, somatic, academic, and occupational concerns, families often face systems of care that are siloed, fragmented, and, accordingly, challenging to navigate. Other potential deterrents to families accessing professional support include social stigma, treatment fears, inadequate grief training among providers, service cost, and lack of insurance coverage for subclinical populations (Griese et al., 2017). Broadly, there is a dearth of comprehensive, high-quality, affordable, family-centered grief care, despite its potential preventive and prosocial benefits (Griese et al., 2017). In response to such concerns, multiple preventive approaches to addressing families' grief have emerged, including time-limited models grounded in cognitive behavioral therapy (CBT) and the stress and resilience literature, as well as the more common, community-based, peer support model (Griese et al., 2017).

There is significant research support for the efficacy of time-limited, CBT-based, preventive interventions for improving bereaved youth and caregiver outcomes, primarily spearheaded by Irwin Sandler and colleagues' evaluation of their Family Bereavement Program (FBP; Griese et al., 2017; Sandler et al., 2003). The FBP is a 12-session program for youth and caregivers specifically designed to target factors shown to be associated with maladjustment, including caregiver demoralization, exposure to stressful life events, ineffective coping, poor caregiver-child relationships, and inconsistent or unclear discipline (Sandler et al., 2013). In randomized controlled trials, participation in the FBP was associated with improved coping, mental health functioning, and self-esteem among bereaved children, as well as enhanced parent mental health, more positive caregiver-child relationships, and exposure to fewer stressful events (see, e.g., Sandler et al., 2013). Additionally, there is some research support for other time-limited, CBT-based, preventive interventions, such as Pathfinders (Griese et al., 2018) and the Grief and Trauma Intervention for Children (Salloum & Overstreet, 2012).

By contrast, the literature is less developed for community-based services, including peer support programs (Griese et al., 2017). Volunteer-led, low- or no-cost, peer support programs have been established by a network of community activists – many of whom have personally experienced bereavement – with the goal of addressing the difficulties many bereaved families face in accessing affordable, family-centered, preventive grief care (Griese et al., 2017). These programs are rooted in the beliefs that grief is a natural, nonpathological, non-time-limited, dynamic reaction to loss that is unique for every individual, and that individuals experience healthy adaptation within a safe, supportive environment facilitating personal agency and empowerment (Schuurman & Mitchell, 2020). Often led by trained volunteers and coordinated by professional staff at grief centers, program activities involve similar-age peers jointly sharing bereavement experiences, discussing associated emotions, and processing grief through art, music, play, sand-play, puppetry, and more. Caregivers attend peer support groups held concurrently (Schuurman & Mitchell, 2021). Groups are ongoing throughout the school year and may be joined at any time. Sessions typically occur weekly in the evenings and last 60-90 minutes. The peer support approach is commonly used to address family bereavement (Schuurman & DeCristofaro, 2010), particularly among individuals facing subclinical challenges (Griese et al., 2017).

At many grief centers, staff and volunteers report having the impression, based on their communications with and informal assessments of bereaved participants, that peer support services are beneficial, especially in helping participants better understand their grief and the death, as well as experience safety and social support among peers facing similar circumstances. However, empirical research on peer support programs for bereaved children and caregivers is decidedly limited. In their review of peer support services for bereaved survivors, Bartone et al. (2019) outlined findings from 32 studies published since 1991, only one of which – a doctoral dissertation – evaluated programs for youth (Baumgarten, 2000). Promisingly, adolescents dealing with parental cancer and/or death reported that they viewed their participation in peer-led peer support groups as their most beneficial source of support (Baumgarten, 2000). Further, among bereaved parents who lost a child, studies showed that peer support programs were viewed as normalizing, validating, and supportive (Diamond & Roose, 2016) and improved grief, coping, and PTG (Aho et al., 2011). We sought to address meaningful gaps in the research literature in this area by examining adjustment among children and caregivers participating in peer support programs.

Context of the Present Study

The present effort grows out of a broader study that seeks to examine the experiences of bereaved youth and caregivers attending peer support programming at grief centers. The lead community partners, prominent in the bereavement field and active in the National Alliance for Children's Grief, engaged in informal contact with grief center directors to discuss their potential interest in participation. Directors of 20+ bereavement centers voiced interest in taking part in the project, with data collection planned to begin in the spring of 2020. Before the lead community partners were able to send interested parties formal invitation letters to join the project, all study processes were necessarily put on hold due to the COVID-19 pandemic.

Given the full study's protocol, it was important for data collection to occur in person. In the face of the ongoing pandemic, the collaborators (i.e., lead community partners and university researchers) decided to attempt to implement a pilot of the study in the spring of 2021. The lead community partners reached out informally to contacts within their network to determine which centers had transitioned back to in-person services and which center directors were interested in participating in a research study. They subsequently had specific study-focused discussions with three centers. In the end, two center directors expressed interest in taking part in the study.

Study Aims

Despite the high prevalence of youth bereavement and its significant impacts on children and families, bereavement has garnered minimal research attention, and a significant portion of the literature regarding bereavement's effects on children and their adjustment was published well over a decade ago. Research is particularly limited for peer support programs providing services for youth experiencing grief (Bartone et al., 2019). Through the present effort, I aimed to contribute to the literature by illuminating surviving caregivers' influences on bereaved youth adjustment, which may, in turn, clarify how to intervene most effectively to promote healthy adaptation and mitigate child mental health problems following the death of a family member.

Among a sample of bereaved families receiving grief support services, this study sought to examine associations between indicators of caregiver functioning and the caregiver-child relationship, including psychological distress, strain, availability, coping advice, and PTG, and indicators of youth psychological functioning, coping resources, and PTG. It was guided by three main research questions:

(1) How are caregiver-reported psychological distress and strain and child-reported caregiver distress and unavailability associated with child-reported psychological functioning? Figure 1 illustrates the relationships examined in this question.

(2) How are different types of coping advice from caregivers associated with children's self-reported psychological functioning and coping resources (see Figure 2)?

(3) How are caregiver-reported PTG, psychological distress, strain, and coping advice, as well as child-reported caregiver distress and unavailability, associated with child-reported PTG (see Figure 3)?

Figure 1

Conceptual Model for Relationships Examined in Research Question 1

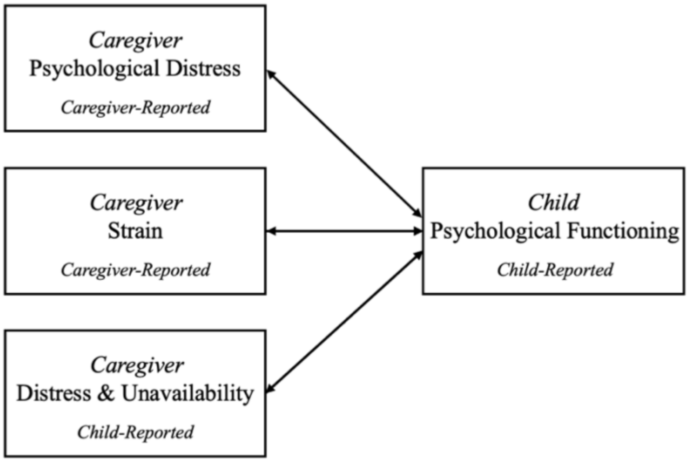


Figure 2

Conceptual Model for Relationships Examined in Research Question 2

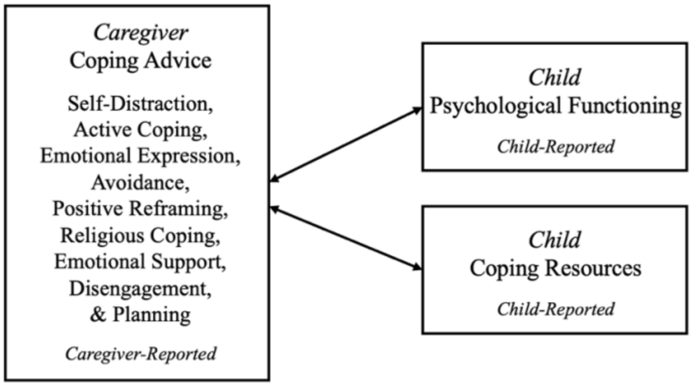
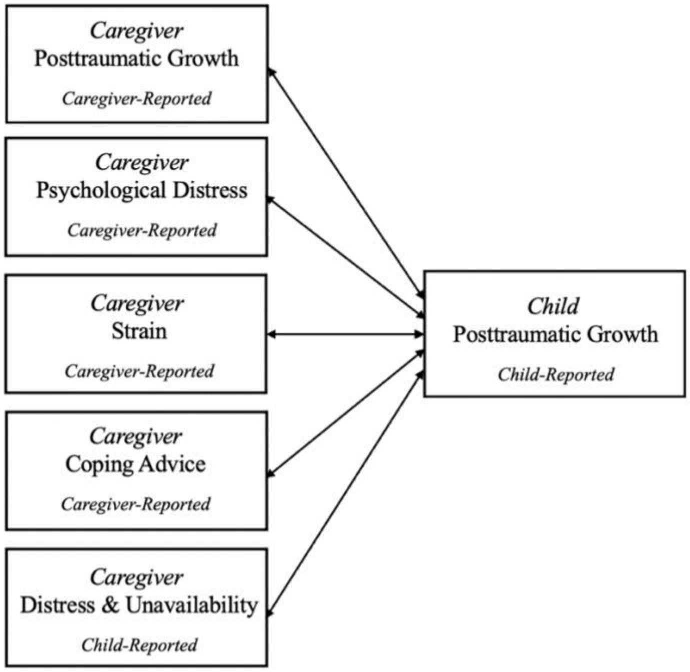


Figure 3

Conceptual Model for Relationships Examined in Research Question 3



Method

Participant Recruitment

For the present study, data collection took place at two bereavement centers, one located in the northeastern United States and one in the southeastern part of the country, from May to June, 2021. Grief centers were selected (a) that use a peer support-based approach and (b) with which two lead community partners have ongoing professional relationships. Participating centers offer peer support groups for youth who experienced the death of a parent or sibling, with co-occurring peer support groups for the caregivers who bring children to weekly group sessions. Participants were children aged 6 to 13 years and their caregivers attending peer support groups for children and caregivers, respectively.

Procedures

The study protocol was approved by the University of North Carolina at Charlotte Institutional Review Board for the Protection of Human Subjects. Materials for the study were shared electronically with grief center leadership. Consistent with the protocol, group leaders at participating centers were oriented to study materials and procedures by the lead community partners, who have considerable experience training staff in the bereavement field.

Data collection took place during predetermined sessions of the co-occurring support groups that agencies hosted for children aged 6 to 13 years old and their caregivers. Upon participants' arrival on the evenings during which data collection was scheduled to occur, group leaders and facilitators distributed two sets of consent forms to eligible caregivers, one for them to sign and another to keep for their own records. Assent forms were provided to children ages 7 years and up whose parents consented to their participation. Group leaders and facilitators highlighted that participation was voluntary and would not impact any services, as well as that efforts would be undertaken to protect participants’ privacy and confidentiality. Neither centers nor families received compensation for their participation.

Upon completion of the consent and assent processes, children and caregivers went into the rooms in which their respective groups were typically held. Individuals who chose not to participate in data collection had the option to stay with their group or to move to another room. In their group room, caregivers independently filled out pencil-and-paper questionnaire packets, placed them in sealed envelopes, then returned them to group leaders. Caregivers commonly completed evaluations and other forms for the centers, so it is not expected that literacy skills impacted responses.

In the youth peer support group room, data collection was supported by the centers' group leaders and facilitators. As bereaved children represent a vulnerable population, lead community partners and grief center directors felt most comfortable with questionnaire administration being led by adults with whom the children had ongoing relationships and often discussed their feelings and reactions to their loss. Groups typically included approximately 14 children, 5 adult facilitators, and one group leader, suggesting that adequate adult support was present to facilitate the administration of child protocol activities.

To start, children completed an art activity for which they drew a picture and wrote words to express how they have or have not changed in response to their loss. Facilitators supported younger children in need of writing assistance, an approach consistent with how they typically supported children during weekly art exercises. Next, the group leader read instructions aloud, and the children completed pencil-and-paper questionnaire packets. Group facilitators supported and assisted children as needed by reading items aloud, answering their questions, assisting with reading and writing, checking in with them, and providing emotional support if a child became distressed. Completed artwork and questionnaires were collected by group leaders.

Copies of all completed study materials were stored on-site at grief centers during the data collection process. Separate forms were used by each center to track participant names and assign them research IDs, which consisted of a two-digit center code, a two-digit family code, and a two-digit participant code (i.e., 01 for caregivers and 02, 03, etc. for eligible children within the family, from oldest to youngest). These IDs are the only identifying information on both sets of questionnaires and children's artwork (though some children added their first names to the latter). Consent and assent forms included participant names. Upon completion of data collection, packets of completed consent and assent forms, questionnaires, and research ID tracking forms were mailed to the university-based researchers via tracked UPS or FedEx services in envelopes without any indication that study materials were enclosed.

At the University of North Carolina at Charlotte, consent, assent, and ID tracking forms were stored in file cabinets in a locked data storage room in a locked office suite. Caregiver and child questionnaires and children's artwork were stored in cabinets in a separate locked room in the locked office suite. A graduate research assistant developed an Excel document into which all questionnaire data could be input and organized. Data were entered into the Excel document, and artwork was scanned by an undergraduate research assistant. The graduate research assistant supervised and verified the accuracy of these efforts. The scanned artwork and Excel document were stored in a secure, university-affiliated Dropbox folder accessible solely by members of the university-based research team. Data were identifiable only by research ID numbers, as necessary for linking child and caregiver data. Research ID forms were shredded after the data were verified.

Participants

Participants included 58 caregivers and 94 children, as many families had multiple children eligible for participation. For the current study, children younger than 6 years of age and older than 13 (*n* = 5) were excluded, as were their caregivers who did not have other children participating in data collection (*n* = 2). Children whose caregiver did not submit a questionnaire were also excluded (*n* = 11). Additionally, due to statistical constraints associated with low sample size (i.e., not being able to conduct multi-level modeling to account for multiple children nested within a given family) – and the fact that some caregiver measures asked the respondent to consider their oldest child, if they have more than one child, when answering – only the oldest child in each family was retained for analyses, resulting in a final sample of 56 caregiver-child dyads (*n* = 112 total participants). There were 41 dyads from the center located in the northeastern United States, and 15 dyads from the center in the southeast.

In this study, children averaged 9.7 years of age (*SD* = 2.1). Caregivers were 43.1 years old on average (*SD* = 7.9) and were predominantly female (87.5%). Most caregivers were white (92.9%), 5.4% were Black, and 1.8% reflected other backgrounds; 5.4% were Hispanic. Notably, white, non-Hispanic women composed 80.4% of this sample. Over half (52.8%) of the caregivers were widowed, 18.9% were married, 13.2% were divorced, 11.3% were never married, and 5.7% had another arrangement. Caregivers had an average of 2.3 children living with them (*SD* = 1.3; range = 1-7). Nearly half (48.1%) of the caregivers had a four-year college and/or graduate degree. Over half (57.1%) of caregivers were employed full-time, 26.8% were unemployed, and 16.1% were employed part-time. Annual household income data were missing for 10.7% of caregivers. Among those who reported income, 70% reported an annual household income of > $50,000, with 34.9% reporting an annual household income over $80,000. Time since the death of the person of interest ranged from 1.5 to 144 months (*M* = 27.4; *SD* = 25.7), though it was most often between 1.5 and 48 months, as times within this range were reported for 86.8% of the sample. Caregivers reported attending support groups for 0 to 84 months (*M* = 16.8; *SD* = 16.8).

Measures

The present effort grows out of a broader study that seeks to examine the experiences of bereaved youth and caregivers attending peer support programs at grief centers. Scales used for the current study are described below:

Caregiver-completed measures

Caregiver psychological distress – Caregivers completed the 25-item Hopkins Symptom Checklist-25 (Derogatis et al., 1974). They rated the degree to which they were bothered or distressed by depression and anxiety symptoms over the past week from 0 (*not at all*) to 3 (*extremely*). Means were computed for total scores (α = .94), as well as depression and anxiety subscale scores (α = .92 and .86, respectively).

Caregiver strain – Caregiver strain was assessed via the 13-item Caregiver Strain Index (Luescher et al., 1999). Caregivers indicated the presence of common caregiving stressors and burdens (0 = *no*; 1 = *yes*). Example items include, “It is confining (e.g., have less free time or cannot go visiting)” and “There have been emotional adjustments (e.g., because of severe arguments).” Caregivers were instructed to respond to questions with their oldest child in mind. Total summary scores were calculated (α = .87).

Caregiver coping advice – Caregivers responded to 20 items indicating how often they suggested their oldest child cope with their loss using the following strategies: self-distraction, active coping, emotional expression, avoidance, positive reframing, religious coping, emotional support, disengagement, and planning (Gil-Rivas et al., 2007). Items were rated on a 5-point scale (0 = *not at all* to 4 = *most of the time*). Mean scores were created for each coping dimension. Dimensions were based on two or three items – correlations for the two-item dimensions ranged from .30 to .76, and alphas for the two three-item dimensions were .58 and .59. While these alphas are just below .60, the level often referenced as adequate or acceptable, we retained these scales for analyses. They have been used in this form previously, including with young children (e.g., Kilmer & Gil-Rivas, 2010).

Caregiver posttraumatic growth – The 10-item Posttraumatic Growth Inventory-Short Form (PTGI-SF; Cann et al., 2010) assessed the degree to which change occurred in caregivers' lives due to the death of their loved one and the struggle afterward, using a scale from 0 (*I did not experience this change*) to 5 (*I experienced this change to a very great degree*). Items reflect five PTG domains: Relating to Others (e.g., "I have a greater sense of closeness with others."), New Possibilities (e.g., "I established a new path for my life."), Personal Strength (e.g., "I know better that I can handle difficulties."), Spiritual Change (e.g., "I have a stronger religious faith."), and Appreciation of Life (e.g., "I have a greater appreciation for the value of my own life."). Means were computed for total score and domain scores. Alpha for the PTGI-SF total score was .91.

Socio-demographic and loss-related characteristics – Caregivers provided information regarding their age, gender, race, ethnicity, employment status, education, annual household income, and relationship status. They also noted the number of children living with them, the amount of time that had passed since the death of their person, and how long they had been attending the support group.

Child-completed measures

Perceived caregiver distress – Children answered, “How upset was your caregiver about the death(s) and what happened afterward?” on a scale from 0 (*not at all*) to 3 (*a great deal*). This item was adapted from one used in studies of families impacted by 9/11 and Hurricane Katrina (Gil-Rivas et al., 2007; Gil-Rivas & Kilmer, 2013).

Perceived caregiver unavailability and distress – Using a scale from 0 (*never*) to 3 (*almost every day*), children responded to two items: “How often did you feel like your caregiver did not want to talk to you about the death(s) and what happened afterward?” and “How often did you feel like your caregiver was too upset to talk to you about your feelings and concerns about the death(s) and what happened afterward?” Items were adapted from questions used in previous research (Gil-Rivas et al., 2007; Gil-Rivas & Kilmer, 2013). Mean scores across the two items were used for analyses.

Child psychological functioning – Six items were written by university-based researchers and lead community partners to assess children’s feelings and functioning since their loss. Using a metric from 0 (*not at all true for me*) to 3 (*very true for me*), children rated the degree to which they were struggling more with worry, anger, sadness, and concentration, as well as with managing their feelings. Mean scores were computed ($\alpha = .76$).

Child coping resources – For this study, the collaborators developed four items to evaluate resources on which children think they can draw for coping since the death of their loved one. Children rated the degree to which they can seek support from friends, family, and others, as well as find activities that help them feel better (0 = *Not at all true for me* to 3 = *Very true for me*). Mean scores were calculated. The alpha for the child coping resources total score was poor ($\alpha = .49$). Dropping one item (i.e., “I am comfortable talking with my friends about my person") resulted in an acceptable alpha of α = .61 (Hulin et al., 2001). Accordingly, only three items from this scale were used for analyses.

Child posttraumatic growth – Children completed the Posttraumatic Growth Inventory for Children-Revised (PTGI-C-R; Kilmer et al., 2009), a 10-item measure assessing change since their loss. Items reflect five PTG domains (i.e., Relating to Others, New Possibilities, Personal Strength, Spiritual Change, and Appreciation of Life) and use a scale ranging from 0 (*no change*) to 3 (*a lot*). Means were calculated for the PTGI-C-R total score (α = .83).

Socio-demographic characteristics – Children reported their age and grade level.

Analytic Approach

Using SPSS Statistics 28.0.1.1, this effort adopted an analytic approach similar to that employed by Gil-Rivas and Kilmer (2013). Descriptive statistics were computed for socio-demographic and loss-related characteristics, variables of focus for the research questions, and relevant subscales. Analyses were also conducted to assess the normality of the data and to determine power. Three sets of intercorrelations were calculated, with each set including the study variables of relevance to one of the research questions. Additionally, hierarchical multiple linear regressions were planned for each research question.

A priori power analyses were completed using G*Power version 3.1.9.6 (Faul et al., 2009). Results indicated that a sample size of 132 was required to obtain 80% power for detecting a large effect ($r = .5$; $p = .05$) for correlation analyses. To detect a moderate effect size ($r = .3$) at 80% power, 356 participants would be necessary. For regression analyses, a sample size of 92, with 6 total and 5 tested predictors, was required to achieve 80% power and detect a medium effect size ($f^2 = .15$; $p = .05$). With a sample size of 56 caregiver-child dyads, the present effort was underpowered.

To determine which socio-demographic and loss-related variables should be included as covariates in the hierarchical regressions, I performed correlation, ANOVA, and *t*-test analyses between the socio-demographic, loss-related, and outcome variables. As I sought to develop the most parsimonious model, only socio-demographic and loss-related variables were found to be significantly associated with the outcome(s) of interest for each research question ($p < .05$) were to be entered into Step 1. Caregiver-related predictor variables significantly associated with the outcome variable(s) for each research question ($p < .05$) were to be entered in Step 2. However, no socio-demographic or loss-related variables were significantly related to the outcome variable for Research Question 1, so I instead conducted a simple linear regression. For Research Question 2, I did not conduct regression analyses because no caregiver-related predictor variables were significantly associated with the relevant outcome variables. I was able to run the hierarchical multiple linear regression for Research Question 3 as planned. Multicollinearity diagnostics were also conducted, and no issues were identified.

There was a low frequency of missing data. The item response rate was 99.8% for children, with 3 total responses missing across 3 participants and 2 scales. Among caregivers, the item response rate was 96.3% for socio-demographic and loss-related data and 97.6% for measures of the variables of interest. Caregivers' responses to a measure were dropped if they answered less than 50% of items in a given scale. Overall, responses were dropped for 4 participants across 3 scales (see Table 1 for remaining sample size per scale and subscale). With these responses dropped, the response rate for the remaining items was 99.0%, with 38 total responses missing across 12 participants and 4 scales.

Results

Table 1 presents descriptive statistics for caregiver-reported variables. Caregivers endorsed low levels of caregiver strain and very low levels of psychological distress. On the measure of psychological distress (i.e., the Hopkins Symptom Checklist-25; Derogatis et al., 1974), scores above 1.75 (suggesting the presence of clinically significant concerns; Winokur et al., 1984) were endorsed by three caregivers (5.5%) for the anxiety subscale, five caregivers (9.1%) for the depression subscale, and three caregivers (5.5%) for total score. On average, caregivers indicated that they tended to give children advice to engage in emotional expression, use positive reframing, seek emotional support, and plan for challenges most often and offer avoidance and disengagement coping advice least often. Caregivers' PTG scores were moderate. Mean scores of caregiver PTG were used for analyses, but sum scores were also calculated to facilitate comparison with other studied populations. Scores of 30 or more were endorsed by 55.9% of caregivers, suggesting they experienced a *moderate* degree of growth. Scores of 10 or less, reflecting a *very small* degree of change or less was reported by 7.4% of caregivers.

Table 1

Descriptive Statistics for Caregiver-Reported Variables

Variable	N	*M*	*SD*	Min	Max
Psychological Distress					
Total	55	0.74	0.56	0	2.21
Depression	55	0.82	0.64	0	2.36
Anxiety	55	0.65	0.55	0	2.17
Strain	56	4.64	3.67	0	13.00
Coping Advice					
Self-Distraction	56	1.81	1.16	0	4.00

Active Coping	54	2.10	1.04	0	4.00
Emotional Expression	56	2.61	0.87	1.00	4.00
Avoidance	56	1.05	0.85	0	4.00
Positive Reframing	55	2.40	0.89	0.33	4.00
Religious Coping	56	1.80	1.36	0	4.00
Emotional Support	56	3.46	0.65	2.00	4.00
Disengagement	56	0.29	0.65	0	3.50
Planning	55	2.71	0.83	0.50	4.00
PTG					
Total (Mean)	54	3.00	1.28	0.20	5.00
Total (Sum)	54	29.91	12.80	2.00	50.00
Relating to Others	54	2.95	1.58	0	5.00
New Possibilities	54	2.63	1.43	0	5.00
Personal Strength	54	3.53	1.52	0	5.00
Spiritual Change	54	2.29	1.82	0	5.00
Appreciation of Life	54	3.59	1.47	0	5.00

Note. PTG = posttraumatic growth.

Descriptive statistics for child-reported variables are presented in Table 2. Children reported high levels of coping resources as well as very high levels of perceived caregiver distress. In contrast, they reported low levels of perceived caregiver unavailability and distress. Children endorsed moderate levels of psychological functioning and moderate levels of PTG. Results suggest that 51.7% of youth endorsed scores of 20 or more, indicating they experienced *some* perceived growth on average across items. *A little* change or less was reported by 14.4% of respondents, who had scores of 10 or less.

Table 2

Descriptive Statistics for Child-Reported Variables

Variable	*M*	*SD*	Min	Max
Perceived Caregiver Distress	2.66	0.70	0	3.00
Perceived Caregiver Unavailability & Distress	0.95	0.78	0	3.00
Psychological Functioning	1.64	0.69	0	3.00
Coping Resources	2.33	0.66	0.67	3.00
PTG (Mean)	1.92	0.70	0.65	3.00
PTG (Sum)	19.17	6.98	6.50	30.00

Note. *N* = 56. PTG = posttraumatic growth.

Results of Shapiro-Wilk tests indicated that the distributions for nearly all study variables were non-normal, with the exception of child psychological functioning, positive reframing coping advice, and caregiver age. Accordingly, due to the sample's non-normality as well as its small size, Spearman's *rho* was used for all correlation analyses.

Research Question 1

How are caregiver-reported psychological distress and strain and child-reported caregiver distress and unavailability associated with child-reported psychological functioning?

Perceived caregiver distress was the only variable significantly correlated with child psychological functioning (see Table 3), suggesting that children who perceived that their caregivers had higher levels of distress were more likely to report worse psychological functioning.

Table 3

Correlations Among Key Variables for Research Question 1

Variable	1	2	3	4	5	6	7
Caregiver Psychological Distress [a]							
1. Total	—						
2. Depression	.97**	—					
3. Anxiety	.94**	.86**	—				
4. Caregiver Strain [a]	.20	.15	.24	—			
5. Perceived Caregiver Distress [b]	-.05	-.04	-.11	-.17	—		
6. Perceived Caregiver Unavailability & Distress [b]	.21	.23	.23	-.16	-.06	—	
7. Child Psychological Functioning [b]	-.07	-.02	-.13	.15	.30*	.01	—

Note. N = 55-56. [a] Caregiver reported; Rows 1-3 reflect total and subscale scores for the Hopkins Symptom Checklist-25. [b] Child reported.

$^{*}p < .05$. $^{**}p < .01$.

Because child psychological functioning was not significantly related to any socio-demographic or loss-related variables, I conducted a simple linear regression analysis with child functioning as the outcome variable and perceived caregiver distress as the predictor. Analyses indicated that perceived caregiver distress significantly predicted variance in child functioning [$F(1, 54) = 10.31$, $p < .01$], such that a one-unit increase in perceived caregiver distress was associated with an increase of .40 in child psychological functioning ($\beta = .40$, $p < .01$), with higher scores indicating more symptomatology. Perceived caregiver distress accounted for 16.0% of the variance in child functioning ($R^2 = .160$).

Research Question 2

How are different types of coping advice from caregivers associated with children's self-reported psychological functioning and coping resources?

There were no significant associations between dimensions of caregiver coping advice and child psychological functioning and coping resources (see Table 4). Psychological functioning was significantly associated with coping resources such that children who reported poorer functioning also endorsed having fewer coping resources.

Caregiver education was the only socio-demographic or loss-related variable significantly related to child coping resources. A one-way ANOVA revealed that there was a statistically significant difference between means of child coping resources across the varying levels of caregiver education [$F(5, 48) = 2.83$, $p < .05$], but a post hoc Tukey HSD test indicated that there were no statistically significant differences in child coping resources between specific levels of caregiver education.

Table 4

Correlations Among Key Variables for Research Question 2

Variable	1	2	3	4	5	6	7	8	9	10	11
Caregiver Coping Advice [a]											
1. Self-Distraction	—										
2. Active Coping	.46**	—									
3. Emotional Expression	.09	.44**	—								
4. Avoidance	.58**	.51**	.11	—							
5. Positive Reframing	.25	.64**	.40**	.35**	—						
6. Religious Coping	.09	.49**	.40**	.20	.44**	—					
7. Emotional Support	.01	.40**	.57**	.03	.54**	.37**	—				
8. Disengagement	.33*	.30*	.07	.50**	.29*	.21	.01	—			
9. Planning	.06	.41**	.46**	.03	.36**	.40**	.45**	.13	—		
10. Child Psychological Functioning [b]	.06	.07	.25	-.05	-.01	.18	.11	.10	.17	—	
11. Child Coping Resources [b]	.14	.08	-.23	.00	.25	-.06	.25	-.12	.00	-.26*	—

Note. $N = 53\text{-}56$. [a] Caregiver reported; Rows 1-9 reflect dimensions of the caregiver coping advice scale. [b] Child reported.

$^{*}p < .05$. $^{**}p < .01$.

Research Question 3

How are caregiver-reported PTG, psychological distress, strain, and coping advice, as well as child-reported caregiver distress and unavailability, associated with child-reported PTG?

Child PTG was significantly and positively associated with active coping, positive reframing, religious coping, emotional support, and planning advice (see Table 5), indicating that children whose caregivers more often suggested they use these coping strategies were more likely to report higher levels of PTG. Correlations among these categories of advice were all statistically significant and ranged from .36 to .64. Additionally, caregivers reporting higher levels of PTG were more likely to recommend some youth coping strategies which related to child PTG (i.e., active coping, positive reframing, emotional support).

Table 5

Correlations Among Key Variables for Research Question 3

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Caregiver PTG [a]	—																
Caregiver Psychological Distress [a]																	
2. Total	.10	—															
3. Depression	.12	.97**	—														
4. Anxiety	.07	.94**	.86**	—													
5. Caregiver Strain [a]	.19	.20	.15	.24	—												
Caregiver Coping Advice [a]																	
6. Self-Distraction	.15	.20	.15	.26	.10	—											
7. Active Coping	.31*	-.05	-.05	.01	.10	.46**	—										
8. Emotional Expression	.33*	-.08	-.02	-.06	.13	.09	.44**	—									
9. Avoidance	-.06	-.09	-.12	-.01	-.03	.58**	.51**	.11	—								
10. Positive Reframing	.33*	.02	.04	.06	.02	.25	.64**	.40**	.35**	—							
11. Religious Coping	.26	-.16	-.10	-.09	.06	.09	.49**	.40**	.21	.44**	—						
12. Emotional Support	.35*	-.10	-.10	-.07	.13	.01	.40**	.57**	.03	.54**	.37**	—					
13. Disengagement	-.04	.00	-.01	.07	-.02	.33*	.30**	.07	.50**	.29*	.21	.01	—				
14. Planning	.10	.14	.17	.09	.07	.06	.41**	.46**	.03	.36**	.40**	.45**	.13	—			
15. Perceived Caregiver Distress [b]	.22	-.05	-.04	-.11	-.17	.12	.07	.00	.13	.09	.04	.06	.15	-.08	—		
16. Perceived Caregiver Unavailability & Distress [b]	.07	.21	.23	.23	-.16	.01	-.05	.06	-.10	.02	.20	.06	.18	.09	-.06	—	
17. Child PTG [b]	-.00	-.16	-.14	-.14	-.02	-.04	.28*	.19	.10	.37**	.27*	.45**	-.10	.27*	-.04	-.09	—

Note. $N = 53\text{-}56$. PTG = posttraumatic growth. [a] Caregiver reported; Rows 2-4 reflect total and subscale scores for the Hopkins Symptom Checklist-25; Rows 6-14 reflect dimensions of the caregiver coping advice scale. [b] Child reported.

$^{*}p < .05$. $^{**}p < .01$.

Analyses of relations between child PTG and socio-demographic and loss-related variables indicated that the only significant association was between child PTG and time since the death of the person of interest, with children tending to report higher PTG when more time had passed since the death [$r_s(51) = .28$, $p < .05$]. Accordingly, time since death was entered into Step 1 and the other significant correlates (i.e., active coping, positive reframing, religious coping, emotional support, and planning advice) were entered into Step 2 in a hierarchical regression model.

At Step 1, time since death was significant, predicting 8.8% of the variance in child PTG [$F(1, 48) = 4.61$, $p < .05$], such that a one-unit increase in time since death (i.e., one month) was associated with an increase of .30 in child PTG mean scores (see Table 6). At Step 2, the regression model significantly predicted child PTG, accounting for 25.6% of the variance in youth self-reported PTG [$F(6, 43) = 2.46$, $p < .05$]. However, after adjusting for time since death, none of the caregiver coping advice variables were significantly associated with child PTG. In addition, time since death was no longer significant in the final model. The R^2 Change at Step 2 was also non-significant ($R^2\ \Delta = .168$, n.s.).

Table 6

Summary of Hierarchical Regression Analysis for Research Question 3 Variables Predicting Child Posttraumatic Growth

	Step 1			Step 2		
	B	*SE B*	β	*B*	*SE B*	B
Time Since Death [a]	.01	.00	.30*	.01	.00	.25
Caregiver Coping Advice [a]						
Active Coping	—	—	—	-.10	.12	-.15
Positive Reframing	—	—	—	.12	.14	.15
Religious Coping	—	—	—	.08	.09	.15
Emotional Support	—	—	—	.35	.20	.28
Planning	—	—	—	.02	.14	.02

Note. [a] Caregiver reported. Step 1: Adjusted $R^2 = .07$; Step 2: Adjusted $R^2 = .15$.

$^{*}p < .05$. $^{**}p < .01$.

Discussion

This study sought to contribute to the limited and largely dated literature regarding the influence of caregivers on children's adjustment to loss (Jiao et al., 2021), examining linkages between indicators of caregiver functioning, the caregiver-child relationship, and child functioning in the context of bereaved families receiving grief support services.

Child Psychological Functioning in the Bereaved Family System – Research Question 1

Results indicated that, out of caregiver psychological distress and strain and child-reported caregiver distress and unavailability (i.e., predictors examined in Research Question 1), solely youths' perceptions of elevated caregiver distress predicted poorer child-reported psychological functioning. These findings only partially align with past studies. Previous research supports observed associations between higher perceived caregiver distress and increased youth symptomatology (Dyregrov & Yule, 2006; Gil-Rivas et al., 2007), but it was unexpected that bereaved youth functioning was not significantly associated with surviving caregivers' psychological distress (see, e.g., Jiao et al., 2021; Zhang et al., 2022), strain (see, e.g., Sandler et al., 1992), or perceived unavailability (see, e.g., Saler & Skolnick, 1992). Further, while the linkage between youth-reported caregiver distress and youth psychological functioning is consistent with expectations, these findings largely contradict expectations for the impact of distress, strain, and unavailability on youth outcomes based on the transitional events model (Felner et al., 1988) and Jiao et al.'s (2021) framework of parent-child relationships in widowed families.

However, it should be noted that the reported levels of caregiver distress, strain, and unavailability were low in this sample, whereas perceived caregiver distress was high. Research suggests it may be caregivers' difficulty meeting their children's needs as a result of their own challenges (e.g., distress, strain) that is core to the impact they have on children’s adjustment to loss (Brent et al., 2012). Caregivers’ reports of low distress and strain and children’s reports of low caregiver unavailability imply that perhaps, in this sample of participants in peer support groups for bereavement (who, on average, reported participating in the support groups for nearly 17 months), children’s functioning was not significantly impacted by these factors because caregivers were receiving the support they needed to function as the caregivers they wanted to be. Alternatively, it is possible that children attending peer support programs may be less impacted by their caregivers because they are otherwise well-supported by group leaders and members.

Additionally, whereas caregivers were asked to endorse their distress “in the past week” (Derogatis et al., 1974), youth reported their caregiver’s distress “about the death(s) and what happened afterward.” Accordingly, children’s reports may reflect their caregivers’ distress – or their recollections of how distressed their caregivers were – over a broader timeline, which may more closely align with children’s reports of their own psychological functioning “since the death of [their] person” and be more reflective of the high level of distress that potentially drove caregivers to seek services. Overall, these findings lend credence to the supposition that caregivers’ distress primarily impacts children to the degree that they are aware of it (see, e.g., Gil-Rivas & Kilmer, 2013). This study is, to our knowledge, the first to demonstrate a link between child-reported caregiver distress and youth psychological functioning among bereaved families.

Children’s psychological functioning was not significantly related to any socio-demographic or loss-related variables (i.e., time since the death; time attending the peer support group; caregiver race, ethnicity, employment status, education, annual household income, age, gender, and relationship status; child age; and number of children living in the home). The obtained non-significant associations of children's symptomatology with time since the death and time attending the support group are consistent with some previous research (Cipriano & Cipriano, 2019; Lin et al., 2004), corresponding to the idea that the experience of grief (and potentially related symptoms) is not linear for many children and families; it may oscillate over time uniquely across participants, corresponding with anniversaries, birthdays, and other important events related to the deceased (Walsh & McGoldrick, 2013). However, other studies have reported that child mental health tends to improve as time since death increases (Brent et al., 2009; Melhem et al., 2011; Park et al., 2021). Families attending programming at grief centers (particularly those that employ a model of ongoing peer support) may thus represent a biased sample, as many self-selected to receive support services for months and years following their loss. This decision may reflect the benefits they experienced from the group (e.g., connection, support), but it may also indicate that perhaps they exhibited less consistently improved functioning over time than might be expected among a community-based sample or families no longer participating in peer support services (Cipriano & Cipriano, 2019). Lending support to this assertion, the studies identified that reported improved youth mental health over time were conducted with community-based samples (see, e.g., Brent et al., 2009; Melhem et al., 2011; Park et al., 2021). Further, in this sample, child functioning and caregiver distress evidenced considerable variability across the range of time that caregivers reported had passed since the death.

Being non-white in race, having lower levels of education, and living in a home with a lower household income have been linked to elevated symptomatology among bereaved youth (see, e.g., Park et al., 2021), but most studies, including the present effort, found no significant associations between these factors and youth outcomes (Cipriano & Cipriano, 2019; Lin et al., 2004). However, rather than reflecting a true lack of salience of the variables, these findings may reflect the fact that most samples involved in research on bereaved caregiver-child dyads, including this study, are whiter, more educated, and from higher resource backgrounds than the broader population (see, e.g., Jiao et al., 2021), and more homogenous samples have reduced likelihood of identifying differences. Further, when considering the potential impact of financial resources, change in income following the loss may be more salient to child mental health outcomes than annual household income in and of itself, given the increased strain it may place on the family (Lin et al., 2004).

Multiple resources delineate developmental differences in understanding death and responding to a loss (e.g., Judi's House, 2015). As for associations between child age and mental health outcomes, our finding of no significant relationship between child age and our measure of psychological functioning aligned with research indicating that there were no clear developmental patterns in mental health functioning (see, e.g., Dowdney, 2000) but was inconsistent with studies reporting worse psychological functioning in younger children (Berg et al., 2016; Lin et al., 2004). The non-significant findings for the present sample may be attributable to the narrower age range of participating children (i.e., ages 6 to 13), as Berg et al. (2016) and Lin et al. (2004) assessed samples including youth from early childhood through late adolescence; it may also be that our brief measure of psychological functioning did not adequately capture potential differences for youngsters of different ages. Broadly, the lack of significant associations between socio-demographic and loss-related variables and child functioning contradicts the emphasis placed by Jiao et al.'s (2021) framework of parent-child relationships in widowed families on the role of such factors (e.g., age, household income, time since death) in influencing youth outcomes.

Coping in the Bereaved Family System – Research Question 2

No significant relations emerged from the examination – pertaining to Research Question 2 – of associations between caregivers' coping advice and children's psychological functioning and coping resources. While there is limited research on these topics, the non-significant finding for psychological functioning contradicts work highlighting the importance of caregivers' coaching of coping or coping advice in the face of adversity (e.g., Kliewer et al., 2006), including studies suggesting that some types of coping advice (e.g., active coping, positive reframing) promoted improved functioning among children who were bereaved (Wolchik et al., 2006) or exposed to 9/11 (Gil-Rivas et al., 2007), whereas other dimensions of advice (e.g., avoidance, planning) were associated with worse functioning in these populations (Gil-Rivas et al., 2007; Raveis et al., 1999). Findings were also unexpected given the hypothesized status of coping advice as a protective resource potentially promoting positive outcomes per the transitional events model (Felner et al., 1988) and as an indicator of the impact of parent-child interactions on outcomes per Jiao et al.'s (2021) framework of parent-child relationships in widowed families.

The child coping resources measure was developed by lead community partners and university researchers based on the partners' interests and questions and does not clearly align with any pre-existing measure. Accordingly, analyses of coping advice with coping resources were exploratory in nature. The coping resources scale did not include subscales assessing specific categories of children's coping behaviors, so it was not surprising that it did not significantly relate to any dimension of caregiver coping advice. Among socio-demographic and loss-related variables, only caregiver education was significantly associated with child coping resources, which is consistent with suggestions in other studies that caregivers' access to resources for supporting their children may vary according to education level (see, e.g., Gil-Rivas & Kilmer, 2013). Further, the finding that children reporting better psychological functioning also endorsed higher levels of coping resources aligns with our conceptualization of child coping resources as a potential protective factor promoting improved youth functioning within the transitional events model (Felner et al., 1988).

Child PTG in the Bereaved Family System – Research Question 3

Research Question 3 explored associations of child PTG with caregiver-reported PTG, psychological distress, strain, and coping advice and child-reported caregiver distress and unavailability, revealing that only caregiver coping advice suggesting active coping, planning, positive reframing, emotional support, and religious coping was significantly associated with youth PTG. In this sample, children tended to report higher PTG when their caregivers more often advised they use coping strategies corresponding with these categories. We are aware of only two past studies assessing youth growth and caregiver coping advice, but our findings align with their demonstrated significant, positive associations of child growth with positive reframing coping advice (for youth impacted by Hurricane Katrina; Kilmer & Gil-Rivas, 2010) and caregivers' use of religious coping strategies (for pediatric cancer survivors; Wilson et al., 2016). Further, although exact comparisons are not possible given that these studies assessed children's coping behaviors rather than caregiver coping advice, our findings are consistent with studies highlighting the positive impacts on children's growth associated with their self-reported use of strategies related to active coping (Wolchik et al., 2009), planning (Aldridge & Roesch, 2008), positive reframing (Felix et al., 2015; Vaughn et al., 2009), emotional support (Wolchik et al., 2009), and religious coping (Vaughn et al., 2009). To the best of our knowledge, this study is the first to demonstrate that caregiver coping advice may predict youth PTG among bereaved families.

There are several conceptualizations that might explain the observed associations. Active coping and planning advice may facilitate constructive components of PTG, wherein growth occurs as a result of efforts to actively engage with challenges following a potentially traumatic event, toward establishing a new post-event reality (Wolchik et al., 2009). Additionally, positive reframing advice is of direct conceptual relevance to PTG given it involves caregivers helping youth reinterpret post-loss events more positively, engage in productive rumination, and integrate new perspectives into schema change, such that children understand potential positive outcomes of their experiences (Kilmer & Gil-Rivas, 2010; Wolchik et al., 2009). Further, as processing loss is inherently challenging, caregivers' offering of emotional support and guiding children to seek such support may provide youth with the supportive context they need to engage in PTG-promoting processes and reflect their caregiver's active involvement in encouraging such processes (Wolchik et al., 2009). Finally, given that spiritual change is a domain of PTG, it logically follows that caregivers encouraging their children to connect with spiritual or religious beliefs would contribute to higher PTG (Cann et al., 2010).

Overall, levels of youth PTG were similar to reports in studies of children who experienced bereavement (Salloum et al., 2017) and Hurricane Katrina (Kilmer & Gil-Rivas, 2010), whereas caregiver PTG scores were lower (in an absolute sense) than those reported in other studies of bereaved caregivers (Albuquerque et al., 2018; Dias et al., 2021) and similar to findings for caregivers exposed to wildfires (Felix et al., 2015). It was anticipated that child PTG would not be significantly related to caregiver psychological distress given past non-significant findings (see, e.g., Felix et al., 2015; Kilmer & Gil-Rivas, 2010; Wurz et al., 2022). The non-significant association between caregiver and child PTG is consistent with findings from those same studies (Felix et al., 2015; Kilmer & Gil-Rivas, 2010; Wurz et al., 2022) but is in contrast to research demonstrating higher youth PTG when caregivers reported higher PTG (Hafstad et al., 2010; Koutná et al., 2021). Additionally, it was unexpected that caregiver strain would not significantly relate to youth PTG, based on findings from past studies (see, e.g., Felix et al., 2015; Hafstad et al., 2010) and expectations grounded in the transitional events model (Felner et al., 1988) and Jiao et al.'s (2021) framework of parent-child relationships in widowed families. Similarly, observed non-significant associations between youth PTG and child-reported caregiver distress and unavailability were not aligned with expectations based on Kilmer and Gil-Rivas' (2010) recommendation to assess the impact of these variables on youth PTG or on the conceptual models guiding this effort (Felner et al., 1988; Jiao et al., 2021). However, it should be noted that we are not aware of past research findings demonstrating these specific, proposed associations, so the observed non-significant relations are not entirely unexpected.

A possible explanation for the findings that youth PTG was not significantly related to caregiver PTG, strain, distress, or unavailability is that these constructs might have served as more distal indicators of caregivers' influence on PTG-promoting processes, such that there were no observed direct effects, whereas coping advice more directly reflected the specific nature of caregiver-child interactions and their impact on PTG (Kilmer & Gil-Rivas, 2010). Moreover, in view of the findings that (a) caregivers endorsing higher PTG more often suggested that their children use some coping strategies which related to child PTG, but that (b) there was not a significant association between caregiver and child PTG, it may be that caregiver PTG primarily relates to child PTG to the degree that it is associated with caregivers offering PTG-promoting coping advice. Further, it is possible that youth may be affected by growth experienced by caregivers insofar as they are aware of it (Kilmer & Gil-Rivas, 2010), a notion which aligns with this study's findings (i.e., Research Question 1) that caregiver psychological distress predicted worse youth mental health when the distress was reported by youth, but not when it was reported by caregivers. Alternatively, as the conceptualized connection between caregiver and child PTG involves caregivers supporting children with PTG-promoting processes that they are simultaneously undertaking themselves, the non-significant association between these variables may be related to caregivers reporting lower PTG than in other studies of bereaved families (Albuquerque et al., 2018; Dias et al., 2021).

Unexpected non-significant relations of caregiver strain with youth PTG may reflect the differing timelines of these scales, as the Caregiver Strain Index included 8 of 13 items worded in the present tense (e.g., "It is a physical strain;" Luescher et al., 1999) compared to growth being assessed since the death (Kilmer et al., 2009). Past studies demonstrating higher PTG in youth exposed to more strain measured exposure to life stressors in the time since a potentially traumatic event (Felix et al., 2015) or over a longer time period (Hafstad et al., 2011; Tillery et al., 2016), which may not have been captured by the Caregiver Strain Index given that it primarily centered around caregivers' current experiences and challenges in parenting their child (Luescher et al., 1999). Further, in a study demonstrating lower youth PTG when caregivers were more strained, strain was operationalized as a parent taking 2+ weeks of sick leave after a tsunami, thus reflecting their experiences immediately following the potentially traumatic event (Hafstad et al., 2010), rather than months or years later as was the case in the present study. It is also possible that the reported levels of caregiver strain in this sample might have been too low to significantly impact youth PTG. In a similar vein, the low levels of caregiver-reported distress and child-reported unavailability in this sample may account for the non-significant associations of these variables with youth PTG.

Among socio-demographic and loss-related variables, only time since death was significantly related to child PTG (in both correlation and regression analyses), such that youth tended to endorse higher PTG when more time had passed since the death. This finding aligns with outcomes reported in one study of bereaved youth (Brewer & Sparkes, 2011) but conflicts with other studies reporting higher growth more recently after loss (in the Appreciation of Life domain, though this effort used a PTG scale developed with adults; Wolchik et al., 2009) or subsequent to a diagnosis with childhood cancer (Phipps et al., 2007). That said, multiple other studies have reported non-significant associations between growth and time since exposure to potentially traumatic events, including among children experiencing bereavement (Salloum et al., 2017; McClatchey, 2020), childhood cancer (Currier et al., 2009), and other major negative life events (Milam et al., 2004). Our significant, positive finding may reflect the unique experiences of youth receiving ongoing grief services, as the opportunity to process shared experiences in a supportive context may facilitate the development of PTG via productive rumination, positive reappraisal, and other relevant processes (Ferris & O’Brien, 2022). While it should be noted that child PTG did not significantly relate to time attending the peer support group in this sample, the correlation between time since death and time attending the support group was very large and statistically significant, so it remains a possibility that the significant association between time since death and PTG may be attributable to the influence of ongoing peer support group experiences.

In the analyses for Research Question 3, time since death and coping advice involving active coping, positive reframing, religious coping, emotional support, and planning were significant correlates of PTG and, in the regression model including these variables, they significantly predicted child PTG. However, while the model was significant, no predictors remained significant in the final model, such that time since death and the included categories of coping advice did not correlate with youth PTG over and above one another. Thus, for many children, specific dimensions of coping advice were not particularly more effective than others in terms of promoting PTG. A potential explanation for this finding is that intercorrelations among all these coping advice variables were positive and statistically significant. Accordingly, even though multicollinearity was not determined to be an issue, the fact that they were highly related to one other may have reduced the unique predictive utility of each coping advice variable in the regression.

Other than time since death, child PTG was not significantly related to any socio-demographic or loss-related variables (i.e., child age; caregiver race, ethnicity, education, annual household income, employment status, relationship status, age, and gender; number of children living in the home; and time attending the peer support group). These results from the present study are consistent with research reporting non-significant associations between child age and PTG (see, e.g., Kilmer & Gil-Rivas, 2010; McClatchey, 2020; Phipps et al., 2007; Salloum et al., 2017). However, it does not align with prior findings suggesting that PTG is higher in younger children (see, e.g., Felix et al., 2015; Yoshida et al., 2016; Yu et al., 2010) or in older youth (see, e.g., Currier et al., 2009; Milam et al., 2004), although discrepancies may be attributable to the restricted age range of our sample, given that these studies included adolescents. Additionally, race and ethnicity may hold relevance to youth PTG (see, e.g., Milam et al., 2005; Phipps et al., 2007), but non-significant relations between these variables have also been observed in various other studies (see, e.g., Currier et al., 2009; Kilmer & Gil-Rivas, 2010; McClatchey, 2020;

Milam et al., 2004; Wolchik et al., 2009). Further, this study's findings are consistent with research reporting non-significant associations of youth PTG with caregiver education (Felix et al., 2015; McClatchey, 2020; Wilson et al., 2016), income (Felix et al., 2015; Kilmer & Gil-Rivas, 2010; McClatchey, 2020; Wilson et al., 2016), employment status (Kilmer & Gil-Rivas, 2010), marital status (Kilmer & Gil-Rivas, 2010; Wilson et al., 2016), age (Hafstad et al., 2010; Kilmer & Gil-Rivas, 2010; Wilson et al., 2016), gender (Felix et al., 2015; Kilmer & Gil-Rivas, 2010; Wilson et al., 2016), and number of children in the home (Wilson et al., 2016).

Limitations

Several study limitations should be recognized. First, the study's sample lacked diversity, as the caregivers were predominately white, non-Hispanic, highly educated, middle-to-high income women. The homogeneity of the sample restricted the ability to detect significant differences among socio-demographic groups and dramatically reduces the study's generalizability to historically minoritized populations. In turn, the sample is not representative of families receiving services from grief centers nationwide nor of bereaved families more generally. Given that the socio-demographics of this study mirror much of the research on bereaved caregiver-child dyads (see, e.g., the works cited by Jiao and colleagues, 2021), such poor generalizability is an area for concern across the bereavement field.

Another limitation of this study is that it only collected data regarding ethnicity for one group (i.e., Hispanic/non-Hispanic), rather than assessing ethnicities for all participants, and it did not report nationality, both of which might have illuminated cultural heterogeneity among participants (Buchanan et al., 2021). While the lack of socio-demographic representativeness in this sample (or perhaps our poor understanding of any existing diversity) may preclude the effective assessment of these constructs, it also should be noted that an additional limitation of this study is that it did not address gaps in the literature regarding socio-cultural- and systems-level factors related to bereaved family functioning and peer support programming. Accordingly, the knowledge gap persists regarding ways in which the interplay of caregiver and child adaptation to loss (e.g., psychological functioning, PTG) may vary across racial, ethnic, and cultural groups, including as related to interpersonal and intrafamilial processes as well as systems-level influences (e.g., systemic racism and discrimination). Further, there continues to be minimal research on minoritized individuals' experiences in peer support programs (see, e.g., the works cited by Bartone and colleagues, 2019), including on the host of factors – studied outside of peer support settings – that may contribute to their lack of representation, such as treatment stigma (Sickel et al., 2014), the preference for alternate settings for seeking support (e.g., the Black church; Blank et al., 2002), the limited cultural relevance of peer support programs (particularly if no efforts are made to enhance cultural responsivity; Tondora et al., 2010), linguistic barriers (e.g., if groups are only offered in English; Al Shamsi et al., 2020), difficulty attending weekly programming (Dobalian & Rivers, 2007), and lack of geographic access to services (Coombs et al., 2021). Such gaps in the literature and poor representation in services are particularly concerning considering that historically minoritized populations, such as Black Americans, are disproportionately affected by bereavement and associated cumulative disadvantage in health and social connection (Umberson, 2017).

A prior rationale for this study was that minimal work has examined those receiving peer support services via grief centers, so this effort necessarily focused on families in that specific context. However, the study's generalizability was also limited by this purposive sampling (i.e., all participants were drawn from peer support groups at grief centers). Accordingly, selection bias was present given that many families likely had shared characteristics and experiences, including those related to seeking out services due to initial (or continuing) struggles with their loss, receiving ongoing support from peers facing similar circumstances, and having increased access to social-emotional resources, beyond what would be expected among the general population (Andrade, 2021). Further, the study has reduced generalizability because data collection occurred during the COVID-19 pandemic (Lourenco & Tasimi, 2020) and at only two centers.

Another limitation of the study is its small sample size, which limited generalizability and statistical power, as well as the ability to conduct more complex statistical analyses. Low power might have precluded the detection of small or medium effects, and thus may explain some non-significant results that were unexpected given past research. In addition to sample size, power was also likely impacted by random error associated with unreliable measurement. Alphas for multiple scales (i.e., some dimensions of caregiver coping advice, child psychological functioning, child coping resources) were below the .8 value indicating very good reliability (Hulin et al., 2001). Further, both of these child measures (i.e., child psychological functioning, child coping resources) were developed for this study by lead community partners and university researchers. Accordingly, no psychometric evaluation of the scales had been conducted prior to this study effort, and thus validity and reliability (beyond internal consistency) are unclear. Given that included items center around the partners' interests and questions rather than precisely defined constructs, construct validity may be an area of particular concern for the child psychological functioning and coping resources measures (Shadish et al., 2001), which may in turn negatively impact internal and statistical conclusion validities (MacKenzie, 2003). As a result of using this novel measure of child psychological functioning, which does not have established clinical cut-offs, we are also unable to ascertain how many children in this sample presented with clinically significant mental health challenges.

Several other measurement-related concerns also serve as study limitations. For one, across the study measures, there is variability or lack of specificity regarding the timelines that should be used when completing the scales. Participants were asked to report experiences in the past week for only the Hopkins Symptom Checklist-25 (Derogatis et al., 1974), which measured caregiver psychological distress. Further, while not specified, the timeline seemed to vary within the Caregiver Strain Index, as most items were worded in the present tense (thus primarily referencing current experiences), yet other items gauged what adjustments or changes there "have been" (thus implying that the timeline would extend from the loss of their loved one; Luescher et al., 1999). All other scales specified that responses should reflect experiences in the time following the death, which might not accommodate exact comparison with the measures of caregiver psychological distress and strain. Additionally, as time since death in this sample ranged from 1.5 to 144 months (averaging 27 months), there might have been variability in the timelines that participants used to respond to the different measures assessing experiences since the loss, given that their presentation likely varied throughout that time period. This lack of consistency in the referenced time period introduces random error, which may reduce the likelihood of detecting significant results.

Bias and random error might also have been introduced as a result of the settings and methods of data collection. For one, due to the small sample size obtained via the center located in the southeast, we did not examine differences in outcomes between centers, so we are unaware of any systematic differences that may exist. We also do not have information regarding systematic differences that might have been present between caregivers who did or did not choose to participate in the study (though the Executive Director from the northeast site shared that all caregivers present on the evening of data collection chose to take part). Further, given that data collection occurred during peer support programming in the presence of the centers' volunteers and staff, experimental reactivity may be an area for concern, as participants might have responded more positively to questionnaires due to a desire to provide the results that they thought center personnel wanted (Shadish et al., 2001). Additionally, it was built into study procedures that there would be variations in the level of support and oversight provided by group facilitators as youth completed the questionnaires (to account for their distinct academic and emotional needs), which might have differentially impacted youths' responses. Moreover, using self-report to assess all variables might have contributed to single-method bias, wherein the method confounds results (Shadish et al., 2001), as well as self-report response bias (e.g., social desirability, recency, acquiescence; Bauhoff, 2014).

Additional limitations of the present study are its lack of a comparison group as well as its cross-sectional design, both of which limit our ability to make causal inferences. While we did make several conjectures concerning the ways in which our findings may reflect the unique experiences of bereaved families attending peer support programming (e.g., that the ongoing processing of shared experiences in a supportive context may promote the development of youth PTG), a comparison group of bereaved families not receiving these services would be necessary to support such assertions (Mota et al., 2017). Moreover, without using a longitudinal design, we were unable to examine change over time, establish a sequence of events, account for confounding factors related to time, or explore developmental considerations (Caruana et al., 2015). As we did not capture the nature of caregiver-child relationships, family functioning, or caregiver and child functioning (e.g., psychiatric history) prior to the death, we are also unaware of the degree to which these factors evolved in the aftermath of the death, or of the role these pre-loss factors might have played in impacting post-loss interpersonal processes and functioning.

The present study is also limited by its exclusion of variables that were shown to be associated with youth PTG and psychological functioning in past research. Several socio-demographic and loss-related characteristics could reasonably have been identified as additional covariates in this study, which might have increased this study's predictive power. Missing potentially significant covariates include religious affiliation, which may predict youth PTG (Milam et al., 2005), and child gender, which may predict both youth PTG (Meyerson et al., 2011) and mental health (Park et al., 2021). Children's PTG and psychological functioning also may be associated with the circumstances of the death, such as sudden, unexpected loss (McClatchey, 2020) or external causes (e.g., accidents, suicide, and homicide; Zhang et al., 2022). Additionally, it should be noted that we were only aware of the relationship to the deceased for the 41 youth from the center located in the northeast (38 of whom lost a parent and 3 of whom lost a sibling), which precluded our inclusion of this variable as a covariate. Several studies have demonstrated that there were no significant differences in outcomes between children who lost a parent and those who lost someone other than a parent (see, e.g., Cipriano and Cipriano 2019); optimally, it would have been possible to conduct such comparative analyses for this sample to assess the degree to which results in the present sample align with that assertion. It might also have been beneficial to assess children's subjective closeness to the deceased, given that bereavement occurs in the context of relationships, as well as the nature of the relationship between surviving caregiver and child (e.g., biological parent, grandparent, etc.).

To better understand the factors contributing to surviving caregivers' influences on youth adjustment among bereaved families receiving grief support services, it might also have been beneficial to incorporate other variables that are conceptually relevant to the topics of interest and are shown to be significantly associated with youth PTG and psychological functioning. This includes social support (see, e.g., Çakar, 2020; Meyerson et al., 2011), caregiver warmth (see, e.g., Jiao et al., 2021; Kilmer & Gil-Rivas, 2010), caregiver coping behaviors (see, e.g., Cipriano & Cipriano, 2019; Wilson et al., 2016), child coping efficacy (see, e.g., Cipriano & Cipriano, 2019; Wolchik et al., 2009), child coping behaviors (see, e.g., Kaplow et al., 2013; Wolchik et al., 2009), number of life stressors to which children were exposed (see, e.g., Felix et al., 2015; Wolchik et al., 2008), and youth perceived stress (see, e.g., Felix et al., 2015; Gil-Rivas et al., 2007). Further, variables might have been included that have been found to relate to youth PTG, such as rumination, PTSD, and positive resources (e.g., optimism, hope, self-esteem; Kilmer et al., 2014; Meyerson et al., 2011), as well as that have been shown to impact youth psychological functioning (and may also impact the development of PTG), such as social disruption in youths' lives following the loss (see, e.g., Brent et al., 2012), positive parenting (see, e.g., Jiao et al., 2021), and family cohesion (see, e.g., Brent et al., 2012).

Strengths & Contributions

Notwithstanding these limitations, the present study offers important contributions to the youth bereavement literature, which has garnered relatively limited research attention to date (much of which was well over a decade ago) despite the notable, and likely increasing, prevalence of youth bereavement and its considerable impacts on families. Importantly, this study provided an examination of both negative and potentially positive outcomes that may be experienced by bereaved families, which are rarely assessed concurrently. Further, it explored the respective impacts of bereavement on children and caregivers as well as the understudied relational factors via which caregiver-child dyads impact one another's functioning (with an emphasis on caregivers' influences on children's adjustment to loss; Jiao et al., 2021). It is a strength of the study that it investigated these relationships among children and caregivers participating in peer support programming at grief centers, given that the literature involving this population is not well developed (Bartone et al., 2019).

Another strength is that we incorporated a variety of variables that may be associated with psychological functioning and PTG, per past research and the conceptual models guiding this effort. Several of the variables we included have rarely been studied in bereaved populations (e.g., PTG, caregiver coping advice, child-reported caregiver distress and availability). Further, we examined some associations that, to our knowledge, have not been assessed previously, including the role caregivers serve in bereaved youths' development of PTG.

Additionally, although conclusions about causality cannot be made at this time, it is notable that we reported several novel findings. To the best of our knowledge, this study is the first to demonstrate among bereaved families that children's perceptions of elevated caregiver distress predicted poorer youth psychological functioning, as well as that caregiver coping advice (specifically related to active coping, planning, positive reframing, emotional support, and religious coping) predicted higher youth PTG. We also found that caregiver education was significantly associated with child coping resources and increased time since death predicted higher youth PTG. It is notable that our findings lend support to the assertion that bereaved youth and caregivers are capable of experiencing PTG in response to the death (see, e.g., Albuquerque et al., 2018; Arslan et al., 2020; Brewer & Sparkes, 2011; Dias et al., 2021; Salloum et al., 2017; Wolchik et al., 2009).

There are several additional strengths of the study specific to our inclusion of caregiver-child dyads. For one, whereas many studies have only used children's reports (Jiao et al., 2021) or caregivers' reports (Breen et al., 2019), we collected data from both children and caregivers, which is essential given that bereavement, by nature, occurs within the family context. Additionally, unique among many studies of grieving families, we explored caregiver-child interactional processes and the bidirectional influences (i.e., transactions) of caregiver and child adaptation to death. For instance, we were able to gauge children's impacts on their caregiver's functioning via the Caregiver Strain Index (asking caregivers to endorse specific strains related to caring for their children; Luescher et al., 1999). Further, in line with the recommendations of Jiao and colleagues (2021), we touched on children's agency in impacting caregiver functioning via the measure of child-reported caregiver unavailability and distress (i.e., regarding children's perceptions that their caregiver did not want or was too upset to talk to them about their feelings and concerns). When they saw their caregiver struggling, children might have chosen to bypass difficult conversations to avoid burdening them (although this measure does not allow us to verify that children's perceptions that their caregiver did not want to or could not have such a conversation necessarily led to children keeping their thoughts and feelings to themselves; Sveen et al., 2016). We also assessed the direct impacts of caregivers on youths' adjustment via the interactional process of caregiver coping advice. A final strength is that we examined both interpersonal factors (e.g., caregiver coping advice) and intra-personal factors (e.g., psychological distress, PTG), which have largely been examined independently to date (Stroebe & Schut, 2015).

Clinical Implications

While additional research is required to establish the clinical implications of the present effort, several preliminary considerations can be noted. First, families may need ongoing support following their loss. Grief and associated difficulties are often non-linear (Walsh & McGoldrick, 2013); in this sample, child psychological functioning and caregiver psychological distress varied considerably across the range of time that caregivers reported had passed since the death. Further, it may take time for potentially positive outcomes to emerge, as children in the present study tended to endorse higher PTG when more time had passed since the death.

Support may be obtained by families in a variety of service settings (e.g., peer support programs, CBT-based preventive interventions, traditional therapy), but it is important that their ongoing needs are being met. For example, while peer support programs are an invaluable resource for connection and healing along the continuum of care, they may be inappropriate for children and caregivers presenting with complications of grief, trauma, and comorbid psychiatric disorders (Griese et al., 2017). Accordingly, to the degree possible recognizing existing barriers to treatment (e.g., cost, inadequate grief training among providers) and bereavement centers' limited resources, centers hosting peer support programming should consider offering clinical assessment and/or referral services to facilitate families' connection with the appropriate level of care (Griese et al., 2017). This latter point is especially salient given that nearly 10% of caregivers in the present sample exceeded the clinical cut-off for depression at the time of assessment.

Regardless of the service setting, providers should recognize the value of culturally sensitive, family-centered grief care. Past research (and, to an extent, the present effort) suggests that caregiver and child adaptation to loss is interdependent and impacted by caregiver-child interpersonal processes (Jiao et al., 2021). Accordingly, providers should be attuned to the factors that have been shown to contribute to outcomes (e.g., caregiver psychological distress, strain, and coping advice) and consider targeting them as part of their intervention. This practice is modeled by the Family Bereavement Program, which was specifically designed to target factors shown to be associated with maladjustment (Sandler et al., 2013).

The findings of the present effort would be most appropriately applied in the context of peer support programming, given that peer support group participants were the studied population. With the caveat that the present study's findings must be viewed as preliminary, some results hold relevance to those in peer support settings. For instance, to mitigate mental health problems, group leaders and facilitators could help children process their feelings about their interpretation of their caregivers' distress, given that reports of elevated distress predicted poorer youth psychological functioning. Additionally, as a significant association was observed between time since death and youth PTG – which may be attributable to the influence of ongoing peer support group experiences on PTG-promoting processes – group leaders and facilitators might take steps to encourage processes such as productive rumination, positive reappraisal, and schema adaptation among group members. Leaders and facilitators might also prompt children to contemplate perceived positive changes following their loss, but it is essential to consider children's readiness for such conversations (Kilmer & Gil-Rivas, 2008; Tedeschi & Calhoun, 2009; Tedeschi & Kilmer, 2005).

Although premature at this time, an additional potential clinical implication of the study is that it highlights the importance of helping caregivers understand how to optimally support their children. Specifically, findings suggest that there might be value in group leaders and facilitators discussing with caregivers the coping advice strategies that may promote healthy adaptation (i.e., active coping, planning, positive reframing, emotional support, and religious coping). Given that none of these dimensions of coping advice were particularly more effective than others in terms of promoting PTG, leaders and facilitators can encourage caregivers to employ the strategies that are best suited to their families. Further, beyond any impacts on their children, it is beneficial to provide caregivers with support and guidance to promote their own well-being following their loss (Hafstad et al., 2010).

While this narrative is focused on providers, several important messages for caregivers also emerge from this work. Caregivers should, to the best of their ability, take steps to ensure that they are getting the support they need to maintain or enhance their own functioning, as well as the functioning of their children. These results also suggest the potential benefit of cultivating an open line of communication with their children about distressing thoughts and feelings, such that caregivers explicitly convey to their children that they are willing and able to talk, even if they are upset themselves.

Future Directions

Many potential future directions emerge from the current study. For one, it is critical to replicate and extend this pilot work with a more representative, larger sample. Fortunately, additional data collection is planned for the fall of 2022 and spring of 2023 at many of the 20+ centers across the U.S. that initially expressed interest in taking part in the study, as well as some new centers. For this project, a concerted effort should be made to recruit a sample that is more representative of historically marginalized identities (regarding, for example, race, ethnicity, income, and education) than the present sample. Another future direction is to assess a broader age range (including adolescents) to explore developmental considerations throughout childhood and adolescence, which is also planned for the upcoming project.

Statistical power in future efforts might be increased by using a larger sample, as well as more reliable measurement. Ideally, measures selected for inclusion in future studies would report strong internal consistency and have pre-existing psychometric evaluations establishing validity and reliability (or comprehensive psychometrics would be performed as part of analyses). Additionally, the timelines of measures would be in alignment, as conceptually appropriate. With added power, more complex statistical analyses could be conducted, such as multi-level modeling with participants nested by family and center.

Further, it would be useful to assess additional caregiver- and child-related variables via the reports of both caregivers and children (i.e., beyond only assessing caregiver psychological distress and child-reported caregiver distress) to further illuminate ways in which children may be impacted by caregivers' functioning to the degree that they are aware of it (or, conversely, caregivers may be impacted by children). Other informants (e.g., teachers, center staff and facilitators) and data collection methods (e.g., interviews, observations) might also be used. For self-report measures, a social desirability scale might be added to identify participants who are responding in an unrealistically positive manner that may not reflect their genuine experiences.

To assess change over time, future studies would also benefit from the inclusion of a comparison group. While many studies contrast the experiences of bereaved and non-bereaved families (see, e.g., Brent et al., 2012), we are not aware of any research comparing bereaved families that are and are not attending peer support programming. Additionally, as is planned for the upcoming expansion of the present effort, longitudinal data should be collected. Specifically, a prospective-longitudinal design would be optimal to enhance our understanding of the process and trajectory of caregiver and child adaptation to loss. It would also be ideal to capture caregiver-child relationships, family functioning, and caregiver and child functioning (e.g., psychiatric history) before the death.

Another potential future direction for research involves incorporating additional variables, together with or instead of variables assessed as part of the present effort. Researchers might consider including the following covariates: child gender, ethnicity, nationality, religious affiliation, post-loss change in income, circumstances of death, relationship to the deceased, and relationship between surviving caregiver and child. Further, measures might be added related to coping (e.g., caregiver coping behaviors, child coping efficacy, child coping behaviors), stress and disruption (e.g., youth perceived stress, life stressors to which children were exposed, social disruption), indicators of the caregiver-child relationship (e.g., caregiver warmth, positive parenting, family cohesion), and factors impacting PTG (e.g., rumination, PTSD, positive resources). Notably, family functioning as well as child rumination, hope, and future expectations were assessed in the broader study out of which this effort grew. Future researchers should also consider incorporating measures of systems-level influences on outcomes, including systemic racism, discrimination, and COVID-19 pandemic-related stress.

A final core future direction emerging from this study is for researchers to increase focus on the peer support program context. While additional research and evaluation efforts are warranted to establish the efficacy of these programs (Bartone et al., 2019), including the degree to which they promote healthy adaptation to loss (e.g., positive mental health), and to identify ways to strengthen programming, it is also important to identify the mechanisms of change that drive the benefits informally reported by center staff and volunteers and that make these programs the dominant model of addressing family bereavement (Schuurman & DeCristofaro, 2010). For one, social support should be assessed given the nature of program activities (a measure of social support was included in the broader study out of which this effort grew). It is also essential to explore the peer support group experiences of historically minoritized populations and the factors that may contribute to their lack of representation (e.g., treatment stigma, preference for alternate settings for seeking support, limited cultural relevance of peer support programs, linguistic barriers, difficulty attending weekly programming, lack of geographic access to services).

Additionally, research should be aimed at establishing how peer support group experiences, including social support, may interact with the variables examined in this study, including as related to enhancing both caregiver-child interactional processes and transactions on caregiver and child functioning. For example, per the spillover hypothesis, positively valenced affect and behavior in one setting (e.g., at grief centers) directly carry over into another within a family system (e.g., at home; Nelson et al., 2009). Accordingly, children and caregivers participating in peer support programming may have more positive, supportive interactions with one another than would have been the case if they did not pursue services, which may, in turn, reduce negative bidirectional influences on functioning. However, further research is warranted to explore these and other processes and influences. To address gaps in the literature, future studies should also increase focus on children's agency in influencing caregiver functioning, rather than exclusively using children's experiences as the outcomes when investigating the interdependence of caregiver and child adaptation to loss (Jiao et al., 2021), as was the case for the present effort. Subsequent findings, especially regarding specific ways in which children may interpret as well as impact caregiver functioning, could be translated into recommendations for providers to enhance evidence-based care within this population and ensure that caregivers are getting the support they need.

Broadly, this study began to address significant gaps in the literature regarding the negative and potentially positive outcomes that may be experienced by bereaved families, as well as the role of the bereaved family system in shaping adjustment to loss. It suggests that caregivers may have positive or negative influences on children's functioning via caregivers' functioning (as reported by children) and caregiver-child interactions. By attending to these factors, peer support program participants, volunteers, and staff may encourage healthy adaptation to loss in an otherwise vulnerable population.

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