

# Protective Factors in the Context of Childhood Bereavement: Youth Gratitude, Future Orientation, and Purpose in Life

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## Abstract

The objective of the study was to examine potential associations between positive youth development constructs (gratitude, future orientation, purpose in life) and psychological functioning (posttraumatic stress symptoms, depressive symptoms, maladaptive grief reactions) among bereaved youth and test whether these associations vary by age. A diverse sample of 197 clinic-referred bereaved youth (56.2% female;  $M = 12.36$ ,  $SD = 3.18$ ; 36.1% Hispanic, 23.7% White, 20.1% Black, 11.9% Multiracial, and 8.2% another race/ethnicity) completed self-report measures of psychological functioning and positive youth development constructs. Linear regression models indicated that gratitude and purpose were associated with lower posttraumatic stress and depressive symptoms among bereaved youth. Future orientation was associated with higher posttraumatic stress symptoms. Results were consistent across age. If replicated longitudinally, gratitude and purpose may be important protective factors against negative mental health outcomes in the aftermath of losing a loved one.

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## Keywords

bereavement, positive youth development, resilience, posttraumatic stress, childhood, adolescence

## Introduction

The death of a loved one has been reported to be one of the most common (Pynoos et al., 2014) and most distressing (Kaplow et al., 2010) traumatic experiences reported by youths (Breslau et al., 2004). In the United States, approximately 4.5 million or 6.6% of youth will experience parental death before age 18 (Burns et al., 2020) due to various causes such as chronic illnesses, drug overdose, and suicide (Case & Deaton, 2017; Guldin et al., 2015). More recently, it has been estimated that more than 350,000 children in the United States have lost a caregiver due to COVID-19, with disparities existing among communities of color (Cox & Bridgeland, 2023; Hillis et al., 2021). Further, the death of a loved one can lead to negative mental health problems, including posttraumatic stress symptoms (Cerel et al., 2006; Melhem et al., 2008), depression (Brent et al., 2009), behavioral problems, substance use (Kaplow et al., 2010), suicide risk and maladaptive grief reactions (Kaplow et al., 2012, 2019, 2020), which can disrupt the developmental trajectories of bereaved youth in crucial areas such as school, interpersonal relationships, and quality of life (Alvis et al., 2022b; Blank & Werner-Lin, 2011; Oosterhoff et al., 2018). Despite the increased risk for psychological and behavioral problems following the death of a loved one, many bereaved youth are able to adapt and continue to thrive (Kaplow et al., 2010; Sandler et al., 2007).

Although it is clear that many bereaved youth are resilient, few studies have examined protective factors in the context of bereavement that appear to play a role in adaptation and healthy functioning post-loss. Most of these studies have focused on the protective role of a caregiver following a death. For example, supportive caregiver grief facilitation behaviors as well as positive parenting, defined by consistent discipline, parental warmth, and positive reinforcement, are associated with adaptive outcomes and lower mental health problems in bereaved children (Alvis et al., 2022a; Howell et al., 2016; Kwok et al., 2005; Lin et al., 2004; Zhang et al., 2023). Individual characteristics of bereaved youth may also help distinguish those who grieve adaptively from those who continue to struggle after the death of a loved one. A study found that bereaved youth who demonstrated adaptive functioning post-loss had lower scores on avoidant coping and higher scores on intrinsic factors such as coping efficacy and religiosity compared to youth who demonstrated higher levels of distress (Howell et al., 2015).

Of those studies that have examined protective factors in the context of bereavement, none have examined the ways in which specific aspects of positive youth development may buffer youth from the negative mental health consequences associated with bereavement. For example, gratitude, future orientation, and a sense of purpose in life represent specific aspects of positive youth development that may encompass healthy

skills that young people can use to help cope with their loss. Further, gratitude, future orientation, and purpose in life may become more relevant and beneficial for bereaved youth as they age, as older youth are both more at risk for developing mood disorders (Maughan et al., 2013) and have greater agency to exercise positive youth development skills (Lerner & Benson, 2003). The current study examined whether gratitude, future orientation, and purpose in life were associated with lower levels of psychological distress among a large sample of bereaved youth and tested whether these effects differed by age.

### *Multidimensional Grief Theory*

Multidimensional Grief Theory (MGT) is a developmentally informed multidimensional conception of grief that proposes that grief reactions can be characterized by three broad dimensions: Separation Distress, Existential/Identity Distress, and Circumstance-Related Distress (Kaplow et al., 2013; Layne et al., 2017). Separation Distress involves distress associated with the physical absence and inability to reunite with their loved one (Kaplow et al., 2013; Layne et al., 2017). Existential/Identity Distress involves distress pertaining to the personal existential meaning one attributes to life and/or identity-related challenges that stem from the death of a loved one (Kaplow et al., 2013; Layne et al., 2017). Circumstance-related Distress involves distress related to troubling thoughts and emotional pain over the actual cause of death, especially under traumatic conditions (e.g., homicide, suicide, fatal accident; Kaplow et al., 2014; Layne et al., 2017). Multidimensional Grief Theory also proposes that each of these dimensions has an adaptive counterpart (e.g., adaptive coping with separation distress involves finding healthy ways of connecting with the deceased; adaptive coping with existential distress involves finding ways to carry on the legacy of the deceased). Consequently, MGT may be an especially useful theory to guide hypotheses regarding the role of positive youth development and mental health among bereaved youth. Specifically, MGT emphasizes that many bereaved youths can experience positive adaptations in the face of each dimension of grief and associated bereavement-related challenges following a loss, thus highlighting the utility of personal protective factors in the context of bereavement. Additionally, developmental differences and domain-specificity of grief reactions outlined in MGT underscore the need to explore how positive youth development may intersect with different facets of grief at different ages.

### *Positive Youth Development and Bereavement*

Several operationalizations of positive youth development have been proposed in past research (Peterson & Seligman, 2004). The broad conceptualization of positive youth development calls for careful consideration for identifying which aspects may be most relevant in the context of bereavement. While non-exhaustive, past research has consistently highlighted the potential mental health benefits of gratitude, future

orientation, and purpose in life for youth and adults who have experienced trauma (Alim et al., 2008; Brunzell et al., 2015; Holman & Silver, 2005; Singer et al., 2020; Vieselmeyer et al., 2017; Zhang et al., 2009). Thus, the current study focused specifically on gratitude, future orientation, and purpose in life given that these components of positive youth development have been associated with mental health benefits among those facing significant life adversity.

Gratitude represents an emotional response demonstrating some sort of appreciation towards the helpful action of others (McCullough et al., 2001). Gratitude is an integral component of positive youth development, as it can help foster social support, self-esteem, and overall well-being (Kong et al., 2015; Lin, 2016; Wood et al., 2008). Higher levels of gratitude have been shown to reduce stress and depressive symptoms throughout early adolescence (Stoeckel et al., 2015; You et al., 2018). The benefits associated with gratitude may be important for how bereaved youth cope with the death of a loved one. For example, studies in palliative care settings have found that gratitude can be protective against psychological distress and may even foster positive outcomes among grieving parents, such as improved quality of life and posttraumatic traumatic growth (Althaus et al., 2018; Blood & Cacciatore, 2014; Cuervo-Suarez et al., 2022; Harvey et al., 2008). Still, no studies to date have examined how gratitude may be linked with mental health among bereaved youth.

Future orientation can be described as the views that individuals have about the future and the ability to set long term goals and plans (Johnson et al., 2014; Seginer, 2008). Prior research suggests that future orientation can have meaningful implications for identity development, mental health, and well-being (Johnson et al., 2014; Seginer, 2008). Specifically, future orientation has been found to be associated with greater self-regulation (Hoyle & Sherrill, 2006), resilience (Oshri et al., 2018), and self-esteem (Jackman & MacPhee, 2017). Greater future orientation has also been found to be related to greater perceived control and responsibility among youth (Kerpelman & Mosher, 2004). All of these benefits may help bereaved youth cope with their loss. Some evidence suggests that the death of a loved one is associated with greater feelings of uncertainty about the future (Boelen et al., 2016; Eisma et al., 2020; Kaplow et al., 2013; Layne et al., 2017); however, few studies have examined how future orientation may be related to mental health among bereaved youth.

Purpose in life can be described as one's personal goals, aims, and objectives towards life (Hill et al., 2013). Youth who reported possessing a sense of purpose in life have a stronger sense of agency in their lives (Cotton Bronk et al., 2009) as well as greater levels of happiness and well-being (Burrow & Hill, 2011) and emotion regulation (Schaefer et al., 2013). Purpose in life has also been associated with lower rates of depression (Barcaccia et al., 2023). However, there is little understanding of how purpose relates to mental health among bereaved youth. Experiencing the sudden death of a child has been found to be associated with a loss of purpose (Kim & Hicks, 2015; Polita et al., 2020), as well as a loss of identity as many parents and caregivers reported finding their own purpose and meaning in raising their children (Alam et al., 2012; Barrera et al., 2009). Parents with a lower sense of purpose after the death of their child

reported higher levels of maladaptive grief (Lichtenthal et al., 2010). Similarly, a strong sense of purpose may help youth process their loss in ways that may encourage attempts at finding meaning (Neimeyer, 2019), including transforming the circumstances of the death into something that can help other people not suffer in the same way as their loved one did (e.g., raising money for breast cancer if parent died of cancer; Kaplow et al., 2013, 2023). This, in turn, may help to buffer against negative mental health outcomes associated with bereavement.

### *Age as a Potential Moderator*

Age may be a potential moderator of the association between positive youth development and mental health among bereaved youth. Compared to younger children, adolescents have much greater individual capability, critical thinking, and personal agency that may lead to more meaningful engagement with positive youth development constructs (Lerner & Benson, 2003). The potentially protective effects of gratitude (Froh et al., 2009), future orientation (Nurmi, 2005), and purpose in life (Tan et al., 2018) may be more important as youth age, given that adverse mental health outcomes like depression and PTSD are more likely to develop in adolescents compared to younger children (Dyregrov & Yule, 2006; Maughan et al., 2013).

### *Potential Confounds*

Examining associations between positive youth development and mental health symptoms requires consideration of possible confounds. In addition to age, gender- and race-based differences have been observed in adolescent mental health, with girls being more likely than boys to report more severe depressive symptoms (Chaplin et al., 2009) and youth of color, including Black and Latino youth, reporting more severe maladaptive grief reactions and posttraumatic stress symptoms compared to their White peers (Douglas et al., 2021). Further, bereaved youth who lost a caregiver from prolonged illness report higher levels of posttraumatic stress symptoms and maladaptive grief relative to bereaved youth who lost a caregiver from a sudden natural death (e.g., heart attack; Kaplow et al., 2014). Violent (e.g., homicide, accident, and suicide) and sudden deaths may also result in severe PTSD symptoms in youth (Kaltman & Bonanno, 2003; Nakajima et al., 2022) and symptoms of distress also tend to be more severe in the more immediate aftermath of a loss (Kaplow et al., 2010). Thus, it is important to account for youth demographic characteristics (age, gender, race) as well as circumstances related to the death (cause of death, time since death) when examining links between positive youth development and mental health symptoms among bereaved youth.

## Current Study

The current study had two primary aims. The first aim was to examine the association between three positive youth development constructs (gratitude, future orientation, purpose in life) and mental health (posttraumatic stress symptoms, depressive symptoms, maladaptive grief reactions) among youth who have experienced the death of a loved one, after accounting for demographic characteristics and circumstances of the loss. We hypothesized that higher levels of gratitude, future orientation, and purpose in life would be associated with lower posttraumatic stress, depressive symptoms, and maladaptive grief reactions in bereaved youth. The second aim was to examine whether links between these positive youth development constructs and mental health varied by youth age. It was hypothesized that these associations would be stronger for older youth compared to younger youth.

## Method

### *Participants and Procedure*

Participants were drawn from a sample of bereaved youth who were seeking treatment at a trauma and grief specialty outpatient clinic in a large metropolitan city in the United States. Participants were recruited via referrals from community agencies and schools in the clinic's catchment area, or via self-referral. Bereaved youth who reported experiencing a death of a loved one and who had completed measures of positive youth development, posttraumatic stress, depressive symptoms, and maladaptive grief reactions were included in the current study ( $n = 197$ ). Youth were aged 7–21 years old ( $M = 12.36$ ,  $SD = 3.18$ ; 56.2% female) and self-identified as Hispanic (36.1%), White (23.7%), Black (20.1%), Multiracial (11.9%), and another race/ethnicity (8.2%).

Bereaved youth completed a standardized battery of self-report measures prior to treatment. Trained clinicians read all measures to participants. All procedures were approved by the study site's institutional review board. Parent/guardian written informed consent as well as child written assent were obtained.

### *Measures*

**Gratitude.** Gratitude was measured using 3 items ( $\alpha = .76$ ) taken from the Youth Civic Character Measures Toolkit (Syvertsen et al., 2015). Youth rated their agreement with each item (e.g., "I feel thankful for everyday things") on a 5-point scale from 1 (not at all like me) to 5 (very much like me). Mean scores were calculated with higher values indicating greater gratitude.

**Future Orientation.** Future orientation was measured using 3 items ( $\alpha = .67$ ) taken from the Youth Civic Character Measures Toolkit (Syvertsen et al., 2015). Youth rated their agreement with each item (e.g., "I am hopeful for my future") on a 5-point scale from 1

(not at all like me) to 5 (very much like me). Mean scores were calculated with higher values indicating greater future orientation.

**Purpose in Life.** Purpose was measured with two items taken from the Youth Civic Character Measures Toolkit (Syvertsen et al., 2015) in which youth rated how much the following items were like them: “I feel a sense of purpose in life” and “I understand my life’s meaning.” Responses ranged from 1 (not at all like me) to 5 (very much like me). Responses of the two items were averaged to create a total score ( $r = .58, p < .001$ ).

**Posttraumatic Stress Symptoms.** The 31-item UCLA Posttraumatic Stress Disorder (PTSD) Reaction Index for DSM-5 (RI-5; Elhai et al., 2013) is a child self-report measure used to assess past-month symptoms of PTSD in relation to an identified index trauma. Symptoms (e.g., “I have upsetting thoughts, pictures, or sounds of what happened come into my mind when I do not want them to”) are rated on a 5-point scale from 0 (*none*) to 4 (*most*). A total score is created by summing ratings across 20 symptoms (range = 0–80;  $\alpha = .92$ ). A score  $\geq 35$  denotes significant risk for PTSD with good sensitivity and specificity (Kaplow et al., 2020; Rolon-Arroyo et al., 2017).

**Depressive Symptoms.** The 13-item Short Mood and Feelings Questionnaire (SMFQ; Angold et al., 1995) was used to assess child depressive symptoms. Frequency of symptoms (e.g., “I felt miserable or unhappy”) experienced during the last two weeks is rated on a 3-point scale (0 = not true, 1 = sometimes true, 2 = true). Responses are summed to create a total score (range = 0–26;  $\alpha = .88$ ). A score of 8 or higher is an indicator of clinically significant symptoms (Thapar & McGuffin, 1998).

**Maladaptive Grief Reactions.** The Persistent Complex Bereavement Disorder (PCBD) Checklist is a 39-item measure of grief for youth designed to assess DSM-5 PCBD criteria and identify youth at risk for maladaptive grief (Layne et al., 2014). Grief reactions (e.g., “I just can’t stop thinking about [insert loved one who died]”) are rated on a 5-point Likert type scale ranging from 0 (*not at all*) to 4 (*all the time*). The PCBD Checklist has demonstrated strong convergent, discriminant, and discriminant-groups validity as well as developmental appropriateness and clinical utility (Kaplow et al., 2018). The PCBD Checklist can also be scored in relation to the primary grief domains proposed by multidimensional grief theory: Separation Distress ( $k = 15$  items,  $\alpha = .90$ ), Existential/Identity Distress ( $k = 7$ ,  $\alpha = .66$ ), and Circumstance-Related Distress ( $k = 10$ ,  $\alpha = .84$ ). Scoring according to multidimensional grief theory involves averaging the items in each of the three grief domains (possible range = 0–4). Only youth who indicated bereavement exposure received the PCBD.

**Covariates.** Youth demographic characteristics were examined as covariates, including child-reported age, gender (1 = female, 0 = male), and race/ethnicity (Black vs. non-Black, Latino/a vs. non-Latino/a, and White vs. non-White). In addition, the number of days between youths’ baseline assessment and youths’ follow-up assessment was

calculated as a proxy for treatment duration. For bereaved youth, the PCBD (Kaplow et al., 2018) was used to assess the circumstances of participants' loss; only sudden natural death (32.3%) and long-term illness (32.3%) had sufficient sample sizes to include as covariates. Time since the death of the loved one was calculated at baseline in months.

### *Data Analysis*

A series of multiple linear regression models were estimated to test associations between three indicators of positive youth development (future orientation, gratitude, purpose) and youth mental health. Posttraumatic stress symptoms, depressive symptoms, and three domains of maladaptive grief reactions (separation distress, existential/identity distress, circumstance-related distress) were examined as outcomes in separate models. Each model controlled for child age, gender (0 = male and 1 = female), race (i.e., three dummy coded variables for not Black = 0 and Black = 1; not Latinx = 0 and Latinx = 1; and not White = 0 and White = 1), years since death, and cause of death (i.e., two dummy coded variables for all other causes of death = 0 and long-term disease = 1; all other = 0 and short-term disease = 1). Next, three positive youth development by age interaction terms were added to the models to explore whether associations between positive youth development constructs and mental health outcomes varied by youth age. Simple slopes were used to probe significant interactions within  $\pm 1$  *SD* from the mean. All regression analyses were performed in RStudio (v4.3.1; R Development Core Team, 2023) using the *lm* function. Simple slopes were examined using the interactions package (Long, 2019).

### **Results**

The means, standard deviations, and bivariate correlations for all study variables are available in Table 1. In general, positive youth development constructs were positively correlated with one another and mental health symptoms were positively correlated with one another. Additionally, positive youth development constructs were generally negatively correlated with mental health symptoms.

#### *Positive Youth Development and Mental Health*

Multiple regression analyses were used to test associations between each of the positive youth development constructs (future orientation, gratitude, and purpose) and mental health (posttraumatic stress, depressive symptoms, and three domains of maladaptive grief reactions). Table 2 displays full model estimates. The model predicting posttraumatic stress symptoms indicated that girls and Black youth reported higher posttraumatic stress symptoms compared with boys and non-Black youth, respectively. Future orientation was associated positively with posttraumatic stress symptoms whereas purpose in life was associated negatively with posttraumatic stress symptoms.



**Table 1.** Means, Standard Deviations, and Correlations Among Key Study Variables.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	12.14	3.06								
2. Future orientation	11.95	2.82	.30**							
3. Gratitude	12.32	2.63	.13	.67**						
4. Purpose	7.51	2.36	.19**	.50**	.52**					
5. Posttraumatic stress	27.73	18.40	.15**	.08	-.04	-.18*				
6. Depressive symptoms	7.49	5.72	.20**	-.03	-.12	-.23**	.74**			
7. Separation distress	1.51	0.95	-.12**	-.06	.04	-.10	.49**	.55**		
8. Existential/ Identity distress	1.27	0.98	-.07	-.04	.02	-.08	.49**	.57**	.86**	
9. Circumstance distress	1.50	0.92	-.09*	.01	.05	-.05	.53**	.48**	.78**	.68**

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

The model for depressive symptoms indicated that younger age, identifying as a boy, and having a higher sense of purpose in life was associated with lower depressive symptoms. Regarding grief, results indicated that positive youth development factors were not significantly associated with any of the three domains of maladaptive grief reactions among bereaved youth.

### Moderation by Age

Estimates for all regression models testing age as a moderator are displayed in the [Supplemental Material](#). Results indicated a significant purpose by age interaction effect for depressive symptoms ( $B = -.18$ ,  $SE = .07$ ,  $p = .010$ ). Simple slope analysis revealed that higher purpose was significantly associated with lower depressive symptoms for older youth ( $B = -1.26$ ,  $SE = .32$ ,  $p < .001$ ) but not for younger youth ( $B = -0.19$ ,  $SE = .28$ ,  $p = .050$ ; see [Figure 1](#)). Age did not significantly moderate any associations between positive youth development and posttraumatic stress symptoms or maladaptive grief reactions.

## Discussion

Results from the present study suggest that some positive youth development constructs are associated with lower posttraumatic stress symptoms and depressive

**Table 2.** Linear Regression Model Results.

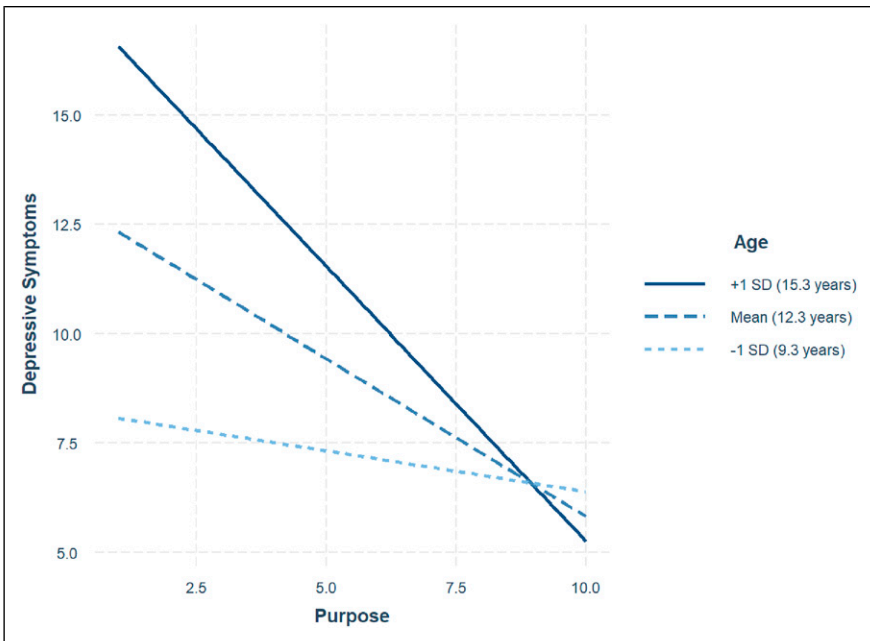
Predictors	Posttraumatic Stress		Depressive Symptoms		Separation Distress		Existential/Identity Distress		Circumstance-Related Distress	
	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI	$\beta$	95% CI
Age	0.06	-0.10-0.22	0.19*	0.03-0.35	-0.05	-0.22-0.12	0.01	-0.17-0.18	-0.07	-0.24-0.10
Female	0.20**	0.05-0.34	0.28***	0.13-0.43	0.10	-0.05-0.26	0.14	-0.01-0.30	0.06	-0.10-0.22
Black	0.23*	0.05-0.40	0.05	-0.13-0.23	0.09	-0.09-0.28	0.07	-0.11-0.26	0.18	-0.01-0.36
Latinx	0.10	-0.08-0.28	-0.04	-0.22-0.14	-0.01	-0.20-0.18	-0.06	-0.25-0.13	0.17	-0.02-0.36
White	0.04	-0.13-0.21	-0.05	-0.22-0.12	-0.20*	-0.38 to -0.02	-0.10	-0.28-0.08	-0.08	-0.26-0.10
Long-term illness	0.04	-0.11-0.19	0.12	-0.04-0.27	0.11	-0.05-0.27	0.19*	0.03-0.36	0.00	-0.16-0.17
Sudden death	-0.12	-0.28-0.04	-0.01	-0.17-0.15	-0.07	-0.24-0.09	-0.04	-0.21-0.13	-0.14	-0.31-0.03
Years since death	0.03	-0.12-0.18	-0.03	-0.18-0.12	-0.09	-0.25-0.06	-0.07	-0.23-0.09	-0.06	-0.22-0.10
Future orient	0.23*	0.00-0.46	0.02	-0.21-0.25	-0.17	-0.40-0.07	-0.15	-0.39-0.09	-0.01	-0.25-0.23
Gratitude	-0.12	-0.35-0.10	-0.09	-0.31-0.13	0.10	-0.13-0.34	0.11	-0.13-0.34	0.02	-0.21-0.26
Purpose	-0.31***	-0.49 to -0.13	-0.27**	-0.45 to -0.09	-0.02	-0.21-0.17	-0.06	-0.25-0.13	-0.02	-0.21-0.17
R <sup>2</sup> /R <sup>2</sup> adjusted	0.205/0.149		0.192/0.135		0.109/0.046		0.091/0.028		0.095/0.032	

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

symptoms among bereaved youth. These findings were consistent after accounting for a range of demographic characteristics and bereavement-related circumstances.

Purpose in life was negatively associated with posttraumatic stress symptoms for bereaved youth, whereas future orientation was positively associated with posttraumatic stress symptoms. These results are similar to findings from other studies demonstrating purpose in life was associated with decreased PTSD symptoms in trauma exposed populations, such as earthquake survivors and military veterans (Feder et al., 2013; Straus et al., 2019). Purpose in life can be helpful for individuals to endure and overcome suffering, particularly when exposed to an event involving life threat. In our study, greater future orientation was associated with higher posttraumatic stress symptoms, which is counter to prior findings that trauma-exposed youth with PTSD were more pessimistic about their futures than traumatized youth with no PTSD symptoms (Rialon, 2011). It is possible that bereaved youth with higher posttraumatic stress symptoms may think more about their future but in a pessimistic way. Future research is needed to further examine links between future orientation and posttraumatic stress symptoms in bereaved youth.

Only purpose in life was associated with lower depressive symptoms for bereaved youth in our sample. This is consistent with prior studies showing purpose in life is associated with lower depressive symptoms for adolescents (Barcaccia et al., 2023; Kang et al., 2013). Purpose in life may provide bereaved youth with a framework for



**Figure 1.** Purpose by age interaction effects on depressive symptoms.

focusing on positive aspects of life and ways to cope with loss, thereby protecting against depressive symptoms. Alternatively, youth with lower depressive symptoms may have an easier time engaging in activities and interactions with others that may help foster a sense of purpose.

We did not find evidence that positive youth development constructs were associated with any of the three domains of grief among bereaved youth. These results were unexpected given that previous studies have demonstrated gratitude, future orientation, and purpose in life may be associated with better mental health outcomes among children and adolescents. This pattern of null findings may indicate that future orientation, gratitude, and purpose have a highly nuanced and symptom-specific relation with mental health among bereaved youth and/or that the effect sizes were smaller than what was detectable with the current sample size. It is also possible that the grief reactions in the current sample are considered “normative” and may not be inherently distressing, thereby not requiring the use of positive youth development constructs as potential coping mechanisms. It should be noted that, in the current sample, average grief scores were not clinically significant. Finally, it is possible that grief may lead to greater positive youth development over time, as children age and as more time passes since the death. Future research should continue to explore possible connections between positive youth development and grief, with careful attention to contexts where these links may be amplified or dampened.

The second aim of this study was to examine whether links between positive youth development and mental health varied by youth age. Results indicated age moderated the association between purpose in life and depression, with higher purpose being more strongly associated with lower depressive symptoms for older youth when compared to younger youth. Past research has also found that older adolescents may be at greater risk for depression than younger children (Maughan et al., 2013). Purpose in life for youth can have important implications for identity development and well-being in youth (Burrow et al., 2010). Identity development is a key developmental task during adolescence (Verhoeven et al., 2019), and purpose may have a greater protective role in relation to depression among older bereaved youth relative to younger bereaved youth. Additionally, identifying one’s purpose in life can be considered a more advanced meta-cognitive ability that some younger youth may not be able to grasp.

Although not central to our primary research questions, results indicated that there were significant mental health differences as a function of gender and race within our sample. Consistent with past research, identifying as female was associated with greater posttraumatic stress and depressive symptoms, possibly due to females being more like to engage in co-rumination and/or gender-based societal norms regarding emotional expression (Garza & Jovanovic, 2017; Girgus & Yang, 2015). With regard to race, youth identifying as Black reported higher posttraumatic stress symptoms relative to non-Black youth. In addition, youth identifying as White reported lower separation distress relative non-White youth. Prior research suggests that higher rates of posttraumatic stress and maladaptive grief among youth of color is in part due to structural inequities that contribute to experiences of discrimination and the disparate placement

of families of color in impoverished and under-resourced neighborhoods, where exposure to community violence, homicide, and other traumatic events are more prevalent (Douglas et al., 2021; Santiago-Rivera et al., 2016).

Results from this study should be interpreted in the context of certain limitations. Data were cross-sectional and temporal interpretations cannot be made. The cross-sectional design of this study does not allow for the examination of how positive youth development and mental health can change over time and prevents us from testing potential bidirectionality. Measures of future orientation and existential/identity distress had lower internal consistency, which may have been due to the small number of items included for each scale. Low internal consistency may represent high measurement error and result in inaccurate estimated effect sizes. Future research should consider exploring the reliability of these measures under different test conditions to better understand when and for whom internal consistency is low. The study may not be representative of all bereaved youth, given that the study included clinic-referred youth seeking services for trauma- and bereavement-related concerns. Thus, it is not clear whether these results can be generalized to youth not actively seeking counseling or psychological services. Future research should examine these associations in a community-based sample of bereaved youth and may consider utilizing a longitudinal, experimental design to ensure results are specifically due to the adoption of positive youth development constructs.

Findings from the present study may have implications for future clinical practice and research. If replicated longitudinally, gratitude and purpose in life may offer promising avenues for reducing posttraumatic stress symptoms and depressive symptoms, respectively, in bereaved youth. Additional research on the potential protective effects of purpose and gratitude for bereaved youth may be beneficial with regard to the development of clinical treatments that help shape health and well-being among bereaved youth, especially given that childhood bereavement is associated with earlier mortality (Burns et al., 2020). Although some grief-focused interventions for bereaved youth focus on cultivating a sense of purpose in life (e.g., Kaplow et al., 2023; Saltzman et al., 2017), refining preventive interventions and clinical treatments that help bereaved youth more explicitly cultivate gratitude and purpose in life may assist with adaptive coping post-loss. Additionally, given that age seems to have a moderating effect, particularly with regard to the relation between depressive symptoms and positive youth development, clinical treatments involving positive youth development constructs may benefit from considering age when tailoring intervention and treatment components.

## Conclusion

Childhood bereavement is a serious public health issue that requires greater public awareness and recognition, given its growing prevalence and the harmful long-term effects bereavement can have on mental and behavioral health. To our knowledge, this study is the first to examine positive youth development constructs in relation to mental

health outcomes among bereaved youth. Positive youth development constructs, such as gratitude and purpose in life, may serve as important protective factors for bereaved youth as they relate to reductions in depression and posttraumatic stress, two of the more common psychological responses to bereavement. Additional research is needed to better understand the positive association between future orientation and posttraumatic stress symptoms as well as the lack of association between positive youth development constructs and grief reactions in particular. Understanding the longitudinal significance of positive youth development constructs can help provide more comprehensive care for bereaved youth as well as encourage more adaptive grief responses and associated mental and behavioral health outcomes over time.

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### **Informed Consent**

Informed consent/assent was obtained from all individual participants included in this study.

### **IRB Approval**

All procedures performed in this study were in accordance with the ethical standards of the institutional review board and with the 1964 Helsinki Declaration. IRB approval was received from the study institution.

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### **Supplemental Material**

Supplemental material for this article is available online.

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**Benjamin Oosterhoff**, PhD, is the Senior Director of Data Analytics for the Trauma and Grief Center at the Meadows Mental Health Policy Institute in Houston. He is a lifespan developmental psychologist and applied quantitative statistician. His research focuses on applying advanced statistical modeling to research related to child and adolescent trauma and loss.

**Julie Kaplow**, PhD, ABPP, serves as Executive Vice President of Trauma and Grief Programs and Policy and Executive director of the Trauma and Grief Center (TAG) at the Meadows Mental Health Policy Institute in Houston. Dr. Kaplow is also Executive Director of the TAG Center at Children’s Hospital New Orleans and Professor of Psychiatry at Tulane University School of Medicine. In these roles, she oversees the development and evaluation of treatments for youth exposed to trauma and bereavement and disseminates trauma- and bereavement-informed “best practices” to community providers nationwide. Her research focuses on the long-term effects of childhood trauma and loss and the effectiveness of interventions for this population.