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Caregiver behaviors associated with positive youth development among bereaved children

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ABSTRACT

Grounded in Multidimensional Grief Theory, this study examined the cross-sectional associations between child-reported caregiver grief facilitation behaviors (ongoing connection, grief expression, existential continuity and support, grief inhibition/avoidance) and positive youth development outcomes (future orientation, gratitude, social responsibility) in treatment-seeking bereaved children ages 7 to 18 (*N*=170; 54.1% girls; 35.9% Hispanic/Latinx, 24.9% White, 17.8% Black) from the United States. Results indicate that higher levels of perceived caregiver existential continuity and support (behaviors theorized to promote the continuity of child routines and reassurance of a positive future after experiencing a death) were associated with greater future orientation and social responsibility values among participants. Findings suggest that in the wake of a death, structured and supportive caregiver responses may be related to children's positive outlook on their future and commitment to others.

The death of a loved one can be a traumatic experience for children (Pynoos et al., 2014). Nearly 6 million US children (8.3%) will experience the death of a parent or sibling before the age of 18 (Judi's House/JAG Institute, 2023). While bereavement can sometimes have negative effects on development and well-being, many children show positive outcomes in the aftermath of a death (Kaplow et al., 2012). Understanding the factors that contribute to positive development can help advance theory and promote resilience in bereaved children.

Multidimensional Grief Theory (MGT) is a developmentally informed model of how children experience grief. MGT proposes that grief is multi-dimensional and includes separation distress (emotional pain associated with the person's physical absence and inability to be with that person), existential identity distress (challenges to one's personal identity and life's meaning), and circumstance-related distress (distressing thoughts and emotional pain regarding the manner of death). The grief dimensions can manifest in both adaptive and maladaptive responses, depending on the stage of development and caregiver support available (Kaplow et al., 2013; Layne et al., 2018). Adaptive responses are domain specific and facilitate healthy

functioning. Specifically, adaptive responses to separation distress include establishing a sense of connection with the person who died. Adaptive responses to existential/identity distress involve developing a greater appreciation for life or embracing the legacy of the loved one who died. Adaptive responses to circumstance-related distress involve engaging in acts that help to transform the circumstances of the death into something meaningful to alleviate the suffering of those who experienced similar deaths (e.g., raising money for breast cancer if a loved one died of breast cancer; Kaplow et al., 2012, 2013).

Consistent with the adaptive aspects of MGT, Positive Youth Development (PYD) constructs such as future-orientation, gratitude, and social responsibility values may be especially relevant for bereaved children's adaptation in the aftermath of the death. Future orientation refers to children's thoughts, plans, motivations, hopes, and feelings about one's future and requires an ability to integrate the past and present self with the future self (Lindstrom Johnson et al., 2014). Bereaved children often experience disruptions to their sense of self and purpose following the death of a loved one, and these maladaptive responses can involve changes to children's future aspirations (Kaplow

et al., 2012; Layne et al., 2018). Research has demonstrated that the tendency to focus on the present without concern for the future puts children at risk for a host of negative outcomes (Steinberg, 2008). Bereaved children with lower future-orientation may experience developmental slowing (e.g., avoidance of forming career and family goals; Kaplow et al., 2012; Layne et al., 2018) or demonstrate a lack of regard for their future and engage in risk-taking behaviors (Kaplow et al., 2012; Kentor & Kaplow, 2020). In contrast, adaptive grief reactions can involve finding ways to feel hopeful about one's future (e.g., attempting to live the kind of life the deceased person would have wanted for them, including striving for future goals; Kaplow et al., 2013, 2023; Layne et al., 2018).

Gratitude involves a sense of appreciation, joy, or thankfulness in response to receiving a benefit (Greene & McGovern, 2017). Gratitude is consistently linked with higher life satisfaction, positive affect, and psychological functioning among children (Obeldobel & Kerns, 2021) and adults in the general population (Emmons & McCullough, 2004), adults who were parentally bereaved as children (Greene & McGovern, 2017), and children and adults exposed to traumatic events (Richardson & Gallagher, 2020). Gratitude can increase in the aftermath of a traumatic experience and may help facilitate adaptation and coping in children (Froh & Bono, 2014). For instance, gratitude was among the most prevalent emotions experienced by adults and children in the aftermath of the September 11, 2001 attacks and was related to lower depression and greater thriving post-disaster (Gordon et al., 2004). Gratitude has been shown to foster greater connectedness with others (Haidt, 2003), which may support healthy adjustment among bereaved children. Gratitude can also help children derive meaning from their experiences and foster a motivation to intentionally contribute to society and to others (Emmons, 2007).

Social responsibility values refer to a set of prosocial values that represent a personal commitment, sense of duty, or obligation to contribute to the welfare of others, community, and society (Wray-Lake & Syvertsen, 2011). As a core motivator of prosocial and civic action, social responsibility values may help bereaved children cope with grief-related distress by enabling them to focus on helping others who have been through similar experiences (Kaplow et al., 2013; Layne et al., 2018). MGT emphasizes that finding prosocial activities that can help bereaved children cope with potentially tragic circumstances surrounding the way their loved one died (e.g., activities that promote social justice and/or saving lives) is an adaptive

coping strategy that can benefit both children and society (Kaplow et al., 2023).

Enhancement of PYD values such as future orientation, gratitude, and social responsibilities may happen naturally among bereaved youth, yet little research has examined the contexts and environments that promote these constructs. Consistent with MGT, when children experience the death of a loved one, their ability to navigate and cope relies heavily on the adults in their environment, making the caregiving context a critical factor in facilitating healthy adjustment (Alvis et al., 2022; Kaplow et al., 2012; Shapiro et al., 2014). Caregivers can facilitate or hinder healthy grief reactions in their children through behaviors including maintaining an ongoing connection with the deceased loved one, providing existential continuity and support, expressing their own grief, and not inhibiting or avoiding grief (Alvis et al., 2022). Ongoing connection involves caregiver behaviors that preserve the memory of, foster closeness with, and highlight positive commonalities to the deceased person. Caregiver grief expression involves caregivers sharing their own grief reactions with their child. Existential continuity and support include caregiver behaviors theorized to promote continuity of the child's routines and reassurance of a positive future. Caregiver grief inhibition/avoidance include efforts to either inhibit or avoid the child's grief reactions.

Research supports that caregiver grief behaviors, including the facilitation of an ongoing connection with their deceased loved one, communicating openly about the death, and modeling the expression of grief, help bereaved children to process and make sense of their own grief experiences and are related to positive developmental outcomes (Alvis et al., 2022; Shapiro et al., 2014; Wardecker et al., 2017). These findings are also supported in the general child and adolescent populations, suggesting that caregiver behaviors that promote bonding, open communication, and emotional modeling can facilitate future-orientation (Zhang & Zhang, 2008), gratitude (Hussong et al., 2021), and social responsibility values (Lenzi et al., 2014). Conversely, behaviors that involve avoiding or suppressing grief are theorized to hinder adaptive grieving processes (Shear et al., 2007). Thus, children's perception of their caregiver's avoidance of their own grief or their child's grief may be related to lower levels of positive developmental outcomes. Despite the clear relevance of caregivers' grief-related behaviors for child development, research has yet to examine links between caregiver grief facilitation and PYD among bereaved children.

Examining associations between caregiver grief facilitation and PYD among bereaved children requires certain methodological considerations. Although bereaved children have the developmental capacity to express and understand their grief (DelGiudice, 2018), the extent to which they do will vary by the norms and cultures of their environment as well as the circumstances related to their loss (Alvis et al., 2022; Alvis et al., 2022). Research on childhood bereavement has shown that grief presentations often vary as a function of gender, race, and age, in part due to the systems of oppression (e.g., racism) that intersect with and shape the developmental contexts in which children are exposed to and cope with bereavement (Shulla & Toomey, 2018; Douglas et al., 2021). Aspects of the bereavement context-including the cause of death, relationship to deceased, and time since death have also been shown to alter children's grief reactions (Kaplow et al., 2018). Links between caregiver grief facilitation and PYD may therefore differ across child demographic characteristics and the bereavement

The current study had two primary aims. The first was to examine associations between child-reported caregiver grief facilitation behaviors (ongoing connection, existential continuity/support, grief expression, grief inhibition/avoidance) and PYD outcomes (future orientation, gratitude, social responsibility). We hypothesized that bereaved children's perception of their caregiver (1) facilitating an ongoing connection with the deceased; (2) promoting existential continuity and support; and (3) expressing their own grief reactions; would be associated with higher future orientation, gratitude, and social responsibility values among children, whereas caregiver grief inhibition/ avoidance behaviors would be associated with lower future orientation, gratitude, and social responsibility values. The second aim was to explore whether links between caregiver grief facilitation and positive developmental outcomes were moderated by child demographic characteristics (age, gender, race) and aspects of the bereavement context (cause of death, relationship to deceased, time since death).

Materials and methods

The sample was drawn from an outpatient clinic for trauma-exposed and/or bereaved children housed in a large academic medical center. Children were seven to 18 years old (N=170; M=12.18, SD=3.04; 54.1%girls), treatment-seeking, and reported experiencing the death of a loved one. Sensitivity analyses indicate that a sample of 170 can detect an effect of $f^2 = .06$ or larger assuming 80% power and error probability of 0.05. The sample was 35.9% Hispanic/Latinx, 24.9% White, 17.8% Black, 13% Mixed/Biracial, 1.2% Asian, and 7.1% Other. Children were bereaved (M = 2.42 years since death, SD = 2.65) by parents (36.5%), siblings (11.2%), grandparents (31.8%), aunts or uncles (5.9%), others (9.4%), or were unreported (5.3%). The causes of death ranged from chronic illness (34.1%), acute illness (19.4%), accident (11.2%), murder (14.1%), suicide (8.8%), or were unreported (12.4%).

The current study used data from a standardized procedural battery of child-report assessments archived from an outpatient clinic for trauma-exposed and/or bereaved children. Prior to treatment, trained clinicians read the assessments aloud for the children to complete. Caregivers provided permission (i.e., informed consent) and children provided informed assent to participate in the study. Procedures were approved by the IRB associated with the primary data collection site. Baseline assessments (i.e., prior to treatment) from children who reported having experienced a death were included in the current study.

Measures

Grief Facilitation Inventory (GFI)

Perceived caregiver grief facilitation behaviors were assessed using the Grief Facilitation Inventory (GFI; Alvis et al., 2022; Kaplow & Layne, 2012; Kaplow et al., 2023). Children completed a 24-item observational report of their caregiver's grief facilitation behaviors during the past month and rated the items on a 5-point frequency scale from 0 = not at all to 4=all the time). The GFI consists of four subscales, including Ongoing Connection (7 items; a = .88; e.g., "My caregiver does things with me to help me remember my ____"), Caregiver Grief Expression (4 items; a = .67; corrected item-total correlations [ITCs] = .55-80; e.g., "My caregiver tells me how he/she is feeling about my ___'s death"), Existential Continuity and Support (8 items; $\alpha = .74$; e.g., "My caregiver lets me know that I can still have a good life even though my ___ has died"), and Grief Inhibition/Avoidance (5 items; a = .61; ITCs = .34-56; e.g., "My caregiver tells me not to talk about how my ___ died with people outside of my family"). Mean scores were calculated for each subscale.

Future orientation, gratitude, and social responsibility values

Measures of future orientation, gratitude, and social responsibility values were taken from the Youth Civic and Character Measures Toolkit (Syvertsen et al., 2015). Future orientation was measured using 3 items (a = .67; "I am hopeful for my future," "When I make a decision, I consider the impact it will have on my future," "I think about who I will be when I'm older"). Gratitude was measured using 3 items ($\alpha = .76$; "I feel thankful for everyday things," "When good things happen to me, I think about the people who helped me," "I find it easy to thank people"). Social responsibility values were measured using 4 items ($\alpha = .75$; "It is important to me to consider the needs of other people," "It is important for me to help those who are less fortunate," "It is important to me to make sure that all people are treated fairly," "It is important to me to think about how my actions affect people in the future"). Children rated their agreement with each item 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, gratitude, and social responsibility values. The measures demonstrated good internal consistency, measurement invariance, and validity in past research with children and youth (see Syvertsen et al., 2015; Oosterhoff et al., 2021; Shubert et al., 2019).

Demographics and covariates

Child-reported demographic information (child age, gender, race) and information regarding the context of bereavement (cause of death, relationship to the deceased, time since death) were collected.

Data analytic plan

All analyses were conducted in SPSS version 28. Prior to analysis, data were checked and did not violate assumptions for univariate and multivariate normality, residual normality, homoscedasticity, and multicollinearity. Three multiple regressions were estimated to test associations between children's perception of their caregiver's grief facilitation behaviors and future orientation, gratitude, and social responsibility values. Each model controlled for child age, gender (0 = boy and 1 = girl), race (three dummy coded variables for not Black = 0 and Black = 1; not Hispanic/Latinx = 0 and Hispanic/Latinx = 1; and not White = 0 and White = 1), relationship to the deceased (two dummy coded variables for non-parental death = 0 and parental death = 1; non-grandparent death = 0 and grandparent death = 1), years since death, and cause of death (three dummy coded variables for all other causes of death = 0 and long-term disease = 1; all other = 0 and short-term disease = 1; all other = 0

and violent death [includes both suicide and homicide-related deaths] = 1).

Exploratory analyses were conducted to test whether demographic characteristics (age, gender, race) and bereavement context (cause of death, relationship to the deceased, time since death) moderated associations between caregiver grief facilitation behaviors and PYD outcomes. All significant analyses were adjusted for FDR and probed within one standard deviation from the mean. Estimates for all models are displayed in the Supplemental Material.

A series of moderation analyses were estimated to explore whether associations between caregiver grief facilitation and PYD varied by demographic characteristics (age, gender, race) and bereavement context (relationship to the deceased, years since death, cause of death). Primary variables were centered, and interaction terms were created. Separate models were estimated for each grief facilitation domain and each demographic and bereavement context characteristic. A False-Discovery Rate (FDR; Benjamini & Hochberg, 1995) correction was applied to all models to correct for family-wise error. Simple slopes were used to probe significant interactions within +/- 1 SD from the mean. Low levels of missing data (< 5%) was addressed using pairwise deletion (Little, 1992).

Results

Table 1 displays the means, standard deviations, ranges, and bivariate correlations for all study variables. Bivariate correlations indicate that child age, gender, and race as well as caregiver ongoing connection and existential continuity and support were positively correlated with child future orientation, gratitude, and social responsibility values. Ongoing connection, grief expression, and existential continuity and support were weakly to moderately correlated (rs ≥.63).

Grief facilitation and positive youth development

The full model estimates for the three multiple regression analyses are displayed in Table 2. The model for future orientation explained 27.8% of the variance, R^2 = .28, F(15, 148) = 3.80, p < .001. After adjusting for FDR, greater perceived existential continuity and support was associated with higher child future orientation. Perceived ongoing connection, grief expression, and grief inhibition/avoidance were not significantly associated with future orientation. The model for gratitude explained 17.4% of the variance, R^2 = .17, F(15, 148) = 2.08, p = .014. Perceived ongoing connection,

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(4	-)	

Variable	Σ	SD	Range	_	7	3	4	2	9	7	8	6	10	1	12	13	14	15	91	17
1. Child age	12.18	3.04	7–18	1		ı	ı	1	1	1	1	ı	ı	ı	ı	ı	ı	1	ı	ı
2. Child gender	.55	.50	0-1	.15	ı	ı	ı	ı	1	ı	ı	ı	ı	I			I	I	ı	ı
3. Black	.18	.38	0-1	07	.17	ı	ı	ı	ı	ı	ı	ı	ı	I	,		I	I	I	ı
4. Hispanic/Latinx	.36	.48	0-1	14	9.	35	ı	1	ı	1	ı	ı	ı	ı	,	,	ı	I	ı	ı
5. White	.25	.43	0-1	03	.003	27**	43**	ı	ı	ı	ı	ı	ı	I	,		I	I	I	ı
6. Long-term disease	.34	.48	0-1	07	.70	004	07	.17*	ı	ı	ı	ı	ı	I	,		I	I	I	ı
7. Short-term disease	.19	.40	0-1	01	<u>.</u>	.05	.003	04	35	ı	ı	ı	ı	I	ı	ı	I	I	I	ı
8. Violent death	.23	.42	0-1	11.	80:	07	.12	15*	39	27**	ı	ı	ı	I	ı	ı	I	I	I	ı
9. Years since death	2.42	2.65	0-12	.10	04	.01	.04	02	20**	.00	07	ı	ı	I	,		I	I	I	ı
10. Parent death	.41	.49	0-1	17*	.005	07	.03	.02	17*	07	.20**	.02	ı	I	,		I	I	I	ı
11. Grandparent death	.50	.50	0-1	06	.01	90:	14	.02	.20**	.07	24**	13	·	 **	,		I	I	I	ı
12. Ongoing connection	12.14	7.75	0-28	.07	.13	*41.	13	.00	9.	.13	05	15	*07:		· -		ı	ı	ı	ı
13. Grief expression	4.65	4.00	0-16	06	.02	.18*	.16	.01	90.	.04	08	29			-	 *	I	I	ı	ı
14. Existential support	17.79	6.91	0-32	.17*	.10	.10	19*	80:	03	.02	.03	1.1			-		 * *	I	I	ı
15. Grief inhibition	3.14	3.33	0-15	02	003	.02	.01	12	15*	60:	.10	.07		02	2 .15	.19	•	 * *	ı	ı
16. Future orientation	4.00	.92	1–5	.28**	.16*	*17*	03	12	08	60:	9.	.08	·				•	•	2 -	ı
17. Gratitude	4.14	.87	1–5	.12	*17*	*17*	10	13	03	.03	9.	.05	·				•	30**02	2 .65**	l *
18. Social values	4.15	.79	2-5	.18*	.24**	1.	10	02	004	14	05	.07	·				•			* .57**

grief expression, existential continuity and support, and grief inhibition/avoidance were not significantly associated with gratitude. The model for social responsibility values explained 27% of the variance, $R^2 = .27$, F(15, 148) = 3.66, p < .001. After adjusting for FDR, greater perceived existential continuity and support was associated with higher social responsibility values. Perceived ongoing connection, grief expression, and grief inhibition/avoidance were not significantly associated with social responsibility values.

Planned exploratory analyses

Future orientation

Estimates for all moderation models are displayed in the Supplemental Material. Time since the death moderated the relationship between perceived existential continuity and support and future orientation (Figure 1(b); [b = -.01, t(21, 142) = -2.23, p = .027]). Simple slopes indicated that existential continuity and support was associated with future orientation for children when the death was more recent ($\beta = .06$, p < .001), but not when the time since death was a longer duration (β = .02, p = .17). More specifically, findings indicate that this positive association is strongest for those who have experienced a death within the past two years. The interaction between age and perceived grief expression as well as the interaction between gender and perceived existential continuity and support were no longer significantly related to future orientation after adjusting for FDR. We did not find any additional evidence of moderation for associations between caregiver grief facilitation behaviors and future orientation.

Social responsibility values

Gender moderated the association between the child's perceived caregiver existential continuity and support and child social responsibility values (Figure 1(a); [b = -.07, t(20, 143) = -3.64, p < .001]). Simple slopes indicated that the positive association between caregiver existential continuity and support and social responsibility was significant for boys ($\beta = .07$, p <.001) but not girls (β = .01, p = .23). Age significantly moderated the association between perceived grief expression and social responsibility values [b = .01,t(20, 143) = 2.54, p = .01]. However, perceived grief expression was not significantly associated with social responsibility values for older or younger children. We did not find any additional evidence of moderation for associations between caregiver grief facilitation behaviors and social responsibility values.

Table 2. Regression results for positive youth development outcomes.

	Future orientation				Gratitude			Social resp. values		
	В	β	SE	В	β	SE	В	β	SE	
Demographics										
Child age	.06**	.21	.02	.01	.02	.02	.03	.10	.02	
Child gender (girl)	.19	.10	.14	.24	.14	.14	.32**	.21	.12	
Black	.28	.11	.22	004	002	.22	06	03	.18	
Hispanic/Latinx	10	05	.19	23	13	.19	26	16	.16	
White	24	11	.20	39	19	.20	24	14	.17	
Bereavement context										
Parent death	13	07	.15	18	10	.15	06	04	.13	
Grandparent death	15	08	.14	06	04	.14	03	.02	.12	
Long-term disease	.03	.02	.19	01	006	.19	.18	.11	.16	
Short-term disease	.23	.10	.21	.01	.01	.21	.37	.18	.18	
Violent death	.07	.03	.20	.10	.05	.20	.01	.004	.17	
Years since death	.02	.05	.03	.03	.10	.03	.02	.08	.02	
Grief facilitation										
Ongoing connection	.02	.16	.01	.03	.22	.01	.02	.15	.01	
Grief expression	05	21	.02	02	08	.02	04	22	.02	
Existential continuity	.04**	.28	.01	.02	.17	.01	.03**	.30	.01	
Grief inhibition	02	07	.02	03	11	.02	01	05	.02	

Note. *p < .05. **p < .01. ***p < .001. P-value thresholds are adjusted for multiple testing using False-Discovery Rate.

Gratitude

We did not find any evidence of moderation for any of the associations between caregiver grief facilitation behaviors and gratitude.

Discussion

This study examined the links between bereaved children's perception of their caregivers' grief facilitation and PYD. Using a MGT framework and a large sample of treatment-seeking bereaved children, the current study found evidence that children's perception of caregiver grief facilitation was associated with their PYD, although the findings were nuanced. Certain links between caregiver grief facilitation and PYD were moderated by gender and time since death, indicating that grief facilitation may be differentially associated with PYD for girls and boys and based on when the death occurred.

MGT emphasizes children's context as an important source of variability in both adaptive and maladaptive reactions to loss. Consistent with MGT and study hypotheses, results indicated that children who perceived that their caregivers provided greater existential continuity and support reported greater future orientation. These findings were further qualified based on time since the death. Perceived caregiver facilitation of existential continuity and support was more strongly associated with greater future orientation for children who experienced the death more recently compared with children who had more time pass since the death. Existential continuity and support involve caregiver behaviors characterized by warmth and support that are theorized to promote continuity of the child's routines, consistent care, and reassurance of a positive future. Research has demonstrated that positive parenting, defined by consistent discipline, parental warmth, and positive reinforcement, is associated with adaptive outcomes in bereaved children. In both cross-sectional (Haine et al., 2006; Howell et al., 2016) and prospective longitudinal studies (Luecken et al., 2014; Tein et al., 2006), findings suggested that positive parenting was related to lower mental health problems in bereaved children. Relatedly, several cross-sectional findings support that positive and sensitive caregiver communication with their bereaved child buffered maladaptive grief reactions including child avoidant coping (Wardecker et al., 2017), maladaptive grief (Shapiro et al., 2014), and poor depressive and mental health symptoms (Shapiro et al., 2014; Wardecker et al., 2017; Weber et al., 2021). Supportive messages from caregivers may be more relevant for children when they first experience a death and questions regarding their future initially arise. During this time, caregivers that provide existential continuity may be creating environments in which their child feels safe and secure to explore, and in turn see a positive future for themselves and are empowered to reciprocate that care to others experiencing a similar hardship.

We also found that existential continuity and support was associated with greater social responsibility values for boys (M = 3.39, SD = .88) but not girls (M=4.31, SD=.65). Restricted variability among girls may reflect a ceiling effect, suggesting that gender may play a role in shaping social responsibility values. Previous research has consistently demonstrated that girls endorse greater social responsibility values than boys (Sosik et al., 2017), which may be due to differences in caregivers' socialization strategies of boys versus girls and

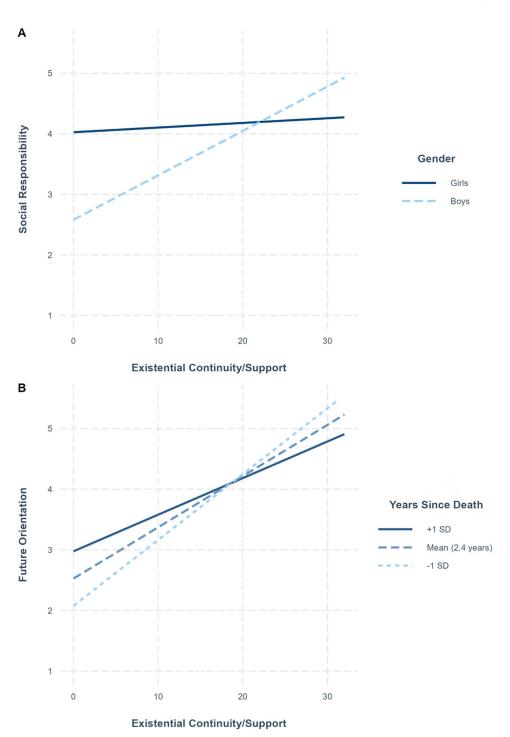


Figure 1. Associations between existential continuity/support and PYD moderated by gender and years since death.

cultural norms that orient girls more than boys to identify with prosocial or other-oriented values (Hastings et al., 2007). Moreover, research has demonstrated that caregivers often use less emotional language with their boys (Chaplin & Aldao, 2013). Compared to girls, boys tend to prefer privacy (Rose & Asher, 2004), share less with caregivers (Papini et al., 1990; Rose & Rudolph, 2006), suppress their emotions more frequently (Chaplin & Aldao,

2013), and are less likely to ask for support when stressed (Rose & Rudolph, 2006). In the context of bereavement, these gender differences may make it particularly challenging for boys to make meaning of the death, connect with others, and in turn, may make boys less inclined to seek out opportunities to help others. It is possible that boys may need more support than they let on to their caregivers, and by facilitating existential continuity and support

post-bereavement, it affords boys with an opportunity to reflect not only on their future, but also ways in which they can use their experience to con-

tribute to society more generally.

Results from this study should be interpreted in the context of the non-statistically significant associations found between caregiver grief facilitation and PYD in treatment-seeking bereaved children. Caregivers' ongoing connection with the deceased person, grief expression, and grief inhibition were not significantly associated with future orientation and social responsibility values and there was no evidence that caregiver grief facilitation was significantly associated with gratitude. This pattern of findings may indicate that: (1) caregiver grief facilitation has a highly nuanced and domain-specific relation with PYD, (2) the true population effect sizes of many of these relations are smaller than what was detectable with the current sample size, and/or (3) that caregiver grief facilitation is unrelated to PYD and the significant effects found in this study are Type 1 errors. Similar interpretations should be considered in the context of the gender and time since death moderation analyses. Although this study does provide some preliminary evidence that caregiver grief facilitation is associated with their children's future orientation and social responsibility values, future replication studies with larger samples are needed.

Findings from this study have implications for theory and practice. Reactions to the death of a loved one include both negative and positive responses. While considerable research has examined the negative consequences of loss, far less research has explored the ways in which children may respond positively to loss and potential explanatory mechanisms. Examining positive outcomes in the aftermath of loss is essential to understanding the nature of grief and the developmental implications of experiencing a death among children. Results from this study provide evidence that specific caregiver grief facilitation behaviors are associated with their children's positive development, reinforcing the notion that surviving caregivers play a meaningful—yet understudied—role in facilitating adaptive grief reactions among children (Alvis et al., 2022). Importantly, the results from this study suggest that associations between caregiver grief facilitation and PYD are nuanced and highly dependent on the aspect of caregiver grief facilitation studied and the specific component of PYD examined. It will be important to consider these nuances when constructing and advancing theory on adaptive grief.

Additionally, caregiver grief facilitation behaviors are malleable processes with direct intervention-related implications (Luthar & Eisenberg, 2017; e.g., Multidimensional Grief Therapy; Kaplow et al., 2023). In practice, family bereavement support organizations or behavioral health providers can provide caregiver coaching to target existential continuity and support type behaviors. Caregivers can promote existential continuity and support by encouraging their child to engage in activities they enjoyed before the death, reassuring them that they will be cared for and can still lead a fulfilling life despite the death, openly answering questions that children may have related to the death, and offering affection and comfort to the bereaved child (Kaplow et al., 2023). In turn, bereaved children can internalize this messaging, which has the potential to make a difference in their future outlook and commitment to helping others. This may be especially important for families seeking support within the first two years of the death and for boys in particular.

Findings should be interpreted in the context of certain limitations. The research design was cross-sectional and causal claims or temporal sequencing cannot be established. It is unclear whether caregiver grief facilitation precedes or follows PYD. Developmental theory suggests that links between parenting behaviors and child outcomes are likely bidirectional and future research should examine these questions longitudinally. Additionally, this research primarily relied on child-reported grief facilitation and future research should consider using a multi-informant (child and caregiver report), multi-method (self-report, observational) design. This study used a sample of children who were primarily seeking treatment for the death of a loved one. It is unknown whether these findings can be generalized to children not seeking counseling or psychological services. Measures of caregiver grief expression and grief inhibition/avoidance, and future orientation had lower internal consistency, which may have been due to the low number of items included for each scale. Low internal consistency may represent high measurement error and result in both inaccurate estimated true 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. Future studies might also control for key factors, such as child trauma exposure and caregiver characteristics (e.g., relationship to the child, age), that may influence PYD outcomes.



MGT highlights that children experience a wide range of positive and negative reactions to loss. Caregivers represent a highly salient dimension of children's social context that is relevant to PYD, yet little is currently known about the role of caregivers in facilitating PYD after experiencing a loss. Results from this study provide evidence that the ways in which caregivers facilitate grief is linked with their children's future orientation and social responsibility values. Understanding whether and how caregiver grief facilitation is associated with child PYD provides important insight into the caregiver behaviors that may shape adaptive responses following a loss. Further, results from this study identify caregiver dyadic grief-related behaviors as a possible intervention target for promoting the developmental functioning of bereaved children. Continued advances in research on PYD among bereaved children could aid in the creation of interventions and social policy seeking to improve the lives of young people who experience loss.

Ethical approval

The study was approved by TriWest Group Institutional Review Board.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

The preexisting dataset analyzed for this study is not publicly available, but is available upon reasonable request from the TAG project team (lalvis@mmhpi.org), who are the owners of these data.

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