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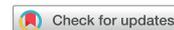
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## Associations between dimensions of religiousness and psychosocial functioning among bereaved youth

Evan E. Rooney<sup>a</sup>, Benjamin Oosterhoff<sup>b</sup>, and Julie B. Kaplow<sup>a</sup>

<sup>a</sup>Section of Psychology, Department of Pediatrics, Baylor College of Medicine and Texas Children's Hospital, Houston, Texas, USA;

<sup>b</sup>Department of Psychology, Montana State University, Bozeman, Montana

### ABSTRACT

Using a sample of recently bereaved youth ( $N = 2,425$ ;  $M_{\text{age}} = 15.31$ ,  $SD = 1.50$ ), this study examined associations between dimensions of religiousness and current functioning. Youth reported on their religious service attendance, religious coping, and the importance of religious beliefs and substance use, academic achievement, depressive symptoms, and self-esteem. Greater religious service attendance was associated with lower substance use and the greater importance of religious beliefs was associated with lower substance use and greater self-esteem. Greater religious coping was associated with greater academic achievement. Findings suggest distinct dimensions of religiousness may have differential implications for adolescent functioning after experiencing loss.

The loss of a loved one is a common and extremely distressing experience among youth (Kaplow, Saunders, Angold, & Costello, 2010; Keyes et al., 2014; Layne, Briggs, & Courtois, 2014). Youth are more likely to first encounter bereavement, especially sudden loss, during adolescence relative to other developmental periods, which may be due to the co-occurrence of increased risk-taking, expanding autonomy, and the growth of social networks (Oosterhoff, Kaplow, & Layne, 2018). Experiencing bereavement during adolescence has been linked to poor functioning across a host of indicators, including increased psychological distress, greater substance abuse, and lower global functioning (Berg, Rostila, & Hjern, 2016; Kaplow, Layne, Pynoos, Cohen & Lieberman, 2012; Kaplow et al., 2010). Further, the deleterious effects of experiencing bereavement during adolescence can have long-term consequences throughout adulthood (Kaplow & Layne, 2014; Keyes et al., 2014). The high prevalence and long-term negative consequences of bereavement among youth has led researchers to examine potential mechanisms that may buffer against these maladaptive outcomes, including caregiver grief facilitation, circumstances surrounding the death, coping strategies, and religiousness/spiritualness (e.g., Howell, Shapiro, Layne,

& Kaplow, 2015; Kaplow et al., 2012; Shapiro, Howell, & Kaplow, 2013).

Research on youth resilience has consistently highlighted the importance of religiousness in promoting the health and well-being of youth who have experienced negative life events (Howell et al., 2015; Wortmann & Park, 2008). Religiousness is thought to provide youth with important resources such as social support and coping skills that may mitigate poor functioning resulting from negative life experiences (Feldman, Fischer, & Gressis, 2016; Olson, Metzger, & Park, 2019). To date, the majority of research has examined the intersection between general measures of religiousness and overall functioning among youth who have experienced adversity (Al-Krenawi, Graham, & Kanat-Maymon, 2009; Howell et al., 2015; Khamis, 2012). Less research has examined how specific facets of religiousness including religious service attendance, seeking comfort through aspects of one's religion, and the importance of religious beliefs are linked with current functioning among bereaved youth. The current study examined how different dimensions of religiousness (i.e., religious service attendance, religious coping, and importance of religious beliefs) are associated with multiple indicators of current functioning (i.e., substance use, academic achievement, depressive

symptoms, and self-esteem) among youth who have recently experienced the death of a loved one.

### **Religiousness and functioning among bereaved youth**

Religiousness represents a broad range of behaviors and beliefs related to one's commitment to divinity (Gallagher & Tierney, 2013). Research using ecological models has highlighted that religiousness may be important for positive youth development (Ferris, Oosterhoff, & Metzger, 2013). Behaviors and beliefs associated with religiousness are thought to provide youth with important social and cognitive resources that are conducive of positive functioning, health, and well-being. Potential mediating mechanisms include access to pro-social peer networks, more frequent interactions with non-parental adults, and opportunities to explore, cultivate, and find meaning within personal beliefs systems (Bartkowski & Xu, 2007; Glanville, Sikkink, & Hernandez, 2008; King & Furrow, 2004).

Religiousness may be particularly beneficial for bereaved youth. Consistent with the Two-Track Model of Bereavement (Rubin, 1999), certain religious beliefs may alter how youth view their relationship with the deceased. For instance, religious beliefs may provide bereaved youth with a sense of comfort through notions of eventual reunification with their loved one, the ability to maintain a spiritual connection with the deceased (i.e., fostering "continuing bonds"; Klass & Steffen, 2017), a belief that their deceased loved one is "in a better place," and overall positive images of the deceased in an afterlife. Other aspects of religiousness can also allow people to find solace following the death of a loved one by providing youth with an avenue of making meaning from the event (Keesee, Currier, & Neimeyer, 2008). Indeed, studies using adult samples have shown links between general religiousness and lower anxiety about death, both in the context of concerns about one's own death (Harding, Flannelly, Weaver, & Costa, 2005) and the deaths of others (Hui & Fung, 2008). Additionally, greater overall religiousness is associated with greater well-being among adults who have experienced bereavement (Feldman et al., 2016). Research with bereaved youth supports trends found in the adult literature and has shown that children and adolescents who reported higher levels of religiousness exhibited lower levels of depressed mood, anxiety, posttraumatic stress, externalizing problems, and internalizing problems (Howell et al., 2015).

### **Religiousness as a multifaceted construct**

Theorists have argued that religiousness is multifaceted and includes both behavioral (e.g., service attendance) and cognitive (e.g., religious beliefs and religious coping) components (Currier, Mallot, Martinez, Sandy, & Neimeyer, 2013; Olson et al., 2019; Wortmann & Park, 2008). Specific components of religiousness may be linked with unique benefits for youth. For example, greater religious service attendance is associated with higher academic performance (Glanville et al., 2008), increased community service (Paxton, Reith, & Glanville, 2014), and decreased substance use (Bartkowski & Xu, 2007; Good & Willoughby, 2011) among adolescents. Religious service attendance is thought to provide youth with important opportunities to garner social support from non-parental adults and pro-social peers (Bartkowski & Xu, 2007; Glanville et al., 2008; King & Furrow, 2004), which may support positive youth development. The social support that accompanies religious service attendance may be especially important for those who have experienced loss. Research with recently bereaved adults found increased religious service attendance was associated with higher social support and higher self-esteem, and these factors were subsequently associated with lower levels of depression (Sherkat & Reed, 1992).

In addition to religious service attendance, religiousness also entails the use of explicit coping strategies. Religious coping is the use of one's supportive religious beliefs or activities to respond to stressful or difficult life events (Wortmann & Park, 2008). Religious coping is distinct from other aspects of religiousness in that it represents direct and intentional efforts to utilize one's religion as a means of providing comfort when faced with a challenge (Pargament, Koenig, & Perez, 2000). Greater religious coping in the context of bereavement is associated with higher levels of posttraumatic growth and lower psychological distress (Currier et al., 2013), greater spiritual well-being (Lord & Gramling, 2014), and lower depression and anxiety (Mattlin, Wethington, & Kessler, 1990). However, there are inconsistencies in this literature with some studies finding no relationship between religious coping and aspects of positive functioning (see Wortmann & Park, 2008 for a review).

The belief in the importance of religion is another important component of religiousness that may be linked with positive functioning among bereaved youth. The importance of religion represents one's intrinsic motivation to be religiously engaged (Shahabi

et al., 2002). For bereaved youth, having an intrinsic motivation to engage with their religion may provide them with a sense of hope, optimism, and coping self-efficacy regarding the death of a loved one. Although little research has examined links between the importance of religion and functioning among bereaved youth, bereaved adults who endorsed a greater sense of the importance of religion following a loss reported lower grief scores up to four years after the death (Brown, Nesse, House, & Utz, 2004). Further, in a study of parents who have lost a child, the greater importance of religion predicted greater well-being and lower distress 18 months following the loss (McIntosh, Silver, & Wortman, 1993).

In sum, current research suggests that religiousness may be an important protective factor among bereaved youth. Additionally, religiousness is thought to be multifaceted, and different dimensions of religiousness may provide unique benefits for youth who have experienced loss. However, the extant research primarily focuses on general measures of religiousness or only one dimension of this complex construct. Less is known about how multiple dimensions of religiousness are independently associated with different facets of functioning among youth who have experienced bereavement. Understanding how specific dimensions of religiousness may be associated with various forms of current functioning among bereaved youth may provide novel insight into the conceptualization and potential benefits of religiousness for youth who recently experienced the loss of a loved one.

### Current study

The current study sought to examine the independent associations between multiple indicators of religiousness (i.e., religious service attendance, religious coping, importance of religious beliefs) and youth functioning (i.e., substance use, academic achievement, depressive symptoms, self-esteem) among a nationally representative sample of bereaved youth. Based on previous research (e.g., Currier et al., 2013; McIntosh et al., 1993; Sherkat & Reed, 1992), we hypothesized that greater religiousness across all dimensions would be independently associated with positive functioning among bereaved youth. Further, given the novelty of the research area, exploratory analyses were conducted to test whether associations between dimensions of religiousness and current functioning among bereaved youth varied across religious affiliation. These analyses were conducted to test the generalizability of our findings and no specific differences were expected.

## Method

### Participants

The current study used data from the National Comorbidity Survey Adolescent Supplement (NCS-A; Kessler, 2013). The NCS-A is a nationally representative epidemiological survey of over 10,000 adolescents between ages 13 and 18. The survey was conducted between 2001 and 2004 to assess the prevalence of DSM-IV disorders and to examine their correlations with measures assessing a wide array of socio-emotional, physical health, and environmental factors. The full details of the NCS-A, including consent procedures, have been previously published elsewhere (Kessler et al., 2009). The sample for this study included only youth (ages 13–18 years) who reported the death of a close friend or family member in the past 12 months ( $N = 2,425$ ;  $M_{\text{age}} = 15.31$ ,  $SD = 1.50$ ). Youth were 54.4% female and identified as White (51.8%), Black (25.0%), Hispanic (18.2%), and Other (5.0%). The highest level of education achieved by participants' parents varied: 20.9% had at least one parent earn a college degree, 20.7% had at least one parent complete some college, 32.3% had at least one parent complete high school, and 9.6% had no parent complete high school. The median household income was \$75,500.

### Measures

#### Religiousness

Separate facets of religiousness were assessed with three single-item indicators. *Religious service attendance* was assessed with one item that asked youth to rate, "How often do you usually attend religious services?" on a 5-point scale from 1 (*never*) to 5 (*more than once a week*). *Religious coping* was assessed with one item that asked, "When you have problems or difficulties in your family, work, or personal life, how often do you seek comfort through religious or spiritual means, such as praying, meditating, attending a religious or spiritual service, or talking to a religious or spiritual advisor?" Responses ranged from 1 (*not at all*) to 5 (*a lot*). *Importance of religious beliefs* was assessed with one item that asked, "In general, how important are religious or spiritual beliefs in your daily life?" This item was rated on a 5-point scale from 1 (*not at all important*) to 5 (*very important*). Each item was treated as a separate indicator with higher values indicating greater religiousness.

### Religious affiliation

Youth reported their religious affiliation from a selected list of 50 separate religious denominations. As per the NCS-A protocol, these selections were combined into five separate categories: Protestant, Catholic, Jewish, Eastern, and Other.

### Substance use

Structured interviews were used in the NCS-A protocol to indicate the presence of alcohol, substance, and tobacco use disorders. Three items were taken from the substance abuse interview to assess youth's marijuana, cocaine, and illicit prescription medication use over the past year ( $\alpha = 0.53$ ). Youth were asked to report whether or not they (1) used marijuana/hash in the past 12 months, (2) used cocaine in the past 12 months, and (3) used non-prescribed medication in the past 12 months using a "Yes" or "No" response format. Sum scores were calculated with higher ratings being indicative of a greater breadth of substance use.

### Academic achievement

A single self-report item was used to assess the youth's academic achievement. The youth rated their grades ranging from 1 (*a lot below average*) to 7 (*a lot above average*) with higher scores indicating higher academic achievement.

### Depressive symptoms

Depressive symptoms were assessed using an adapted measure of the Quick Inventory of Depressive Symptomatology-Self-Report (QIDS-SR; Rush et al., 2003). The original QIDS-SR has shown high reliability and convergent validity among adolescents (Bernstein et al., 2010; Kessler et al., 2003). Youth rated the frequency at which they experienced 13 depressive symptoms ( $\alpha = 0.87$ ) in the past 30 days on 5-point scale from 1 (*none of the time*) to 5 (*all of the time*). Mean scores were calculated with higher values indicating greater depressive symptoms.

### Self-esteem

Consistent with prior research (Oosterhoff, Kaplow, Wray-Lake, & Gallagher, 2017), self-esteem was measured with 5 items ( $\alpha = 0.71$ ) adapted from the Rosenberg Self-Esteem Scale (RSES; Gray-Little, Williams, & Hancock, 1997). The original RSES has shown high reliability and construct validity among adolescents (Bagley, Bolitho, & Bertrand, 1997). The youth rated their agreement with a variety of statements (e.g., I am a person of worth, at least equal with

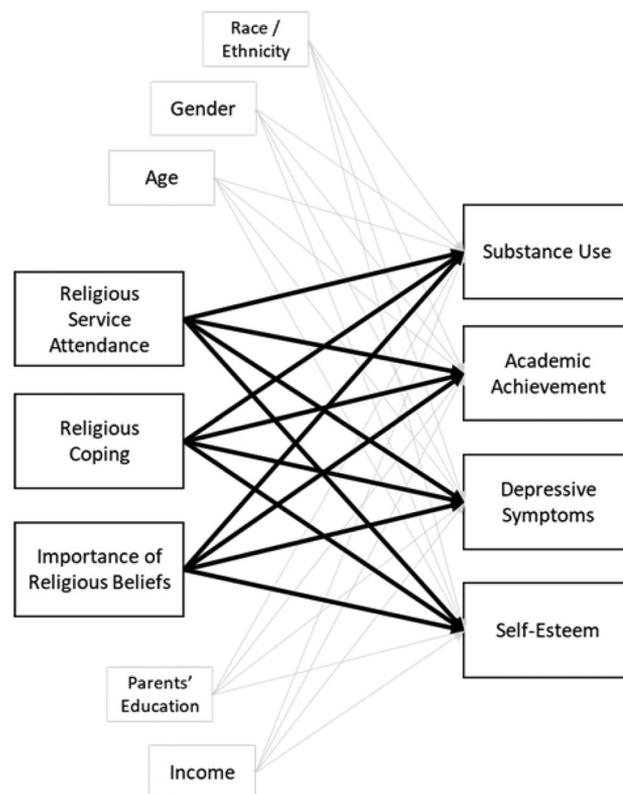
others) on a 4-point scale from 1 (*not at all true*) to 4 (*very true*). Higher scores indicated greater self-esteem.

### Demographics

Youth self-reported their age, gender, and race/ethnicity. Parent reports were used to assess household income and parent's education (i.e., years of school completed).

### Analytic technique

We used structural equation modeling (SEM) to examine associations among dimensions of religiousness and indicators of youth functioning after a death. SEM was chosen over other analytic techniques (i.e., multiple regression modeling) because it allowed for testing multiple dependent variables simultaneously and provided a more parsimonious test of moderation by religious affiliation. Separate dimensions of religiousness (religious service attendance, religious coping, and importance of religious beliefs) were specified as manifest exogenous variables and were simultaneously entered into the model (Figure 1). Substance use, academic achievement, depression, and self-esteem were specified as manifest endogenous variables.



**Figure 1.** Conceptual structural equation model testing associations among dimensions of religiousness and functioning among bereaved youth.

Exploratory multi-group models were estimated to determine if the structural paths varied across religious affiliation. Given the low number of youth who indicated that their affiliation was Jewish ( $n = 14$ ) or Eastern ( $n = 18$ ), these categories were combined with 'Other'. Thus, multi-group models focused on testing whether structural paths were invariant across youth who indicated an affiliation of Protestant, Catholic, or Other, with invariance indicated by a  $\Delta CFI < 0.01$  (Cheung & Rensvold, 2002). All analyses accounted for adolescent age, gender, race/ethnicity, income, and parent's education. Models were estimated in Mplus version 7 utilizing maximum likelihood estimation with robust standard errors. Model fit was evaluated with standard metrics and acceptable fit was indicated with confirmatory fit index (CFI)  $> 0.90$ , root-mean square error of approximation (RMSEA)  $< 0.08$ , and standardized root mean square residual (SRMR)  $< 0.08$  (Ullman & Bentler, 2003). Modification indices were used for model modification if an acceptable model fit was not obtained.

## Results

### Preliminary descriptive and bivariate statistics

Table 1 shows descriptive statistics and Table 2 displays bivariate correlations for all study variables.

**Table 1.** Descriptive statistics for key study variables.

	Range	M (N)	SD (%)
Protestant Affiliation	0–1	(1136)	(46.8)
Catholic Affiliation	0–1	(674)	(27.9)
Other Religious Affiliation	0–1	(353)	(14.5)
No Religious Affiliation	0–1	(262)	(10.8)
Parent's Education	0–20	13.69	2.79
Household Income <sup>a</sup>	0–141	5.72	7.54
Religious Service Attendance	1–5	3.24	1.30
Religious Coping	1–4	2.93	0.95
Importance of Religious Beliefs	1–4	3.06	0.95
Substance Use	0–3	0.21	0.51
Academic Achievement	1–8	4.94	1.74
Depressive Symptoms	1–5	1.80	0.58
Self-Esteem	1–4	3.45	0.57

<sup>a</sup>Ratio of income to poverty level used.

**Table 2.** Bivariate correlations for all study variables.

	2	3	4	5	6	7	8	9	10	11	12
1. Age	–.04	.10*	.02	.03	–.17*	–.03	–.12*	.21*	.02	–.01	.06*
2. Gender	–	.02	–.01	.03	.05*	.12*	.07*	–.02	.03	.12*	–.16*
3. Race/ethnicity	–	–	.28*	.17*	–.04*	.00	–.17*	.07*	.15*	–.15*	.04
4. Parent Education	–	–	–	.21*	.07*	.08*	–.03	–.01	.23*	–.14*	.12*
5. Income	–	–	–	–	–.01	.03	–.02	.04	.11*	–.05*	.02
6. Religious Service Attendance	–	–	–	–	–	.30*	.48*	–.20*	.08*	–.04	.02*
7. Religious Coping	–	–	–	–	–	–	.43*	–.09*	.12*	–.05*	.06*
8. Importance of Religious Beliefs	–	–	–	–	–	–	–	–.21*	.03	–.04	.06*
9. Substance Use	–	–	–	–	–	–	–	–	–.11*	.13*	–.15*
10. Academic Achievement	–	–	–	–	–	–	–	–	–	–.16*	.16*
11. Depressive Symptoms	–	–	–	–	–	–	–	–	–	–	–.56*
12. Self-Esteem	–	–	–	–	–	–	–	–	–	–	–

Notes: \* $p < .05$ . Gender is coded as 1 = Male and 2 = Female. Race/ethnicity is coded as 1 = White and 0 = Not White.

Older youth reported greater substance use and greater self-esteem relative to younger youth. Adolescent females reported greater depressive symptoms and lower self-esteem than males. Non-White youth reported greater depressive symptoms, lower substance use, and lower academic functioning than White youth. Adolescents with more highly educated parents reported greater academic achievement, greater self-esteem, and lower depressive symptoms. Youth with lower household income reported greater depressive symptoms and lower academic achievement. Greater religious service attendance was correlated with greater academic achievement, lower substance use, and greater self-esteem. Greater religious coping was correlated with greater academic functioning, greater self-esteem, lower substance use, and lower depressive symptoms. Additionally, the greater importance of religious beliefs was correlated with greater self-esteem and lower substance use.

### Dimensions of religiousness and adolescent functioning among bereaved youth

A structural equation model was used to examine associations among dimensions of religiousness and current functioning among bereaved youth. Separate sets of covariances were specified among dimensions of religiousness and among indicators of functioning. The model provided an acceptable fit to the data,  $\chi^2(19) = 112.96$ , CFI = .950, RMSEA = .045 [90% CI: .037, .053], SRMR = .029. Table 3 displays the standardized estimates, unstandardized estimates, and standard errors for the model. After accounting for age, gender, race/ethnicity, parents' education, and family income, greater religious service attendance and the greater importance of religious beliefs were associated with lower substance use. The greater importance of religious beliefs was also associated with greater self-esteem. Greater use of religious coping was associated with higher academic achievement. We did not find

**Table 3.** Standardized estimates, unstandardized estimates, and standard errors from a structural equation model testing associations between dimensions of religiousness and current functioning among bereaved youth.

	Substance use			Academic achievement			Depressive symptoms			Self-esteem		
	$\beta$	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$	B	SE
<b>Covariates</b>												
Age	.18*	.07	.01	.01	.01	.03	.01	.00	.01	.05*	.02	.01
Gender	.01	.01	.02	.02	.08	.07	.13*	.15	.02	-.17*	-.19	.02
Parents' Education	-.03	-.01	.00	.19*	.12	.01	-.09*	-.02	.00	.12*	.02	.01
Income	.04	.00	.00	.05*	.01	.01	-.01	.00	.00	.00	.00	.01
Race/ethnicity	.03	.04	.02	.10*	.33	.08	-.13*	-.15	.02	.02	.02	.02
<b>Dimensions of Religiousness</b>												
Religious Service Attendance	-.12*	-.05	.01	.05	.06	.03	-.02	-.01	.01	-.03	-.01	.01
Religious Coping	-.05	-.03	.02	.09*	.13	.05	-.04	-.02	.02	.05	.03	.02
Importance of Religious Beliefs	-.07*	-.04	.02	-.03	-.06	.06	-.04	-.02	.02	.07*	.04	.02
R <sup>2</sup>	.08			.08			.06			.06		

Notes: \* $p < .05$ ;  $N = 2,425$ . Gender is coded as 1 = Male and 2 = Female. Race/ethnicity coded as 1 = White, 0 = Not White.

evidence of an association between any dimension of religiousness and depressive symptoms.

### Multi-group model by religious affiliation

Multi-group models were tested to examine whether structural paths varied by religious affiliation (Protestant, Catholic, Other). When comparing the unconstrained model (structural paths allowed to vary across group;  $\chi^2(57) = 142.251$ , CFI = .920, RMSEA = .046 [90% CI: .036, .055], SRMR = .033) to the constrained model (structural paths held constant across group;  $\chi^2(81) = 167.782$ , CFI = .918, RMSEA = .039 [90% CI: .030, .047], SRMR = .035) the  $\Delta$ CFI was .002, indicating that the structural paths were invariant across groups. These findings support the generalizability of the overall model and suggest that the structural paths did not collectively differ for youth who affiliate with Protestant, Catholic, or Other religions.

### Discussion

This study examined the associations between multiple dimensions of religiousness and indicators of current functioning among a large sample of recently bereaved youth. Consistent with our main hypothesis, findings indicate that religious service attendance, religious coping, and importance of religious beliefs were independently associated with facets of adolescent functioning, even when accounting for demographic characteristics. We did not find any evidence that these links vary across Protestant, Catholic, and other religious affiliations. Findings from this study contribute to the burgeoning body of evidence that supports the benefits of religiousness among youth more generally (Bartkowski & Xu, 2007; Glanville et al., 2008; Good & Willoughby, 2011) and extends this research by demonstrating that separate dimensions of

religiousness may relate to distinct indicators of functioning among youth who have recently experienced the loss of a loved one.

Consistent with study hypotheses, greater religious service attendance was associated with lower substance use among bereaved youth. Religious organizations often provide youth with an opportunity to cultivate interpersonal relationships and acquire social support from others within the religious community (Bartkowski & Xu, 2007; Glanville et al., 2008; King & Furrow, 2004; Sherkat & Reed, 1992). For many youths, the loss of a loved one often entails a loss of social support. Frequent religious service attendance may provide youth with access to new relationships that may offer guidance, discourage substance use, or help youth cope with their loss in more adaptive ways. The lower rates of substance use among youth who reported greater religious service attendance may also be the result of repeated exposure to positive peer groups in the religious context who may discourage drug use (Bartkowski & Xu, 2007; Glanville et al., 2008). Linking greater religious service attendance with lower substance use is particularly notable considering prior research has indicated that bereaved youth are more likely to engage in problematic levels of substance use relative to their non-bereaved peers (Kaplow et al., 2010). Given the cross-sectional nature of this study, these results may also indicate that bereaved youth who are less inclined to use substances may be more likely to engage in religious service attendance.

Findings also indicated that utilizing religious beliefs as a means of coping was associated with greater academic functioning. This may be particularly pertinent for bereaved youth as recent evidence indicates that experiencing bereavement may interfere with adolescents' academic performance (Oosterhoff et al., 2018). Potentially, youth who endorse higher levels of religious coping may be able to use these

skills to manage persisting grief reactions and stress, which may then be associated with greater academic functioning.

As with religious service attendance, the importance of religious beliefs was associated with lower substance use; however, it was also associated with greater self-esteem. Many religions emphasize the existence of an afterlife and conceptions that negative events happen for a reason (Wortmann & Park, 2008). Potentially, youth who endorse greater importance of religious beliefs may be more inclined to hold beliefs that provide personal comfort (e.g., picturing the deceased person in a desirable afterlife, fostering continuing bonds by maintaining a spiritual connection; Klass & Steffen, 2017) or make meaning of the death (e.g., believe that the person's death served a greater purpose; Keesee et al., 2008; Rubin, 1999). These beliefs may provide bereaved youth with greater solace or lower guilt following a loss, which in turn may be associated with greater self-esteem and lower high-risk behaviors such as substance use. This interpretation is also consistent with prior research that has shown that greater importance of religion is associated with greater well-being among bereaved youth, and these effects are partially explained by finding meaning after the death (McIntosh et al., 1993).

We did not find evidence of a connection between any dimension of religiousness and depressive symptoms. In the current study, depressive symptoms were measured in the past 30 days from the time of assessment whereas youth included in this study reported being bereaved in the past year. It is possible that youths' depressive symptoms were a product of more proximal contextual factors rather than directly tied to the loss of a loved one. However, it is important to note that, although non-significant, the effect of each dimension of religiousness on depressive symptoms was negative and consistent with our general hypothesis.

### **Implications for theory and practice**

Results from this study contribute to a growing body of evidence that supports the benefits of religiousness and extends these findings to the specific sample of bereaved youth. These results build on prior research that has connected broad conceptualizations of religiousness with positive functioning among youth by demonstrating that these connections are nuanced and vary across dimensions of religiousness. Linking specific components of religiousness with distinct aspects of adolescent functioning highlights the need

to identify mechanisms that could help to explain these associations. For instance, future studies may consider how separate dimensions of religiousness may provide bereaved youth with distinct social and psychological benefits or how these dimensions may mitigate maladaptive reactions to the loss including grief or posttraumatic stress reactions. Such efforts may advance research on adolescent bereavement and religiousness by outlining a model of when, how, and why religiousness contributes to positive functioning among bereaved youth. Candidate mechanisms may involve the development of continuing bonds or making meaning following the death of a loved one (Currier, Holland, Neimeyer, 2006; Klass & Steffen, 2017). The differential associations between dimensions of religiousness and aspects of youth functioning seen in the current study also underscore the importance of assessing multiple dimensions of religiousness when families seek support following a death. For example, bereavement-informed screening and assessment protocols that include multidimensional measures of religiousness can help to identify potential strengths that youth can draw from in the aftermath of a death.

### **Limitations and future directions**

Although this study had a number of strengths, including the use of a large nationally representative sample of bereaved youth, findings should be interpreted in light of certain limitations. The cross-sectional nature of the data limits the ability to test the directionality of the effects and hinders claims regarding causality. Additionally, all constructs were assessed using self-report measures and are subsequently subject to reporter biases. Reports of academic functioning and dimensions of religiousness were assessed using single self-report items, which may not have fully captured the breadth of each construct. Future research should utilize more rigorous assessments of dimensions of religiousness, such as ecological momentary data collection to record the number of times participants attend religious services, think about the importance of their religion, or use religious coping strategies over a given time period. Additionally, given the high variability in religious affiliations, multi-group models were only able to compare whether findings were consistent for youth who indicated that they were Protestant, Catholic, or another religion. Future research may benefit from examining links between religiousness and functioning for bereaved youth across a wider range of religious

affiliations. Effect sizes from this study were relatively small and future research should also consider potential moderators for the observed effects.

Finally, our assessment of bereavement experiences only encompassed whether youth had experienced the death of a loved one in the past 12-months and no additional information about the context of the death was collected. Future research should examine how the circumstances surrounding the death, including the participant's relationship with the deceased, the time since the death, and other potentially relevant factors (e.g., social support following the death, witnessing the death, participant's grief reactions) may promote or mitigate the benefits of religiousness. Previous research has indicated these factors may play an important role in youth functioning following the death of a loved one (Kaplow, Howell, & Layne, 2014; Layne, Kaplow, Oosterhoff, Hill, & Pynoos, 2017; Wardecker, Kaplow, Layne & Edelstein, 2017).

Experiencing bereavement during adolescence may contribute to poor functioning over time and across multiple life domains (Keyes et al., 2014). Findings from this study suggest that religion may serve as a "protective marker" among bereaved youth. Future studies should examine dimensions of religiousness as potential protective factors as well as the mediating mechanisms by which distinct dimensions may promote positive functioning among bereaved youth.

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