Do you remember being told what happened to grandma?

The role of early socialization on later coping with death

Lucia Martinčeková Matthew J. Jiang2 Jamal D. Adams2 David Menendez2 Iseli G. Hernandez2 Gregory Barber3 & Karl S. Rosengren2

1 Institute of Experimental Psychology, Centre of Social and Psychological Sciences, Slovak

Academy of Sciences

2 Department of Psychology, University of Wisconsin-Madison

3 Morehouse College

Corresponding Author: Karl S. Rosengren, krosengren@wisc.edu

This is the peer reviewed version of the following article: Martinčeková, L., Jiang, M. J., Adams, J. D., Menendez, D., Hernandez, I. G., Barber, G., & Rosengren, K. S. (2020). Do you remember being told what happened to grandma? The role of early socialization on later coping with death. *Death Studies*, *44*(2), 78-88, which has been published in final form at 10.1080/07481187.2018.1522386.

Acknowledgments:

This study was supported in part by a core grant to the Waisman Center from the National Institute of Child Health and Human Development (U54 HD090256) and a grant from the National Science Foundation (SMA-1004961). The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Awards #R305B150003 to the University of Wisconsin-Madison. The opinions expressed are those of the authors and do not represent views of the U.S. Department of Education.

Abstract

Using a mixed-methods approach, we examined how participants' memories of socialization regarding death might influence their self-reported coping with losses in childhood and adulthood. We recruited 318 adults to complete an online survey. Path analyses indicated that participants who remembered their parents shielding them less from issues related to death reported better coping as children and adults. Qualitative responses suggested participants wanted to receive more information about death from their parents as they went through the grieving process. We highlight the potential benefits of socializing children about death, and how it may aid in their coping with death-related events.

Keywords: early socialization, coping, bereavement, death

Do you remember being told what happened to grandma?

The role of early socialization on later coping with death

In some countries in the world, such as the United States, children are shielded from death on a regular basis under the assumption that children lack the cognitive and emotional capacities to cope with death (Rosengren, Miller, Gutiérrez, Chow, Schein, & Anderson, 2014). This interdiction of death has not gone unnoticed, as historian Philippe Ariès (1974) wrote: "Think of how carefully people today keep children from anything to do with death!" (p.12). Ariès argued that this "modern" avoidance of death was a relatively new occurrence in the United States that emerged at the beginning of the 20th century. In earlier times, images of death were quite common, and death was viewed as an important event to be publicly shared by family and friends with little or no attempt to exclude young children from conversations and rituals pertaining to death.

The interdiction of death present in countries like the United States contrasts sharply with cultural practices surrounding death in some other countries. One country with quite different death related practices is Mexico. In many parts of Mexico, symbolic representations of death are abundant in everyday life, where homes and public places may contain skulls and skeletons depicted in everyday activities and practices. Death is often viewed as the national symbol of Mexico (Lomnitz, 2005) and it is celebrated annually as part of the national holiday surrounding *día de los muertos* (i.e., day of the dead). During this event, children are active participants, learning about death through observation and pitching in (Gutiérrez, Rosengren, & Miller, 2015; Rogoff, 2014). Including children in the rituals and events surrounding death socializes children to think of death as part of life, and that it is something to be embraced rather than avoided

(Gutiérrez et al., 2015; Gutiérrez, Menendez, Jiang, Hernandez, Miller, & Rosengren, under review).

Although the socialization practices related to death in Mexico represent the other end of the spectrum compared to those in the United States, parents, even those within the same country, often differ in how they socialize their children (Miller, Koven, & Lin, 2011; Wiley, Rose, Burger, & Miller, 1998). With respect to death, parents may vary in the extent to which they talk with their children about this topic, include children in death related rituals, and provide an environment where children feel that it is acceptable to ask questions and express emotions related to the loss of a loved one. It is still an open question whether these socialization practices may in turn influence how children cope with the death of a loved one.

Parents can be an important resource to help children cope with the death of a loved one and clinicians have written resource guides to aid parents trying to help their children in this area (Dyregrov, 2008; Grollman, 2011; Primo, 2013; Webb, 2010; Wolfelt, 2013). For example, using his firsthand experience working with bereaved families, Grollman (2011) provides parents with advice on how to support their children. Grollman and others suggest that parents should be open to talking with their children about death and recommend that parents should encourage their children to express their thoughts and feelings related to the death of a loved one (Dyregrov, 2008; Grollman, 2011; Webb, 2010; Wolfelt, 2013). Additionally, previous research has highlighted the importance of communication with a child at the time of a parent's terminal illness or death (Christ & Christ, 2006). Open and timely communication has been shown to be positively associated with a child's adjustment after the loss of a close family member (Ellis, Dowrick, & Lloyd-Williams, 2013; Field, Tzadikario, Pel, & Ret, 2014; Wallin, Steineck, Nyberg, & Kreicbergs, 2016). Therefore, parents who are not open to talking about death and their children's feelings are thought to be creating an obstacle to the child's healing process. If not being open to talking about death is an obstacle in the grieving process, then children who are socialized to see death as a natural part of life may have better coping skills than those whose parents never talk about death.

While recent research has highlighted important differences in attitudes, values, and behaviors regarding death (Rosengren et al., 2014; Gutiérrez et al., 2015), there has been no attempt that we are aware of to explicitly explore how early socialization practices influence later coping and adjustment to loss. An important question is whether different socialization practices, even within a culture, influence later bereavement and coping practices when individuals experience death later in life. We operationalized socialization to include whether parents shielded their children from information related to death, and how openly parents talked about death and death-related practices to their children. In this study, we also focus on how parents talk about death from a biological perspective as a natural part of life, as this is the perspective on which researchers studying children's understanding of death have concentrated on (e.g., Speece & Brent, 1984; 1996).

Studying the impact of childhood socialization with respect to death is challenging for both ethical and pragmatic reasons. From an ethical perspective, attempting to recruit and interview families in the midst of coping with death is difficult and potentially intrusive. From a pragmatic perspective, measuring early socialization practices and then tracking families longitudinally, with the goal of investigating how they cope with a later death of a loved one, would be logistically difficult. In order to examine how early socialization with respect to death relates to later coping, we chose to conduct a retrospective study in which participants were asked to recall and reflect on their childhood and experiences coping with the death of loved ones. One area of research that has used a similar approach is the investigations on adult attachment (e.g., Fraley & Shaver, 2000). For example, researchers have shown that adults' memory of their early relationship history with their parents has been linked to the quality of their adult relationships (Hazen & Shaver, 1987) and feelings of loneliness (Shaver & Hazen, 1987). In our work, we view adult memory of death-related socialization experiences as likely influencing life-long coping with respect to death.

In the current project, we examined whether individual differences in socialization with respect to death are related to differences in self-reported coping with the death of a loved one. Using a mixed-methods approach, combining quantitative and qualitative measures, we explored how adults' memory of early socialization with respect to death and death-related events as a child were associated with self-reports of later coping with the loss of a loved one. Given previous research indicating that parents in different cultural groups socialize their children differently with respect to death (Gutiérrez et al., under review), we decided to only look at adults who were raised in the United States. In this sense, this study is examining within cultural variation on how adults remember being socialized about death, and the possible implications this may have on their bereavement process.

The quantitative measures allowed us to test specific hypotheses related to memory of early socialization processes and self-reported coping. We specifically recruited adults who stated that they were able to recall the death of a family member within the last ten years. We hypothesized that in families in which parents feel comfortable talking about death, children would grow up to treat death as a natural process. These individuals may cope with the death of a loved one better than individuals who grew up in families with parents who are not comfortable talking about death with their children. Including qualitative methods enabled participants to elaborate on important areas that they thought were of particular salience. Since episodes of coping with a death of a loved one can be complicated and a very individualized experience, providing each participant with opportunities to extend and elaborate may allow us to more clearly understand how early socialization may impact later coping. Qualitative elaborations such as these may serve to provide additional layers of evidence that complement the quantitative data (Rosengren, Gutiérrez, & Jiang, 2016). In this study, participants responded to an online questionnaire about their memories of parental conversations related to death and general attitudes of death exhibited in their families and provided information about their views of their own coping and bereavement experiences as adults.

Method

Participants

Three hundred and ninety participants were recruited from Amazon's Mechanical Turk (mTurk) to complete an online questionnaire. mTurk is Amazon's platform on which researchers can recruit participants to complete studies directly online. Participants on mTurk have been found to be more demographically diverse with respect to age and socioeconomic status than typical college students and yields data that are as reliable as other methods used in psychological research (Buhrmester, Kwang, & Gosling, 2011; Buhrmester, Talaifar, & Gosling, 2018; Paolacci & Chandler, 2014). Of the 390 participants who completed the survey, 2.6% of the sample was not analyzed because they were not able to recall a death experience within the last ten years and 15.6% were excluded due to errors while completing the survey. Errors in completing the survey were primarily due to failing any one of the three attention checks. We included attention checks as a standard approach (Hauser & Schwarz, 2016) to screen out

individuals who may not be responding to our quantitative measures seriously (i.e., to prevent response sets). Our final sample included 318 adults (48.4 % male). Participants ranged in age from 18 to 72 years old (M = 33.1, SD = 10.2). On an 11-point sliding scale, participants' subjective socioeconomic status ranged from 0 to 9.1 (M = 4.50, SD = 1.91; Goodman, Adler, Kawachi, Frazier, Huang, & Colditz, 2001). Table 1 shows the demographic information of the sample. Participants received one U.S. dollar for completing the survey.

Materials and Procedures

This study consisted of a 137-item questionnaire divided into eight sections. We only discuss the sub-sections of the questionnaires that are relevant to the current analysis. A full version of the questionnaire and the dataset can be obtained upon request from the corresponding author. Here, we focus on a subset of the data that was collected focusing primarily on the relationship between how participants remembered being socialized with respect to death and how they remembered coping with death in childhood and/or adulthood. The survey was powered by Qualtrics® (Provo, UT), an online survey construction software, with a link to the survey posted to mTurk. Prior to completing the questionnaire, participants completed a screening tool designed to exclude anyone who had not lost a direct family member in the last ten years, anyone under the age of eighteen and anyone living outside of the U.S. Following the screener questions, participants read and agreed with an online consent statement. They were then prompted to answer questions that included multiple choice answers, Likert scales, and open-ended questions.

The first part of the questionnaire explored how participants remembered being socialized about death during their childhood. As we know of no measures that explore adults'

memories for how they were socialized about death as children, we constructed our own instrument. The majority of the questions used in the instrument were based on previous work in cognitive development that focused on children's biological understanding of death (see Rosengren et al., 2014; Slaughter & Lyons, 2003; Speece & Brent, 1984; 1996). Additional questions were derived from research examining the socialization of death in the U.S. and Mexico (Gutiérrez et al., 2015). Our scale contained ten items that asked participants to recall whether and how their parents talked to them about death. Three items pertained to the extent to which participants remembered their parents shielding them from death. Three items pertained to the extent to which participants remembered their parents being open about the topic of death. The remaining four items addressed socialization with respect to subconcepts of death: finality, universality, and psychological and biological non-functionality (Speece & Brent, 1984; 1996). These items were rated on a 1 (strongly disagree) to 6 (strongly agree) Likert-type scale. The exact items are presented in the results section. We assessed the reliability of our seven-item socialization scale by calculating Cronbach's alpha. The raw alpha for the scale was .92 indicating high internal consistency. This value did not increase if any of the questions were removed.

The socialization questions were followed by a section concerning death experiences when the participant was a child. For example, participants were asked "As a child did you attend funerals and/or memorial services when they occurred?" Participants were specifically asked to "[t]hink about the death of your closest friend or relative who died before you were 18." Then participants responded to questions such as, "today, thinking about this person's death, how well do you think you coped with the death?" Participants answered these questions on a 10point scale from 1 (not well at all) to 10 (extremely well). Participants then answered similar questions, based on their adult experiences coping with the death of a loved one. Information regarding participant's death experience can be found in Table 2 (as a child) and Table 3 (as an adult).

We had four optional open-ended questions that were interspersed throughout the survey to gain insight into the unique individual experiences that participants may have had with the loss of a loved one. The four questions asked were:

1."When you look back on this death now, are there things that you wished your parents or other individuals had done to help you cope with the death? If yes, please explain.";

2."When you look back on this death now, are there things that you wished you had done differently to cope with death? If yes, please explain.";

3."[With respect to the death during childhood] are there any other things regarding this death and how you have coped with it that you would like to share?";

4."[With respect to the death during adulthood] is there anything regarding this death and how you have coped with it that you would like to share?"

Finally, participants answered background demographics (e.g., gender, education). Participants were allowed one hour to complete the survey and on average spent 30 minutes.

Data analysis

We first analyzed the death socialization scale with an exploratory factor analysis. We then calculated factor scores for each individual, and examined their correlations with our two outcome variables of interest: childhood and adult coping. Finally, we constructed a path model to examine whether socialization about death and death related rituals predicted how participants remembered coping with the death of a loved one as a child, and subsequently as an adult.

Given the correlational nature of our data, we also ran an alternative path model in which childhood coping predicted socialization related to death, and subsequently adult coping. Testing alternative models allows us to examine other possible causal pathways. In this model, we examined whether childhood experiences with death of a loved one may have impacted how they were socialized, and whether socialization then influences adult coping. The path model with the smaller Bayesian Information Criterion (BIC; Lin, Huang, & Weng, 2017) was then selected to be the one that more likely generated the data..

Qualitative coding

To code the open-ended qualitative responses, we adopted the Consensual Qualitative Research–Modified approach (CQR-M; Spangler, Liu, & Hill, 2012). This method uses a bottom-up approach that favors discussion between coders at every step of the process. Three of the authors (L.M., J.D.A. & I.G.H) independently categorized responses into domains, categories, and subcategories for each of the open-ended questions. Responses could receive multiple codes if they contained more than one theme. To ensure accuracy and agreement, we resolved any item-level discrepancies through discussion until we reached consensus.

Results

Overall Demographics

The majority of the respondents (298 of the 318, 93.7%) reported having **at least** one death of a loved one before the age of 18. Of these participants, sixty-one (19.2%) participants reported experiencing between three and five deaths of loved ones, and 16 (5.0%) reported more than five. The most common type of death was a grandparent or great-grandparent (n = 202), followed by aunts or uncles (n = 29), family friends (n = 29), and parents (n = 25). The most common cause of death was prolonged illness (n = 155), followed by sudden illness (n = 70), and

any type of accident (n = 33). Additional details about the reported deaths are provided in Table 2. Out of 318 respondents, 266 (83.6%) attended a funeral or memorial service as a child, and 44 of them (16.5% of these 266) reported going to more than one. Of these 266, 236 (88.7%) said that the body was present during the service and 210 (78.9%) reported attending a burial. Of the 318 initial respondents, 264 (83%) reported visiting graves as children; 237 of these 264 (89.8%) are included in the group that reported attending a funeral.

Out of the total respondents, 246 (77.4%) reported experiencing the death of a close family member or friend since they turned eighteen. Of these, 37 (15%) reported experiencing the deaths of three to five members, and 33 (13.4%) reported having experienced the death of more than five. The most common category was grandparents or great-grandparents (n = 96), then parents (n = 55), and close family friend (n = 41). The most common cause of death was a prolonged illness (n = 115), followed by sudden illness (n = 69), and accident (n = 33). Additional details about these reported deaths are provided in Table 3.

Quantitative Results

We first conducted an exploratory factor analysis on our socialization scale. Parallel analysis scree plots suggested that a 3-factor model optimally captured the data best (i.e., parallel analysis screen plots compares the current dataset to a randomly generated dataset of the same size). We used the psych package in R (Revelle, 2017) to conduct an exploratory factor analysis with a oblimin rotation and found that the model showed good fit to the data, TLI = .959, RMSEA = .079, 90%CI [.054, .102]. Table 4 shows the factor loadings of the exploratory factor analysis. We interpreted these factors to be Parental Shielding, Openness to Discuss Death, and Non-Functionality, and this model accounted for 71% of the variance in the data. These factors were all correlated: Parental Shielding was negatively correlated with Openness to Discuss Death

(r = -.30) and Non-Functionality (r = -.15). Openness to Discuss Death and Non-Functionality were positively correlated (r = .75).

The Parental Shielding ($\alpha = .86$) and the Openness to Discuss Death factors ($\alpha = .89$) showed high internal consistency (internal consistency was not calculated for the Non-Functionality factor as there were only two items). With this 3-factor model, we calculated subscores by averaging participants responses for each factor. Before constructing the overall path model, we calculated zero-order correlations between the three factor scores and our two main outcome variables: childhood and adult coping. All correlations were in the expected direction. Parental Shielding was negatively correlated with Childhood Coping (r = .20) and Adult Coping (r = .12). Openness to Discuss Death was positively correlated with Childhood Coping (r = .16) and Adult Coping (r = .14). Lastly, Non-Functionality was positively correlated with Childhood Coping (r = .14) and Adult Coping (r = .21).

We then constructed the hypothesized path model in R with the lavaan package (Rosseel, 2012) using the three factors to predict child coping, and subsequently predict adult coping. Of the three factors, Parental Shielding (M = 1.84, SD = 2.08) was a negative predictor of childhood coping (b = -.221), p = .01. Openness to Discuss Death and Non-Functionality were non-significant predictors of childhood coping. Childhood Coping (M = 5.69, SD = 2.66) predicted Adult Coping (M = 6.08, SD = 2.98, b = .423), p < .001. Lastly, the indirect effect from Parental Shielding to Adult Coping through Childhood coping was also significant (b = -.094), p = .019. This model showed adequate fit to the data (Robust $\chi_2(3) = 6.370$, p = .095, CFI = .917, TLI = .806, BIC = 6836.4, RMSEA = .059, 90% CI [.000; .122], accounted for 5.4% of the variance in Childhood Coping and 14.1% of the variance in Adult Coping. This model is presented in Figure 1.

Due to the correlational nature of the data, we tested an alternative model, in which childhood coping was used to predict the three factors of socialization, and the three factors of socialization predict adult coping. The fit indices of this model were worse than our proposed model (Robust $\chi_2(4) = 285.673$, p < .001, CFI = .000, TLI = -1.526, BIC = 7512.9, RMSEA = .471, 90%CI [.425; .517]). The Bayesian Information Criterion was larger than that of our proposed model (7512.9 vs. 6836.4). The model fit indices and BIC both indicate that our proposed model is more likely to have generated the data than this alternative model.

Qualitative Results

One hundred sixty-six participants (52.2%) completed at least one of the four qualitative questions yielding 271 responses. We coded participants' responses to the open-ended questions using CQR-M. This approach revealed a number of important themes. The main themes related to our research question and hypothesis were communication (n = 50), emotional support (n = 62), and age (n = 24). Other important themes included cause of death (n = 36), the relationship with the deceased (n = 22), celebration of life (n = 12), and shock (n = 10). A number of other themes had fewer than 10 responses. Twenty-four responses were not codable. Based on our research question and hypothesis, we focused on the following topics in greater detail below: communication, emotional support, and issues related to age.

Communication. Opportunities to have conversations about death are an important aspect of socialization. The qualitative responses falling into this category alluded to the importance of communication about death as a young child. Several respondents (n = 14) expressed a desire to have spoken more with others about their loss (e.g., P: 301; Female: "I wished I had talked about it more to those close to me"). When asked what others could have done differently, some respondents (n = 23) expressed a desire for greater communication (e.g.,

P: 126; Female: "I wished my parents would have explained death more thoroughly to me and given me more faith that the person who died was in peace and happy"). Participants (n = 5) also wished they had more instruction on how to grieve adaptively (e.g., P:30; Male: "Give me a heads up that this would happen eventually, and the best ways to deal with death of close loved ones"). Others wished that they had been provided with more communication about the rituals and ceremonies they had to attend (n = 3; e.g., P: 74; Female: "I wished they had prepared me for the ceremonies and explained the significance to me before it began. It was often frightening to me"). Participants also wished they had received communication about the death in a timely manner (n = 4; e.g., P: 209; Male: "I wished I had been told when it happened, not days later").

Emotional support. Participants' responses suggested dissatisfaction with the level of emotional support given or received when coping with a loss. When asked what they wished others had done differently, some participants (n = 16) expressed a lack of emotional support from those surrounding them (e.g., P47; Female: "I wish my parents would have let me know that it's okay to be sad and confused. That it's a normal response"; P255; Female: "I think my parents should have done a better job of helping me through the death instead of ignoring my feelings"). When asked if they had anything else to share, some respondents (n = 11) reported a lack of support through avoidance (e.g., P153; Female: "I noticed many people went away from our family because they didnt [sic] know what to say"). When participants were asked what they wished they had done differently in response to a death of a loved one, a number of respondents (n = 7) suggested that they themselves should have provided greater support for others (e.g., P302; Male: "...would have been there for everyone else instead of being wrapped up in my selfish world").

Common among the responses discussing lack of emotional support is the idea that the topic of death is often not discussed. This is evident in the responses that suggest that individuals did not feel that they received the amount of emotional support from their parents that they thought they needed. The response that mentioned people avoiding them following a death also suggests that individuals may perceive discomfort in others about talking about death.

Age Related Issues. Another theme that was present in the qualitative data related to the idea that children are too young to understand and cope with a death. Some respondents (n = 10) described that they themselves felt too young at the time to understand death or to be able to cope with it effectively. Others (n = 6) elaborated on how with age, they came to have a better understanding of what it means to die and of the implications of someone dying (e.g., P: 55; Male: "I think I was too young to understand how this affected my parents, particularly my mother"). Another individual stated, P: 241; Male: "I was still too immature to fully understand the severity and gravity of the situation. I was confused, then shocked, but eventually accepted it." These comments highlight the belief that children are not capable of understanding death. These statements suggest that the adult participants have some notion that they were once too young to understand the deaths of their loved ones.

Discussion

The goal of the current study was to examine how adults' memory of early socialization with respect to death and death-related events impacts coping with the loss of a loved one in childhood and adulthood. We conducted a mixed-method, retrospective study to achieve this goal. Our quantitative analysis revealed that participants who remembered their parents shielding them less from information about death coped better with a death as a child. This also lead the respondents to report that they coped better with a death of a loved one as an adult. In parallel

IMPACT OF SOCIALIZATION ON COPING

with these quantitative findings and consistent with our hypothesis, a consensual qualitative analysis of open-ended responses showed that participants wished others (e.g. parents, teachers) would have spoken to them more openly and honestly about death when they were children. These respondents also wished that others would have provided more information, greater guidance, and support when they were coping with the death of a loved one.

Although, as far as we are aware, this is the first time that memory of early socialization about death was measured in relation to coping with loss in childhood and adulthood, previous studies show similar findings on the importance of open communication about death with a child at the time of bereavement. These studies show that absence of open and honest communication with a child about the loss of a loved one may contribute to children's distress, depression, and anxiety (Ellis et al., 2013; Raveis, Siegel, & Karus, 1999; Wallin et al., 2016). On the other hand, open communication about death has been positively associated with children's self-esteem and positive adjustment to loss (Field et al., 2014; Hurd, 1999). Our results add to previous research by extending past work to examine the association between memory for early socialization about death and coping with a loss in both childhood and adulthood.

Another noteworthy finding from our study is that our participants, bereaved adults, were also not satisfied with how much they themselves communicated with others at the time of death and if they could, they would have changed this and communicated more. However, it is unclear whether their own lack of communication at the time of loss was caused by lack of early socialization about death. It is possible that individuals who grow up in a family where their parents see death as a natural process in life and openly communicate about death, will also be able to communicate more openly when their loved ones die. These individuals may also be able to provide better support to someone else who is suffering the loss of a loved one since they may not avoid the subject of death.

Some participants not only expressed a desire to have been given more and more accurate information about death in childhood, but also a desire for greater emotional support at the time of death. These respondents would have appreciated getting more guidance regarding the expression of emotions during grieving and reassurance that their emotional responses were normal and typical reactions to loss. Parents and caregivers of grieving children might consider not only providing cognitive guidance (e.g., explaining to children what death is and how it might have occurred) but also emotional guidance such as explaining that it is okay to express oneself emotionally. This idea has been similarly suggested by other researchers (Bush & Kimble 2001; Christ & Christ, 2006). Our data suggests that future work should explore how memory of early socialization with regards to the emotional components relating to death influences the grieving process in adulthood.

Some individuals stated they believed they themselves were too young to comprehend the concept of death and too young to cope with death. This is in line with a belief of some parents that children are too young to understand death and death-related events, and therefore it is safer to shield them from death (Miller, Gutiérrez, Chow, & Schein, 2014). In fact, Gaab, Owens, and MacLeod (2013) found that children's understanding of the concept of death was significantly higher than caregivers thought. Therefore, parents should not avoid talking about death and death-related events with their children due to a belief that children cannot comprehend death. Indeed, open communication about death can lead to an even more mature understanding of death concepts from a biological perspective in children, which has been found to be related to children's lower death anxiety (Slaughter & Griffiths, 2007).

Our quantitative and qualitative results have some important practical implications. Children may have difficulty coping with death when they are provided with limited information about death, and this lack of information may negatively affect coping with death in both childhood and adulthood. Parents who avoid talking with their children about death may exacerbate the situation by creating an obstacle to their children's adjustment to a loss. These parents may lead their children to a) avoid thinking or talking about death, b) have difficulties regulating emotion when a loss occurs, and c) lack the skills to cope effectively with death. We argue that parents should provide their children with opportunities to discuss death, and create an environment where children feel that it is acceptable to ask questions about death and exhibit emotions when grieving. One approach that parents might use would be to use various educational tools to address the concept of death, such as exposing their children to appropriate stories and picture books dealing with the theme of death (Ortego et al., 2016; Wiseman, 2013).

Based on the responses from our participants, it is essential that parents normalize their children's various emotional reactions to the loss. Since parents themselves may be emotionally disturbed by the loss in the family, they may need to reassure their children that even when they are also grieving, they can still take care about them, as Horsley and Patterson (2006) suggest. When a child experiences high distress, it may be beneficial to suggest help from a counselor or a bereavement group. Moreover, our respondents expressed a need to be given information about a death in a timely manner. Christ and Christ (2006) similarly emphasize that open and timely communication with a child about the death of a parent is an important protective factor for children's adjustment to such major stressful events. This communication should be seen as a process, not a one-time event. The authors also provide some age-specific guidelines for communication with a child whose parent is terminally ill or has died (Christ & Christ, 2006).

While parents and caregivers are important socialization agents with respect to death; teachers may also be important agents in this socialization process. Previous studies have shown that death education led to significantly higher understanding of death concepts, grief and grieving in children (Lee, Lee, & Moon 2009; Stylianou & Zembylas, in press). Children who participated in an educational intervention about death also felt less anxious to talk about death (Stylianou & Zembylas, in press). In addition, bereaved children themselves have emphasized the role of a supportive teacher upon their return to school, when it is important for them to have a teacher who talks with them openly about the loss and who shows an understanding for their experience (Holland, 2008; Lytje, in press). Teachers, on the other hand, often feel that they lack the necessary knowledge and skills to support a grieving child (Dyregrov, Dyregrov, & Idsoe, 2013; Holland, 2003; Papadatou, Metallinou, Hatzichristou, & Pavlidi, 2002), and often feel uncomfortable in discussions about death with children (Lee et al., 2009; McGovern & Barry, 2000). Therefore, it is important to provide teachers with training in death and bereavement education so that they are better prepared to talk to children about this topic. This can be particularly important in cultures that generally avoid talking about death.

While our findings demonstrate the potential importance for early childhood socialization regarding death, it has some limitations. The first limitation relates to the retrospective nature of our study. Adults' memories of early socialization may not be accurate. This may have several implications for our current results. As time passes, adults' reflections of their past may change, and the self-report provided by the participants may be skewed in different ways depending on the varying circumstances around the death being recollected. Alternatively, adults' may in fact be reporting their idealized view of what happened instead of what actually happened. However, as shown in other areas of developmental research (i.e., adult attachment) reports of early

socialization even if inaccurate may reflect underlying mental models that influence adults behaviors. The second limitation concerns the non-homogeneity of our sample. The most common type of loss based on a relationship with the deceased was death of a grandparent. The relationship of socialization and coping with death may be different when dealing with the loss of a grandparent and the loss of a family friend. Also, this relationship may be different when facing sudden loss, which was underrepresented in our sample. The third limitation relates to the correlational nature of our study, which does not allow us to make causal arguments. However, given that the hypothesized path model explained more of the variability in the data than the alternative model and was supported by the qualitative responses, we are confident that our analyses provide a realistic account of the relationship between socialization practices and coping. An additional limitation concerns online recruitment and generalization from the sample. However, mTurk participants have been shown to be socio-economically and ethnically more diverse than a standard college sample (Casler, Bickel, & Haslett, 2013). Finally, future studies might consider using richer indicators of adjustment to the loss, such as sense-making and benefit-finding (e.g. Holland, Currier, & Neimeyer, 2006).

Despite these limitations, our study provides initial evidence on the importance of socialization about death in coping with a death during childhood and adulthood. We believe that our findings can be used to encourage parents and caregivers to talk more openly with their children about death and death-related events. It is our hope that this research will serve as a base for future studies on this topic.

References

- Ariès, P. (1974). Western attitudes towards death: From the middle ages to the present.Baltimore, MD: Johns Hopkins University Press.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5. doi: 10.1177/1745691617706516
- Buhrmester, M., Talaifar, S., T., & Gosling, S. D. (2018). An evaluation of Amazon's
 Mechanical Turk, its rapid rise, and its effective use. *Perspectives on Psychological Science*, *13*(2), 149-154. doi: 10.1177/1745691610393980
- Bush, T., & Kimble, C. (2001). Grieving children: Are we meeting the challenge? *Pediatric Nursing*, 27(4), 414-8.
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. *Computers in Human Behavior*, 29(6), 2156-2160. doi: 10.1016/j.chb.2013.05.009
- Christ, G.H., & Christ, A.E. (2006). Current approaches to helping children cope with a parent's terminal illness. *Cancer Journal for Clinicians*, 56(4), 197-212. doi: 10.3322/canjclin.56.4.197
- Dyregrov, A. (2008). *Grief in Children: A Handbook for Adults Second Edition*. Philadelphia: Jessica Kingsley Publishers.
- Dyregrov, A., Dyregrov, K., & Idsoe, T. (2013). Teachers' perceptions of their role facing children in grief. *Emotional and Behavioural Difficulties*, 18(2), 125–134. doi: 10.1080/13632752.2012.754165

- Ellis, J., Dowrick, C., & Lloyd-Williams, M. (2013). The long-term impact of early parental death: Lessons from a narrative study. *Journal of the Royal Society of Medicine*, 106(2), 57-67. doi: 10.1177/0141076812472623
- Field, N.P., Tzadikario, R., Pel, D., & Ret, T. (2014). Attachment and mother-child communication in adjustment to the death of a father among cambodian adolescents. *Journal of Loss and Trauma*, 19(4), 314-330. doi: 10.1080/15325024.2013.780411
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4(2), 132-154. doi: 10.1037//1089-2680.4.2.132
- Gaab, E.M., Owens, G.R., & MacLeod, R. (2013). Caregivers' estimations of their children's perceptions of death as a biological concept. *Death Studies*, *37*(8), 693-703. doi: 10.1080/07481187.2012.692454
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001).
 Adolescents' perceptions of social status: Development and evaluation of a new indicator.
 Pediatrics, 108(2), e31-e31.
- Grollman, E. A. (2011). *Talking about Death: A dialogue between parent and child*. (4th ed).Boston, MA: Beacon Press.
- Gutiérrez, I. T., Menendez, D., Jiang, D., Hernandez, I. G., Miller, P., & Rosengren, K. S. (under review). Embracing death: Mexican parent and child perspectives on death.
- Gutiérrez, I.T., Rosengren, K. S., & Miller, P. J. (2015). Día de los Muertos: Learning about death through observing and pitching in. In M. Correa-Chavez, R. Mejia-Arauz, & B. Rogoff (eds.), Advances in Child Development and Behavior. 49, 229-249). Academic Press.

- Hauser, D. J., & Schwarz, N. (2016). Attentive Turkers: MTurk participants perform better on online attention checks than do subject pool participants. *Behavior Research Methods*, 48(1), 400-407.
- Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*(3), 511-524. doi: 10.1037//0022-3514.52.3.511
- Holland, J. (2003). Supporting schools with loss: 'Lost for Words' in Hull. *British Journal of Special Education*, *30*(2), 76-78. doi: 10.1111/1467-8527.00287
- Holland, J. (2008). How schools can support children who experience loss and death. *British Journal of Guidance & Counselling*, *36*(4), 411–424. doi:
 10.1080/03069880802364569
- Holland, J., Currier, J., & Neimeyer, R. (2006). Meaning reconstruction in the first two years of bereavement: The role of sense-making and benefit-finding. *OMEGA-Journal of Death and Dying*, 53(3), 175-191. doi: 10.2190/FKM2-YJTY-F9VV-9XWY
- Horsley, H., Patterson, T. (2006). Intervention on communication among adolescents who have experienced the sudden death of a sibling. *The American Journal of Family Therapy, 34*, 119–137. doi: 10.1080/01926180500301519.
- Hurd, R.C. (1999). Adult view their child bereavement experiences, *Death Studies*, 23(1), 17-41. doi: 10.1080/074811899201172
- Lee, J.O., Lee, J.L., & Moon, S.S. (2009). Exploring children's understanding of death concepts. *Asia Pacific Journal of Education*, 29(2), 251-264. doi: 10.1080/02188790902859020
- Lin, L. C., Huang, P. H., & Weng, L. J. (2017). Selecting Path Models in SEM: A Comparison of Model Selection Criteria. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(6), 855-869.

Lomnitz, C. (2005). Death and the Idea of Mexico. New York: Zone Books.

- Lytje, M. (in press). Voices that want to be heard Using bereaved Danish students suggestions to update school bereavement response plans. *Death Studies*. doi: 10.1080/07481187.2017.1346726
- McGovern, M., Barry, M.M. (2000). Death education: Knowledge, attitudes, and perspectives of Irish parents and teachers. *Death Studies*, *24*(4), 325-33. doi: 10.1080/074811800200487
- Miller, P.J., Gutiérrez, I. T., Chow, P. I., & Schein, S. S. (2014). European Americans in Centerville: Community and family contexts. *Monographs of the Society for Research in Child Development*, 79(1), 19-42. doi:10.1111/mono.12077
- Miller, P. L., Koven, M., & Lin, S. (2011). Language socialization and narrative. In A. Duranti,
- E. Ochs, B. B. Schieffelin (Eds.), The handbook of language socialization (Vol. 72 pp.190 -
- 208). West Sussex: John Wiley & Sons.
- Ortego, C.A., Aparicio, M., Paz, M., Torres, B., Sarabia, R., Sevilla, L., Álvarez, L., & Agudo,
 M.J. (2016). Tales: A tool to address death with children. *Journal of Hospice & Palliative Nursing*, *18*(5), 429-435. doi: 10.1097/NJH.00000000000268
- Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science*, 23(3), 184-188. doi: 10.1177/0963721414531598
- Papadatou, D., O. Metallinou, C., Hatzichristou, Ch., & Pavlidi, L. (2002). Supporting the bereaved child: Teacher's perceptions and experiences in Greece. *Mortality*, 7(3), 324–339. doi: 10.1080/1357627021000025478
- Primo, J. M. (2013). *What Do We Tell the Children?: Talking to Kids About Death and Dying*. Nashville, TE: Abingdon Press.

- Raveis, V., Siegel, K., Karus, D. (1999). Children's psychological distress following the death of a parent. *Journal of Youth and Adolescence*, 28(2), 165-180.
 doi:10.1023/A:1021697230387
- Revelle, W. (2017) psych: Procedures for Personality and Psychological Research, Northwestern University, Evanston, Illinois, USA, https://CRAN.R-project.org/package=psych Version = 1.7.8.
- Rogoff, B. (2014). Learning by observing and pitching in to family and community endeavors: An orientation. *Human Development*, *57*, 69-81.
- Rosengren, K. S., Gutiérrez, I. T., Jiang, M. J. (2016). Using mixed methods in developmental psychology: From scale errors to death. Chapter to appear in: Prior, J. & Vanherwegen, J. (Eds.), Practical Research with Children (pp. 191-208). London: Routledge.
- Rosengren, K. S., Miller, P. J., Gutiérrez, I. T., Chow, P. I., Schein, S., & Anderson, K. N.
 (2014). Children's understanding of death: Toward a contextualized and integrated account. *Monographs of the Society for Research in Child Development*, 79, 1-141.
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1-36. doi: 10.18637/jss.v048.i02
- Shaver, P., & Hazan, C. (1987). Being lonely, falling in love: Perspectives from attachment theory. *Journal of Social Behavior and Personality*, 2(2), 105-124.
- Slaughter, V., & Griffiths, M. (2007) Death understanding and fear of death in young children. *Clinical Child Psychology and Psychiatry*, 12(4), 525-35. doi: 10.1177/1359104507080980.
- Slaughter, V., & Lyons, M. (2003). Learning about life and death in early childhood. Cognitive psychology, *46*(1), 1-30. doi: 10.1016/S0010-0285(02)00504-2

- Spangler, P. T., Liu, J., & Hill, C. E. (2012). Consensual qualitative research for simple qualitative data: An introduction to CQR-M. In C. E. Hill (Ed.), *Consensual qualitative research: A practical resource for investigating social science phenomena* (pp. 269-283).
 Washington, DC: American Psychological Association.
- Speece, M. W., & Brent, S. B. (1984). Children's understanding of death: A review of three components of a death concept. *Child Development*, 55(5), 1671-1686. doi: 10.2307/1129915
- Speece, M. W., & Brent, S. B. (1996). The development of children's understanding of death. In
 C. A. Corr & D. M. Corr (Eds.), *Handbook of childhood death and bereavement* (pp. 29– 50). New York, NY: Springer.
- Stylianou, P., & Zembylas, M. (in press). Dealing with the concepts of "Grief" and "Grieving" in the classroom: Children's perceptions, emotions, and behavior. *Omega – Journal of Death and Dying*. doi: 10.1177/0030222815626717
- Wallin, A. E., Steineck, G., Nyberg, T., & Kreicbergs, U. (2016). Insufficient communication and anxiety in cancer-bereaved siblings: A nationwide long-term follow-up. *Palliative* and Supportive Care, 14(5), 488–494. doi: 10.1017/S1478951515001273.
- Webb, N. B. (Ed.). (2010). Helping bereaved children: A handbook for practitioners. (3rd ed.). New York, NY: Guilford Press.
- Wiley, A. R., Rose, A. J., Burger, L. K., & Miller, P. J. (1998). Constructing autonomous selves through narrative practices: A comparative study of working-class and middle-class families, *Child Development*, 69(3), 833-847. doi:10.1111/j.1467-8624.1998.tb06246.x
- Wiseman, A. M. (2013). Summer's end and sad goodbyes: Children's picturebooks about death and dying. *Children's Literature in Education*, 44(1), 1–14.

Wolfelt, A. D. (2013). Finding the Words: How to Talk with Children and Teens about Death, Suicide, Homicide, Funerals, Cremation, and other End-of-Life Matters. Chicago, IL: Companion Press.

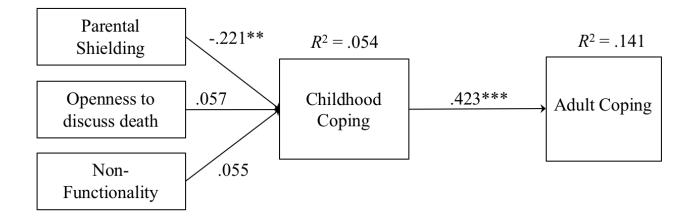


Figure 1. The figure shows the hypothesized path model. The boxes on the left represent the factor scores from the socialization scale. The numbers by each path are the standardized regression coefficients.

Frequency Urban 79 Gender Suburban 173 Male 154 Household growing up Female 144 Dual parent 246 Prefer not to answer or 20 Single parent 52 NA Multigenerational 13 *Ethnicity* War veteran status Black/ African American 17 Veteran 6 Asian/Asian American 28 Not a veteran 295 Hispanic/Latino 19 NA 17 White/ Caucasian 222 Religion 2 Native American Catholic 31 3 Biracial Protestant 85 5 Multiracial Jewish 3 Prefer not to answer or 20 NA Hindu 3 Education Muslim 1 Some high school 1 27 Other High school degree 35 Do not practice any 151 religion Some college 111 NA 17 College degree 115 Attendance to religious 23 Master's degree services Other graduate degree 16 Never 170 17 NA Less than once a year 46 Once a year 46 *Community growing up* Couple of times a year 33 Rural 71

Table 1. Demographic data of participants

Once a week 33 NA 17

More than once a week 9

Table 2. Death experience as a child

	Frequency	Other Family (e.g., cousin)	3
Deaths of family before 18		NA	22
None	20	Cause of death	
At least one	221	Prolonged illness	155
Between 3 and 5	61	Sudden illness	70
More than 5	16	Accident	33
Family death		Other	37
Grandparents or Great- grandparent	202	NA	23
		Death of pet before 18	
Aunt or uncle	29	None	64
Family friends	29	At least one	184
Friend	2	Between 3 and 5	57
Parent	25	More than 5	13
Sibling	6		

Table 3. Death experience as an adult

	Frequency	Child	3		
Deaths of family after18		Other Family (e.g., cousin)	4		
None	66	NA	73		
At least one	176	Cause of death			
Between 3 and 5	37	Prolonged illness	115		
More than 5	33	Sudden illness	69		
NA	6	Accident	33		
Family death		Other	26		
Grandparent or Great- grandparent	96	NA	75		
Aunt or uncle	32	Death of pet after 18			
Family friend	41	None	188		
Friend	4	At least one	98		
Parent	55	Between 3 and 5	10		
	8	More than 5	8		
Sibling		NA	14		
Spouse	2				

Item	Biological Processes	Shielding	Non- Functionality
My parents shielded me from deaths portrayed in movies	0.07	0.94	-0.07
My parents shielded me from deaths portrayed in book	0.03	0.83	0.02
My parents shielded me from deaths portrayed in everyday life	-0.26	0.71	0.06
My parents talked openly about how bodily functions (e.g. eating, growing) cease at death	0.01	-0.02	0.92
My parents talked openly about how psychological functions (e.g. thinking, dreaming) cease at death	0.05	-0.01	0.83
My parents talked openly about the finality (that the dead cannot come back to life) of death.	0.91	0.05	-0.01
My parents talked openly about the universality (that all living things must die) of death for all living things.	0.81	0.08	0.13
My parents were open to talking about death	0.68	-0.07	0.13
My parents acted if death was a natural part of life	0.74	-0.21	-0.07
My parents talked openly about what happened after death	0.45	0.07	0.27

Table 4. Exploratory factor analysis of the socialization of death scale

Factor Loadings