

The influence of (un)expectedness on bereavement outcome: The role of underlying dimensions  
and country differences

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### Abstract

(Un)expectedness of loss is an important risk factor to take into consideration when predicting bereavement outcomes. The literature presents with inconsistent findings, whether expected or unexpected loss has a more detrimental effect during one's bereavement. In this study we aim at investigating the concept of perceived (un)expectedness with the addition of underlying dimensions: a chance to say goodbye, discussing practicalities, a formal cause of death, the untimeliness of the loss, and the impact of caregiving experiences. Further, the loss of someone close is an inevitable experience universally, in our study bereavement outcomes among different countries are investigated with respect to (un)expectedness. The sample consisted of 268 participants from 4 countries: Greece, Ireland, Lithuania, and Turkey, divided into two groups according to uncertainty avoidance levels. The result analysis showed that perceived unexpectedness predicts higher levels of grief when tested alone, nevertheless, it ceased to be significant when additional (un)expectedness related aspects were added. A chance to say goodbye, losing one's parent and age of the deceased were significant predictors of bereavement outcome in the final model. No differences between countries were found in terms of (un)expectedness. The (un)expectedness of a loss can be seen as an umbrella covering its underlying dimensions, our findings confirm the importance of considering the latter when evaluating the unexpectedness.

Key words: (un)expectedness, bereavement, a chance to say goodbye, practicalities, untimeliness, caregiving, uncertainty avoidance.

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Bereavement outcomes are associated with a variety of risk factors. It is necessary to acknowledge and evaluate their influence in order to prevent negative outcomes. One of the risk factors is (un)expectedness of death (Stroebe, Folkman, Hansson, & Schut, 2006; Stroebe, Schut, & Stroebe, 2007). Unexpected loss is a subjective concept which comprises the element of surprise, whereas expected death is anticipated due to suicidal ideations or previous suicide attempts, cause of death such as long-lasting illness, or indulging in risky behaviors. According to cognitive explanation, surprise is an emotional appraisal of unexpectedness (Meyer, Reisenzein, & Schützwohl, 1997).

**(Un)expectedness.** Research findings are inconsistent whether unexpected (Burton, Haley, & Small, 2006; Caserta, Utz, & Lund, 2013; Keyes et al., 2014) or expected deaths (Saldinger, Cain, Kalter, & Lohnes, 1999) are related to elevated risk of poorer bereavement outcomes, or if there is no difference at all (Hill, Thompson, & Gallagher, 1988). Janoff-Bulman (1992) presented the concept of internal assumptions, stating that everybody has three fundamental assumptions: “the world is benevolent; the world is meaningful, and the self is worthy” (p. 5). The unexpected loss, considered as a traumatic experience, contributes to shattering these assumptions (Janoff-Bulman, 1992). The negative influence of unexpected death may be explained by the impact of shock one endures and not being able to grieve pre-loss as well as a lack of time to prepare and adjust to death (Hayslip, Ragow-O’Brien, & Guarnaccia, 1999; Keyes et al., 2014). Moreover, studies have been conducted that fail to find differences between the expected and unexpected loss (Carr, House, Wortman, Nesse, & Kessler, 2001; Stroebe & Schut, 2001). One of the possible explanations state that there are additional

influencing variables to relations between (un)expectedness and bereavement outcome (Carr et al., 2001). Another reason presented is a lack of rigid methodological criteria (Stroebe & Schut, 2001). It is important to take into account the methodological limitations (e.g., cross-sectional and retrospective designs, small sample sizes) of studies conducted in this field (Williams & McCorkle, 2011) and a lack of consistency in terms of defining (un)expected death (Bruera, Chisholm, Dos Santos, Bruera, & Hui, 2015). Due to inconsistent findings it is important to test tightly related aspects of (un)expectedness, such as a chance to say goodbye, consideration of practicalities, causes of death and its untimeliness, and the importance of caregiving.

Firstly, many bereaved individuals wish they had said good-bye to their loved one before his or her death. Gamino, Sewell, and Easterling (2000) found that a chance to say goodbye to the person who died contributes to a better post-bereavement adjustment. The impact of saying goodbye might be explained by the concept of unfinished business. Absence of closure may result in feelings such as regret, anger, guilt, or remorse, which are related to a negative bereavement outcome (Klingspon, Holland, Neimeyer, & Lichtenthal, 2015).

Secondly, the process of end of life preparedness refers to effective planning of medical, financial, funeral, and legal arrangements before death. Avoidance and delaying taking care of practicalities may result in additional and unexpected strain of emotional resources, due to uncertainty, lack of knowledge, and new responsibilities (Banner et al., 2018). Even though it is acknowledged to be beneficial in terms of end of life quality, satisfaction, and medical care, the impact of the relationship between these conversations and bereavement is yet to be studied.

Thirdly, there are many different classifications of causes of death (e.g., sudden, natural, violent, acute, etc.), which are tightly interrelated to (un)expectedness. Many studies distinguished expectedness by cause of death and proposed different definitions, however

findings cannot be generalized (Jaaniste, Coombs, Donnelly, Kelk, & Beston, 2017). The cause of death does not necessarily translate into the perceived (un)expectedness. For instance, a loss after a long-term illness does not equal an expected loss (Bruera et al., 2015; Jaaniste et al., 2017), as a less aggressive course of a disease is not necessarily expected to result in death. Moreover, suicidal ideations and attempts prior to a completed suicide is not necessarily considered as unexpected either (Ribeiro et al., 2016; Walsh, Ribeiro, & Franklin, 2017). Further testing whether a formal cause of death is in line with perceived (un)expectedness is needed.

Fourthly, untimely death is a non-normative event which is usually considered to be unexpected (Neimeyer, Prigerson, & Davies, 2002; Waugh, Kiemle, & Slade, 2018). The element of untimeliness is mostly studied in terms of the age of the deceased whilst not being an essential variable in bereavement studies. The significance of the relationship to the deceased is added in terms of untimeliness (Currier, Holland, & Neimeyer, 2009). Untimely loss, with the integration of the relationship to the deceased and his/her age, is potentially a traumatic event which challenges one's world view (Janoff-Bulman, 1992), thus contributing to a poorer adjustment after the loss. Nevertheless, more recent studies (Currier et al., 2009; Mancini, Prati, & Bonanno, 2011) state that the assumptions after a traumatic, non-normative event are not changed and the differences prior to an event are more influential.

Finally, family caregivers usually accept the process of caregiving naturally and consider it as a moral obligation imposed by society. In the final stages of an illness caregivers take up a 'Decider at the end-of-life' task which presents them with additional distress (Velooso & Tripodoro, 2016). Große, Treml, and Kersting (2017) propose two plausible rationales for different bereavement outcomes due to the role strain. Firstly, the death of a care recipient reduces stress by ending the stressful obligations (Boerner & Schulz, 2009; Schulz et al., 2003).

Secondly, it adds more stress and leads to impaired bereavement due to exhaustion of coping resources, and conjunction of stressors (Boerner & Schulz, 2009; Williams & McCorkle, 2011). Boerner and Schulz (2009) propose one additional explanation stating that caregivers expect to be bereaved to some extent and thus endure anticipatory preparation which can be beneficial in post-loss bereavement. However, it is important to stress that the majority of caregiving studies are centered around cancer patients and their caregivers (Veloso & Tripodoro, 2016). Therefore, caregivers are considered to be a vulnerable group which requires additional attention in terms of testing post-bereavement outcome following different types of illnesses.

**(Un)expectedness and culture.** The loss of someone close is a universal experience across cultures, however, the way people from different cultures react differ (Hardy-Bougere, 2008; Stroebe & Schut, 1998; Walter, 2010) as well as the impact it has on people from various cultures is different (Hardy-Bougere, 2008; Rosenblatt, 2007).

It is noteworthy that the differences of grief are usually studied between Western and non-Western countries as well as within the scope of non-Western ones, however, in this study we focus on Western countries only. In this study we will try to explain how (un)expectedness is related to bereavement outcome in different cultures. The Hofstede taxonomy was developed in order to describe national cultures in 6 dimensions (Hofstede, Hofstede, & Minkov, 2010). One of which is uncertainty avoidance – the extent to which the members of a culture feel threatened by ambiguous or unknown situations, in this case the loss of someone close.

A plausible explanation of relations between (un)expectedness and avoidance of uncertainty lies within cognitive conservatism. People are exceedingly resistant to change as they perceive information only which is in line with their cognitive schemas. Naturally, unexpected situations such as unanticipated loss serve as a discordance to one's schema (Janoff-

Bulman, 1992). The concept of aforementioned uncertainty avoidance is in accordance with the need to maintain the grand schema intact. To sum up, the relations between (un)expectedness and differences in uncertainty avoidance are of great significance to analyze owing to the fact that they both lie within a concept of cognitive conservatism however representing opposite facets.

**Aim and hypotheses.** In this study, the predictive value of (un)expectedness and its underlying variables will be tested in terms of different levels of grief. We will focus on perceived (un)expectedness, meaning how do participants evaluate the loss rather than judging from an imposed societal perspective. We will also try to investigate whether different cultures react differently to expected and unexpected losses.

We hypothesize that a chance to say goodbye, preparations prior to death, certain causes of death, untimeliness and caregiving experiences in conjunction with perceived unexpectedness predict levels of grief. We further hypothesize that countries with high levels of uncertainty avoidance will be associated with a poorer bereavement outcome in instances of unexpected death whereas we do not expect to observe any significant differences in cases of expected death.

## Method

### Design, participants, and data collection

This study is a part of a larger research project, conducted by other Master's programme students at Utrecht University, with the goal to compare 4 different countries, namely Lithuania, Greece, Turkey, and Ireland, in terms of bereavement. It is a retrospective design study.

The criteria for participation were as follows: i) 18 years or older; ii) experienced a loss within the past 4 years; iii) be of one of the nationalities surveyed. They were recruited via Social Networking Sites (SNS) and support groups for bereaved individuals. The survey was created on ThesisToolsPro platform. Participants signed an informed consent form. The period of acquisition ran between January and April 2019.

After adjusting to the compatibility, the final sample consisted of 268 participants: 226 (84.6%) women and 41 (15.4%) men; mean age in years 35.28 (SD=13.30), ranging from 18 to 82. In respect to the sample distribution among countries, the characteristics are as follows: 87 (32.5%) Lithuanians, 78 (29.1%) Greeks, 51 (19%) Turkish, and 52 (19.4%) Irish participants. For an extensive description of demographic characteristics see Appendix A.

### Instruments

Originally instruments were in English and then translated to 3 other languages via forward and backward translations by translators working in the Psychology field. In order to assess perceived (un)expectedness and its related circumstances, single-item questions were asked. Measured on a 3-point scale: *Was his/her death expected to you?; Did you have a chance to say 'goodbye'?. Yes or No measure: Did you think of/discuss major practicalities before his/her death, such as: legal; financial; funeral arrangements; children custody; other?*



**Caregiving experience.** Caregivers were asked about the length and whether the care lasted until death. It was followed by Caregivers Reaction Assessment (CRA), a self-rating questionnaire used to assess family member caregiver's reactions, both negative and positive (Große et al., 2017; Nijboer, Triemstra, Tempelaar, Sanderman, & van den Bos, 1999). It comprises of 5 consistent subscales (health problems, disrupted schedule, financial problems, lack of family support, and self-esteem). It consists of 24-items with five possible answers ranging from *I totally disagree* to *I totally agree*. The validity and reliability of the questionnaire (English, Dutch, & Swedish versions) range from moderate to satisfactory (Given et al., 1992; Nijboer et al., 1999; Persson, Wennman-Larsen, Sundin, & Gustavsson, 2008). In this study the overall Cronbach's alpha coefficient is .86<sup>1</sup>.

**Inventory of Complicated Grief.** Bereavement outcomes were assessed with the 19-item Inventory of Complicated Grief (ICG) scale, developed by Prigerson and colleagues (1995). It was found to be a "reliable scale for the assessment of individuals who experience high levels of potentially maladaptive aspects of grief" (Prigerson et al., 1995, p. 77). Respondents were asked to evaluate how often (s)he experienced the given statement in the past month, with 5 possible answer options: *Never, Rarely, Sometimes, Often, Always*. Higher scores indicate poorer outcome, score range is from 0 to 76. The psychometric properties of this questionnaire were proven to be strong across the years (Lichtenthal, Neimeyer, Currier, Roberts, & Jordan, 2013; Prigerson et al., 1995). In this study the overall Cronbach's alpha coefficient is .91<sup>2</sup>.

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<sup>1</sup> With respect to the countries Cronbach's alpha coefficients are as follows: Lithuania .83, Greece .75, Turkey .83, and Ireland .87.

<sup>2</sup> With respect to the countries Cronbach's alpha coefficients are as follows: Lithuania .92, Greece .90, Turkey .91, and Ireland .93.

**Uncertainty Avoidance Index (UAI).** In our study 4 countries are compared that differ in the degree of UAI: the Greeks (112), Irish (35), Lithuanians (65), Turkish (85). The scores presented derive from a formula based on answers to three questions: 1) job stress; 2) rule orientation; 3) long-term career at the same organization. “All three are expressions of the level of anxiety that exists in a particular society in the face of an uncertain future” as argued by Hofstede and colleagues (2010, p. 191). Values of each of the questions contributed equally to the final score, which is ranging from 0 (weak UAI) to approximately 100 (strong UAI).

### **Processing and Analyzing the data.**

The dependent variable (DV) for this study was ICG-score, a continuous variable. Independent variables (IV) were of different types: continuous (e.g., (un)expectedness, duration of illness), dichotomous (e.g., practicalities, caregiver), and polytomous (e.g., relationship to the deceased). The analyses were executed using SPSS 25.0. DV scores were transformed as suggested by Tabachnick & Fidell (2013) using square root transformation, therefore the assumption of normality has been met. Background variables were analyzed using Independent sample t-tests, one-way ANOVA, and Pearson Correlation, where appropriate, in order to check for group differences of demographic characteristics regarding grief levels. The significant variables were used for the further Multiple Linear Regression (MLR) analysis.

In respect to the first hypothesis, MLR analysis has been applied in order to evaluate the added explained variance of (un)expectedness to the underlying variable as well as significant demographic and loss characteristics, in terms of grief levels. In order to use categorical predictors in MLR they were coded into dummy variables. (Un)expectedness has been added to each of the underlying, significant demographic, and loss variables separately, in turns. Subsequently, the significant predictors were combined into one model. In our main analysis,

hierarchical MLR was applied in order to evaluate the added predictive value of (un)expectedness to significant underlying variables in terms of ICG-scores (levels of grief). Eventually, the required assumptions were examined.

Furthermore, in order to examine the second hypothesis, countries were grouped into two groups regarding their level of uncertainty avoidance. To check whether there are background differences between groups, Chi-square test for independence was conducted. Finally, two-way ANOVA analysis has been used with the objective to evaluate the interaction and main effect between variables.

## Results

The general view of loss characteristics is as follows: 178 (66.4%) out of 268 participants denoted having experienced multiple losses, the most disturbing was chosen in order to answer further questions; the mean time since the loss was 24.5 months ( $SD = 14.14$ ); mean age of the deceased in years was 62.49 ( $SD = 24.15$ ); 68 (25.4%) participants have lost grandparent, 66 (24.6%), parent or step-parent, 38 (14.2%) friend, 26 (9.7%) child or step-child, and 52 (19.4%) other (unspecified category). The mean expectedness score was 2.28 ( $SD = 0.78$ ) on a 3-point scale – higher score denotes higher level of unexpectedness. A total of 77 participants (28.7%) were caregivers; with mean CRA score 58.54 ( $SD = 10.35$ ), the scale range is from 24 to 120, higher scores indicating stronger negative caregiving experience. Mean ICG score was 22.88 ( $SD = 13.65$ ), which suggests lower levels of grief as the cutoff point for substantial impairment is considered 25. For an extensive description of loss characteristics, see Appendix B.

### Preliminary analyses

Demographic and loss characteristics were tested for group differences in terms of ICG-scores. People who endured multiple losses had significantly higher grief levels ( $M = 4.70$ ,  $SD = 1.52$ ) in comparison to the group who did not ( $M = 4.24$ ,  $SD = 1.40$ ),  $t(266) = 2.35$ ,  $p = .019^3$ .

### Hypothesis 1

Simple linear regression showed that (un)expectedness significantly predicts ICG-score,  $F(1, 266) = 4.861$ ,  $p < 0.05$ . (Un)expectedness accounts for 1.8% of ICG variance with higher levels of unexpectedness predicting higher levels of ICG values. Next step was checking for underlying variables, religion, and multiple losses were tested for their predictive value together

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<sup>3</sup> The difference between religion groups were also significant,  $F(5, 262) = 2.60$ ,  $p < .05$ . Post-hoc comparison using Hochberg's GT2 test showed that the mean score for Muslims ( $M = 3.80$ ,  $SD = 1.60$ ) and Catholics ( $M = 4.71$ ,  $SD = 1.54$ ) was significantly lower. Nevertheless, it was not a significant predictor in the subsequent analysis (see Hypothesis 1).

with (un)expectedness. The hypothesis of some underlying variables being significant predictors when (un)expectedness is added to the model was not supported<sup>4</sup>.

The analyses were followed by sequential MLR. Results in detail are presented in Table 1. Model 1 (underlying variables without unexpectedness) results in 24.2% explained variance in grief levels,  $F(10, 257) = 8.21, p < .001$ . After entering (un)expectedness, the total explained variance by the Model 2 (underlying variables and unexpectedness) was 24.4%,  $F(11, 256) = 7.50, p < .001$ . (Un)expectedness explained the additional 0.2% variance, the change was small and insignificant,  $F \text{ change}(1, 256) = .54, p > .05$ . Investigation of the final model learns that only three variables were significant predictors: a chance to say goodbye (negative relationship), being a child of the deceased (positive relationship), and age of the deceased (negative relationship), the latter being the strongest predictor of the three. Exploring interaction of these significant predictors yielded no additional explanatory power.

Furthermore, a separate analysis was needed for testing the model where the Disrupted Schedule and Health Problems subscales were included, due to significant differences in sample sizes. The only significant variable was the Health Problems subscale,  $\beta = .25, p < .05$ . The addition of (un)expectedness (Step 2) did not improve the predictive value substantially,  $F \text{ change}(1, 88) = .09, p > .05$ . In this model Health Problems remained the only significant predictor,  $\beta = .25, p < .05$ . Note though that the results cannot be compared with the previous analysis, as the sample sizes differ drastically.

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<sup>4</sup> The statistics related of significant underlying variables, as tested in separate analysis: a chance to say goodbye  $\beta = -.16, p < .05$ ; natural anticipated cause of death  $\beta = -.17, p < .05$ ; 'other' cause of death  $\beta = .14, p < .05$ ; loss of a child/step-child  $\beta = .13, p < .05$ ; loss of a parent/step-parent  $\beta = .17, p < .01$ ; loss of a sibling/step-sibling  $\beta = .13, p < .05$ ; loss of a grand-child  $\beta = .27, p < .001$ ; age of the deceased  $\beta = .37, p < .001$ ; being a caregiver of the deceased  $\beta = .15, p < .05$ ; experiencing multiple losses in the past 4 years  $\beta = -.15, p < .05$ ; CRA subscale – disrupted schedule  $\beta = .24, p < .05$ ; CRA subscale – health problems  $\beta = .28, p < .01$ .

Table 1

The MLR analysis, including all the significant underlying variables (Model 1), and adding unexpectedness (Model 2).

<i>Grief level predicted by</i>	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Constant	6.65	.49		6.42	.58	
Goodbye	-.24	.16	-.13	-.26	.13	-.14*
Natural anticipated	-.36	.21	-.11	-.28	.23	-.09
Other cause of death	.22	.28	.05	.28	.29	.06
Relationship: parent	.56	.31	.11	.54	.31	.11
Relationship: child	.77	.23	.22**	.75	.23	.22**
Relationship: sibling	.90	.50	.10	.95	.50	.11
Relationship: grandchild	.16	.25	.05	.16	.25	.05
Age of the deceased	-.02	.00	-.36***	-.02	.00	-.36***
Caregiver	.06	.21	.02	.06	.21	.02
Multiple losses	-.25	.18	-.08	-.27	.19	-.09
(Un)expectedness				.10	.14	.05
<i>R</i> <sup>2</sup>		.24			.24	
$\Delta F$		8.21***			.54	
<i>F</i>		8.21***			7.50***	

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

## Hypothesis 2

Before conducting the analyses, countries were grouped into two categories: high levels of UAI - Greece (n=112) and Turkey (n=85), and relative low levels of UAI - Lithuania (n=65) and Ireland (n=35) (Hofstede et al., 2010). The groups were checked for relatedness to different background variables. 100% of Catholics sample were in the low UAI group, whereas Orthodox and Muslims were only in the high UAI levels group. The majority (75%) of the participants living in suburban areas were distributed among low UAI levels. Also, participants who were employed for wages were focused (67.2%) in the low UAI group, 'out of job and currently looking' participants were centered (100%) in the high UAI levels group.

A two-way ANOVA was conducted with UAI level and expectedness (1: expected, 2: more or less, 3: unexpected) as factors and on grief levels as dependent variable (see Table 2).

Table 2

*ICG scores M (SD) by (un)expectedness and UAI factors*

	(Un)expectedness			ICG-score total
	Yes	More or less	No	
Not high levels of UAI	23.92 (13.85)	22.83 (15.01)	25.03 (14.08)	24.17 (14.26)
High levels of UAI	18.97 (15.20)	18.57 (9.45)	24.88 (13.18)	21.50 (12.88)

A main effect for uncertainty avoidance levels was not found  $F(1, 262) = 2.70, p = .102$ , partial  $\eta^2 = .010$ . Whereas the main effect for (un)expectedness was significant  $F(2, 262) = 3.12, p = .046$ , partial  $\eta^2 = .023$ , but small, with more unexpectedness being associated with higher levels of grief. The expected interaction effect between levels of uncertainty avoidance and (un)expectedness was not found  $F(2, 262) = .91, p = .404$ , partial  $\eta^2 = .007$ .

It was further decided to explore whether underlying variables of (un)expectedness in interaction with Uncertainty Avoidance levels would provide further information, which proved to be insignificant.

## Discussion

In this study we investigated how perceived (un)expectedness in conjunction with its underlying variables is related to grief levels, and whether there are cultural differences regarding grief levels related to (un)expectedness. The study covers a list of pre-loss circumstances that are not changeable over time. The hypotheses presented were as follows:

*1) a chance to say goodbye, preparations prior to death, certain causes of death, untimeliness and caregiving experiences in conjunction with perceived unexpectedness predict levels of grief;*

*2) countries with high levels of uncertainty avoidance will be associated with a poorer bereavement outcome in instances of unexpected death whereas we do not expect to observe any significant differences in cases of expected death.*

According to our findings unexpectedness of loss did not predict worse bereavement outcome, when other conceptually related aspects were taken into consideration. This finding contrasts with previous studies where it was found that unexpectedness is a risk factor for higher levels of grief and/or other negative emotional impact (e.g., Burton et al., 2006; Caserta et al., 2013; Keyes et al., 2014; Stroebe et al., 2007). These studies, however, did not consider the other concepts that are strongly related to the anticipation of the event. In our study, when considered by itself, unexpected loss can also foresee worse bereavement outcome. A plausible explanation for the findings might be that unexpectedness is an overarching concept and does not explain additional variance, because its underlying dimensions cover its predictive value. Our subsequent findings possibly explain the construct of unexpectedness and its plausible profoundness.



We have further confirmed the need of a chance to say goodbye prior to one's death as stated in previous studies (Frost, Honeycutt, & Health, 2017; Gamino et al., 2000). This proves its importance in coping with a loss. Not having a chance to say goodbye represents a concept of unresolved issues which may evoke emotions of rumination, guilt, regret, or anger (Klingspon et al., 2015). However, it is rather related to expectedness, which poses the question, how to ameliorate the bereavement outcome for those who did not expect the loss. Sometimes closure can be reached after one's loss noting that a farewell post-loss can also improve bereavement adjustment (Schut, de Keijser, van den Bout, & Dijkhuis, 1991; Wijngaards-de Meij et al., 2008), thus this could be of notable interest for future research and clinical practice.

We have also concluded, that the relationship to the deceased, specifically losing a parent, can also predict poor bereavement outcome. The significance of this type of relationship to predict grief levels is in line with previous studies (Hayslip, Pruett, & Caballero, 2015; Luecken, 2003) confirming that losing a parent is a salient and influential experience as the relationship between a child and parent is essential in one's development. Nevertheless, other studies state that losing a child is the most impactful loss (Stroebe et al., 2007). It might be a cue to testing the quality and importance of a relationship rather than a formal kinship (Reed, 1998). The significant predictive value of age of the deceased is also in line with prior findings, stating that the death of a young person presents with greater difficulties during bereavement (Herberman Mash, Fullerton, & Ursano, 2013; Reed, 1993; Reed, 1998). Reed and Greenwald (1991) argue that the age of the lost person is a more important predictor of grief outcome than relationship, something we also concluded from our study.

The aforementioned variables (relationship to the deceased and age) form a dimension of untimeliness (Currier et al., 2009). For young adults losing a parent is an untimely experience,

whereas for a middle-aged person it is considered to be a normative event (Hayslip et al., 2015; Walter & McCoyd, 2009). The importance of untimeliness may lie in a cognitive explanation. A person has a certain scheme of how he or she appraises a situation, in this case an untimely death upsets the norm, thus a person endures cognitive dissonance (Festinger, 1962). Certain emotions derive grief, anxiety, as rational thinking (cognitions) shifts to emotional appraisal. Further, the anxiety and worry may also focus on oneself, changing the worldviews, that the world is not a safe place anymore (Janoff-Bulman, 1992). Whenever the schemes are challenged, the emotional appraisal contributes to the evaluation of the situation.

Additionally, our findings showed that a caregiver who experienced health problems during the course of caregiving, presented with higher levels of grief. These findings are in line with previous research, noting, that poorer physical health is associated with poor mental health during bereavement (Brazil, Bédard, & Willison, 2002; Tsai et al., 2016). This confirms that caregiving is a strenuous experience, exhausting a person of his coping resources (Große et al., 2017). Plausibly, a caregiver enduring physical problems obtains a lower response to emotional triggers threshold, thus less severe stimuli are needed to cause strong emotions.

With respect to the second hypothesis, we found, contrary to our expectations, that the countries with higher levels of uncertainty avoidance together with unexpectedness did not translate into worse bereavement outcomes. The failure to confirm this hypothesis could lie within the concept of unexpectedness, similar to the findings of the first hypothesis. The reason of a lack cultural differences might be beyond the perceived (un)expectedness which is possibly an overarching aspect of underlying dimensions. Further, the differences of cultures might be specific to grief, thus a questionnaire regarding beliefs related to grief according to cultural differences would possibly show different results. This could also show that the Western

countries tested do not present substantial differences with regards to grief. Finally, it could be important to focus on participants' generational differences, as due to globalization, the distinctions within generations might be eroding. Therefore, longitudinal studies would be needed to test the latter.

The study does not come without its limitations. Firstly, it is a retrospective design study where recall bias could be present. Secondly, the questionnaires were self-report and not controlled for socially acceptable answers. Thirdly, there was only a small number of participants that have discussed practicalities prior to the loss. It is unclear whether the small number is due to our sample characteristic or indicative of an avoidance of this topic, something that Banner and colleagues (2018) noted as well. Finally, cultural differences were not tested separately, assuming that participants from the same country have similar beliefs in terms of uncertainty avoidance. Future studies investigating differences among countries should focus on testing specific cultural beliefs in terms of respondent's grief.

To sum up, the results of our study suggest that how people perceive (un)expectedness of loss is an overarching predictor for grief levels. A chance to say goodbye and the untimeliness of a loss explain the unexpectedness's profoundness. Cultural differences with respect to bereavement requires a more detailed approach in further studies. Death is a harrowing event, which cannot be completely unexpected in the general picture. When evaluating the (un)expectedness it is important to take into consideration in what time span the loss was unexpected. We mourn how it happened: expectedly or unexpectedly, but most importantly we mourn that it happened in untimely manner and we did not have a chance to say goodbye.

## References

- Banner, D., Freeman, S., Kandola, D. K., Meikle, M., Russell, B. K. M., Sommerfeld, A., ... Schiller, C. J. (2018). Community perspectives of end-of-life preparedness. *Death Studies*. doi: 10.1080/07481187.2018.1446060
- Boerner, K., & Schulz, R. (2009). Caregiving, bereavement and complicated grief. *Bereavement Care*, 28, 10-13. doi: 10.1080/02682620903355382.
- Brazil, K., Bédard, M., & Willison, K. (2002). Correlates of health status for family caregivers in bereavement. *Journal of Palliative Medicine*, 5, 849-855. doi: 10.1089/10966210260499032
- Bruera, S., Chisholm, G., Dos Santos, R., Bruera, E., & Hui, D. (2015). Frequency and factors associated with unexpected death in an acute palliative care unit: Expect the unexpected. *Journal of Pain and Symptom Management*, 49, 822-827. doi: 10.1016/j.jpainsymman.2014.10.011
- Burton, A. M., Haley, W. E., & Small, B. J. (2006). Bereavement after caregiving or unexpected death: Effects on elderly spouses. *Aging and Mental Health*, 10, 319-326. doi: 10.1080/13607860500410045
- Carr, D., House, J. S., Wortman, C., Nesse, R., & Kessler, R. C. (2001). Psychological adjustment to sudden and anticipated spousal loss among older widowed persons. *Journal of Gerontology: SOCIAL SCIENCES*, 4, 237-248. doi: 10.1093/geronb/56.4.s237
- Caserta, M. S., Utz, R. L., & Lund, D. A. (2013). Spousal bereavement following cancer death. *Illness, Crisis, & Loss*, 21, 185-202. doi: 10.2190/IL.21.3.b

- Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2009). Assumptive worldviews and problematic reactions to bereavement. *Journal of Loss and Trauma, 14*, 181-195. doi: 10.1080/15325020802537153
- Festinger, L. Cognitive Dissonance. *Scientific American, 207*, 93-106. doi: 10.1038/scientificamerican1062-93
- Frost, J. K., Honeycutt, J. M., & Heath, S. L. (2017). Relational maintenance and social support in the aftermath of sudden and expected death. *Communication Research Reports, 34*, 326-334. doi: 10.1080/08824096.2017.1350573
- Gamino, L. A., Sewell, K. W., & Easterling, L. W. (2000). Scott and White grief study phase 2: Toward an adaptive model of grief. *Death Studies, 24*, 633-660. doi: 10.1080/07481180050132820
- Given C., Given B., Stommel M., Collins C., King S., & Franklin S. (1992). The Caregiver Reaction Assessment (CRA) for caregivers to persons with chronic physical and mental impairments. *Research in Nursing and Health, 15*, 271-283. doi: 10.1002/nur.4770150406
- Große, J., Treml, J., & Kersting, A. (2017). Impact of caregiver burden on mental health in bereaved caregivers of cancer patients: A systematic review. *Psycho-Oncology, 27*, 757-767. doi: 10.1002/pon.4529
- Hardy-Bougere, M. (2008). Cultural manifestations of grief and bereavement: A clinical perspective. *Journal of Cultural Diversity, 15*, 66-69.
- Hayslip, B., Pruett, J. H., & Caballero, D. M. (2015). The “How” and “When” of parental loss in adulthood: Effects on grief and adjustment. *OMEGA--Journal of Death and Dying, 71*, 3-18. doi: 10.1177/0030222814568274

- Hayslip, B., Ragow-O'Brien, D., & Guarnaccia, C. A. (1999). The relationship of cause of death to attitudes toward funerals and bereavement adjustment. *Omega*, *38*, 297-312. doi: 10.2190/M5E7-KAEU-KHUC-9G7C
- Herberman Mash, H. B., Fullerton, C. S., & Ursano, R. J. (2013). Complicated grief and bereavement in young adults following close friend and sibling loss. *Depression and Anxiety*, *30*, 1202-1210. doi: 10.1002/da.22068
- Hill, C. D., Thompson, L. W., & Gallagher, D. A. (1988). The role of anticipatory bereavement in older women's adjustment to widowhood. *The Gerontologist*, *28*, 792-796. doi: 10.1093/geront/28.6.792
- Hofstede, G., Hofstede G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*, 3<sup>rd</sup> Ed. New York, NY: McGraw-Hill.
- Jaaniste, T., Coombs, S., Donnelly, T. J., Kelk, N., & Beston, D. (2017). Risk and resilience factors related to parental bereavement following the death of a child with a life-limiting condition. *Children*, *4*, 96. doi: 10.3390/children4110096
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York, NY: The Free Press.
- Keyes, K. M., Pratt, C., Galea, S., McLaughlin, K. A., Koenen, K. C., & Shear, M. K. (2014). The burden of loss: Unexpected death of a loved one and psychiatric disorders across the life course in a national study. *The American Journal of Psychiatry*, *171*, 864–871. doi: 10.1176/appi.ajp.2014.13081132
- Klingspon, K. L., Holland, J. M., Neimeyer, R. A., & Lichtenthal, W. G. (2015). Unfinished business in bereavement. *Death Studies*, *39*, 387-398. doi: 10.1080/07481187.2015.1029143

- Lichtenthal, W. G., Neimeyer, R. A., Currier, J. M., Roberts, K., & Jordan, N. (2013). Cause of death and the quest for meaning after the loss of a child. *Death Studies, 37*, 311-342. doi: 10.1080/07481187.2012.673533
- Luecken, L. (2003). Long-term consequences of parental death in childhood: Psychological and physiological manifestations. In C. D Bryant (Ed.), *Handbook of death and dying* (pp. 397-416). Thousand Oaks, CA: Sage.
- Mancini, A., Prati, G., & Bonanno, G. A. (2011). Do shattered worldviews lead to complicated grief? Prospective and longitudinal analyses. *Journal of Social and Clinical Psychology, 30*, 184-215. doi: 10.1521/jscp.2011.30.2.184
- Meyer, W. U, Resenzein, R., Schützwohl, A. (1997). Toward a process of analysis of emotions: The case of surprise. *Motivation and Emotion, 21*, 251-274.
- Neimeyer, R. A., Prigerson, H. G., & Davies, B. (2002). Mourning and meaning. *American Behavioral Scientist, 46*, 235-251. doi: 10.1177/000276402236676
- Nijboer, C., Triemstra, M., Tempelaar, R., Sanderman, R., & van den Bos, G. A. M. (1999). Measuring both negative and positive reactions to giving care to cancer patients: Psychometric qualities of the Caregiver Reaction Assessment (CRA). *Social Science & Medicine, 48*, 1259-1269. doi: 10.1016/S0277-9536(98)00426-2
- Persson, C., Wennman-Larsen, A., Sundin, K., & Gustavsson, P. (2008). Assessing informal caregivers' experiences: A qualitative and psychometric evaluation of the Caregiver Reaction Assessment Scale. *European Journal of Cancer Care, 17*, 189-199. doi: 10.1111/j.1365-2354.2007.00833.x

- Prigerson, H. G., Masiejewski, P. K., Reynolds III, C. F., Bierhals, A. J., Newsom, J. T., ... Miller, M. (1995). Inventory of Complicated Grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research*, *59*, 65-79. doi: 10.1016/0165-1781(95)02757-2
- Reed, M. D. (1993). Sudden death and bereavement outcomes: The impact of resources on grief symptomatology and detachment. *Suicide and Life-Threatening Behavior*, *23*, 204-220. doi: 10.1111/j.1943-278X.1993.tb00180.x
- Reed, M. D. (1998). Predicting grief symptomatology among the suddenly bereaved. *Suicide and Life-Threatening Behavior*, *28*, 285-301. doi: 10.1111/j.1943-278X.1998.tb00858.x
- Reed, M. D., & Greenwald, J. Y. (1991). Survivor-Victim status, attachment, and sudden death bereavement. *Suicide and Life-Threatening Behavior*, *21*, 385-401. doi: 10.1111/j.1943-278X.1991.tb00576.x
- Ribeiro, J. D., Franklin, J. C., Fox, K. R., Bentley, K. H., Kleiman, E. M., Chang, B. P., & Nock, M. K. (2016). Self-injurious thoughts and behaviors as risk factors for future suicide ideation, attempts, and death: A meta-analysis of longitudinal studies. *Psychological Medicine*, *46*, 225-2236. doi: 10.1017/S0033291715001804
- Rosenblatt, P. C. (2007). Recovery following bereavement: Metaphor, phenomenology, and Culture. *Death Studies*, *32*, 6-16. doi: 10.1080/07481180701741228
- Saldinger, A., Cain, A., Kalter, N., & Lohnes, K. (1999). Anticipating parental death in families with young children. *American Journal of Orthopsychiatry*, *69*, 39-48. doi: 10.1037/h0080380
- Schulz, R., Mendelsohn, A. B., Haley, W. E., Mahoney, D., Allen, R. S., Zhang, S., ... Belle, S. H. (2003). End-of-life care and the effects of bereavement on family caregivers of



- persons with dementia. *The New England Journal of Medicine*, 349, 1936-1942. doi: 10.1056/NEJMsa035373
- Schut, H. A. W., de Keijser, J., van den Bout, J., & Dijkhuis, J. H. (1991). Post-traumatic stress symptoms in the first years of conjugal bereavement. *Anxiety Research*, 4, 225-234.
- Stroebe, M. S., Folkman, S., Hansson, R. O., & Schut, H. (2006). The prediction of bereavement outcome: Development of an integrative risk factor framework. *Social Science & Medicine*, 63, 2440-2451. doi: 10.1016/j.socscimed.2006.06.012
- Stroebe, M., & Schut, H. (1998). Culture and grief. *Bereavement Care*, 17, 7-11. doi: 10.1080/02682629808657425
- Stroebe, W., & Schut, H. (2001). Risk factors in bereavement outcome: A methodological and empirical review. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. A. W. Schut (Eds.), *Handbook of bereavement research: Consequences, coping and care* (pp. 349-371). Washington, DC: American Psychological Association.
- Stroebe, M., Schut, H., & Stroebe, W. (2007). Health outcomes of bereavement. *Lancet*, 370, 1960-1973. doi: 10.1016/S0140-6736(07)61816-9
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*, 6<sup>th</sup> Ed. Boston, MA: Pearson.
- Tsai, W. I., Prigerson, H. G., Li, C. Y., Chou, W. C., Kuo, S. C., & Tang, S. T. (2016). Longitudinal changes and predictors of prolonged grief for bereaved family caregivers over the first 2 years after the terminally ill cancer patient's death. *Palliative Medicine*, 30, 495-503. doi: 10.1177/0269216315603261

- Veloso, V. I., & Tripodoro, V. A. (2016). Caregivers burden in palliative care patients: A problem to tackle. *Current Opinion in Supportive and Palliative Care, 10*, 330-335. doi: 10.1097/SPC.0000000000000239
- Walsh, C. G., Ribeiro, J. D., & Franklin, J. C. (2017). Predicting risk of suicide attempts over time through machine learning. *Clinical Psychological Science, 5*, 457-469. doi: 10.1177/2167702617691560
- Walter, T. (2010). Grief and culture. *Bereavement Care, 29*, 5-9. doi: 10.1080/02682621003707431
- Walter, C. A., & McCoyd, J. L. M. (2009). *Grief and loss across the lifespan: A biopsychosocial perspective*. New York, NY: Springer.
- Waugh, A., Kiemle, G., & Slade, P. (2018). What aspects of post-traumatic growth are experienced by bereaved parents? A systematic review. *European Journal of Psychotraumatology, 9*. doi: 10.1080/20008198.2018.1506230
- Wijngaards-de Meij, L., Stroebe, M., Stroebe, W., Schut, H., van den Bout, J., van der Heijden, P. G. M., & Dijkstra, I. (2008). The impact of circumstances surrounding the death of a child on parents' grief. *Death Studies, 32*, 237-252. doi: 10.1080/07481180701881263
- Williams, A. L., & McCorkle, R. (2011). Cancer family caregivers during the palliative, hospice, and bereavement phases: A review of the descriptive psychosocial literature. *Palliative and Supportive Care, 9*, 315-325. doi:10.1017/S1478951511000265

## Appendix A

Demographic characteristics of the sample ( $N = 268$ )

Demographic variables	
Gender, $N$ (valid %)	
Female	226 (84.6)
Male	41 (15.4)
Age in years, $M$ ( $SD$ ), range	35.28 (13.30), 18-82
Nationality, $N$ (valid %)	
Lithuanian	87 (32.5)
Greek	78 (29.1)
Turkish	51 (19.0)
Irish	52 (19.4)
Religion, $N$ (valid %)	
Catholic	98 (36.6)
Orthodox Christian	61 (22.8)
Muslim	36 (13.4)
Unaffiliated	30 (11.2)
Non-religious	30 (11.2)
Other	11 (4.1)
Educational level, $N$ (valid %)	
Lower than high school	2 (0.7)
Vocational education	10 (3.7)
High School Diploma	69 (25.7)
Bachelor's Degree	103 (38.4)
Master's Degree	79 (29.5)
Doctoral Degree	5 (1.9)
Living arrangements, $M$ ( $SD$ ), range	2.99 (1.3), 1-7
Marital status, $N$ (valid %)	
Single, never married	90 (33.6)
Married or Domestic Partnership	120 (44.8)
Widowed	8 (3.0)
Divorced or Separated	9 (3.4)
In a relationship but not living together	31 (15.3)
Area one lives in, $N$ (valid %)	
Urban	205 (76.5)
Suburban	32 (11.9)
Rural	31 (11.6)
Employment, $N$ (valid %)	
Employed for wages	128 (47.8)
Self-employed	34 (12.7)
Out of work and looking for work	12 (4.5)
Homemaker	14 (5.2)
Student	65 (24.3)
Retired	11 (4.1)
Unable to work	3 (1.1)

## APPENDIX B

Loss characteristics of the sample ( $N = 268$ )

Loss characteristics		
Multiple losses, $N$ (valid %)		
Yes		178 (66.4)
No		90 (33.6)
Time since loss in months $M$ ( $SD$ ), range		24.5 (14.14), .16 - 48
Age of the deceased $M$ ( $SD$ ), range		62.49 (24.15) 0-99
Gender of the deceased, $N$ (valid %)		
Female		102 (38.2)
Male		165 (61.6)
Type of relationship, $N$ (valid %)		
Spouse		8 (3.0)
Partner		2 (0.7)
Parent/ step parent		26 (9.7)
Child/ step child		66 (24.6)
Sibling/ step sibling		8 (3.0)
Friend		38 (14.2)
Other		52 (19.4)
Grandchild		68 (25.4)
Cause of death, $N$ (valid %)		
Accident		25 (9.3)
Homicide		2 (0.7)
Suicide		21 (7.8)
Natural sudden		94 (35.1)
Natural anticipate		92 (34.3)
Other		34 (12.7)
Prior suicide attempts, $N$ (valid %)		
Yes		3 (20.0)
No		12 (80.0)
Duration of illness in years, $M$ ( $SD$ ), range		2.17 (3.57) .008 - 30
Expectedness of loss, $M$ ( $SD$ ), range		2.28 (0.78) 1-3
Chance to say goodbye, $M$ ( $SD$ ), range		2.40 (0.78) 1-3
Discuss practicalities, $N$ (valid %)		
Legal issues		
	Yes	31 (11.6)
	No	237 (88.4)
Financial matters		
	Yes	41 (15.3)
	No	227 (84.7)
Funeral arrangements		
	Yes	48 (17.9)
	No	220 (82.1)
Children custody		
	Yes	8 (3.0)
	No	260 (97.0)
Other important issues		
	Yes	22 (8.2)
	No	246 (91.8)

Caregiver, <i>N</i> (valid %)	
Yes	77 (28.7)
No	191 (71.3)
Duration of caregiving in months, <i>M</i> ( <i>SD</i> ), range	33.12 (54.89), .25 - 216
Was it right before death, <i>N</i> (valid %)	
Yes	44 (65.7)
No	23 (34.3)
Caregiver's Burden, <i>M</i> ( <i>SD</i> ), scale range, sample range	58.54 (10.35), 24 - 120, 33-85
Disrupted schedule	15.19 (4.82), 5-25, 5-24
Financial problems	7.38 (1.75), 3-15, 3-12
Lack of family support	9.04(3.52), 5-25, 5-20
Health problems	9.75(3.15), 4-20, 4-20
Self-esteem	25.04 (4.19), 7-35, 15-33
Grief levels, <i>M</i> ( <i>SD</i> ), scale range, sample range	22.88 (13.65), 0-76, 1-65

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