# Differences in Grieving: A Corpus Linguistics Study of Grief from Self-Focused Mortality Versus Other-Focused Mortality

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#### Abstract

This study aimed to perform a contextual analysis around the most salient words concerning the processing of one's own demise to distinguish between selffocused and other-focused grief. The study examined the discourse around mortality through corpus linguistic analyses involving the keyness and collocations of keywords in memoirs written by those processing the death of a loved one versus memoirs written by individuals dying of terminal illness. The corpus linguistics software AntConc was used to perform keyness analyses, and the software #Lancsbox 6.0 was utilized to perform collocation analyses. Keyness was determined using the log likelihood ratio test for frequency and dispersion. Strength of collocation was measured by means of the log Dice calculation. The top positive keywords distinguishing self-focused memoirs from other-focused memoirs were found to be "member," "despair," and "uncertainty." The most infrequent keyword in self-focused grief memoirs was the word "grief," suggesting disenfranchisement of the expression of sadness. The collocates of "despair" were "anger," "exist," and "fear," denoting existential apprehension as a discourse theme. The words "future," "life," and "cancer" were found to be the top collocates for the positive keyword "uncertainty," indicating a sense of unpredictability about life and worsening terminal illness. Collocations of the words "death," and "grief" showed burstiness, implying urgency of the message. The complex emotions around existential ambiguities concerning the loss of one's own life along with the muting of the expression of grief are discussed in terms of clinical and research implications.

*Keywords:* AntConc, Lancsbox, keyness, collocation, grief, terminal illness, mortality

#### Introduction

The inevitability of death and the grief that ensues are universal human experiences. Grief is experienced in different ways and expressed through different styles of grieving. Grief can result from losing a loved one or from knowing that

one's own life has an imminent end due to terminal illness. Despite variations in causes and expressions of grief, the counseling field has approached bereavement through a unidimensional lens. This study aimed to differentiate grief due to the loss of a loved one and grief about one's own impending death to help define nuances within the area of grief and bereavement.

The purpose of this study was as follows. First, the study aimed to fill a gap in bereavement research, exploring questions about the expression of grief that have not been previously examined. While prior research using the corpus linguistics methodology has addressed aspects of bereavement (Geisler & Dykeman, 2021), there is no research that has looked at bereavement through a corpus linguistics lens to distinguish between grieving the loss of a loved one versus grieving the loss of one's own life. A second purpose of this study was to produce knowledge that could potentially disrupt current practice. Counseling practice still uses broad brushstrokes to capture the essence and treatment of grief. There is little understanding about the differences in grief and the grieving process when grappling with one's own mortality versus coming to terms with the mortality of loved ones. The results of this research could enhance counselors' understanding of bereavement, leading to practices within the therapy session that better fit the needs of a grieving individual.

In examining the literature on grief, five themes emerged: (a) important terminology, (b) what is known about writing about one's own death versus the death of a loved one, (c) what is known about word usage and writing about one's own death, (d) what is known about keyness and writing about one's own death, and (e) what is known about collocation and writing about one's own death. After these themes are examined, the research questions are presented.

Certain key terms are important to fully understand the literature on grief. Grief can be defined as a normal and expected response to a significant loss (Worden, 2009). For this study, the term "about one's own death" is operationalized as describing an individual who has a terminal diagnosis with a prognosis of imminent death. The term "death of a loved one" means the death of a family member or significant individual in the grieving person's life.

In the counseling field, there is much that has been written by psychotherapists processing death. This large body of work falls into one of three areas: (a) writing by therapists dealing with their own imminent deaths (Feinsilver, 1998; Sussman, 1995; Yalom, 2008), (b) therapists writing about the death of a loved one and its impact on therapy (Callahan & Dittloff, 2007; Cowen-Jensen, 2007), and (c) therapists writing about working with older patients in palliative care (Atkins & Loewenthal, 2004; Steel, 2021). Assessing for differences in the perception and processing of different avenues of grief by therapists has the potential to impact grief therapy within the counseling session. The greater the

understanding counselors have on processing different avenues of grief, the better clinicians can understand and address the needs of bereaved clients.

Research on mortality has focused on multiple issues concerning death, including behaviors surrounding grieving and perceptions about what is a good way to die. Research looking beyond behavior and at the linguistic expressions of grief are few. One study described bereavement discourse by examining online COVID-19 memorials and found that the language of grief reflects the relationships between the bereaved and decedents (McGlashan, 2021). Research on language use of depressed adolescents and how they express distress revealed that their language choices reflect personal and social contexts in which their depression is situated (Harvey, 2012). For example, two recurring constructs were found: "I am depressed" and "I have depression." Examining language use around the expression of grief stemming from different types of loss and bereavement may provide a clearer understanding of the process of grief.

There are not a lot of keyness analyses and writing about one's own death. One study looked at the way individuals reported their experiences with terminal illness. Age differences were found in terms of how individuals struggled with accepting the shock and pain of facing death, with younger patients being less accepting of their reality (Maci, 2021). Similarly, Maci found that gender differences conformed to gender stereotypes when it comes to grief. Descriptive differences in language use between grieving the loss of one's own life versus grieving the loss of a loved one may shed light on differences in the grieving process, which could pave the way for clinicians to better address such grief.

There are no collocation analyses of writing about one's own death. However, research examining different grieving styles (intuitive versus instrumental) has found differences in node words and their collocates (Geisler & Dykeman, 2021). The authors analyzed clinical vignettes of different grieving styles and found that the most frequently used words of intuitive grievers differ from those of instrumental grievers. In addition, collocates of emotion characterized the language of instrumental grievers, while collocates indicating intensity were characteristic of intuitive grievers. Further research examining collocates may shed light on differences between self-focused grief and other-focused grief, providing a greater understanding of the grieving process.

Given the aforementioned gaps in the literature regarding the differences in processing the death of a loved one versus processing one's own imminent death due to a terminal illness, seven questions were designed to guide the present study concerning a corpus of memoirs written by people processing the death of a loved one or processing their own imminent death. These seven questions were:

- RQ1: By their frequency of use, what words distinguish memoirs concerning one's own impending death from memoirs about the death of a loved one?
- RQ2: By their infrequency of use, what words distinguish memoirs concerning one's own impending death from memoirs about the death of a loved one?
- RQ3: What is the word network of the word that most distinguish memoirs about one's own impending death from memoirs about the death of a loved one?
- RQ4: What is the word network of the word that secondly most distinguish memoirs about one's own impending death from memoirs about the death of a loved one?
- RQ5: What is the word network of the lemma "illness" in memoirs about one's own impending death?
- RQ6: What is the word network of the lemma "death" in memoirs about one's own impending death?
- RQ7: What is the word network of the lemma "grief" in memoirs about one's own impending death?

#### Method

## Design

The study employed a synchronic corpus linguistic design (Weisser, 2016). The corpus was composed of two types of memoirs: those about the death of a loved one and those about one's own impending death due to terminal illness. The linguistic variables for this study included word frequency, word dispersion, word level of collocate association, and death-related terms including the stems of illness, death, and grief. The level of measure for all variables was continuous. The unit of analysis was words (tokens).

An a priori power analysis using G\*Power 3.1 was conducted to determine minimum sample size (Faul et al., 2009). The planned analysis involves a form of the  $\chi 2$  test and thus the Cohen's w inputted as the effect size. The Cohen's w used in this analysis was drawn from the average of this metric in Table 2 of a study on PTSD (Zilcha-Mano et al., 2022). The G\*Power 3.1 input parameters were: (a) test family =  $\chi 2$  tests; (b) statistical test = goodness-of-fit tests: contingency tables; (c) power analysis = compute required sample size - given  $\alpha$ , power, and effect size; (d) effect size w = .125; (e)  $\alpha$  error probability = .001; (f) Power (1- $\beta$  error probability) = 0.80; and (g) degrees of freedom = 1. The G\*Power 3.1 output parameters were: (a) total sample size = 1093 and (b) actual power = 0.80.

#### **Study Corpus**

## Register, Scope, and Sources

The register for the corpus was published nonfiction writing, and the subregister was memoirs processing grief and loss because of terminal illness. In terms of scope, the corpus contained memoirs with a focus on individuals processing their own imminent death. The scope was limited to books published within the years 2000 and 2022. The sources for the memoirs were e-books found through a Google search for "best books on grief" and "best books on bereavement." Memoirs were selected if they pertained to processing the grief and loss because of one's own imminent death due to terminal illness. An additional criterion for inclusion was the book being reviewed on a mainstream media outlet such as the *New York Times*. All chosen books were reviewed on one or more of the following sites: the *New York Times*, *Washington Post*, NPR, *Publisher's Weekly*, *Kirkus*, the *Guardian*, or *New Yorker*. A final list of eight memoirs was included in the corpus. Of the eight books in the corpus, six were written by women and two by men. The terminal diseases afflicting the writers were cancers of the brain, breast, lung, ovaries, and colon, and ALS.

## **Preprocessing**

The software program Kindle Converter v3.19.918.386 (2019) was used in this study to convert .kfx files to plain text files. After preprocessing, the corpus contained 491,626 tokens (words).

# **Reference Corpus**

## Register, Scope, and Sources

The register for the reference corpus was published nonfiction writing, and the subregister was memoirs processing grief and loss because of the death of a loved one. In terms of scope, the reference corpus contained memoirs with a focus on individuals grappling with the loss of a loved one. The scope of the reference corpus was limited to books published within the years 2000 and 2022. The sources for the memoirs were e-books found through a Google search using the same process as the search for the corpus. Memoirs were selected if they pertained to processing the grief and loss due to the demise of a loved one. A final list of 10 memoirs was included in the corpus. The study corpus contained 500,863 tokens (words), and the reference corpus comprised 625,637 tokens (words).

# **Preprocessing**

Preprocessing was the same as for the study corpus.

#### Measures

#### Node word

A node word is a word, phrase, or grammatical structure of interest (Brezina et al., 2018). Node words are central to understanding the frequency, word positioning, and linguistic relationships among words. Node words for both types of memoirs were chosen to explore frequency and adequate dispersion. Node words related to grief and death were chosen, including (a) illness, (b) death, and (c) grief.

# Keyness

Keyness is a measure of frequency most associated with keywords, or "words which occur with unusual frequency in a given text" (Scott, 1997, p. 236). Keywords appearing at a high frequency as compared to a reference corpus offer insights about how a discourse may be structured and how it may differ from the reference corpus.

**Positive Keyness.** Words in a target corpus that appear with unusually high frequency compared to the reference corpus demonstrate positive keyness (Weisser, 2016).

**Negative Keyness.** An unusually low frequency of occurrence of words in a target corpus compared to a reference corpus indicates negative keyness (Weisser, 2016).

#### **Collocation**

Collocation is defined as the methodical co-occurrence of words in a text (Brezina et al., 2018). A collocate is a word that appears in high frequency with a node word and together with the node word influences the meaning and focus of a text. Collocations can be modulated in terms of the collocation window or the span of words around the node, as well as the directionality (before or after). For this study, the window parameters of seven left and five right were used.

# Collocation Graph (Graphcoll)

A collocation graph is a diagrammatic representation between the node word and its collocates (Brezina, 2018). The graph visually identifies three distinct dynamics: (a) the association strength between the node word and its collocates as indicated by the distance from the node; (b) the frequency of the collocate as indicated by the colored shading of the collocate; (c) the positioning of the collocate in the text, where the positioning of the collocate in the graph indicates positioning in the text (Brezina, 2018).

#### Frequency

There is a long tradition of conducting frequency measures in corpus linguistics (Aarts, 1971). Frequency refers to a relative measure based on the size of

the corpus. Frequency can shed light on the importance of a collocate. One can track the frequency with which a collocate occurs with a node word as opposed to occurring frequently beside other words. Descriptive statistics for frequency measures are typically in terms normalized frequencies where the word's occurrence is represented in relation to the total number of words in the corpus (Gabrielatos, 2018).

#### Mutual Information (MI)

The mutual information statistic measures the construct of exclusivity of collocates; it is the relationship between the number of times collocates are seen together as opposed to separately in a corpus (Gablasova et al., 2017).

# Log Dice

Log dice is an association measure of collocation that measures the strength of the association between the node and collocate and highlights collocates that are exclusively in each other's company but are not necessarily rare (Brezina, 2018).

# **Apparatus**

For RQs 1–2, an R package for managing and analyzing textual data named quanteda was used to conduct the keyness analyses (Benoit et al., 2018). In terms of RQs 3–7, the GraphColl module of #LancsBox was used to analyze and graphically present the word networks of the node words of interest (Brezina et al., 2018).

# **Data Analysis**

In terms of RQs 1–2, the 10 words that most distinguish the study corpus from the reference corpus in terms of frequency and infrequency are reported. The statistical analysis employed with these procedures is the log-likelihood ratio test ( $G^2$ ). The effect size used for these analyses was the binary log ratio (LR). LR is a metric where each additional point represents a doubling of the ratio such that it would be twice as common in the study corpus compared to the reference corpus if LR = 1 (Hardie, 2014). For RQs 1–2, the preset alpha was at p < .001. Concerning RQs 3–7, the #LancsBox setting for collocation analysis were similar to the parameters set forth by Baker (2016): span: 5 right, 7 Left; statistics: 03 MI; thresholds - statistic value MI: 6; collocation frequency: 2; type: type; filters: none.

#### **Results**

Regarding RQ1, the keywords distinguishing self-focused memoirs from other-focused memoirs are displayed in Table 1. The top three keywords were "member," "despair," and "uncertainty." For RQ2 that examined negative keywords

(by infrequency of use), the results are indicated in Table 2, with the top infrequent word being "grief." In reference to RQs 3-4 that looked at collocates of the words "member," "despair," and "uncertainty," the list of the top 10 collocates for each word are displayed in Tables 3-5 along with the collocation graphs in Figures 1-3. Results of RQs 5-7 that examined the collocates of the lemmas "death," "illness," and "grief" are indicated in Tables 6-8 and Figures 4 to 6.

#### Discussion

The central aim of this study was to explore self-focused grief through a corpus linguistic analysis of memoirs focused on grief. The study examined both the aboutness (keyness) of self-focused memoirs through frequency and dispersion analyses of word use, as well as contextual analyses (collocations) of salient words and words related to death and grief. RQs 1–2 examined positive keywords (most frequent) and negative keywords (most infrequent), respectively. RQs 3–4 further explored the contextual environments of the two most frequent words determined by the results of RQ1. RQs 5–7 investigated the contextual use of the lemmas "death," "grief," and "illness."

Regarding RO1, an examination of the top 20 words revealed themes in the discourse of self-focused grief. The first observation of note was the presence of feeling-related nouns indicating an effort to come to terms with death such as "despair," "uncertainty," "exhaustion," and "burden." A contextual examination of these words revealed that despair and uncertainty were written about in the context of the writers' uncertain futures, living with a terminal illness, and medical risks. Similarly, exhaustion was used in the context of being an inescapable treatment symptom. The word "burden" was used predominantly in the sense of being a burden on family because of disease. A second theme that emerged was through adjectives used to describe salient characteristics of the writers' experience with illness. The words "complex," "greatest," and "severe" described aspects of being terminally ill. For example, "complex" was used predominantly to qualify medical operations and procedures related to the writers' diagnoses. The word "complex" was also used to describe emotions and cognitions surrounding illness. The most salient use of the adjective "greatest" was in the context of "greatest challenge of my life" and "greatest fears" when describing the effort to survive terminal illness. The word "severe" was used overwhelmingly as a descriptor of a variety of symptoms such as constipation, diarrhea, and pain. An additional theme that emerged was that of spirituality and meaning making. The word "meaningful" and "pray" were used at three times the frequency as in the reference corpus. The word "pray" was used mostly in the context of appealing to a higher power; the word "meaningful" was used most to modify the noun "life," along with other nouns such as "projects," "deeds," and "moments." Taken together, the top keywords in the study corpus are concerned with bracing terminal illness. The thematic analysis of the discourse revealed physical, emotional, and existential reflections on the repercussions of terminal illness.

In reference to RO2 that explored the infrequency of word use, the word "grief" was found to be the top negative keyword. This word was present in all 10 books of the reference corpus and in seven of eight of the study corpus books. However, it was used at a frequency six times greater in the reference corpus than in the study corpus. An examination of the contextual use of the word in the study corpus revealed that of 55 instances of its presence, only 11 were used in reference to grief about one's own demise (self-focused grief). The overwhelming majority of its usage was in the sense of grieving the loss of a loved one. Thus, not only was "grief" used in a lower capacity in the study corpus than in the reference corpus, but its use was predominantly referencing other-focused grief. This indicates that in the discourse around mortality, self-focused grief was a theme that was explored to a lower extent than other-focused grief. One explanation for this finding is that grief is a disenfranchised emotion in the context of one's own mortality. A second explanation could be that the discourse around the study corpus is influenced by commercial needs of producing a marketable "uplifting" product. A third explanation is that writers viewed the memoirs they wrote as legacies they were leaving behind and were thus driven to remain positive and not focus on their own grief. Using Occam's razor to choose the best explanation, the most parsimonious interpretation that entails no assumptions is the first.

Regarding RQs 3-4 (collocates of strongest and second strongest keywords), there was a three-way tie between "member," "despair," and "uncertainty." The word networks surrounding these three words are addressed one at a time. In terms of the keyword "member," the strongest collocates were "species," "board," "class," and "family," indicating a constellation of terms around classification. One explanation is that the term "member" was used in a functional capacity denoting the term "person" and was thus linked to several grouping terms. However, "member" was a positive keyword found predominantly in the selffocused grief memoirs, and the reasoning does not explain why this type of usage did not occur in the reference corpus of other-focused grief books. An alternative explanation for the salience of terms around categorization in the memoirs on selffocused grief is that belongingness may have been an underlying theme in selffocused grief narratives. Support for this interpretation comes from research where over 70% of terminally ill patients who rated the importance of end-of-life issues found that the presence of family, not dying alone, sharing time with friends, and resolving unfinished business with family and friends were very important (Steinhauser et al., 2000).

Concerning the keyword "despair," the three strongest collocates were "exist," "anger," and "fear," denoting a theme of existential apprehension. Another explanation for the emotions of anger and fear collocating with despair is that emotions were talked about collectively in the text. This interpretation does not have explanatory adequacy regarding the presence of the word "despair" having a greater presence in the study corpus compared to the reference corpus. Steinhauser

et al. (2000) offered support for the interpretation on existential angst in their finding that being free of pain, being free of anxiety, feeling prepared to die, and believing that family is prepared for the individual's death were rated as very important factors by the majority of end-of-life patients.

The words "future," "life," and "cancer" were the strongest collocates for the keyword "uncertainty." These collocates portray a preoccupation with the unpredictability of one's life prospects, especially as it relates to the disease worsening. Research on the anticipatory grief felt by terminally ill patients supports this notion of grappling with ambiguity. Terminally ill patients were found to manifest grief over losses in independence and functioning, hopes about their future, and their roles and identities professionally and with family to name a few (Hottensen, 2010).

Taken together, the top positive keywords in the study corpus (member, despair, uncertainty) and their strongest collocates denote themes of belongingness and existential fears fueled by the unpredictability of life and of the possibility of terminal illness spreading. These keywords and their contextual elaborations converge on the idea that self-focused grief may be a complex emotion comprising elements of despair, anger, and fear. In addition, processing one's own mortality due to terminal illness entails coming face to face with existential ambiguities and an unpredictable future.

RQs 5–7 pertained to collocational analyses of three words chosen a priori as worthy terms to explore—namely, "illness," "death," and "grief." The strongest collocates for the word "illness" were "terminal" and "fatal." These words depict a theme of incurability and lethality. The focus of the memoirs in the study corpus was the mortality of the writers due to an irremediable illness. Thus, not surprisingly, the narrative around the word "illness" focused on the immutability of the disease.

The words "death" and "grief" are addressed together as they evinced a unique linguistic phenomenon. The three strongest collocates of "death" were "death," "life," and "dying. The three strongest collocates of "grief" were "grieve," "grief," and "gray." Thus, both "death" and "grief" demonstrated self-collocation. The term *burstiness* is used to describe this propensity of topical words to occur frequently in close proximity to one another—i.e., in bursts (Pierrehumbert, 2012). There are two possible reasons underlying this finding of self-collocation. One explanation is that the burstiness of "grief" and "death" may simply be a function of the words' semantic typologies as increased burstiness is correlated with the greater permutability of some nouns (Altman, 2009). A second explanation looks beyond intrinsic linguistic properties of the words and evokes characteristics of the discourse. The self-collocation of "grief" and "death" may be a manifestation of lexical cohesion where collocation was used to further the movement of the discourse (Morley, 2006). This explanation is more plausible as there is evidence of

social motivations driving self-collocation. For example, a study examining a range of jihadist narratives found that instances of the burstiness of words related to jihadist ideology either increased or decreased when moving from fringe to moderate to extremist writing (Brooks & McEnery, 2020).

The question of what social motivations drove self-collocation of keywords in these illness narratives warrants comment. There is extensive linguistic evidence that the repetition of sounds or words or phrases in oral and written communication serve specific discourse purposes (Norrick, 1987). Self-collocations of the words "grief" and "death" in these mortality narratives could imply a sense of urgency and increased intensity in the message. An interesting paradox is that the top negative keyword (grief) evinced burstiness. This indicates that despite the memoir writers' decision to not focus on grief, their discourse belies this choice. There appears to be a sense of persistence and priority surrounding the words "grief" and "death" as indicated by their repetition. Repeating linguistic forms is known to produce the effect of increasing the illocutionary force (the speaker's intention) and the emphasis and persuasion of the speaker (Hsieh, 2011). The implications of this covert urgency are relevant to the counseling profession.

There are a few limitations to this study and avenues for future research that should be considered when interpreting the results. First, in terms of generalizability of the findings, the study and reference corpuses are representative of a narrow demographic comprising mostly educated women, many of whom were in a writing-related profession. While the collocation analyses of this study offer robust results, further research with writings from individuals spanning a larger range of demographics are necessary to extrapolate the findings widely. A second limitation concerns confounding cultural effects on attitudes toward mortality. While most writers in this study came from western cultures, two writers were of Asian descent. Individualistic and collectivist cultures demonstrate broad differences in attitudes toward death with the former being more invested in striving for symbolic or literal immortality and the latter having a more holistic attitude, allowing for the existence of both "good" and "bad" (Ma-Kellams & Blascovich, 2012). While this research has identified salient attitudes toward one's own death, future research needs to differentiate cultural nuances. Finally, another limitation concerns the influence of the publication industry on the discourse around mortality. The question of whether published, bestseller writing aimed at selling books would differ from, for example, personal journaling meant for no outside audience is an important notion to investigate in future research. Despite these limitations, this study offers a preliminary glimpse into the processing of one's own death, which has significance for the counseling profession.

Several clinical implications can be drawn from the results of this study for counselors and counselor educators. On a macro level concerning the discourse around mortality, the top keyword results of RQ1 demonstrate that counselors need to be aware of the motif of physical, emotional, and existential concerns of

individuals with terminal illness. Similarly, the collocates identified in RQs 3–4 indicate a focus on belongingness and existential fears driven by the possibility of terminal illness spreading and the unpredictability of life. An awareness of these themes among counselors-in-training would enhance the guided exploration of issues related to mortality in the therapeutic space. In addition, end-of-life practitioners would benefit from continuing education trainings that address these themes so that they can facilitate conversations around the notion of "a good death" (Krikorian et al., 2020).

Similarly, the results of RQ2 showed a lower use of the word "grief," indicating possible disenfranchisement of the expression of sadness. That the topic of death in western cultures is taboo and evokes emotions of fear and shame is well documented (Thornton, 1997). However, there is an increasing awareness of this discomfort and an emerging impetus among health care professionals to change attitudes and embrace openness in mortality-related discussions (Chu, 2019). This study provides linguistic evidence to address grief head on and legitimize the discussion of emotions around end-of-life issues. Counselors can use these results to initiate conversations around reactions to terminal illness and the sentiments that ensue.

The findings of RQs 6–7 that demonstrated the burstiness of the words "grief" and "death" point to discourse dynamics of urgency and earnestness in mortality narratives. This emphasis, juxtaposed with the low usage of the word "grief" in memoirs about one's own mortality, portrays a dire need by counselors to encourage and privilege conversations around death and the feelings they evoke. This research also suggests that professionals working with individuals at the end of life be made aware of the importance of giving voice to topics and emotions that the larger culture may be discouraging.

Finally, on a micro level of discourse analysis, this research points to a possible constellation of emotions around the processing of one's own death—namely, feelings of despair, anger, fear, uncertainty, and grief, as well as existential ambiguity. These emotions may derive from multiple avenues of an individual's life. For example, there are psychological repercussions to one's identity due to chronic illness (Karnilowicz, 2011). Illness is also a personal experience that varies from individual to individual (Hydén, 1997). In addition, pain that often accompanies terminal disease is difficult to assess and describe (Padfield & Zakrzewska, 2017). Given the complexity of factors around chronic and terminal disease, having an emotional heuristic to begin exploring the process of coming to terms with a fatal illness is a valuable tool for counselors.

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**Table 1**Positive Keyness Results (RQ1)

	Frequency				Dis	persion		
Word	Study	Ref.	G2	Decile	Study	Ref.	G2	Decile
member	22	5	11.84	9	8	3	15.67	9
despair	28	13	11.84	9	8	3	9.46	9
uncertainty	22	10	11.84	9	8	3	7.68	9
cells	76	8	9.45	9	8	4	79.78	9
standard	37	6	9.45	9	8	4	32.28	9
complex	30	15	9.45	9	8	4	8.99	9
exhaustion	32	18	9.45	9	8	4	7.71	9
diagnosed	110	8	7.41	9	8	5	129.24	9
symptoms	68	19	7.41	9	8	5	41.26	9
greatest	43	11	7.41	9	8	5	28.05	9
matters	43	15	7.41	9	8	5	21.04	9
clinic	51	22	7.41	9	8	5	19.20	9
meaningful	21	6	7.41	9	8	5	12.50	9
fortune	28	11	7.41	9	8	5	11.93	9
access	24	9	7.41	9	8	5	10.82	9
pray	21	7	7.41	9	8	5	10.79	9
severe	24	10	7.41	9	8	5	9.47	9
brief	32	17	7.41	9	8	5	8.61	9
lifetime	27	14	7.41	9	8	5	7.59	9
burden	29	16	7.41	9	8	5	7.26	9

**Table 2**Negative Keyness Results (RQ2)

	Frequency				Disp	persion		
Word	Study	Ref	G2	Decile	Study	Ref.	G2	Decile
grief	55	322	154.65	9	7	10	1.70	8
father	302	735	103.03	9	7	10	1.70	8
boy	43	173	57.58	9	7	10	1.70	8
wore	20	116	55.29	9	5	10	5.64	9
tree	41	145	40.81	9	7	10	1.70	8
cat	10	70	38.26	9	4	10	7.98	9
grace	20	95	37.90	9	4	10	7.98	9
yellow	29	108	32.61	9	7	10	1.70	8
knees	7	54	31.39	9	5	10	5.64	9
drunk	9	54	26.43	9	5	10	5.64	9
shoes	27	94	25.87	9	6	10	3.56	9
girl	85	199	25.23	9	7	10	1.70	8
christmas	68	168	24.42	9	7	10	1.70	8
town	75	179	23.87	9	7	10	1.70	8
boxes	11	56	23.87	9	3	10	10.69	9
ran	49	133	23.84	9	7	10	1.70	8
pair	21	78	23.47	9	7	10	1.70	8
sleeping	24	82	21.96	9	7	10	1.70	8
downstairs	12	56	21.95	9	4	10	7.98	9
breakfast	12	56	21.95	9	6	10	3.56	9

**Table 3**Collocates of the Node Word "Member" (RQ3)

	Frequen	су		
Collocate	of Collocation	in Corpus	Log Dice	MI3
species	2	16	10.8	13.4
board	2	37	10.1	12.2
class	2	58	9.7	11.6
family	5	393	8.6	12.8
phone	2	159	8.5	10.1
made	3	434	7.8	10.4
i'd	2	302	7.7	9.2
says	2	328	7.5	9.1
your	2	658	6.6	8.1
never	2	676	6.6	8

Table 4

Collocates of the Node Word "Despair" (RQ4)

	Frequen	су		
Collocate	of Collocation)	of Corpus	Log Dice	MI3
exist	3	44	10.4	13.4
anger	2	35	10	12
fear	3	134	9.2	11.8
without	5	341	8.8	12.6
cannot	2	161	8.4	9.8
hope	2	199	8.2	9.5
moment	2	248	7.9	9.1
often	2	265	7.8	9
such	2	271	7.8	9
felt	2	366	7.4	8.6

Table 5

Collocates of the Node Word "Uncertainty" (RQ4)

Frequency					
Collocate	of Collocation	in Corpus	Log Dice	MI3	
future	2	169	8.4	10	
more	4	1,072	6.9	10.4	
life	3	1,162	6.4	9	
when	4	1,638	6.3	9.8	
our	3	1,253	6.3	8.9	
cancer	3	1,367	6.1	8.8	

**Table 6**Collocates of the Node Word "Illness" (RQ5)

	Frequen	ісу		
Collocate	of Collocation	in Corpus	Log Dice	MI3
terminal	9	35	10.7	16.1
narratives	5	14	10	14.9
fatal	5	20	10	14.4
book	9	181	9.8	13.7
during	8	279	9.3	12.6
your	7	658	8.2	10.8
never	7	676	8.1	10.7
death	6	591	8.1	10.3
his	11	1,504	7.8	11.5
this	12	1,707	7.7	11.7

**Table 7**Collocates of the Node Word "Death" (RQ6)

	Freque			
Collocate	As collocate	In corpus	Log Dice	MI3
death	44	591	10.3	16.9
life	56	1,162	10	16.9
is	107	3,494	9.7	18.1
dying	20	275	9.6	14.6
of	289	12,443	9.5	20.6
by	46	1,546	9.5	15.7
not	66	2,535	9.4	16.5
own	22	454	9.4	14.2
about	47	1,663	9.4	15.7
sentence	12	31	9.3	15.5

Table 8

Collocates of the Node Word "Grief" (RQ7)

Frequency						
Collocate	of Collocation	in Corpus	Log Dice	MI3		
grieve	3	10	9.9	13.8		
grief	4	51	9.9	12.7		
gray	3	21	9.8	12.8		
loss	4	83	9.6	12		
declining	2	1	9.5	15.4		
permit	2	6	9.4	12.8		
observe	2	7	9.4	12.6		
sorrow	2	15	9.3	11.5		
waves	2	17	9.3	11.3		
elderly	2	18	9.2	11.2		

Figure 1

Collocates of the Node Word "Member" (RQ3)

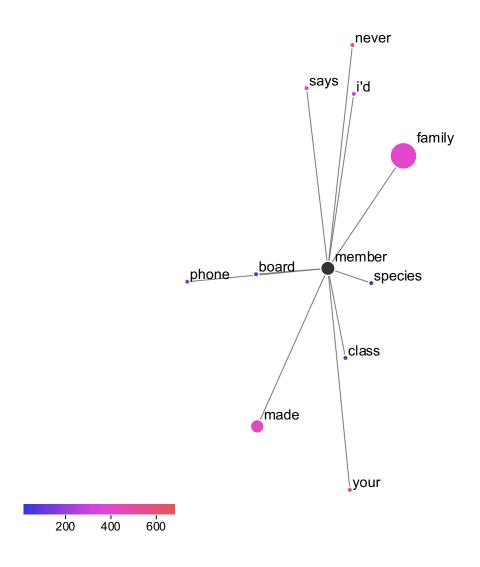


Figure 2

Collocates of the Node Word "Despair" (RQ4)

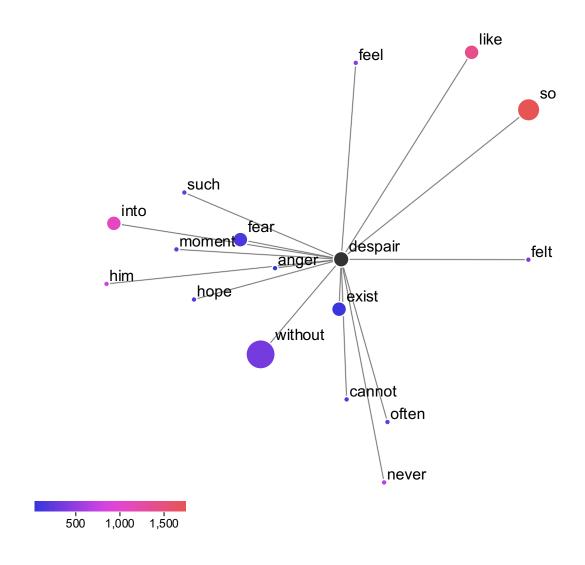


Figure 3

Collocates of the Node Word "Uncertainty" (RQ4)

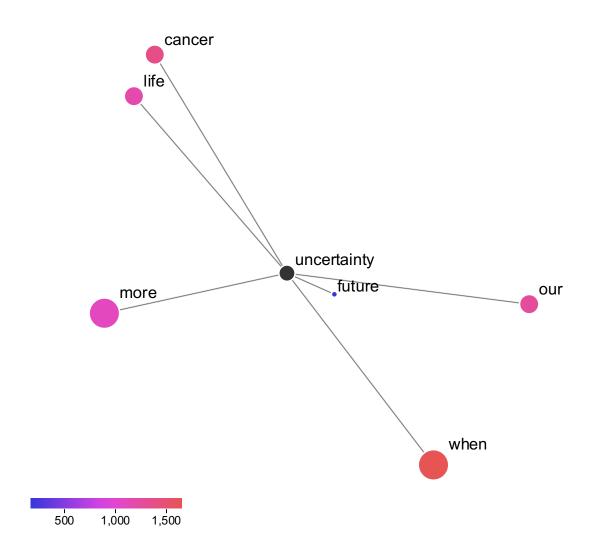


Figure 4

Collocates of the Node Word "Illness" (RQ5)

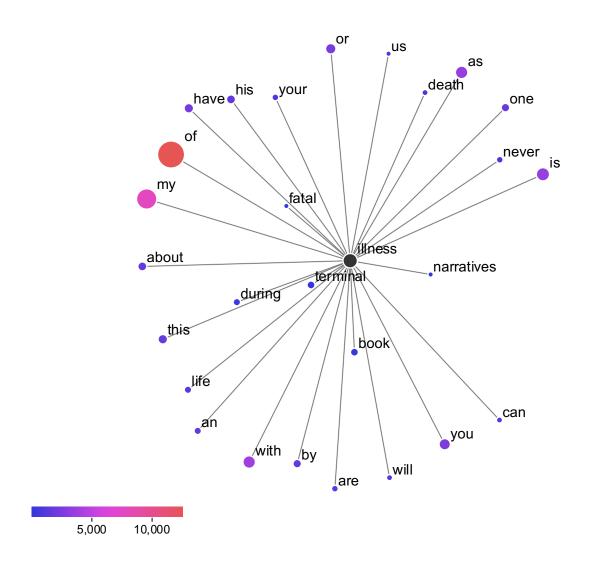


Figure 5

Collocates of the Node Word "Death" (RQ6)

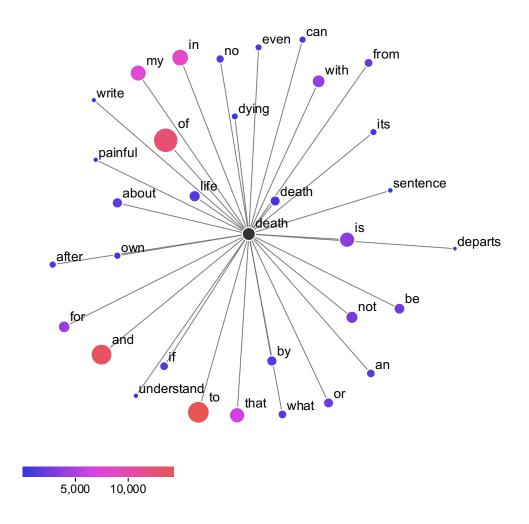


Figure 6

Collocates of the Node Word "Grief" (RQ7)

