When Grief Goes Viral:

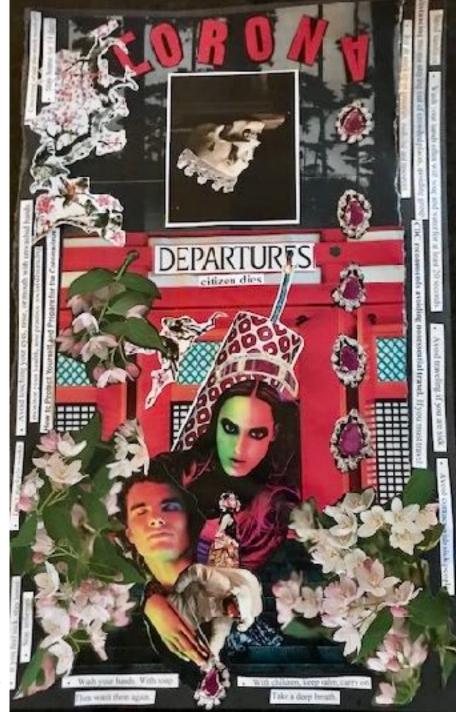
Helping to Heal Grief in the time of COVID

Robert A. Neimeyer, PhD

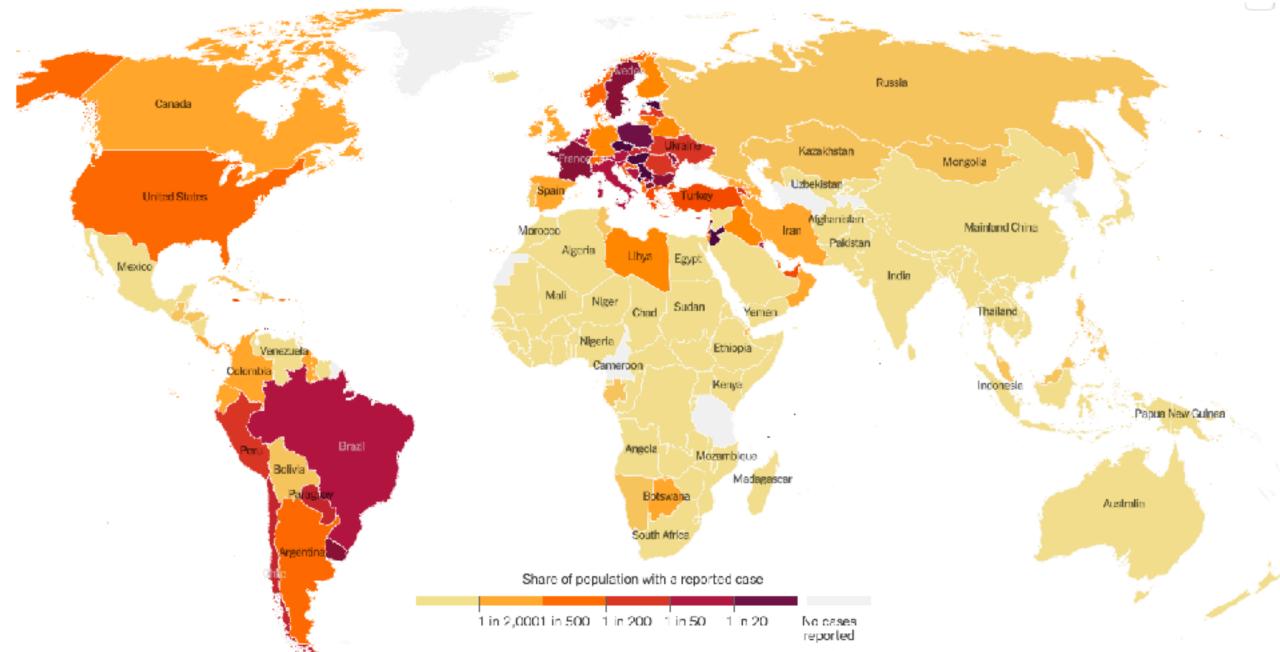
Director, Portland Institute for Loss and Transition



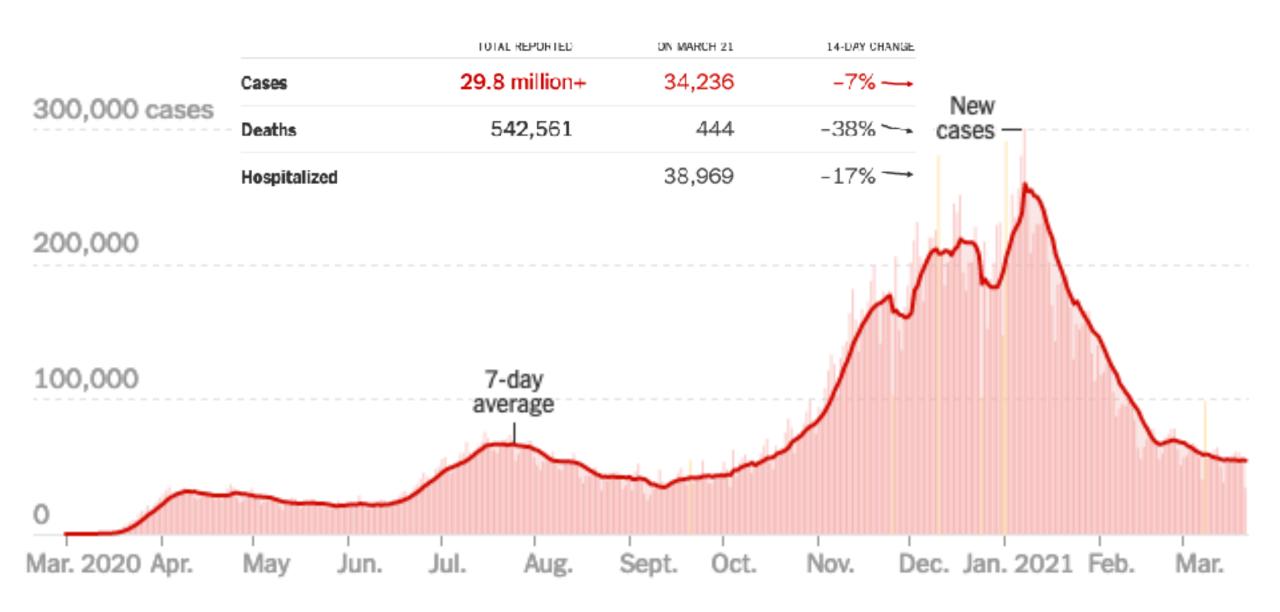
Sharon Strouse Departures



For Whom the Bell Tolls: COVID-19 Infections



COVID Infections and Deaths the US



A Container for Grief, a Holder for Memory





Torn Away

R.I.P.

Loss
Unmasked





Counting Our Losses

Coronavirus Anxiety Scale (CAS)

- 775 diverse US adults assessed from 11-13 March
 2020
- 20 candidate items from anxiety literature in cognitive, behavioral, emotional and physiological domains
- Rated on Likert scale from 0 (not at all) to 4 (nearly every day)
- Results subjected to PCA and CFA, validity tests and ROC analysis
- Final scale correlated with range of symptoms and attitudinal self-reports



Sherman A. Lee, Ph.D.

Christopher Newport

University

Death Studies, 2020

Coronavirus Anxiety Scale (CAS)

		<u> </u>				
How often have you experienced the		Not at all	Rare, less	Several	More than	Nearly
following activities over the last 2 weeks?			than a day	days	7 days	every day
			or two			
1.	I felt dizzy, lightheaded, or faint, when I read	0	1	2	3	4
	or listened to news about the coronavirus.					
2.	I had trouble falling or staying asleep	0	1	2	3	4
	because I was thinking about the					
	coronavirus.					
3.	I felt paralyzed or frozen when I thought	0	1	2	3	4
	about or was exposed to information about					
	the coronavirus.					
4.	I lost interest in eating when I thought about	0	1	2	3	4
	or was exposed to information about the					
	coronavirus.					
5.	I felt nauseous or had stomach problems	0	1	2	3	4
	when I thought about or was exposed to					
	information about the coronavirus.					
	Caluman Tabala					
	Column Totals	+	+	+	+	+
	<u> </u>	I				



Sherman A. Lee, Ph.D.

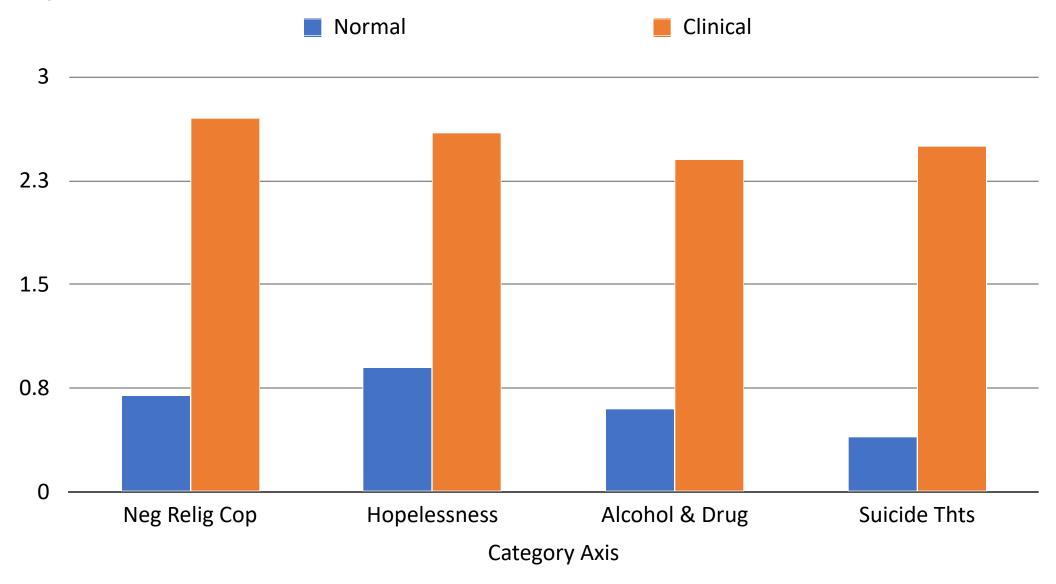
Christopher Newport

University

Death Studies, 2020

A CAS score ≥ 9 optimally classified adults as having (90% sensitivity) or not having (85% specificity) dysfunctional levels of anxiety (Youden's index of 75) with a false positive rate of 15%.

Symptoms Associated with Coronavirus Anxiety



CAS correlated .86 with Impairment in Work and Social Adjustment

Modeling Pandemic Depression & Anxiety

Milman, Lee & Neimeyer, Journal of Affective Disorders Reports

Contant list available at Science News

Journal of Affective Disorders Reports

journal homepage: www.shaulec.com/locate/act-



Besearch Paper

Modeling pandemic depression and anxiety: The mediational role of core beliefs and meaning making



Evgenia Milman ** Sherman A. Lee * Robert A. Keimeyer * Amanda A. Marhis * Mary C. John *

"Mallanet Faculty, Jr. Ellword": Onliversity, Ministral Chrismoly, of Yorah Carolina, United States

'Department of Psychology, Christopher Nouport Indientity, Unded States Department of Psychology, The University of Mongola, United Joseph

Department of Principlings, Institutely of Point Dates, United States

Construent of Perchalogical and Brain Sciences, Life County Insulingian Literativy Crisis Science

ARTICLE INTO

Analytis Meaning making Core belief violation Cognitive processes ULTYTE A great decision of STORY

ABSTRACT

Budgment. The aim of this research was to examine core belief violation and disrupted meaning making as primary-cognitive processes regulating mercalibealts during the pendenic. The study tunted the hypothesis that both these argentive processes function as modisting markeniums, accounting for the advancemental beauthoritoris of multiple possibility consists.

Minhels: A survey design (x = 2460) assessed demographic variables associated with poor pandemic mental health (pender, age, effective, obscarios), discri COVID stressers (diagnosis, death), indirect COVID stressers (unemproyment, increased fiving core, chindran toxs), over bene vinction, messing made of the gardenic coronavirus assists (CA), depression, and general assistsy RISULTS: Dore belief vidation and disrupted mass ing making explained the severity of Sepression, general anxiety, and CA to a significantly greater degree than the discussions, dept 3.572 exempt, and industry covers compare, in addition, now best to lation and disrupted meaning making significantly mediated the impact of direct and indirect 00VEE stresson or all mental tealth outcomes. Specifically, each stressor was associated with increased rose belief violation and decreased meaning making of the pandemic, in turn, those whose core beliefs were violated and those who made less meaning of the pandernic experienced prestor dipression, general anxiety, and CA.

Unitation: The use of a cross sectional looks published assessment of character cross below

Conclusions: This study describes the first unifying model of pandonic mestal health, satablishing violation of core helefs and the inability to make meaning of the pundentic as targets for clinical intervention is the somest diverse sandenia stressor.

Note significance materiant This research describer the fest model of how poor mensal houlds develops during the possionale. Unimately, ruch a model is intended to intern mental health prevention and intervention in the COVID context.

As the conservines continue to spread globally, the general population must contend with the proving likelihood of receiving a DOVID classesh or griering a 607TB death. At the same time, indisect streesors associated with social isolation policies for curbing GDNE transmission are also mounting. Such secondary stressors identified within the US and throughout the world include increased living costs, childcare less and other parenting stressors, unemployment, diminished scdall support, and many more (Books et al., 2020; Brown et al., 2020;

Fortile and Gorwood, 2020; Lotain-et al., 2020; Missan et al., 2020; Park e. at., 2020; Stanston et al., 2020; Stapito et al., 2020; Loss of employees: in particular has been reperted as the most strengtal pancemic edated challenge, while the consequent financial strain was identified as a risk factor for a host of additional streamer including increased infection risk (Park et al., 2020). Not surprisingly then, COVIDrelated unemployment above is expected to-cause increases in rates of reicide (Mcintyre and Lee, 2020). In the context of these numerous and substantial puncionic stresson, research has documented globalite caeases among the general population in symptoms of depression, and lety, protetroussaile stress, solistance use, and conserving auxiety (GA) Grooks et al., 2020; Len, 2020; Mazza et al., 2920; Shankes et al., 2020; Senomblew et al., 2029; Wang et al., 2020) The latter is a key mental health surcome of the pandemic defined by altendful of physical assists symptoms experienced in reference to COVID (n.g., distincts, incomalis, named and profering saintial literature, substance coping, Repressive functional impairment, douth unsitry, and potentiated assisty beyond

https://doi.org/101004/j.jedc210010003

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266-515E/C 2028 The Nathers Published by Disease EV. This is an open access article under the OCBYNG-ND Increase

Assessed background characteristics (e.g. gender, ethnicity), direct COVID stressors (diagnosis, death) and indirect COVID stressors (unemployment, child care loss) as risk factors in 2380 adults, along with depression,

Measured disruption of core beliefs (CBI) and meaning making about pandemic (ISLES) as mediators

general anxiety and CA

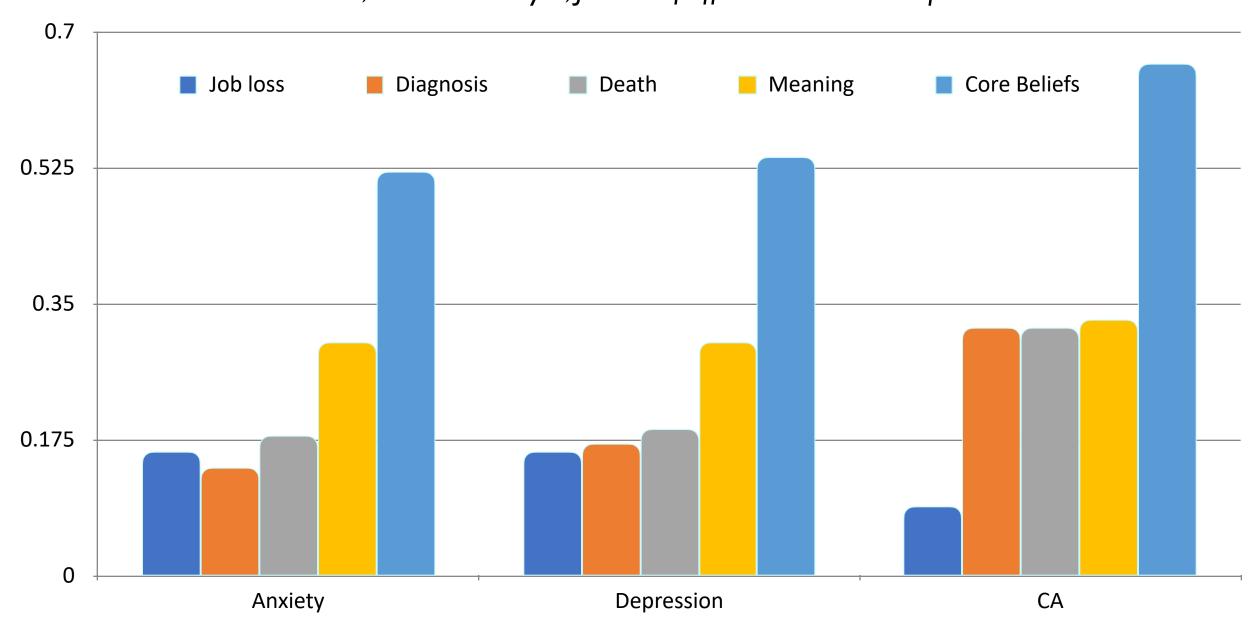


Jane Milman, PhD Medical University of South Carolina St. Edwards University, **Austin Texas**

^{*} Governmeding author.

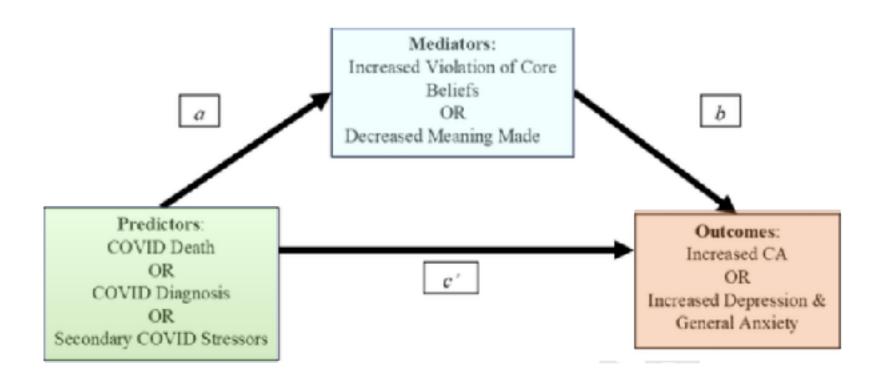
Modeling Pandemic Depression & Anxiety

Milman, Lee & Neimeyer, Journal of Affective Disorders Reports



Modeling Pandemic Depression & Anxiety

Milman, Lee & Neimeyer, Journal of Affective Disorders Reports



Mediation replicated across two independent measures of intactness of Assumptive World:

Conservation of Core Beliefs and Meaning Making regarding the pandemic

- All risk factors were significantly mediated by Core Belief Violation and Meaning Made of Pandemic
- Violation of Core Beliefs fully accounted for impact of all secondary COVID stressors—unemployment, lost childcare, increased cost of living
- Primary effects replicated across both measures of meaning and all outcome variables.



From Assessment to Intervention

Target physiological arousal, emotion regulation, social isolation through:

- Psycho-education about buffering effect of social mitigation practices
- Progressive muscle relaxation
- Controlled breathing, yoga
- Mindfulness Based Stress Reduction
- "Time out" from exposure
- Physical exercise, Tai Qi
- Sleep hygiene
- Building virtual "communities of care"
- Somatic and art therapy approaches as possible bridge to symbolizing and verbalizing the unspeakable

COVID-19 and Family Bereavement in the United States

Ashton M. Verderyl, Emily Smith-Greenway?

Edited on March 23, 2020

The COVID-19 pandemic may cause substantial excess mortality around the globe, and in the United States specifically (Ferguson & The Imperial college COVID-19 Response Team, 2020). Current estimated case fatality rates, combined with the potential of upwards of 40% of the U.S. population becoming confirmed cases, suggest that COVID-19 could lead to millions of deaths in this country. Even more stunning is the estimated number of bereaved family members that these decased would leave behind, which itself will have tremendous consequences for population health.

Bersevement and grief in the wake of a family member's death is often outbrally articipated, yet some individuals experience more severe, prolonged mental health consequences, including major depression, anxiety, (Maj. 2012). Prolonged Grief Dispreer (Prigerson et al., 2009), Complicated Grief (Horowitz et al., 2003), and other defectious outbomes. Beyond mental health, bersevement is also tied to physical health risks including worse cardiovascular health and mortality (Carey et al., 2014); Elwert & Christakis, 2008; Stahl, Amold, Chen, Anderson, & Schulz, 2016; Williams Jr., 2005). The risk of experiencing detrimental, bersevement-associated outcomes is more likely in the case of a family member's sudden, unexpected death (Parkes, 1976; Sanders, 1983), like those families may soon experience from COVID-19. Moreover, the potential for dustering of deaths within families due to highly transmissible nature of SARS-CoV-2 will lead to multiply bersewed family members, furthering risks of mental and physical health problems (Fletcher, Mailox, Song, & Wolfe, 2013; Li, Stroebe, Chan, & Chow, 2014; Sanders, 1990; Shear, Frank, Houck, & Reynolds, 2005).

Early evidence from China and Italy highlight the strong age gradient in COVID-19 mortality patterns (Ferguson & The Imperial college COVID-19 Response Team, 2020). To estimate the burden of family bereavement from these preliminary

mortality estimates requires consideration of the structure of U.S. kinship networks (Daw, Verdery, & Margolis, 2016). To estimate the potential scale of family bereavement due to COVID-19, we draw on recent demographic microsimulation work that approximates the kinship networks of White and Black Americans (Margolis & Verdery, 2019; Verdery & Margolis, 2017).

Combining estimates of U.S. kinship networks and population structure in March 2020 from this work. with age-specific COVID-19 case fatality rates from Italy (Dowd et al., 2020), we simulate potential bereavement burdens in three scenarios of excess COVID-19 mortality: a scenario with 10% confirmed. infection prevalence distributed uniformly at random. in the U.S. population, a scenario with 20%, and a scenario with 40%, which are in line with ranges used in prior work (Dowd et al., 2020; Ferguson & The Imperial college COVID-19 Response Team. 2020).2 We focus on experiencing the loss of parents and grandparents and document how many of the surviving White and Black Americans may experience such events, multiplying estimates by the current count of White and Black Americans ("Population Clock," 2020: "U.S. Census Bureau QuickFacts," 2020).

Figure 1 shows results. These models imply the potential for hundreds of thousands to millions of deaths, respectively, which would, in turn, lead to an even higher burden of bereavement. With a uniformly distributed 10% of the White and Black U.S. population confirmed infected and the most recent age-specific case-fatality rates from Italy, an estimated 537 thousand Americans would die; which would, in turn, translate into an estimated 1.238 million White and Black Americans losing a parent and an estimated 2.381 million losing at

The Demography of Death

Verdery & Smith-Greenway, Applied Demography Newsletter

- Use demographic microsimulation to estimate parental and grandparental mortality in Americans under conditions of 10, 20 and 40% infection rates
- Account for clustering of deaths within families given transmissible nature of Coronavirus
- Report that "these models imply the potential for hundreds of thousands of deaths... which would in turn lead to an even higher burden of bereavement"

Pownsylvenia State University (arry\$4200pgu.ecu)

^{*} University of Southern Carternia (amingrecource out)

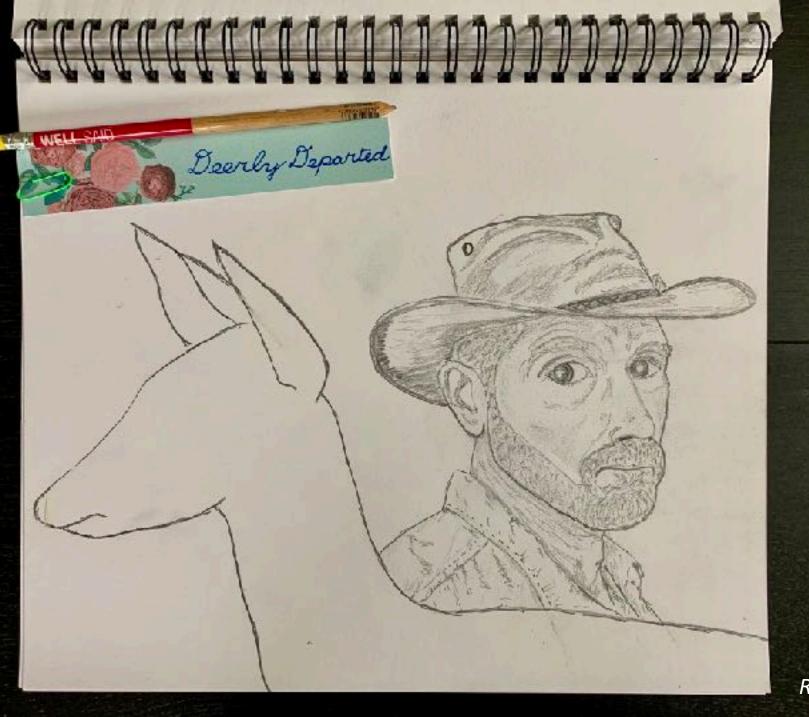
¹ The kinship networks of other race and affinit groups, including those who identify as multiple race, are not possible to approximate with the demographic microsimulation methods used in these societies.

² Secures of restricted access to testing, current estimates of wase fittedit, rates do not reflect inflation fortality rates (Reservet at 2000), to be clear, we are neededing scenarios where "continued intections" reflect the eige-specific denominators in the Internating.
Applied Demography Newsdatefor | April 1, 2008 | vol. 32 | no. 01 | Page 5 of 2

The Coming Tsunami

• "The COVID-19 pandemic may lead to enormous loss of life in the United States. The collateral damage that this level of mortality would exact on American families cannot be overlooked. It is important that the burden of bereavement, and its potential mental and physical health consequences, is factored into discussions of the public health challenge facing all nations."





A
Personal
Loss

Robert A. Neimeyer

Pandemic Grief Scale (PGS)

Lee & Neimeyer, Death Studies



- Constructed a brief screening scale for dysfunctional grief in the context of COVID loss
- Based on 831 adults who lost significant person to COVID-19
- Winnowed 37 candidate items to best 5 using PCA and CFA, with strong reliability
- PGS displayed incremental validity in accounting of 18% more of functional impairment than general anxiety and depression combined

Pandemic Grief Scale (PGS)

Lee & Neimeyer, Death Studies

- ROC analysis revealed that a PGS score
 ≥ 7 optimally classified adults as having
 (87% sensitivity) or not having (71%
 specificity) dysfunctional levels of grief
 as assessed by impairment in work and
 social functioning
- Higher PGS scores associated with:
 - COVID diagnosis
 - Seeking professional help
 - Suicide ideation (.69)
 - Alcohol and drug coping (.65)

PGS

ex	ver the last 2 weeks, how often have you perienced the following thoughts, feelings, or haviors related to your loss?	Not at all	Several days	More than half the days	Nearty everyday
1.	I wished to die in order to be with the deceased.	0	1	2	3
2.	I experienced confusion over my role in life or felt like my identity was diminished because of the loss.	0	1	2	3
3.	Nothing seemed to matter much to me because of this loss.	0	1	2	3
4.	I found it difficult to have positive memories about the deceased.	0	1	2	3
5.	I believed that without the deceased, life was either meaningless, empty, or could not go on.	0	1	2	3
	Column Totals	+	+	+	+

66.4% of sample

Scored above the clinical cut point



Risk Factors

I felt guilty about not being able to be there for the deceased before he/she died. [Not There]

I felt upset about how the deceased died (e.g., alone or suffering). [LO Alone]

I felt upset that the deceased was not given a proper funeral or memorial service. [No Funeral]

I kept thinking about what I could have done to prevent the deceased's illness. [Prevent]

I felt that the circumstances of the death created emotional distance between us. [Distance]

I worried that I will lose other people I care for to the same disease. [Lose More]

I kept having images of the deceased struggling for life on some machine. [Machine]

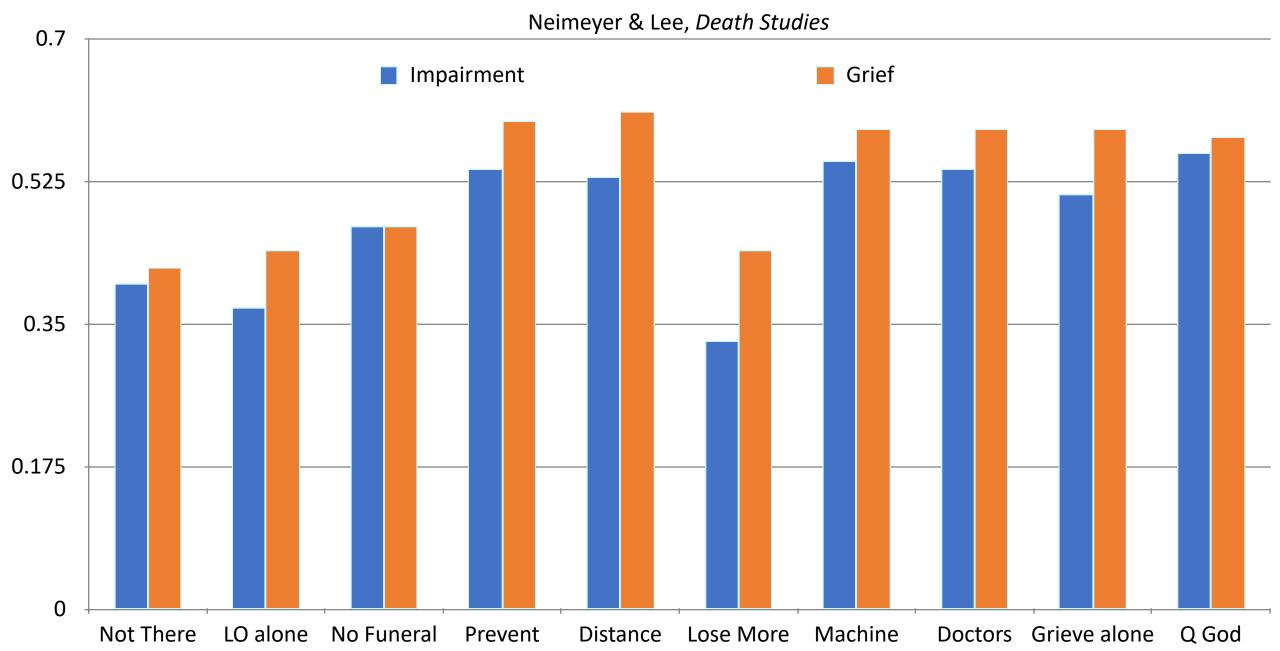
I resented that the doctors didn't keep me informed about the deceased's condition. [Doctors]

I felt too alone in my grief because of social isolation policies to control the pandemic. [Grieve Alone]

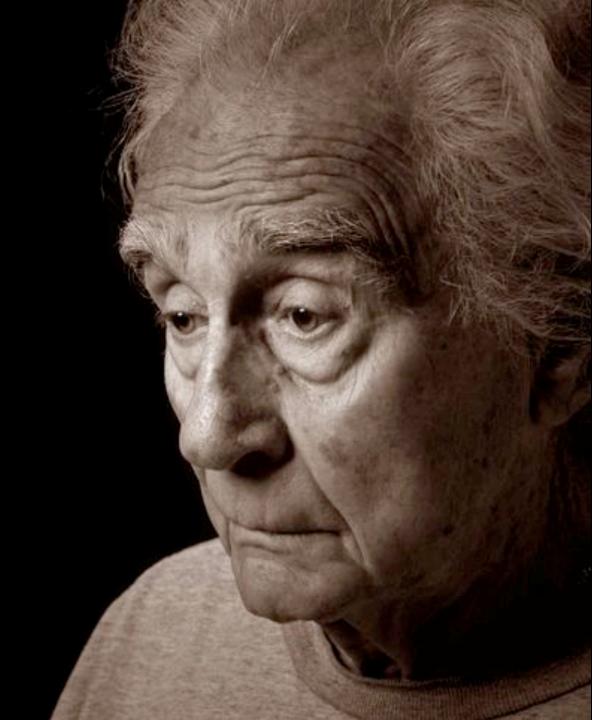
I questioned why God or the universe is punishing us in this way when I thought about the deceased. [Q God]



Risk Factors for Pandemic Grief



Grief Therapy
in the
Pandemic



At the Abyss: A Case Study





Dangling at the Abyss



All in the Family



Rivka's Search for Meaning



The 15 Minutes



1 Minute with Father



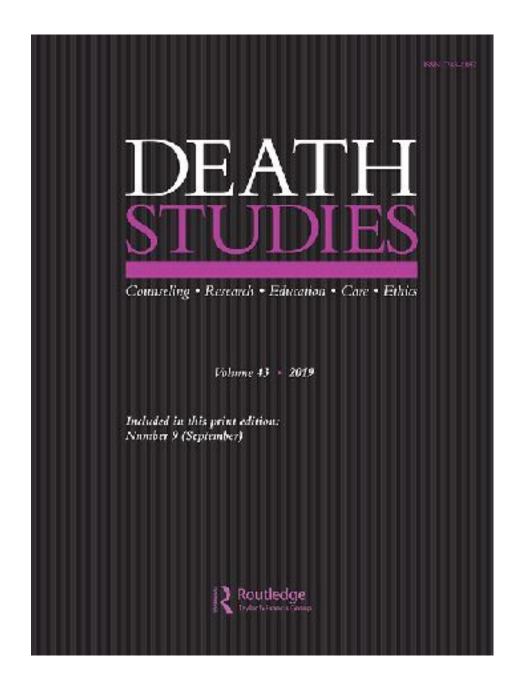
Guidelines for Working with Bereavement

```
significance
         honor change conversation
share
                 meaning
      resilience
                    strength
   ritual
         journal
```

Guidelines for Working with Bereavement

- *Speak their names: Encourage conversations about loved ones
- Keep a journal: Shift between expression and reflection
- *Share grief: Connect with others in family or online group
- *Review photos: Celebrate high points, acknowledge low points
- Reconstruct legacy: Keep the loved one's stories alive; Digital storytelling
- Review resilience: Explore strengths and success over adversity
- *Live in the now: Slow down into the present moment
- Conduct rituals of remembrance: Symbolically honor loved one as well as personal change
- Make meaning: Explore what has significance now





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