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# Widowed young: The role of stressors and protective factors for resilience in coping with spousal loss

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#### Abstract

While distressing, late life spousal loss is considered a normative life event and most demonstrate resilient recovery from grief. However, for 5-7% of the population spousal loss comes early, before the age of 50, and little is known about the factors that influence adjustment in this population. We used the DPM integrative framework by M. Stroebe et al., (2006) to examine correlates and predictors of mental wellbeing and grief intensity in an international sample of 603 young widows and widowers. Contrary to existing bereavement research, loss-orientated stressors (e.g., expectedness and cause of death) did not predict bereavement outcomes. Employment and financial wellbeing were the only statistically significant restoration-orientated stressors associated with coping, mental wellbeing and grief intensity. We found no significant associations between parental status and coping or bereavement outcomes. Loss-orientated coping, followed by inter and intrapersonal protective factors for resilience and financial wellbeing were the greatest predictors of grief intensity. Loss-orientated coping was highest in early bereavement, the greatest predictor of grief intensity and associated with being unemployed, financial insecurity and decreased protective factors for resilience. Restoration-orientated coping was highest in later bereavement, was a weak predictor of grief intensity and associated with being employed, increased financial wellbeing and protective factors for resilience. Overall, we found the young-widowed population is at heightened risk of poor adjustment. Almost two-thirds reported decreased functioning, probable depression with high rates of psychological distress. Nearly half met diagnostic criteria for prolonged grief disorder. We discuss implications for research and clinical practice.

Keywords: Widowed Young, loss, bereavement, resilience, spousal loss

Spousal loss is considered one of the most stressful significant life events (Holmes & Rahe, 1967). It is associated with deep sadness, increased stress, physical and mental health issues as well as changes in routines and resources (West et al., 2019). In developed countries, spousal loss follows a typical age and gender pattern (Bennett & Soulsby, 2012). The vast majority become widowed in their seventies, and women generally experience a longer period of widowhood than men (Bennett & Soulsby, 2012). Widowhood in this period is considered a normative life event, with common and familiar effects for the bereaved (Bennett & Soulsby, 2012) Yet, for an estimated 5% to 7% of the population, widowhood occurs between the ages of 20 and 49 years (Thomson et al., 2011). For these individuals, the loss is 'off-time', with less common and familiar effects, which brings the potential for greater and more complex challenges (Bennett & Soulsby, 2012).

However, it is unknown what impact these challenges have on adjustment in young

widowhood as there is a paucity of published research. The existing research tends to focus on risk factors in isolation (e.g., cause of death, social support) in primarily older widowed populations. The impact of secondary stressors, not directly related to, but resulting from the death (e.g., sole parenting, financial and workforce participation) is largely overlooked. Of the limited research available, the articles are dated (Ball, 1977) and the majority are qualitative (Jones et al., 2019; Lowe & McClement, 2011; Taylor & Robinson, 2016). While qualitative research provides rich detailed data on the young widowed experience, it does not afford researches or clinicians the ability to generalise to the young widowed population. QuantativeQuantitative analysis is needed to achieve this aim. Moreover, quantiativequantitative analysis will provide important descriptive statistics that may enable comparisons across other widowed groups, and highlight potential relationships between variables. There are limited studies guided by theory and to the best of our knowledge there are no <del>publised</del>published quantitative studies investigating young widowhood. Against this background, we identified a need for research that is theoretically and hypothesis-driven to understand what factors are associated with bereavement outcomes in young widowhood.

#### **Literature Review**

Compared to their older age counterparts, young widow(er)s experience a marked decline in psychological health (Taylor & Robinson, 2016). Young widow(er)s navigate the challenges associated with spousal loss differently to older widow(er)s in social, parental and work domains (Bennett & Soulsby, 2012). Often, they are emotionally and practically unprepared, have limited access to resources and few, if any, similarly aged exemplars (Bennett & Soulsby, 2012). Further, events that occur off-time carry with them stressors not usually associated with the life stage in which they occur (Lowe & McClement, 2011). Young widow(er)s may find themselves raising dependent children alone, managing child grief while adapting to the role of sole parent (Yopp et al., 2015). Alternatively, they may find themselves childless—not by choice—and managing grief associated with the secondary loss. At the same time, they are often coping with diminished financial resources, increased responsibility in the home and significant changes to workforce participation (Yopp et el., 2015).

#### Young Widowhood and Sole Parenting

In households where there were previously two parents, the death of a co parent increases demands on the surviving spouse (Holmgren, 2019; McClatchey, 2018). In addition to coping with their own grief, they must also adjust to the role of sole parent, while providing support to grieving children (Holmgren, 2019). Minimal attention has been paid to the effects of widowhood on sole parenting. This is despite evidence that suggests the extent to which a child can successfully navigate the bereavement process is largely dependent on the quality of the relationship with the surviving parent (Yopp & Rosenstein, 2012).

## Sole Parent Widows

The experience of young widowed women raising children is not well known (McClatchey, 2018). There is extensive research on single women raising children, yet young-widowed participants in Levinson (1997) voiced objection to being grouped with single or co-parent families and viewed their transition to sole parenthood as qualitatively different. A literature review by Gass-Sternas (1995) found sole-parent widows were often mixed with other single-parent types, such as divorcees. According to Fulmer (1983) the types of stressors, appraisals, resources and grief responses are likely to differ based on the family type. Sole-parent families due to widowhood differ from single or co-parent families due to divorce or separation (Fulmer, 1983). The former consists of only one parent, who is tasked with providing the child's emotional and economic support, whereas in the latter, there is an opportunity for co-parenting (Yopp & Rosenstein, 2012).

Participants in a qualitative study of young Iranian widows with children revealed they concealed overt mourning and internalised the grief experience (Khosravan et al., 2010). Adding, dependent children were the only reason they moved forward with life, despite feeling suicidal (Khosravan et al., 2010). Similarly, bereaved women in Nuttman-Schwartz et al. (2019) <u>study</u> described unshared grief as they attempted to keep suffering to themselves to shield children from the pain of loss.

In Lowe and McClement (2011) five young Canadian widows described increased responsibility, changes to identity and struggles associated with sole parenting. When compared to their older age counterparts, Stroebe and Stroebe (1987) found those widowed at a younger age experienced more intense grief reactions and greater difficulty adjusting to the loss.

To the best of our knowledge there are no recent published studies investigating the impact of sole parenting in young widowed mothers. Therefore, it is unknown if, <u>-or to what</u>

<u>extent</u>, children and the associated connections <u>are considered a buffer or burden when</u> <u>investigating young widowhood</u>. Or understanding bereavement.provide a buffer against the deleterious effects of bereavement or present an additional burden, or even both. \*\* I can't seem to make this sound good :/

#### Sole Parent Widowers

There is limited research on sole parent widowers, the majority examine older widowed men without dependent children. Themes arising from qualitative research on young widowers centre on a commitment to new roles, where caring for children and domestic responsibilities take priority (O'Neil & Mendelsohn; McClatchey, 2018). Widowed fathers also lament how lonely and difficult it can be to make decisions on behalf of children, without input from the other parent (McClatchey, 2018).

Two quantitative studies (Yopp et al., 2015, 2019) examined young-widowed fathers. The first exploratory study consisted of 259 fathers with dependent-aged children and who had lost a wife to cancer (Yopp et al., 2015). While participants reported satisfaction with their parenting style and felt they met parental expectations, they also reported elevated depression, grief and stress related to their parenting role (Yopp et al., 2015). Within the sample, 65% reported clinically significant depressive symptoms and 75% reported feeling overwhelmed with the responsibilities of being a parent (Yopp et al., 2015). The second study examined grief intensity and depressive symptoms among 252 widowed fathers, mean age 46 years, who had lost a wife to cancer (Yopp et al., 2019). Two years post-bereavement, 45% of the sample exceeded clinically significant thresholds for depressive symptomatology (Yopp et al., 2019). Grief intensity mirrored that of depression and remained significantly high 2 years post-loss (Yopp et al., 2019).

Together, the findings by Yopp et al. (2015, 2019) indicate that young widowed fathers are a psychologically vulnerable group, who experience elevated depression and grief

intensity for a considerable period post-loss. However, it is unknown if this is due to sole parenting, being widowed men or young widowhood in general, as there was an absence of non-parents and widows from the sample. Whatever the case, poor bereavement outcomes were evident many years after the loss and Yopp et al.'s (2015, 2019) findings contradict those found within the broader literature on spousal loss (Bonanno et al., 2002; Mancini et al., 2015). Here, there is almost unanimous agreement that two years is an appropriate period for an individual to adapt to and recover from the effects of bereavement (Bennett & Soulsby, 2012).

## **Financial Wellbeing**

The death of a primary income earner is considered one of the most devastating shocks faced by a household (Fadlon et al., 2019). The threat to income security following spousal loss is considerable and often leads to poverty and poor bereavement outcomes (Feldman et al., 2000). It is estimated up to 56% of the difference in economic status between married and widowed individuals is attributable to the death of a spouse (DiGiacomo et al., 2015). Among young widows, economic hardship was identified as the most common stressor, particularly for those with children (Gass-Sternas, 1995). Young-widowed fathers earning less than USD50,000 per annum were found to have significantly higher grief two years post-loss in Yopp et al. (2019). Moreover, Gass-Sternas (1995) found economic issues in young widowhood have the potential to impact the health of not only the surviving spouse but also of dependent children. Despite the importance of financial status on wellbeing, there is a lack of attention to economic issues in young widowhood.

## Employment

In addition to income, employment is an important determinant of wellbeing (Sinclair & Cheung, 2016). Paid employment could reduce the adverse effects of economic hardship on bereavement outcomes (Pai & Barrett, 2007). Workforce participation also expands the

social network, which is said to buffer against feelings of social isolation (Pai & Barrett, 2007).

A study of older widows who were in the paid workforce prior to bereavement found greater psychological adjustment for those previously employed compared to those without employment experience (Pai & Barrett, 2007). However, Gass-Sternas (1995), reported employment was an additional stressor placed upon young widows with children. Adding that employment was not possible for some as they lacked the necessary support to look after dependent children (Gass-Sternas, 1995). ). It is currently unknown if the beneficial effects of employment extend into the young-widowed population, or if the energy and effort required to take on employment limits the energy and effort available to look after dependent children, engage in self-care, adapt to a new identity and cope with the loss (Shapiro, 1997).

### **Circumstances of Death**

Grief intensity may be further magnified when the death is unnatural or unexpected, as is often the case in early to midlife (Jones et al., 2019). Unexpected death of a loved one is reported as the most common traumatic experience in community epidemiological surveys worldwide (Atwoli et al., 2017). It has strong associations with post-traumatic stress disorder and according to the *DSM-5*, only unexpected violent or accidental death of a loved one not natural death qualifies for PTSD diagnosis. When loss is anticipated, the psychological adjustment to bereavement is said to be smoother (Sasson & Umberson, 2014). It has been suggested that long-term illness provides the surviving spouse with the opportunity to prepare and experience a type of anticipatory grief (Donnelly et al., 2001); however, this claim is contentious (Carr et al., 2001). While several studies have explored whether anticipated or sudden death is more disressingdistressing, the research findings are not conclusive (Carr et al., 2001), and do not specifically address the the-unique circumstances of those widowed young.

A handful of studies have failed to find significant correlations between violent causes of death and bereavement outcomes (Feigelman et al., 2009; van der Houwen et al., 2010), yet a body of research suggests the opposite (McDevitt-Murphy et al., 2012; Shear et al., 2006). A recent study using a large epidemiological general population sample (N = 26,534) found associations between sudden cause of death (i.e., terrorist attacks, accidents, suicide, murder and heart attack) and symptoms of anxiety, depression, psychiatric disorders, substance misuse and elevated risk of PGD (Keyes et al., 2014). Moreover, relatives bereaved by suicide have self-reported lower psychiatric and general health (Feigelman et al., 2009) as well as an increased need for professional help compared to those bereaved by natural death (de Groot et al., 2006).

Yet, there was no impact of forewarning on depression, shock, anger or grief among those widowed in Carr et al. (2001). Further, cancer deaths were equally as distressing as unexpected deaths in Caserta et al. (2013). Objective not subjective expectation of death, was associated with increased depressive and grief symptoms in a study of adults bereaved in mid to late life (Donnelly et al., 2001). However, Byrne and Raphael (1994) found subjective not objective expectation of death was the only significant predictor of grief intensity in a sample of older Australian widowers. In a younger bereaved sample, subjective unexpected loss was associated with increased grief (Stroebe et al., 2012). The impact of forewarning on bereavement outcomes is not conclusive, largely due to differences in methodology and operational definitions (e.g., objective versus subjective expectancy) used. As such, we included a subjective measure of expectedness as well as an objective measure of cause of death.

## **Intrapersonal Resilience and Interpersonal Support**

Within the bereavement literature, there is a large emphasis on resilience as an intrapersonal trait (Thompson & Cox, 2020). It has been found to protect individuals

experiencing trauma and interpersonal loss, is a significant predictor of positive emotions (Ong et al., 2010) and aids in recovery from stress (Ong et al., 2006). More recently, prebereavement psychological resilience mediated depressive symptoms among a large sample of older men and women (N = 5,626) who had experienced spousal loss (King et al., 2018).

However, when examining bereavement, a purely intrapersonal approach is not appropriate, as it does not recognise the social resources surrounding the bereaved (Thompson & Cox, 2020). A broader definition of resilience offered by Pooley and Cohen (2010) acknowledges that, while resilience is within the individual, it is their ability to 'exhibit resourcefulness by using available internal and external resources in response to different contextual and developmental challenges' (p. 34) that affords them the ability to adapt when faced with adversity.

Peer and family support are two interpersonal resources that provide the bereaved an opportunity to address and identify their needs, in the context of knowing others are there to support them (Lowe & McClement, 2011). Bereaved individuals more often seek support from family and friends than professionals, yet almost one third report they do not receive adequate support (Aoun et al., 2020). It is assumed social support buffers deleterious effects of bereavement, however, investigations into the role of peer and family support have produced mixed results (W. Stroebe et al., 2005). However, when social support is perceived as helpful it is a strong determinant of psychosocial wellbeing and a protective factor against prolonged grief disorder (PGD) and depression post-bereavement (Breen, 2021).

In Stylianos and Vachon (1993), family support was the most helpful form of assistance in early bereavement, while peer support was most valuable over time. However, a meta-analysis of social support as a buffer against PGD found it did not moderate the impact of bereavement on stress levels (W. Stroebe et al., 2005). Among the qualitative literature on young widowhood, there is a strong focus on seeking support via friendships (Lowe & McClement, 2011). Young widows report the value of new friendships, especially with those who have also lost a spouse (Lowe & McClement, 2011). Participants reported feelings of isolation due to their unique situation in Taylor and Robinson (2016), and participants in Jones et al. (2019) felt only those who had experienced a similar loss would understand. A common theme is instant support in the immediate aftermath of losing a spouse, yet a dwindling of long-term support (Taylor & Robinson, 2016).

#### **The Dual Process Model**

Taken together, loss-orientated stressors directly related to the death (e.g., cause and exepectednessexpectedness) and restoration-orientated stressors indirectly related (e.g., finances, sole parenting) have the potential to impact upon bereavement outcomes. The dual process model (DPM) of coping with bereavement provides a framework to systematically examine these factors. Established in 1999 by Margaret Stroebe and Henk Schut the DPM partitions rumination from Freud's theory of grief work and integrates cognitive stress theory, stress response syndrome, the two-track model of bereavement and the model of incremental grief (for a review, see Fiore, 2019).

The DPM improved upon existing models by identifying and overcoming their limitations, accounting for the fact that (a) bereaved persons often deal with multiple stressors rather than one at a time and (b) interpersonal relationships and interactions with others are as crucial as intrapersonal processes (Stroebe & Schut, 2006). The DPM posits that the bereaved oscillate between loss-orientated and restoration-orientated coping in response to loss-orientated and restoration-orientated stressors (Stroebe & Schut, 2006). The DPM has been found to accurately reflect the challenges faced by the bereaved (Fiore, 2019) and is certainly applicable to the widowed young, as they face a complex and challenging set of restoration-orientated stressors. We used the DPM to systematically examine factors in the framework relevant to young widowhood that impact upon coping and bereavement

outcomes (see Figure 1).

# Figure 1



*Note*. CFPB = Consumer Financial Protection Bureau; PFRS = Protective Factors for Resilience Scale; IDWL = Inventory of Daily Widowed Life; WEMWBS = Warwick– Edinburgh Mental Well-Being Scale; PGD = prolonged grief disorder; PG-13 = Prolonged Grief Disorder Scale–13. Segments A, B and C in the model represent factors in the present study, applicable to young widowhood, that influence coping (Segment D) and bereavement outcomes (Segment E). Adapted from 'The Prediction of Bereavement Outcome: Development of an Integrative Risk Factor Framework', by M. S. Stroebe, S. Folkman, R. O. Hansson & H. Schut, 2006, *Social Science and Medicine*, *63*(9), p. 2444. (https://doi.org/10.1016/j.socscimed.2006.06.012) Copyright 2006 by Elsevier.

The Present Study's Hypotheses

We proposed the following hypotheses with the aim to better understand what factors in the DPM framework are associated with bereavement outcomes in young widowhood:

- In accordance with the DPM framework, the independent variables—expectedness of death, cause of death, employment, parental status, financial wellbeing and protective factors for resilience—will be significantly associated with:
  - 1(a) the use of loss-orientated and restoration-orientated coping
  - 2(b) mental wellbeing
  - 3(c) grief intensity
- 2. In keeping with prior research, loss-orientated coping will be negatively associated with mental wellbeing and positively associated with grief intensity.
- 3. In keeping with prior research, restoration-orientated coping will be positively associated with mental wellbeing and negatively associated with grief intensity.
- 4. In accordance with the DPM integrative framework, after controlling for time since loss, the predictor variables expectedness of death, cause of death, employment, parental status, financial wellbeing, protective factors for resilience, loss-orientated coping and restoration-orientated coping will explain a significant amount of the variance in grief intensity

## Method

## **Participants**

Participants aged 18-49 years and widowed at least 3 months were recruited from private young-widowed Facebook support groups of which the chief investigator was a member. The online survey elicited 741 responses. Participants were removed from the final analyses for exceeding age criteria (n = 39), incomplete survey data missing completely at random (n = 85) and poor-quality responses (n = 1), leaving 651 participants. Outliers were assessed using Hoaglin and Iglewicz's (1987) outlier labelling rule, whereby cases falling outside the interquartile range (IQR) by a factor of 2.2 (times IQR) were removed. Thirteen cases were removed due to income estimates above the threshold, leaving 603 participants. The mean age of participants was 39.3 years (SD = 6.19); sociodemographic data and relevant loss characteristics are presented in Table 1.

# Table 1

Variable	n	%	Variable	n	%
Sex			Highest education level		
Female	589	97.7	Less than 12 years of	19	3.2
Male	14	2.3	education		
Expectedness of death			Completed high school (12 years of education)	42	7.0
Sudden	472	78.3	Some university trade or		
Not sudden	131	21.7	technical school	137	22.7
Cause of death			Completed university, trade	231	38.3
Natural (illness)	324	53.7	or technical school		
Unnatural (suicide,	279	46.3	Postgraduate or professional degree	174	28.9
homicide, accident)			protessional degree		
Current relationship status			Current employment status		
In a romantic relationship	211	35	Full-time employed	329	54.6
Not in a romantic	392	65	Part-time employed	124	20.6
relationship			Not in paid	29	4.8
Country of residence			employment/not looking		
United States	409	67.8	Not in paid	36	6.0
Australia	126	20.9	employment/looking		
Canada	28	4.6	Homemaker or child rearing	70	11.6
United Kingdom	30	5.0	Student	15	2.5
Other	10	2.0			

Sociodemographic Data and Loss Characteristics

Time since spousal loss			Income per annum (USD)		
3 - 6 months	63	10.4	<\$10,000	46	7.6
6 -12 months	95	15.8	\$10,001 to \$20,000	66	11.0
1 - 2 years	117	19.4	\$20,001 to \$40,000	194	32.1
2-5 years	223	37	\$40,001 to \$60,000	138	22.9
> 5 years	105	17.4	\$60,001 to \$80,000	95	15.8
Dependent children			\$80,001 to \$100,000	39	6.5
Yes	473	78.4	>\$100,000	25	4.1
No	130	21.6			

Note. N = 603

### Materials

The Consumer Financial Protection Bureau (CFPB) Financial Well-Being Scale (CFPB, 2017) assessed the subjective current and future financial wellbeing of participants. The brief 5-item scale conceptualises financial wellbeing as an individual's capacity to meet economic goals, absorb financial shock and have financial freedom to enjoy life (Netemeyer et al., 2018). In the current sample, taking age and self-administration into account, those with a financial wellbeing raw score under 5 will almost universally experience financial insecurity. Raw scores of 6–10 indicate probable financial insecurity. The majority of those with raw scores of 11–14 are financially stable, and those scoring over 14 are almost universally financially secure (CFPB, 2017). Cronbach's alpha in the present study was .84.

The Protective Factors for Resilience Scale (PFRS; Harms et al., 2017) captured the inter- and intrapersonal variables of interest. The self-report 15-item scale measured participants psychosocial resources for resilience. These include personal resources (e.g., 'I believe in myself'), social resources–peers (e.g., 'My friends treat me fairly'), and social resources–family (e.g., 'I feel safe within my family'; Appendix E; Harms et al., 2017). Higher summed scores indicate greater psychosocial and personal resources for resilience (Harms et al., 2017). Cronbach's alpha in previous studies is excellent, .93 (Harms et al., 2017). Cronbach's alpha in the present study was .91.

The Inventory of Daily Widowed Life (IDWL; Caserta & Lund, 2007). The 22item IDWL measured how often participants took part in loss-orientated coping (e.g., looking at photos of their spouse) and restoration-orientated coping (e.g., attending to financial matters) over the previous week. Cronbach's alphas in previous studies are .91 for the lossorientated subscale and .78 for the restoration-orientated subscale (Caserta & Lund, 2007). It is widely accepted that Cronbach's alpha levels above .70 are adequate for research purposes (Hulin et al., 2001). The IDWL Loss-Orientated subscale reached .90. Yet the IDWL Restoration-Orientated subscale did not reach minimum internal consistency at .68. Removal of two items would increase the alpha to .70 but had the potential to impact content validity. Cronbach's alpha is concerned with measuring interrelatedness among scale items and we would not necessarily expect all restoration-orientated activities to be related (e.g. watching television, visiting lawyers). While reliability of the IDWL Restoration-Orientated subscale is low, the summed scores indicate the extent of restoration-orientated coping used. Therefore, all items of the IDWL Restoration-Orientated subscale were retained and included in the final analysis.

#### The Warwick–Edinburgh Mental Well-Being scale (WEMWBS; Tennant et al.,

**2007)** captured hedonic (e.g., happiness) and eudemonic perspectives of wellbeing (e.g., a sense of purpose, social relationships; Ng Fat et al., 2017). The positively worded 14-item measure has five response categories, which yield a total summary score range of 14–70 (Koushede et al., 2019). A score below 40 indicates low mental wellbeing with probable depression; 41–45, possible high risk of psychological distress; 45–60, average mental wellbeing; and 60 and above, high mental wellbeing (Warwick Medical School, 2018). Previous validation studies have found excellent internal consistency ranges of .89–.91 in

student and population samples (Tennant et al., 2007). Cronbach's alpha in the current sample was .95.

The Prolonged Grief Disorder–13 (PG-13) scale (Prigerson et al., 2009) assessed grief intensity. The 13-item instrument is widely used in research and clinical settings and is a diagnostic tool for PGD (Pohlkamp et al., 2018). Eleven items assess cognitive (e.g., 'Have you had trouble accepting the loss?'), behavioural (e.g., 'How often have you tried to avoid reminders that the person you lost is gone?') and emotional (e.g., 'Do you feel emotionally numb since your loss?') symptoms of PGD (Prigerson et al., 2009). These items are rated on frequency scales of 1 'not at all' to 4 'at least once a day' and intensity scales of 1 'not at all' to 5 'overwhelmingly'. The possible score range is 11–55 points. While there are no officially recommended cut-off scores, past research has found summed scores of 35-54 for these 11 items meet diagnostic criteria for PGD (Pohlkamp et al., 2018). The remaining two items are 'yes' or 'no' responses concerned with the duration of grief (e.g., experiencing yearning or intense emotional pain for at least 6 months) and functional impairment (Prigerson et al., 2009). To meet criteria for functional impairment, participants must answer 'yes' to the question: 'Have you experienced a significant impairment in social, occupational or other important areas of functioning?' (Prigerson et al., 2009). Validated in several different countries, the internal consistency of the PG-13 is high, .89 (Pohlkamp et al., 2018). Cronbach's alpha in the current sample was .88.

#### Results

#### **Descriptive Statistics**

As can be seen in Table 2, the majority of participants faced significant or probable financial insecurity. Almost half experienced low mental wellbeing with probable depression. In line with past research, we used the score range 35 - 54 as a guideline to determine diagnostic criteria for PGD (Pohlkamp et al., 2018; Prigerson et al., 2009). Applying this

criterion to the current sample, almost half scored within the diagnostic range for PGD.

Nearly two-thirds have experienced a significant reduction in social, occupational or other important areas of functioning.

# Table 2

# **Descriptive Statistics**

Measure	Recommended or suggested cut-off scores	n	%		
CFPB	Significant financial insecurity (raw score 0–5)				
	Probable financial insecurity (raw score 6-10)	224	37.1		
	Financially stable (raw score 11–14)	141	23.4		
	Financially secure (raw score 15–20)	88	14.6		
WEMWBS	Low mental wellbeing with probable depression (14–40)	305	50.6		
	Possible high risk of psychological distress (41-45)	108	17.9		
	Average mental wellbeing (45-60)	173	28.7		
	High mental wellbeing (> 60)	17	2.8		
PG-13	Does not meet diagnostic criteria for PGD (< 35)	341	56.6		
	Meets diagnostic criteria for PDG (35–54)	261	43.4		
	Experiencing a significant impairment in social, occupational or other important areas of functioning	392	65		

*Note. N* = 603; CFPB = Consumer Financial Protection Bureau Financial Well-Being Scale; WEMWBS = Warwick–Edinburgh Mental Well-Being Scale; PG-13 = Prolonged Grief Disorder–13 scale; PGD = prolonged grief disorder

# Table 3

Descriptive Statistics, Pearson Correlation Coefficients and Reliability Analyses for the Control Variable and Variables in the Dual Process Model Integrative Framework

		1	2	3	4	5	6	7	8	9	10	M	SD	Skew	α
1.	Time											3.35	1.23	-0.47	
2.	Expectedness	01										1.22	0.41	1.38	
3.	Cause	11*	47**									1.46	0.50	0.15	
4.	Employment	09*	03	.07								1.25	0.43	1.17	
5.	Dependents	.02	.05	07	11**							1.22	0.41	1.39	
6.	CFPB	06	.01	04	10*	05						9.13	4.78	0.20	.84
7.	PFRS	.09*	.03	04	21**	05	.42**					75.82	16.03	-0.51	.91
8.	IDWLLO	41**	03	04	.13**	.02	17**	37**				31.09	7.24	-0.26	.90
9.	IDWLRO	.18**	.01	03	26**	.03	.18**	.49**	22**			27.50	4.76	-0.14	.68
10.	WEMWBS	.23**	.06	07	14**	.01	.37**	.73**	55**	.54**		40.36	11.01	0.01	.95
11.	PG-13	36**	08*	09*	.16**	.01	31**	57**	.72**	38**	73**	32.94	10.30	0.06	.88

*Note.* N = 603.  $\alpha$  = Cronbach's alpha; Time = time since loss, coded as 1 = 3-6 months; 2 = 6-12 months; 3 = 1-2 years; 4 = 2-5 years; 5 = > 5 years. Expectedness coded as 1 = sudden; 2 = not sudden. Cause = cause of death, coded as 1 = natural; 2 = unnatural. Employment coded as 1 = employed; 2 = not employed. Parent coded as 1 = parent; 2 = non-parent. CFPB = Consumer Financial Protection Bureau Financial Well-Being Scale; PFRS = Protective Factors for Resilience Scale; IDWLLO = Inventory of Daily Widowed Life, Loss-Orientated subscale; IDWLRO = Inventory of Daily Widowed Life, Restoration-Orientated subscale; WEMWBS = Warwick–Edinburgh Mental Well-Being Scale; PG-13 = Prolonged Grief Disorder–13 scale

#### **Intercorrelations between Variables in the Dual Process Model Integrative Framework**

Hypothesis 1 (a) was partially supported. Personal protective factors for resilience demonstrated a large negative association with use of loss-orientated coping and a large positive association with use of restoration-orientated coping. Employment and finances were the only restoration-orientated stressors with significant associations. The loss-orientated stressors cause and expectedness of death were not significantly associated with lossorientated or restoration-orientated coping.

Hypothesis 1 (b) was partially supported. Employment, finances, and protective factors for resilience were all significantly associated with mental wellbeing. Cause, expectedness of death and parental status failed to reach significance. Hypothesis 1 (c) was largely supported. All factors in the DPM model except parental status were significant associated with grief intensity.

Hypothesis 2 was supported. Loss-orientated coping was negatively associated with mental wellbeing and positively associated with grief intensity. Hypothesis 3 was also supported. Restoration-orientated coping was positively associated with mental wellbeing and negatively associated with grief intensity.

Those employed with greater financial resources and inter and interpersonal protective factors for resilience used more restoration-orientated coping and reported greater mental wellbeing and lower grief intensity. Conversely, those not employed with poorer financial resources and inter and intrapersonal protective factors for resilience reported more loss-orientated coping, greater grief intensity and lower mental wellbeing. While statistically significant, the practical significance of cause and expectedness of death on grief intensity was minimal.

#### Regression

A hierarchical regression was performed to test Hypothesis 2, that variables within the DPM integrative framework would explain a significant amount of the variance in grief intensity. Given the non-significant associations between parental status and any of the variables, parental status was excluded from analyses. Time since loss was entered as a control variable in Step 1. Expectedness of death, cause of death, employment and financial wellbeing were entered at Step 2. Protective factors for resilience were entered at Step 3. Loss-orientated and restoration-orientated coping were entered at Step 4. Results from the regression are reported in Tables 4.

## Table 4

Hierarchical Regression Identifying the Relative Influence of Each Variable within the Dual Process Model Framework on Grief Intensity after Controlling for Time Since Loss

Predictor	B [95% CI]	β [95% CI]	Adj. <i>R</i> <sup>2</sup>	$\Delta R^2$
Step 1				
Time since loss	-2.90 [-3.50, -2.30]**	-0.36 [-0.44, -0.29]**	.13**	
Step 2				
Cause (LO stressor)	1.80 [0.24, 3.40]*	0.09 [0.02, 0.17]*	.25**	.13**
Expectedness (LO stressor)	-1.08 [-2.94, 0.79]	-0.05 [-0.12, 0.04]		
Employment (RO stressor)	1.92 [0.32, 3.51]*	-0.08 [0.02, 0.16] *		
CFPB (RO stressor)	-0.65 [-0.79, -0.50]**	-0.31 [-0.39, -0.25]**		
Step 3				
PFRS (inter/ intrapersonal factors)	-0.29 [-0.33, -0.25]**	-0.48 [-0.54, -0.41]**	.43**	.18**
Step 4				
IDWL (LO coping)	0.73 [0.65, 0.81]**	0.54 [0.48, 0.59]**	.64**	.21**
IDWL (RO coping)	-0.17 [-0.29, -0.06]*	-0.08 [-0.14, -0.03]*		

*Note*. N = 603. Cause = cause of death, coded as 1 = natural; 2 = unnatural. Expectedness = expectedness of death, coded as 1 = sudden; 2 = not sudden. Employment coded as 1 = employed; 2 = not employed. LO = loss-orientated; RO = restoration-orientated; CFPB = Consumer Financial Protection Bureau Financial Well-Being Scale; PFRS = Protective Factors for Resilience Scale; IDWL = Inventory of Daily Widowed Life. \*p < .05. \*\*p < .001.

As can be seen in Table 4, together, the variables in the DPM integrative framework significantly predicted grief intensity as a measure of PGD. Specifically, the semipartial correlations for the control variable, time since loss (.36), accounted for 13% of the variance in the final model. Over and above this, cause of death and employment status significantly positively predicted grief intensity; however, the semipartial correlation (.08) was small and accounted for only 1% of unique variance for each predictor. Expectedness of death did not reach statistical significance. Financial wellbeing and protective factors for resilience significantly negatively predicted grief intensity: the semipartial correlations (-.31) and (-.42) accounted for 9.6% and 18% unique variance, respectively. Loss-orientated coping significantly positively predicted grief intensity: the semipartial correlation (.46) accounted for 21% unique variance. Restoration-orientated coping significantly negatively predicted grief intensity as small (-.07) and accounted for only 1% unique variance. Hypothesis 2 was supported, as loss-orientated and restoration-orientated coping significantly and restoration-orientated coping significantly predicted grief intensity.

#### Discussion

We used the DPM integrative framework to systematically examine correlates and predictors of mental wellbeing and grief intensity in an international sample of 603 young widows and widowers, who had lost a spouse over 3 months ago. We found the DPM is compatible with notion that certain stressors and coping responses in young widowhood render adaptation more difficult. Overall, our findings suggest the young-widowed population is at heightened risk of poor adjustment, in line with Ball (1977).

As hypothesised, and consistent with prior research (Bennett et al., 2010; Caserta & Lund 2007; Richardson & Balaswamy, 2001; Wijngaards-de Meij et al., 2008), increased use of loss-orientated coping was detrimental to wellbeing and increased grief intensity. The strong association between loss-orientated coping and grief intensity highlights the mental anguish caused by off-time spousal loss. As in Carr et al. (2001), young-widowed participants in this study attempted to maintain connections to their spouse and, as a result, experienced substantial yearning and grief. Young widows in Haase and Johnston (2012) held onto their grief as part of their identity, which then influenced relationships, and family and life satisfaction. Traditional theories of bereavement emphasise the importance of 'grief work', where the bereaved focus on feelings towards and circumstances of the loss (Richardson, 2007). However, our results, and those of Richardson (2007), suggest that a focus on loss-orientated coping as a form of grief work may be detrimental. It is generally agreed that recurrent repetitive thinking about the consequences and causes of loss at the expense of restoration-orientated activities is unhealthy and can lead to poor adjustment (Bennett & Soulsby, 2012; Richardson, 2007; Pohlkamp et al., 2018).

As far as we know, the present study is the first to assess the relationship between employment and bereavement outcomes in those widowed young. Consistent with Pai and Barrett (2007), there was a significant association between being employed and higher mental wellbeing and lower grief intensity scores, though the direction of this relationship cannot be established. Additionally, we discovered that being employed was associated with increased restoration-orientated coping and unemployment was related to increased loss-orientated coping. Employment may act as a buffer against the deleterious effects of bereavement and assist young widow(er)s in rebuilding their life, via increased engagement in restorationorientated coping, improved finances and mental wellbeing.

Contrary to our hypothesis, there was no significant associations between parental status grief intensity or mental wellbeing. While we are not aware of any published studies comparing those widowed young with and without dependent children, Yopp et al. (2015) examined widowed fathers with a mean age of 47 years. Participants in Yopp et al. (2015) reported elevated levels of grief intensity similar to those in the present sample. This study and those of Yopp et al. (2015) indicate that perhaps age, rather than parental status, may be the common significant factor in elevated grief intensity. The lack of an association between parental status and grief intensity in the present study is consistent with the proposition that secondary or ambiguous loss may impact upon bereavement outcomes (Harris, 2012; Lowe & McClement, 2011). For example, parents left with the sole responsibility of raising children may grieve the loss of freedom and shared responsibility, while those left childless may grieve the loss of future children. In each circumstance, there is grief concerning the loss of future hopes and dreams (Lowe & McClement, 2011).

In the current study we found 68% of participants reported probable depression with high rates of psychological distress. However, in general widowed populations, meta-analysis has estimated the pooled prevalence of depression as between 19% and 40% (Blanner et al., 2019). Nearly two-thirds experienced a significant reduction in social, occupational, or other important areas of functioning. Almost half reported elevated levels of grief intensity and scored within the diagnostic range for PGD. To put this in context, the pooled prevalence of PGD in general bereaved populations is estimated to be 9.8% (Lundorff et al., 2017), yet 43.4% of the current sample met the diagnostic criteria for PGD. The mean PG-13 score this sample was higher than the mean score in the majority of published studies, including those

of bereaved parents (He et al., 2014; Li & Prigerson, 2016; Pohlkamp et al., 2019; Yu et al., 2017).

The finding that participants remain psychologically distressed many years after loss is inconsistent with Bonanno et al. (2002) and Mancini et al. (2011) who have found the majority (45% to 60%) of those widowed in later life return to pre-loss functioning within months. Considering half of the present sample were over 2 years post-loss, this study indicates that adjustment to off-time spousal loss may differ to late-life widowhood (Bonanno et al., 2015). Among the literature, a common factor associated with prolonged grief-related distress is the violent or unexpected death of the partner (Bottomley et al., 2017; Işıklı et al., 2020).

However, we found only a very small significant association between expectedness of death, cause of death and grief intensity. As predictors, expectedness did not reach significance, and unnatural cause of death only accounted for 1% of the unique variance in grief intensity. Further, there was no association between expectedness, cause of death and mental wellbeing. There was no evidence in the present study to suggest that time to adjust eases pain of loss. It is worth noting that expectedness in the present study was a subjective judgement, and there was no evidence for the reliability and validity of this judgement. It could be the case that off-time spousal loss is uncharacteristic of the life course stage and considered unexpected, regardless of whether or not the death was anticipated.

Personal protective factors for resilience were highly correlated to coping strategies and emerged as the second greatest predictor of grief intensity. The more that participants had access to intrapersonal resilience, peer, and family support, the more they were orientated towards rebuilding their life (restoration-orientated coping) and the lower their levels of grief intensity. Conversely, those unable to harness these resources engaged in more lossorientated coping and experienced higher levels of grief intensity. This finding is consistent with Stroebe et al. (2005), who found social support was predictive of depression; Burke and Neimeyer (2013) and Infurna and Luthar (2017), who found interpersonal support was strongly correlated with bereavement outcomes; Mancini et al. (2015), who found intrapersonal resilience in bereaved individuals was a protective factor for adaptive coping; and Ong et al. (2006), who found trait resilience buffered the detrimental effects of stress post-bereavement.

Considering the strong relationship between protective factors for resilience and poor outcomes among our sample, those widowed young may not be receiving the support they need. Support typically declines past the first year of bereavement (Breen et al., 2017). Moreover, the provision of post-bereavement support may be hampered by people's anxiety and discomfort concerning death (Breen, 2007). This sentiment was reflected in qualitative research, wherein participants felt friends were uncomfortable dealing with their loss (Jones et al., 2019; Lowe & McClement, 2011). While friends and family were an important resource for recovery in bereavement in Brazil et al. (2003), M. Stroebe et al. (2006) points out that family could function as a resource, a situational demand or even both. Considering interpersonal support is a potentially modifiable protective factor, our findings lend weight to Lowe and McClement's (2011) suggestion that seeking out new friendships with others in the same situation may be of benefit to those widowed young.

Financial wellbeing was the only restoration-orientated stressor associated with statistical and practical significance in the regression model, accounting for a significant portion of grief intensity. In keeping with research on older widows (DiGiacomo et al., 2015; Feldman et al., 2000; Utz et al., 2011) financial insecurity is a pertinent stressor in young widowhood. Moreover, financial insecurity was associated with increased loss-orientated and decreased restoration-orientated coping. Consistent with Utz et al. (2011): a widowed person's financial resources influence coping post-bereavement. Despite the current sample reporting above average levels of education and three-quarters being engaged in paid employment, half reported financial insecurity. As the current sample was comprised mainly of women, it appears the loss of a husband's salary is rarely compensated, perhaps due to income disparities between genders (Gass-Sternas, 1995). Further, child care comes at great expense, which may influence the decision to return to work (Gass-Sternas, 1995). In light of the results, it appears there is inadequate financial assistance available to those widowed young. Indeed, some countries, such as Australia, have no supports in place. Often, there is no opportunity to financially prepare for off-time spousal loss, and it could be assumed that it is not at the forefront of young married couples' minds. As a result, the financial blow from young widowhood is significant and has the potential to induce further restoration-orientated stressors, such as loss of the family home.

# Limitations

We used a cross-sectional survey design; therefore, cause or direction of relationships cannot be assumed. While this sample size was larger than most in bereavement research (Breen et al., 2017; Logan et al., 2018), it is not possible to determine if the sample is representative of the broader young-widowed community. Our participants were drawn from online support groups and it is plausible those who seek out online support may not have sufficient interpersonal support networks. Generalisability of the findings to men and same-sex couples is also limited. Consistent with past bereavement research, the vast majority of the sample were women (Breen & O'Connor, 2007) in heterosexual relationships. The world context in which the survey took place is also a consideration: participants reported on general wellbeing, finances and grief intensity in the midst of a global pandemic. This may have magnified feelings of grief and distress and impacted upon participants' financial situations. Finally, we did not assess prevalence of comorbid psychological conditions among the sample, nor did we exclude on this basis. This may have affected the results, as those

suffering from depression may be at risk for poor adjustment in bereavement (Raphael et al., 2001; Utz et al., 2011).

#### **Implications and Future Research**

Young widow(er)s are a vulnerable population at heightened risk for PGD. Those who meet the criteria for PGD are also at increased risk of suicide, alcohol or substance misuse and social and physical impairments (Lichtenthal et al., 2004). In keeping with M. Stroebe's (2007) suggestion, grief interventions should be targeted to those at risk based on empirical evidence. Further, among bereaved samples, 98.5% have expressed they would be receptive to treatment if they were experiencing an atypical grief experience (Logan et al., 2018). In light of the results, clinicians providing grief support in this population should initiate assessment to distinguish typical grief reactions from PGD. There is a large body of evidence that has found grief treatments to be efficacious in alleviating short- and long-term grief symptoms consistent with PGD (Wittouck et al., 2011).

The role of protective factors for resilience in grief intensity and mental wellbeing is substantial. The widowed young may benefit from finding a safe place in the form of online or in-person support groups, within which they can harness these psychosocial resources and connect with those navigating a similar experience (Gass-Sternas, 1995; Logan et al., 2018).

The finding that expectedness and cause of death had no significant effect on adjustment has important clinical implications. According to the *DSM-5* criteria for posttraumatic stress disorder (PTSD), only unexpected violent or accidental death of a loved one—not natural death—qualifies for PTSD diagnosis. While we did not specifically assess PTSD, PGD is strongly related to PTSD (Pohlkamp et al., 2019), and it is plausible based on the high percentage of participants reporting PGD that some are also experiencing symptoms of PTSD. There are calls to have the cause of death qualifier for PTSD in *DSM-5* removed (Atwoli et al., 2017; Keyes et al., 2014). It is certainly relevant in the present study, as these findings are consistent with Caserta et al. (2013), who found cancer deaths were equally as distressing as unexpected death, and with Atwoli et al. (2017), who found no association between cause of death and PTSD. Clinicians need to be mindful that findings on expectedness are not conclusive.

This study of stressors and protective factors is nowhere near exhaustive yet plays an important role in identifying specific factors and their impact on bereavement outcomes. We found that financial insecurity, being unemployed and decreased protective factors for resilience were associated with increased loss-orientated coping and grief intensity. However, there are many other factors worthy of investigation. For example, as a loss-orientated stressor, what is the impact of turbulent or difficult relationships with the deceased on bereavement outcomes? Restoration-orientated stressors in the form of secondary losses, such as the family home or future children, are also worthy of consideration. We discovered intrapersonal resilience is a strong predictor of bereavement outcomes; however, other intrapersonal processes (i.e., attachment style, emotions, affect, previous mental illness or substance misuse) are also worth investigation. In light of our non-significant results regarding expectedness and cause of death and the cause of death qualifier for PTSD in DSM-5, it would be beneficial to examine associations between these loss-orientated stressors and symptoms of PTSD in a young-widowed population. Considering the strong association and predictive relationship of financial wellbeing, future researchers should consider controlling for this confounding variable. We hope the findings from this study drive future research to investigate other factors associated with bereavement outcomes in a young-widowed population.

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