Published in final edited form as:

Death Stud. 2018 April ; 42(4): 247–253. doi:10.1080/07481187.2017.1339743.

Widowed parenting self-efficacy scale: A new measure

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Abstract

The authors developed and tested a novel measure of parenting self-efficacy specifically for recently widowed parents of dependent-age children. They tested the scale among 244 recently widowed fathers via an open-access web survey. Exploratory factor analysis identified 3 factors: perception of meeting parenting expectations ($\alpha = .88$), provision of effective discipline ($\alpha = .69$), and sense of parental burden ($\alpha = .69$). Scores on the new scale correlated positively with Kansas Parenting Satisfaction and Psychological Adaptation Scale scores, and negatively with CES-D (depression) and TRIG (grief) scale scores. The resulting 9-item Widowed Parenting Self Efficacy Scale is a promising measure for use in research and clinical settings.

Recently widowed mothers and fathers face unique and daunting challenges in adapting to their new role as sole parents (Burgess, 1995; Yopp & Rosenstein, 2012). They are simultaneously tasked with adjusting to altered parenting roles, tending to their children's grief reactions, and taking on child care responsibilities that were once shared with the deceased parent. Coping with these increased parental demands can be especially difficult in the context of acute bereavement (Burgess, 1995; Glazer, Clark, Thomas, & Haxton, 2010; Saldinger, Porterfield, & Cain, 2004; Yopp & Rosenstein, 2012). Thus, it is not surprising that widowed parents endorse high levels of parenting-related stress (Yopp et al., 2015) and may lack confidence in their abilities to carry out parental duties (Burgess, 1995).

The ability of surviving parents to meet parental responsibilities is a strong protective factor for their children's psychosocial adaptation (Haine, Wolchik, Sandler, Millsap, & Ayers, 2006; Lin, Sandler, Ayers, Wolchik, & Luecken, 2004; Raveis, Siegel, & Karus, 1999).

Specifically, a child-centered parenting approach is closely linked to greater psychological resiliency and fewer short- and long-term psychological problems in children. Increased caregiving demands may lead widowed parents to feel pressure to compensate for the absence of their coparent. Yet, this population has been largely overlooked in both research and clinical arenas. Specifically, the challenge of widowed parenting has received far less research attention than other aspects of bereavement as reflected by the absence of validated measures to assess parenting self-efficacy among this population.

Parenting self-efficacy pertains to one's perception of his or her ability to carry out parenting tasks necessary to effectively raise a child. It is conceptually related to the construct of parental competence, defined by Jones and Prinz as "parenting behaviors, skills, and strategies that have been considered to promote positive and adaptive child development outcomes" (Jones & Prinz, 2005). High parenting self-efficacy is positively associated with aspects of child-centered parenting such as using effective discipline and promoting warm relationships with children, as well as increased parenting satisfaction and involvement in their children's lives (see Jones & Prinz (2005) for summary). In contrast, low parenting self-efficacy has been associated with parental depression (Damato, Anthony, & Maloni, 2009; Doudna, 2012; Gondoli & Silverberg, 1997; Gross, Conrad, Fogg, & Wothke, 1994; Kohlhoff & Barnett, 2013; Weaver, Shaw, Dishion, & Wilson, 2008), high levels of stress (Damato et al., 2009; Scheel & Rieckmann, 1998), and a passive coping style (Dumka, Stoerzinger, Jackson, & Roosa, 1996; Wells-Parker, Miller, & Topping, 1990). Given that widowed parents may be at heightened risk for depression and prolonged grief (Yopp et al., 2015), context-specific assessment of their parental self-efficacy may prove valuable in designing and evaluating interventions for this vulnerable population.

This article describes the development and validation of a new scale, the Widowed Parenting Self-Efficacy Scale (WPSES), to assess general parenting self-efficacy among widowed parents. We used extensive feedback from widowed fathers whose wives died from cancer in the screening and selection of candidate items in order to develop a scale to assess relevant aspects of widowed parenting. The validity and reliability of the WPSES were assessed in a sample of widowed fathers who participated in a research study that included the scale and other measures of psychosocial functioning. We examined convergent validity using existing measures of parenting satisfaction, depression, grief, and psychological adaption.

Method

Participants

Participants were 244 self-identified widowed fathers who had at least one biological or adopted child under the age of 18 living at home and whose mother died from cancer within the past 5 years. Demographics of the participants of this study are reported in detail elsewhere (Yopp et al., 2015). In brief, the mean age at survey completion was 47.1 years ($SD = 7.54$) and 90% of respondents were Caucasian. The majority reported working full-time (81%), had a college degree (73%), and earned over \$50,000 a year (76%). One third (33%) reported one child under 18 living in their home at the time their wife died, 46% reported two children, and 21% reported 3 or more children under 18 in the home. The mean

age of the oldest child at time of mother's death was 11 years; mean age of the youngest child was 8 years. Almost all respondents (95%) resided in the United States.

Procedures

Literature review of existing parenting scales and widowed parenting—We conducted a narrative literature review using searches in PubMed and Google Scholar, the PsycInfo and Health and Psychosocial Instruments (HaPI) databases, and several published compilations (books) of scales in the University of North Carolina at Chapel Hill collections. We enlisted the assistance of a professional information services librarian at the University of North Carolina at Chapel Hill Health Sciences Library. The search strategy was an iterative process, first identifying one set of potentially relevant sources, then consulting the references cited in those sources. We continued to explore the references in the second level sources and so on until we reached saturation. The search terms we used were *widowed parenting, parenting self-efficacy, parenting competence, parenting confidence, parenting outcomes, parenting satisfaction, parenting skills, bereaved parenting, bereaved child, parent coping, and child coping*.

The parenting self-efficacy scales identified in our literature review fall into three broad categories: (a) scales that measure overall parenting self-efficacy, (b) scales that assess a parent's perception of his/her own competence in specific parenting skills such as soothing a crying infant (Teti & Gelfand, 1991) or discussing sex with an adolescent (DiIorio et al., 2001), and (c) narrow-domain scales that focus on one aspect of parenting such as discipline (Arnold, O'Leary, Wolff, & Acker, 1993). Some scales have been designed for age-specific populations such as the Maternal Self-Efficacy Scale (Teti & Gelfand, 1991), the Tool to Measure Parenting Self Efficacy (Kendall & Bloomfield, 2005), and the Self-Efficacy for Parenting Tasks Index (Coleman & Karraker, 2000). In searching for a measure that would assess overall parenting self-efficacy for the broad population of widowed parents, we excluded scales that focus only on certain parenting tasks or domains, and those designed for parenting children of a specific age.

Two existing scales fit the criteria of measuring general parenting self-efficacy for parents of children of all ages: the Efficacy subscale of the Parenting Sense of Competency Scale (Johnston & Mash, 1989) and the Parenting Self-Agency Measure (Dumka et al., 1996). Yet neither scale was appropriate for use with the widowed parent population. For example, it would have been necessary to rephrase individual scale items to be consistent with the context of widowed parenting. If used with a bereaved population, items on extant measures may be blind (at best) or insensitive (at worst) to the predicament facing widowed parents. In addition, to capture parenting self-efficacy in the context of widowed parenthood, items should explicitly ask the respondent to rate self-efficacy since the death of the coparent. For these reasons, we chose to develop a new scale.

Domain selection—Decisions regarding which parenting domains to include in our scale were informed by a review of the literature on widowed parenting and our clinical experience working with this population. Several domains emerged as important to measure. Bereaved parents are at risk for feeling overwhelmed by the time and energy required to be a

sole parent (Glazer et al., 2010), thus it was necessary to include items assessing parenting stress. Widowed parents are prone to believing that no matter what they do, it will not be good enough because their children no longer have both parents (Boerner & Silverman, 2001; Glazer et al., 2010). As such, surviving parents report feeling great parenting pressure, guiding us to assess whether they are meeting their own (or others) expectations. A parent's perception of whether he or she can empathize with their bereaved child is another salient aspect of widowed parenting (Boerner & Silverman, 2001; Saldinger et al., 2004). Finally, maintaining discipline within the home is considered a critical component of providing parentally-bereaved children with needed structure and stability (Boerner & Silverman, 2001; Glazer et al., 2010) and is something that some surviving parents may struggle to achieve.

Item development—Based on review of existing scales, clinical experience, and concept elicitation interviews with widowed fathers, we generated 50 items focused on four domains: (a) sense of parenting burden; (b) meeting parental expectations; (c) discipline; and (d) empathy. The items underwent face validity assessment for clarity of wording, avoidance of bias, and coherent logical structure with the planned disagree–agree response scale. Redundant, vague, and biased items were eliminated. Twenty-five candidate items were reviewed by seven widowed fathers in the Single Fathers Due to Cancer support group at the University of North Carolina at Chapel Hill. The fathers evaluated the list for content validity, provided feedback on wording, and communicated their consensus opinion that the most important dimensions of widowed parenting had been captured. Based on the fathers' feedback, 13 items were eliminated as redundant or not relevant, leaving 12 final candidates for our scale.

The items are worded as first-person statements. Respondents indicate their level of agreement on a labeled 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*), following an instruction of “Thinking about your parenting in the time since [NAME/your wife] died, how much would you disagree or agree with each of the following statements?”

Recruitment—The 12-item scale was included as part of an open-access online survey that was available from October 2012 to November 2013 at www.singlefathersduetocancer.org. This website is maintained by the Single Fathers Due to Cancer program at the University of North Carolina at Chapel Hill and served the dual purposes of housing the survey and providing online resources for widowed fathers. The survey was approved by the UNC Institutional Review Board. The website was publicized through cancer support networks, relevant professional associations (e.g., American Psychosocial Oncology Society; Livestrong Foundation) and national television and print media. For more information on the survey, see Yopp et al., 2015.

Construct validity—Demonstrating construct validity of a new scale is challenging because, by definition, no “gold standard” exists to compare the new scale to. One approach is to measure correlation with results from validated scales assessing related constructs. When correlations are as hypothesized, it contributes to construct validity. (Westen & Rosenthal, 2003) Prior studies of bereaved parents led us to predict that parenting self-efficacy would be negatively correlated with depressive and grief symptoms and positively

correlated with parenting satisfaction and psychological adaptation. (Maciejewski, Prigerson, & Mazure, 2000; Philip, Merluzzi, Zhang, & Heitzmann, 2013)

The survey included measures of each of these four constructs. The Center for Epidemiological Studies-Depression scale (CES-D; Radloff, 1977) was used to measure depressive symptoms (Cronbach's $\alpha = .78$). The CES-D is widely accepted as a valid measure of depressive symptoms used in clinical and research settings. Parenting satisfaction was measured using the Kansas Parenting Satisfaction Scale (James et al., 1985), which assesses parents' satisfaction with themselves as a parent, the behavior of their children, and their relationship with their children (Cronbach's $\alpha = .80$). The Psychological Adaptation Scale (PAS; Biesecker et al., 2013) was used to measure participants' psychological adaptation to the death of their wives (Cronbach's $\alpha = .93$). The PAS has been used to assess adaptation to other health-related conditions including genetic disorders, bipolar disorder, and chromosomal conditions. The Texas Revised Inventory of Grief (TRIG; Faschingbauer, DeVaul, & Zisook, 1977) was used to assess grief. The TRIG is divided into two parts: Part A (Cronbach's $\alpha = .75$) contains 8 items measuring feelings and actions that occurred at the time of the death. Part B (Cronbach's $\alpha = .89$) consists of 13 items assessing current grief symptoms.

Analysis—After examining descriptive statistics for the items, we performed exploratory factor analysis with oblique rotation using a polychoric correlation matrix that reflects the ordinal nature of the data (Holgado-Tello, Chacón-Moscoso, Barbero-García, & Vila-Abad, 2008). Alpha values for the items within each factor and all nine items together were calculated reflecting the ordinal nature of the data (Zumbo, Gadermann, & Zeisser, 2007). Pearson correlation coefficients were used for convergent validity assessments. All analyses were conducted using SAS version 9.3.

Results

The items and their distributions and means are shown in Table 1. For six of the 12 items, higher scores indicate greater self-efficacy. However, for Items 2, 3, 5, 6, 8, and 10, higher scores reflect lower self-efficacy. These items were reverse scored for all further analyses.

From the exploratory factor analysis, a clear three-factor solution emerged. Results are shown in Table 2. The factors conform to the dimensions of meeting parenting expectations (meeting expectations; $\alpha = .88$), providing effective discipline (discipline; $\alpha = .69$), and sense of burden related to parenting responsibilities (burden; $\alpha = .69$).

We found no evidence to support a fourth factor of empathy. Three items (2, 4, and 9) did not having factor loadings above .50 for any of the factors and were therefore eliminated from the final version of the scale. The ordinal alpha for the remaining nine items was .80.

We proceeded to calculate a WPSES overall score for each subject by averaging the values associated with their responses to the nine items. Possible scores ranged from 1 to 6, with higher scores indicating higher self-efficacy. Among our 244 participants, the minimum score was 1.67 and the maximum was 5.89. The mean overall score was 3.73 ($SD = .80$) and

the median overall score was 3.66. Subscale scores were calculated by averaging the responses for the items within each factor.

The means, standard deviations, and Pearson correlations of the three subscale scores and the overall WPSES score with each of our construct validity measures are shown in Table 3. The overall score, Meeting Expectations subscale score, and Burden subscale score were correlated as expected with all four measures. That is, higher parenting self-efficacy was associated with lower depression scores, lower grief scores, higher parenting satisfaction scores, and higher psychological adaptation scores. The Discipline subscale was negatively correlated with depression and grief at time of death, and positively correlated with parenting satisfaction; however, this subscale was not significantly correlated with psychological adaptation or current grief-related symptoms. Together, these findings provide compelling initial support for the construct validity of the WPSES in the context of widowed parents due to cancer. The final WPSES scale with scoring is provided in Table 4.

Discussion

Widowed parents must adapt to a complex set of altered parenting roles and their effective adjustment to sole parenting promotes healthier psychological functioning in their children. Parenting self-efficacy may be particularly challenging for widowed parents facing increased parenting demands in a time of acute bereavement. To the best of our knowledge, no validated measure of parenting self-efficacy had been created specifically for use with this vulnerable population. The WPSES was designed to assess self-efficacy across four areas of parenting considered especially important following the death of a coparent: the sense of meeting expectations in raising children; the perceived burden of being a sole parent; the perceived ability to enforce discipline in the home; and the capacity to empathize with a grieving child. Factor analysis identified support for the first three subscales but not the fourth.

Little is known about how widowed parents perceive their parenting competency. Previous research has found that widowed parents report elevated depression, high stress, and poor psychological adaptation in the years following the deaths of their spouses (Yopp et al., 2015). Given the consistent finding in nonwidowed samples that depression (Damato et al., 2009; Doudna, 2012; Gondoli & Silverberg, 1997; Gross et al., 1994; Kohlhoff & Barnett, 2013; Weaver et al., 2008) and high stress (Damato et al., 2009; Scheel & Rieckmann, 1998) are associated with low parenting self-efficacy, it is clear that assessing how widowed parents perceive their parenting is critical to identifying their needs. Furthermore, carrying out parenting duties is important for a widowed parent's sense of self-worth as well as the child's psychological well-being and adaptation following the loss of a mother or father. Consequently, parenting self-efficacy may be a critical target of intervention. The WPSES holds promise for future clinical assessment of parental self-efficacy and as a research tool for designing and assessing the effectiveness of interventions to enhance parenting self-efficacy at different time points during acute bereavement.

There are several limitations to this study, most notably, the narrow representativeness of the sample. All participants in this study were male and widowed by virtue of their wives'

cancer. It may be that fathers who filled out the survey on the Single Fathers Due to Cancer website represent a particularly distressed subset of the widowed parent population, or they may represent a subset of widowers functioning well enough to search for help. Any biases of the group are unknown. Further, there was considerable homogeneity in the sociodemographics of our sample, limiting its representativeness. Participants had above average levels of education and income and had access to the internet. Because our results were not based on a probability sample, the findings cannot be generalized to all widowed fathers. Widowed mothers would be expected to have different experiences from men. Similarly, spousal loss from causes other than cancer may be associated with different parenting challenges (e.g., parental death by suicide). An additional limitation is that the factor analysis of the WPSES did not yield a distinct factor for one aspect of parenting self-efficacy considered important for widowed parents—the perception that they were empathic toward their grieving children. It is possible that parental empathy remains an important construct in widowed parenthood that was not adequately represented by the WPSES.

Conclusion

The WPSES holds promise as a parenting self-efficacy measure for researchers and, in the future, clinicians working with bereaved parents. It is easily administered and not specific to age(s) of child(ren) or cause of the parent's death. Though promising in its debut, the WPSES will benefit from being tested in other populations and from reassessment of its validity and reliability among other widowed parent populations. Our own research with a cohort of fathers followed longitudinally will soon examine whether, as might be expected, widowed parenting self-efficacy is lowest in the weeks and months immediately following spousal death and improves over time as the father adjusts to his new role as sole parent. Comparing WPSES scores to clinical outcomes could provide further validation of the scale over time. We encourage other researchers to gather data using the WPSES to aid in assessing its validity and utility as a scale specifically designed for this neglected and vulnerable population.

Acknowledgement

This research was partially supported by the Intramural Research Program of the National Human Research Institute, National Institutes of Health.

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Table 1.

Initial pool of tested items.

Q#	Question	Strongly disagree (1)	Moderately disagree (2)	Mildly disagree (3)	Mildly agree (4)	Moderately agree (5)	Strongly agree (6)	Mean (SD)
1	I am doing an excellent job raising my child(ren) since my wife died	1%	6%	9%	30%	36%	18%	4.47 (1.15)
2	I feel pressure to be the perfect parent because my wife died	5%	7%	11%	22%	27%	27%	4.41 (1.44)
3	I am unsure how to discipline my child(ren) since their mother died	21%	24%	13%	23%	14%	5%	3.02 (1.53)
4	I understand what my child(ren) are going through	10%	15%	17%	23%	23%	12%	3.69 (1.52)
5	No matter how I raise my child(ren), it won't be good enough because they don't have a mother	15%	12%	14%	27%	14%	19%	3.70 (1.66)
6	I feel overwhelmed by the responsibilities of being a parent	7%	7%	11%	23%	30%	22%	4.29 (1.45)
7	My wife would be proud of how I am raising our child(ren)	0%	5%	7%	21%	41%	26%	4.75 (1.09)
8	I am less strict with my child(ren) since their mother died	8%	16%	16%	29%	21%	10%	3.68 (1.43)
9	I am comfortable talking with my child(ren) about their mother	0%	3%	2%	10%	34%	50%	5.25 (0.98)
10	Caring for my child(ren) takes up all my time and energy	2%	9%	9%	27%	32%	21%	4.39 (1.29)
11	My child(ren) listen to me as well as they did before their mother died	1%	7%	10%	20%	36%	26%	4.59 (1.25)
12	I meet my own expectations for being a parent	3%	17%	14%	30%	30%	7%	3.88 (1.29)

Note: Married respondents who completed survey within 5 years of wife's death and answered all 12 items, n = 244.

Table 2.

Initial and final factor structure matrices.

Q#	Question	Initial 12-item factor loadings			Final 9-item factor loadings			Final communality estimate
		Factor 1 expectations	Factor 2 discipline	Factor 3 burden	Factor 1 expectations ($\alpha = .88$)	Factor 2 discipline ($\alpha = .69$)	Factor 3 burden ($\alpha = .69$)	
1	I am doing an excellent job raising my child(ren) since my wife died	.90	.34	.31	.89	.28	.18	.79
12	I meet my own expectations for being a parent	.82	.32	.38	.83	.27	.26	.70
7	My wife would be proud of how I am raising our child(ren)	.78	.31	.23	.77	.18	.12	.59
3R	I am unsure how to discipline my child(ren) since their mother died	.38	.71	.30	.33	.72	.24	.52
8R	I am less strict with my child(ren) since their mother died	.19	.62	.25	.10	.63	.21	.41
11	My child(ren) listen to me as well as they did before their mother died	.51	.55	.10	.51	.54	-.04	.41
10R	Caring for my child(ren) takes up all my time and energy	.05	-.03	.56	.01	-.12	.57	.36
6R	I feel overwhelmed by the responsibilities of being a parent	.40	.30	.69	.38	.23	.70	.52
5R	No matter how I raise my child(ren), it won't be good enough because they don't have a mother	.35	.41	.66	.31	.38	.62	.45
2	I feel pressure to be the perfect parent because my wife died	.04	.22	.49	–	–	–	–
9	I am comfortable talking with my child(ren) about their mother	.37	.36	.10	–	–	–	–
4	I understand what my child(ren) are going through	.31	.15	-.01	–	–	–	–

Note: R = indicates reverse scoring. α values reflect ordinal nature of the data. See Zumbo et al. (2007). EFA conducted on polychoric correlation matrix, promax rotation, 3-factor solution, ordinal $\alpha = .80$ for final 9 items.

Number in bold indicate most significant loading when > 0.50

Table 3.

Total and subscale score correlations with related measures.

Subscale/scale	CES-D	KPS	PAS	TRIG-A	TRIG-B
Expectations Subscale (<i>Mean</i> = 4.37, <i>SD</i> = 1.02)	-.046***	.60***	.35***	-.035***	-.024***
Discipline Subscale (<i>Mean</i> = 3.96, <i>SD</i> = 1.09)	-.026***	.39***	.08	-.031***	-.013
Burden Subscale (<i>Mean</i> = 2.87, <i>SD</i> = 1.14)	-.040***	.18**	.18**	-.038***	-.038***
Total WPSES (<i>Mean</i> = 3.73, <i>SD</i> = 0.80)	-.049***	.52***	.27***	-.047***	-.034***

Note: CES-D = Center for Epidemiological Studies-Depression scale; KPS = Kansas Parenting Satisfaction Scale; PAS = Psychological Adaptation Scale; TRIG-A = Texas Revised Inventory of Grief Part A; TRIG-B = Texas Revised Inventory of Grief, Part B.

**
p < .01.

p < .001.

Table 4.

Widowed Parenting Self-Efficacy Scale (WPSES) with scoring.

Thinking about your parenting in the time since [NAME/your wife] ^a died, how much would you disagree or agree with each of the following statements? Please select one response on each row.	Point value for scoring					
	Strongly disagree	Moderately disagree	Mildly disagree	Mildly agree	Moderately agree	Strongly agree
I am doing an excellent job raising my children since my wife died	1	2	3	4	5	6
I am unsure how to discipline my children since their mother died	6	5	4	3	2	1
No matter how I raise my children, it won't be good enough because they don't have a mother	6	5	4	3	2	1
I feel overwhelmed by the responsibilities of being a parent	6	5	4	3	2	1
[NAME/My wife] would be proud of how I am raising our children	1	2	3	4	5	6
I am less strict with my children since their mother died	6	5	4	3	2	1
Caring for my children takes up all my time and energy	6	5	4	3	2	1
My children listen to me as well as they did before their mother died	1	2	3	4	5	6
I meet my own expectations for being a parent	1	2	3	4	5	6

Note: WPSES Score = average of responses to items using values shown.

^a At the beginning of the survey, respondents chose a preferred wording for the survey. Most opted to provide their wife's first name; others chose for the questions to use the phrase "your wife."