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Parental death and its impact on the marital satisfaction of the surviving adult child

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PARENTAL DEATH AND ITS IMPACT ON THE MARITAL
RELATIONSHIP OF THE SURVIVING ADULT CHILD

by

Ryan G. Henry

A dissertation submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Marriage and Family Therapy

Brigham Young University

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BRIGHAM YOUNG UNIVERSITY

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ABSTRACT

PARENTAL DEATH AND ITS IMPACT ON THE MARITAL RELATIONSHIP OF THE SURVIVING ADULT CHILD

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Doctor of Philosophy

Previous literature has identified parental death as having a negative impact on the physical and mental health of the surviving adult child. In addition, research suggests that the marital satisfaction of a male or female adult child is negatively impacted after either a father or mother has died. The purpose of this research is to further study this topic by examining longitudinal dyadic data to determine how the death of a parent or death of an in-law impacts marital interaction when certain mediating variables are taken into account. Some of the mediating variables included quality of the parent-child relationship, caregiving, and gender. Data from 98 couples, with an average age of 47, from the USC Longitudinal Study of Generations, were examined using stepwise regression. During the 3 year interval between 1997 and 2000, 45 couples in the sample experienced the death of at least one of their parents. The main finding of the study was that marital satisfaction appears to remain fairly stable following the death of a parent. In other words, there were very few significant changes in positive or

negative marital interactions for grieving sons and daughters. However, the few significant results indicated that sons who had a mother die experienced a significant decline in negative interaction with their wife. The death of a spouse's parent also did not impact perceived marital satisfaction in a significant way. Clinical implications are discussed, as well as recommendations for future research.

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Introduction

Parental death is an inevitable life event that most commonly occurs in midlife. As people live longer, the life expectancy has increased to 79 for women and 74 for men (Federal Interagency Forum, 2000). Since parents are living longer, it is becoming more common for adult children to be in their 40's or early 50's before losing a parent to death. Only around 10% of children lose a parent before the age of 25, while 75% of adult children have lost both parents by age 62 (Winsborough, Bumpass, and Aquilino, 1991). Only about 5% of women have had both parents die by age 40. In other words, 95% of women will have a parent die after age 40 (Watkins, Menken, & Bongaarts, 1987).

During the last two decades, research on parental death has revealed some insight into how adult children are impacted both physically and psychologically by the death of a parent. There appears to be ample evidence that there is an association between parental death and the psychological and physical well-being of the surviving adult child (Moss & Moss, 1983, Umberson & Chen, 1994; Horowitz, Krupnick, Kaltreider, Wilner, Leong, & Marmar, 1981) one to five years following the death (Scharlach & Fredriksen, 1993; Douglas, 1990).

Several of the most common physical declines occurring for adult children after the death of a parent are an increase in alcohol consumption (Umberson & Chen, 1994), an increase in somatic reactions, and a decrease in overall health. It has been estimated that 45% of adult children experience somatic reactions to the death of a parent and around 13% report declines in overall health (Scharlach & Fredriksen, 1993).

Decreases in psychological health tend to occur immediately following the death and often times persist for several years. Anxiety and depression are two of the most common forms of psychological distress grieving adult children experience (Popek & Scharlach, 1991;

Scharlach & Fredriksen, 1993). Other common forms of psychological distress include emotional shock, anger, guilt, confusion, helplessness, and avoidance. Other reactions include intrusive thoughts, dreams, and images, periods of impaired recall or concentration, and conspicuous numbness (Popek & Scharlach, 1991). After six months, there is generally a significant decline in these emotional reactions to death (Pratt, Walker, & Wood, 1992).

Research, however, is not as clear regarding how parental death affects the marital relationship of the grieving adult child. What we do know is that in some marriages the death of a parent seems to have a negative impact on the relationship (Umberson, 1995; Scharlach and Fredriksen's, 1993; Guttman, 1991; Kaltreider, Becker, & Horowitz, 1984). Specifically, Scharlach and Fredriksen (1993) found an increase in conflict in 20% to 30% percent of marriages, depending on whether the mother or father died. A decrease in relationship harmony and social support was also present in the marriages of adult children following the death of a parent (Umberson, 1995). Through the use of interviews, past research has also identified patterns of interactions that seem to be contributing to the decline in overall marital satisfaction during this period of mourning (Kaltreider, Becker, and Horowitz, 1984; Guttman, 1991; Umberson, 1995). What is lacking in the research is an understanding of partner effects on marital satisfaction following the death of a parent and what specific actor effects buffer the effects of parental death or contribute to its decline. The current study proposes a model of marital satisfaction and parental death using dyadic data that will fill the gap in previous research.

Understanding the impact that life transitions, such as parental death, has on marital satisfaction is very important because marital quality is strongly associated with global happiness (Glenn, 1990) and overall health (Finchman & Beach, 1999). For example, Whisman and Bruce

(1999) identified dissatisfaction in marriage as being correlated with having a major depressive episode. More specifically, spouses that were dissatisfied with their marriage were 3 times more likely to develop a major depressive episode than a spouse who was satisfied. In addition, marital distress has been identified as putting couples at increased risk for physical illnesses (Levenson, Carstensen, & Gottman, 1993). Heart disease, endocrine, immune, neurosensory are several physiological mechanisms that have been identified as being directly influenced by marital discord (Kiecolt-Glaser, & Newton, 2001).

The purpose of the current study is to examine how the parent-child relationship, demographic variables and caregiving mediate the effects of parental death on the marital satisfaction of adult children. Four stepwise regression models based on the gender of the adult child and type of interaction in the marriage were constructed and tested using longitudinal dyadic data. Gaining a better understanding of what factors impact marital satisfaction may have important implications for both the treatment and prevention of complicated grief and the prevention of decreased physical health and global happiness.

Previous Literature

Unique Reactions to the Death of a Parent

Parental death is an important event in the life of an adult child. It tends to mark a transition for adult children in how they see themselves and how they see their own mortality. This loss often brings adult children face-to-face with the realization that they are next in line for poor health and eventual death (Douglas, 1990). In addition, adult children may become aware of traits, either positive or negative, of the deceased parent in their own self-image (Malinak, Hoyt, & Patterson, 1979). The research literature has identified important variables associated with how specific adult children respond to the death of a parent.

Moderating Variables of Grief

Relationship with parent. One variable that is consistently found to impact adult children's reaction to the loss of a parent is their relationship with their parent prior to death. A closer examination of parent-child relationships reveals that the issue is more complex than just whether or not the adult child feels that they were close to their parent. In a study by Popek and Scharlach (1991), results indicated that the gender of both the parent and the adult child influenced how significant the relationship affected the mourning process. Only the female daughters who had ambivalent, conflictual, or emotional distant relationships with their mothers had an increased likelihood of having reactions to the death one to five years later. On the other hand, daughters who had close and mutually accepting relationships appeared to resolve mourning symptoms quicker.

Douglas (1990) found that adults who reported feeling close to their adult parents had a stronger reaction to the death than adults who felt distant to their parent before the death. Umberson and Chen (1994) identified a similar pattern in their study. Specifically, higher levels of emotional support from the father before his death were associated with an increase in alcohol consumption for the adult child after death.

Childhood memories of parents also seem to have a significant impact on how children respond to parental death. Once again, the interplay of the parent's and child's gender influences which memories are distressing and which are not. For example, sons who had childhood memories of their father as having a mental illness were more distressed following the death of the father compared to sons who had no memories of mental illness in their father. The opposite was true of daughters who had memories of their fathers having a mental illness. These daughters actually exhibited lower distress scores following the death than daughters who did not

have fathers with mental illness (Umberson & Chen, 1994). Increased alcohol consumption was also connected to negative memories of the parent-child relationship. This was evident with daughters who had memories of a violent mother. Adult children also increased their drinking significantly when they had memories of their father having a drinking problem. Other forms of physical health did not seem to be effected by the previous relationship with parents (Umberson & Chen, 1994).

Caregiving and other circumstances around the death. Caregiving for an ill parent prior to death seems to aid the adult child through the grief process. Some possible reasons for this may include the adult child losing a demanding role and having time to prepare themselves for the death. A study by Scharlach and Fredriksen (1993) found that the termination of demanding care for a mother due to death was associated with expressed relief and increased happiness for the adult child. The research on other issues, such as whether the death was sudden or due to chronic illness, showed mixed results. Sanders (1980) found that there were no significant differences in levels of intensity of symptoms between losing a parent suddenly or through a chronic illness. Malinak, Hoyt, and Patterson (1979) conducted a qualitative study of 14 people who had experienced the death of a parent 3 to 20 months previously. They found that unexpected or sudden death did not impact an adult child's ability to comprehend and integrate the loss of a parent. On the other hand, Horowitz, Weiss, Kaltreider, Krupnick, Marmar, Wilner, and DeWitt (1984) found that adult children who experienced a sudden or unexpected death of a parent had higher levels of anxiety as reported on the SCL-90, and they were more likely to seek mental health treatment. They also found that an adult child feeling responsible for the death was related to more persistent distress symptoms one year later.

Demographics of the adult child. The gender, age, and marital status of the adult child, as individual variables or in combination with each other, seem to also impact how adult children respond to the death of a parent. The effect of the age of an adult child on the grieving process has been found to have mixed results. Umberson and Chen (1994) found that age was positively related to drinking in response to a father's death, while Horowitz, Krupnick, Kaltreider, Wilner, Leong, and Marmar (1981) found that younger adult children had higher levels of depression.

Across studies, marriage has been identified as a buffer against the negative effects of parental death. In a study by Umberson and Chen (1994), married children consumed less alcohol by 34 drinks per month than adult children who were not married. Horowitz and colleges (1981) found that married adult children also had lower levels of depression than unmarried adult children following the death of a parent.

Overall, daughters seem more vulnerable to the negative effects of parental death. Douglas (1990) found that the loss of a father was devastating for about 75% of the female adult children in the sample, while only about 25% of the male adult children experienced similar reactions. The female adult children used words like "traumatized", "destroyed", "adrift", "alone", "horrible" and "awful" to describe how the death of their father made them feel. The majority of the females felt that this loss was the biggest event of their lives.

Gender of the deceased parent. The findings from previous research indicate that the gender of the deceased parent plays a role in how adult children respond to the death of a parent, but not necessarily in the severity of the response. Adult children that experienced the death of a mother had a significant increase in psychological distress (Umberson & Chen, 1994), commonly not subsiding after a year of mourning (Horowitz, Weiss, Kaltreider, Krupnick, Marmar, Wilner, & DeWitt, 1984). The death of a father, however, was associated with a

significant increase in alcohol consumption. A closer comparison using t-tests in their study revealed that the only significant difference between the death of a father and a mother was increased alcohol consumption associated with a father's death (Horowitz, et al., 1984). Regardless of the parent's gender, adult children experienced a significant decline in reported physical health (Umberson & Chen, 1994).

In summary, the individual effects of parental death appear to impact the physical and psychological well-being of the surviving adult children. However, the degree of severity seems to be based on specific modifying variables. The variables that seem to buffer the effects of parental death are having a positive relationship with the deceased parent, being married, being religious, anticipating the death, and caregiving prior to the death. Having an ambiguous or distant relationship with the parent complicates the mourning process leading to more psychological and physical symptoms.

Parental Death and Marital Satisfaction

There have been three key studies that have specifically examined parental death's impact on the marital satisfaction of adult children (Guttman, 1991; Kaltreider, Becker, & Horowitz, 1984; Umberson, 1995). Two earlier studies were exploratory in nature and used interviews and case vignettes. The results of both of the earlier studies suggested that parental death has a negative effect on some marriages.

Kaltreider and colleagues (1984) conducted the first study using a nonequivalent contrast group design to answer several important questions about parental death and marital satisfaction. Participants in the field group included 18 males and 19 females that had lost a parent as recently as two months and no longer than 1 year previously. The patient group included two males and 33 females that sought psychotherapy within the year of losing a parent to death. Not everyone in

the sample was married. A combination of self-report measures and short interviews was used to compare the two groups of grieving adult children.

The analysis of the data revealed three distinctive patterns that occurred within intimate adult relationships after the death of parent. The first pattern was characterized by the surviving adult child displacing unacceptable feelings about the deceased on their significant other. The displacement of these unacceptable feelings resulted in a strain on the relationship. In the second, a demand of high levels of caretaking was placed on the significant other, and then if the significant other left them because of these demands, the surviving adult child experienced a loss that was similar to the loss experienced after the death of their parent. This second loss would just add to the surviving adult child's feeling of helplessness and abandonment. The third pattern was characterized by a fear that the parent's worst qualities existed in themselves and could now damage their significant other. This negative self-image either limited how intimate they allowed themselves to get in order to protect themselves or undoing the threat by focusing on a caretaking role. These patterns only applied to the individuals that sought therapy to facilitate the mourning process. Consequently, negative effects or patterns in marriage were only seen in a clinical sample. However, the study gave very little explanation or examples of what was actually happening in each pattern.

The vague description and mixed sample of married and not married participants left room for a more descriptive analysis to be done on the topic. In 1991, Guttman wrote a clinical article that added case vignettes to highlight the processes that occur in these different types of patterns. From his clinical work, Guttman concluded that couples presenting with a sudden deterioration of their marriage often had a parent recently die that was over idealized or viewed

as ambivalent. He identified problems occurring when the marriage became a replica of the former parent-child relationship that was lost.

Two studies using more rigorous qualitative methods have examined the impact of parental death on adult children and their marital relationships. Douglas' (1990) study of 22 daughters and 18 sons found a large percent of the sample reporting a marital upheaval following the death of a parent. Around 57% of the female adult children in the sample reported that they had experienced a marital upheaval within three years of the death of a parent and around 30% of the male adult children also experienced an upheaval in their marriage. Two-thirds of the sample spoke of their marriage as a continuation or replacement of the past parent-child relationship with the deceased parent.

Scharlach and Fredriksen's (1993) qualitative study was based on 83 interviews with adults aged 35- 60 who had lost a parent one to five years earlier. They found that after the death of a mother, 20% of the respondents reported an increase in conflict with their spouse. The death of a father resulted in 29% of the adult children reporting increased conflict with their spouse/partner. More specifically, 11% reported that the death of a parent contributed directly to their decision to divorce or separate. The most common reason cited was they no longer felt the need to remain together due to parental expectations. Many respondents also stated that their significant other was unable to understand the depth of their grief or provide the needed support during this difficult time.

Umberson's 1995 seminal study was a major addition to the research literature on parental death and marital satisfaction. This study used a combination of quantitative and qualitative data. The quantitative portion of the study consisted of longitudinal data with a control group in order to assess if and how the death of a parent affects marital satisfaction of the

adult child. They followed 123 married or cohabiting individuals that had lost a parent between 1986 and 1989. The control group consisted of 679 individuals that were also surveyed in 1986 and 1989. The qualitative data consisted of 42 in-depth interviews with recently bereaved adult children between the ages 25 and 67. These interviews were used to help answer the possible reasons for the declines that the quantitative data revealed.

The results of their analysis revealed differences between the death of a father and mother. The results indicated that the death of a mother is associated with a decline in social support and an increase in negative behavior from a grieving adult child's partner. They also found that the death of a father was associated with a decline in relationship harmony and an increase in strain and conflict in marriage, especially for African- Americans. In addition, the results indicated that higher education was related to a greater decline in marital satisfaction. Finally, the duration of the relationship was associated with less strain and conflict that resulted from a fathers' death.

The in-depth interviews revealed four main themes of why marital quality declined following a parental death. The most common theme was that partners could not provide the needed or desired emotional support. The second reason was an unwillingness or inability of the partner to communicate about the loss. Often the bereaved adult child wanted their partner to initiate conversations about their deceased parent. The third theme was that their partner did not adequately understand the importance and significance of the loss of a parent. This inability to empathize with their grief was usually explained as their spouse not having lost a parent of their own. The fourth theme was excessive expectations of the partner. They had difficulty understanding why their grieving spouse was not fulfilling their roles or why they were not done mourning yet. Another theme, less often reported but still important, was the theme of liberation.

Couples reported this theme when they divorced or separated and cited the reason as no longer having to worry about how their parent would view the dissolution of the marriage.

The methods and data for this study were sound, allowing the results to be more generalizable and reliable than the other studies described above. However, in her analysis, Umberson (1995) only used demographic characteristics to control for the effects of parental death on marital satisfaction. While, gender, race, education, age, income, years in the relationship, and parenthood status are important factors, past research has indicated that psychosocial factors, such as parent-child relationship and circumstances surrounding the death may also be important mediating variables. These mediating variables may play an important role in why some couples are affected negatively by this life event and other marriages are not.

Attachment and Loss

Attachment theory provides a lens for explaining possible reasons why parental death affects some marriages negatively while other marriages remain unaffected. The basic premise of attachment theory is that humans have innate needs for safety, security, and connection. In the early stages of attachment theory, Bowlby described a bond he believed existed between primary caregivers (usually mothers) and children. Later labeled “attachment” (Ainsworth, 1964; Bowlby, 1958; Bowlby, 1969), it was conceptualized as the affective connection between two individuals that provides them with a firm emotional foundation from which they can interact with the world.

Through the work of Ainsworth and colleagues, the first typology of attachment styles was created. Their work revealed three different styles of child behavior: secure attachment, anxious attachment, and avoidant attachment (Ainsworth, Blehar, Walters, & Wall, 1978). Bowlby believed that the combination of positive and negative beliefs about the self and others

created the different attachment styles described by Ainsworth (Bowlby, 1980). Children that displayed secure attachment believed that they were worthy of love, they carried that expectation with them and selected relationships that were congruent with that belief. Secure forms of attachment were characterized by supportive, trusting, caring, and accepting behaviors (Bowlby, 1969). Anxious attachment was characterized by the child believing that the world or others were not to be trusted; they were hesitant in emotionally connecting to others because of the perceived pending doom of the relationship. Avoidant attachments are characterized by the child believing that they are unlovable or unacceptable but that others are good. These types of bonds are believed to be the foundation for future relationships, as well as the individuals' paradigmatic view of themselves and others. Therefore, adult children that have insecurely attached relationships with parents are more likely to form insecure attachments with their spouse.

Central to the theory of attachment are the behaviors that maintain the relational attachment styles (Cassidy, 1999). This refers to a person's relationship behaviors being congruent with the current beliefs about self and others. The specific behaviors exhibited in a relationship are important because of their function in maintaining the attachment. Although these behaviors change as relational contexts change their function of maintaining the relational attachment style remains consistent. When an attachment is threatened behaviors such as crying, clinging, anger, and eventual withdrawal may occur.

Within the last 15 years attachment theory has established itself as not only a theory of child development, but as a theory of adult love. Hazen and Shaver (1987) were among the first to use attachment to describe adult romantic relationships. Marital satisfaction, divorce rate, and emotional intimacy began being connected with a couple's style of attachment. In fact, research showed that securely attached couples had a lower divorce rate, were more comfortable with

emotional intimacy, and reported joy and satisfaction with close relationships (Brennan & Shaver, 1990). Research has also found that avoidant couples were more likely to exhibit fear of intimacy, and discomfort with getting close to others. Ambivalent couples expressed reluctance to get close to another because of fear that the relationship would end. This fear would often get expressed through aggressive relational attachment behaviors that would push others away (Hazen & Shaver, 1987).

Attachment theory as it relates to the death of a parent is best understood in terms of the level an adult child has achieved personal autonomy (Abeles, Victor, & Delano-Wood, 2004). Being able to live independently as a successfully functioning adult is thought to be the result of a healthy separation process from one's parents. Attachment theorists suggest that the adult child's grief reactions depend on their attachment with the parent prior to death. As such, insecurely attached individuals, as evidenced by an inability to successfully separate, have greater difficulty with the bereavement process (Noppe, 2000).

Thus, not only does parent-child attachment affect the adult child's response to their parents death, it is also a predictor of the type of attachment they have formed with their spouse (Bowlby, 1980). The death of a parent triggers the maintaining attachment behaviors that may ultimately lead to a decline in marital satisfaction. Attachment behaviors triggered by the death of a parent may reveal for the first time the insecurities that are present, but dormant, in the marital relationship.. It could also be concluded that the culmination of experiencing a more aversive reaction to the death of a parent due to the previous insecure attachment with the deceased, as well as having an insecure relationship with the spouse, would be the catalyst for a decline in relationship harmony and an increase in relationship strain and conflict.

Hypotheses

Based on attachment theory and the results of previous research, the current study hypothesizes:

1. The death of a parent will have a negative impact on marital satisfaction
2. Female adult children losing their mother to death will experience more distress in their marriage than male adult children losing their mother to death.
3. The death of a mother will have more of an impact on marital satisfaction than the death of a father.
4. Negative parent-child relationships prior to the death of that parent will contribute to a decline in marital satisfaction after the death of a parent.
5. Adult children who have been involved in caregiving for a parent prior to death will be more likely to not experience a decline in marital satisfaction.

Method

Data Collection

This study used data from the University of Southern California Longitudinal Study Of Generations, which will be referred to as the USC study from this point forward. The USC study began in 1971, with 2,044 participants ranging in age from 16 to 91. Three hundred and twenty-eight three-generational families participated in the first wave of the study in 1971. Male participants were randomly selected from all subscribers of a Southern California health maintenance organization. Out of the random selection, males that were 55 and older, who had a dependent family member covered under the plan, as well as had at least one grandchild 16 or older, were eligible for participation. The sample, then, included three generations: older

grandparents, (G1) middle-aged parents, (G2) and younger adult children (G3) (Gilford, & Bengtson, 1979).

The USC study collected data from each three-generation family through mailed self-report questionnaires. There have been a total of eight waves of data over the last 35 years. The response rate for each wave of the study has averaged 80%, except between wave-1 and wave-2, which was 67%. However, the longitudinal response rate is somewhat lower, around 50%, due to deaths and mentally incapacitated grandparents in the first generation (Silverstein, & Bengtson, 1997). The major benefit of using data from the USC study, as opposed to other potential datasets, such as the National Study of Families and Households, was that the USC study included multi-item, psychometrically-tested scales that measure marital satisfaction, caregiving, and parent-child relationships. The data are also dyadic in nature, including both husbands and wives, which allows for testing actor and partner effects.

Sample

The present study is based on data from the sixth and seventh waves of the USC study, which were collected in 1997 and 2000. The total number of respondents in 1997 was 1,697, and the total number of respondents in 2000 was 1,678. For this study, only the G2 and G3 generations were analyzed because they were at the ages when parental death was most likely to occur. This subsample included 1,362 participants that responded in 1997 and in 2000. For this study only couples where both spouses responded to the survey at both waves were included. This narrowed the sample down to 304 couples. Out of the 304 couples, 34, or 11% of the subsample, had at least one spouse who did not respond to both waves of the study. Seven of the 34 couples who did not respond reported divorcing between waves 6 and 7. No attrition bias was detected between those who responded only to wave 6 and those who responded to both waves.

Attrition bias was tested by running t -tests and chi-squares on the variables used in the final analysis. After excluding these 34 couples, there were 270 couples that responded and were married during both waves of the survey. Out of the 270 couples, 45 couples experienced the death of at least one parent between 1997 and 2000.

The remaining 225 couples were evaluated to see if they fit the criteria to be in the comparison group. The inclusion criteria for the comparison group required that neither the husband nor the wife could have ever experienced the death of a parent. There were a total of 53 couples in the sample that met the criteria for inclusion in the comparison group. Consequently, the final sample for the study consisted of 45 couples experiencing the death of a parent and 53 couples who have never experienced the death of a parent for a total of 98 couples.

Sample Characteristics

The average age of the final sample was 47 years old. Around 98 percent of the sample had earned a high school degree, and 28 percent of the sample had earned a four year college degree or higher. The racial make-up of the sample was 88 percent Caucasian and 12 percent other. No other racial group exceeded 2 percent of the sample. The average total household income for the sample was \$75,000 a year. Approximately 96 percent of the sample reported being happy in their marriage in 1997.

Table 1. Mean and standard deviation statistics for each variable in the model by group

Variables in Model	Total		Death Group		Comparison Group	
	M	Std.	M	Std.	M	Std.
Mother died	.14	.35	.31	.47	---	---
Father died	.09	.28	.20	.40	---	---
Time since the death	.52	1.01	1.12	1.25	---	---
Age in years	47.14	10.25	51.39	10.69	43.57	8.38
Total household income	8.64	3.93	7.99	3.59	9.19	4.14
Highest level of education	5.47	1.56	5.14	1.43	5.74	1.63
Neg. interaction change score	-.13	2.85	-.79	3.14	.43	2.46
Pos. interaction change score	.04	3.30	.21	3.47	-.11	3.16
Amount of caregiving in 1997	61.32	5.33	60.62	6.18	61.91	4.44
Neg. mother/child relationship in 1997	5.33	3.11	5.57	3.42	5.17	2.91
Neg. father/child relationship in 1997	5.09	2.28	5.42	2.88	4.96	1.98
Neg. marital interaction in 1997	9.21	3.48	9.56	3.51	8.91	3.44
Pos. marital interaction in 1997	18.18	4.34	18.22	4.81	18.16	3.93
Neg. marital interaction in 2000	9.08	3.08	8.78	2.76	9.34	3.33
Pos. marital interaction in 2000	18.23	4.44	18.43	4.62	18.05	4.31

The statistical comparison between the 45 couples that experienced the death of a parent and the 53 couples that did not experience the death of a parent revealed several significant differences. (See Table 1.) The first difference was that the subsample that never lost a parent

was significantly younger ($t=-5.73$, $p<.001$) by 8 years, on average, than the couples who had lost a parent. The couples who had not lost a parent were also significantly more educated ($t=2.64$, $p=.009$) and earned on average \$15,000 more a year in total household income ($t=2.152$, $p=.033$). However, there were no significant differences in marital satisfaction or parent-child relationship in 1997. In order to control for these differences, age, income, and education were included as control variables in the analyses.

Measures

Marital relationship. A ten-item scale of positive interaction and negative interaction was used to measure overall marital satisfaction in both the 1997 and 2000 waves of data. Both aspects were measured using a 5-point scale (1=hardly ever, 5=almost always). Examples of positive interaction items included statements like “You laugh together” and “You have stimulating exchanges of ideas”. Negative sentiment items included “One of you is sarcastic” and “You disagree about something important”. (Refer to Appendix A for the complete measure). In Gilford and Bengtson’s (1979) study, a factor analysis was conducted on these items to test for discriminate validity. The ten items loaded onto two factors, with the five positive items loaded on to one factor and the five negative items loaded on to the other factor. The items loaded onto the target factors with factor loadings between .57 and .89. The Cronbach’s alpha is .87 for the positive interaction scale and .84 for the negative sentiment scale (Feng, Giarrusso, Bengtson, & Frye, 1999). The analyses in this study will exam negative and positive aspects of marital interaction separately.

Parental death. The death of a parent was determined by participant’s response to the question, “has either of your study parents died?” If the participant responded in the affirmative, then the year of death, age of parent at death, and gender was requested.

Parent-child relationship. A three-item parent-child negative interaction scale was used to determine the emotional distance and conflict between parents and their adult children. Using a 6-point scale (1=not at all, 6=extremely), adult children were asked, “Taking everything into consideration, how much conflict, tension, or disagreement do you feel there is between you and your parent at this point in your life?”, “How much do you feel your parent is critical of you or what you do?”, and “How much does your parent argue with you?” Respondents answered these three questions in regards to their mother and their father separately. A preliminary factor analysis was conducted on the three items which loaded on relationship with mother at .86, .83, and .79, respectively, while the three items loaded on relationship with father at .52, .62, and .45, respectively. The Cronbach’s alpha was .91 for relationship with mother and .58 for relationship with father.

Caregiving. This variable was measured by 8 items evaluating the types of support and amount of support given to the participant’s father and mother. The four areas of support are household chores; transportation, help when they are sick, and assistance with personal care (e.g. help with bathing, dressing, etc.). For each item, participants marked an 8-point scale that best described how often they had done these things for their mother and father (1=daily, 8=not at all). A preliminary analysis to determine the factor loading and Cronbach’s alpha for each factor or scale was completed. The eight items loaded onto two factors, with the four areas of support provided to the mother loading on to one factor and the four areas of support provided to the father loading on the second factor. The factor loadings for support provided to mother ranged from .77 to .89, and the factor loadings for support provided to father ranged from .74 to .83. The Cronbach’s alpha for support provided to mother was .84 and .78 for support provided to father. A total score was calculated for overall care given to parents and was used in the final analysis.

Demographics. Gender was measured by a standard demographic question assessing gender, and a dummy variable (0=male, 1=female) was created for the analysis. The average household income was measured by a standard question assessing income with 21 response options ranging from 1 (under \$10,000) to 21 (\$200,000 or over). The large number of response options and smaller sample was examined for a skewed distribution. The skewness statistic of .490 indicated a normal distribution for household income. Age of the adult child was measured in years. Education was measured by a standard question assessing the highest level of education with eight response options available. The response options included, 1 = 8th grade or less, 2 = Some high school (9th-11th grade), 3 = High school or vocational school graduate, 4 = Specialized technical business, or other training after high school, 5 = Some college (1-3 years; AA degree), 6 = College or university graduate 7, = One or more academic years beyond college, including M.A., 8 = Post-graduate degree (Ph.D., M.D., J.D., etc.)

Results

Analysis

Interaction terms were computed in order to analyze how the death of a parent was impacted by caregiving and the parent-child relationship. This was done by multiplying the death of a mother and death of a father variable by the caregiving variable. The procedure was repeated for the parent-child relationship variable (Jaccard, Turrisi, & Wan, 1990).

In a recent methodological article, (Johnson, 2005) argued that using a change score method of analysis is a more effective way to measure the effects of transitions on marital satisfaction over time than a lagged dependent variable method. Change scores allowed for an unbiased estimate of the effects of parental death on marital satisfaction. Change in negative

marital interaction and positive interaction between the two points of data collection was calculated by subtracting the Time-2 score from the Time-1 score.

With the change scores of positive and negative marital interactions as the dependent variable, the independent variables in the models were death of a father, death of a mother, time since death, caregiving, father-child relationship, mother-child relationship, death of father*caregiving, death of father*father-child relationship, death of mother*caregiving, death of mother*mother-child relationship, death of spouse's father, death of spouse's mother, time of death since spouse's parent's death, spouse caregiving, spouse's father-spouse relationship, spouse's mother-child relationship, death of spouse's father*caregiving, death of spouse's father*spouse's father-spouse relationship, death of spouse's mother*caregiving, death of spouse's mother*mother-spouse relationship. From this point forward, when the word mother or father is being used it is referring to the biological mother and father of either the son or daughter being discussed. The findings in regard to the biological parents will be categorized as actor effects. Spouse's father or mother will be used when referring to the son or daughter in-laws. The findings in regards to in-laws will be categorized as partner effects. The terms actor effects (e.g. variables relating to one's self) and partner effects (e.g. variables relating to one's spouse) are common terms used in dyadic analysis (Kilpatrick, Bissonnette, & Rusbult, 2002; Whisman, Uebelacker, & Weinstock, 2004). By including both actor effects and partner effects, the dyadic nature of the dataset was fully exploited. That is, the effects of the death of the participant's parents, (with contextual and control variables), and the effects of the death of the participant's spouse's parents (with contextual and control variables) on changes in positive and negative marital interactions could be analyzed.

With 20 independent variables and only 98 couples in the sample, it was necessary to use stepwise regression to analyze the data. Stepwise regression enters one variable at a time to see if it is independently a significant predictor of the dependent variable, and only those variables that reach a threshold p-value of .05 remain in the model (Sen & Srivastava, 1990; Weisberg, 2005). Because only those variables that reach this minimum level of significance are included in the model, the potential for low power becomes minimized. In other words, there were more variables than the sample size could handle. The rule of thumb is that for every variable in the study you need ten participants in the sample. Ten variables would be the most this sample of 98 couples could handle without losing power. In addition, with both main effects (e.g. death of father and father-child relationship) and interaction effects (e.g. death of father*father-child relationship), there was a high probability of multicollinearity. Because only significant variables are retained in the model, the threat of multicollinearity was minimized.

A total of four models were analyzed. In order to examine the influence of gender, models for son's and daughter's were run separately. In addition, separate models were run for negative marital interaction and positive marital interaction. Thus, there were models for son's negative and positive marital interaction and daughter's negative and positive marital interaction.

Results of Models

Table 2. Unstandardized coefficients for the four best models based on gender and type of marital interaction

Variables	Son		Daughter	
	Negative Marital Interaction	Positive Marital Interaction	Negative Marital Interaction	Positive Marital Interaction
Death of Mother	-9.902***	-----	-----	-----
Death of Father	-----	-----	-----	-----
Time Since Death	-2.569***	-----	-----	-----
Caregiving	-.305*	-----	-----	-----
Caregiving*Death of Mother	.168*	-----	-----	-----
Relationship Mother *Death of Mom	-----	-----	-----	.684*
Models adjusted R-Squared	.357***	-----	-----	.078*
F-score	7.675***	-----	-----	5.087*

P value of .05=*, .01=**, .001=***

Son's negative interaction model. As indicated in Table 2, the results of the stepwise analysis revealed that the best fitting model for predicting change in negative marital interactions for sons included the death of a son's mother, time since the death, caregiving, and caregiving * death of a mother. When the interaction term, caregiving * death of a mother, was added to the model, there was a significant change in the adjusted R² (.091, p=.013). The main effects of death of a father and negative relationship with the mother and father were not included in the best fitting model, indicating that these variables did not significantly add to the model. The interaction terms of caregiving * death of father, and negative relationship with mother * death of mother and negative relationship with father * death of father were also not retained in the

best fitting model, indicating that these interaction terms did not significantly add to the model of marital satisfaction and death of a parent.

The best fitting model indicates that sons' negative interaction in marriage decreases with the death of their mother. On average, if a son's mother dies, the negative interactions in his marriage decreased by -9.902 ($F=8.071$, $p=.007$) between Time-1 and time-2 when controlling for the other variables in the model. In other words, the negative interaction change score decreased following the death of a mother, but not the death of a father, indicating an improvement in the relationship.

The main effect of caregiving indicated that the less caregiving a son did for his parents at Time-1, the less negative marital interactions ($b=-.305$, $p=.016$) occurred at Time-2. The interaction effect of caregiving * death of a mother indicated that if their mother died, then there was a significant change in sons' negative marital interactions by -9.734 ($F=7.675$, $p<.001$) for each unit decrease in caregiving. In other words, sons who were involved in more caregiving experienced more negative interaction in their marriage after the death of a mother. The last significant main effect had to do with time since the death of a parent. The results indicated that with each year that passes after the death of a parent there was a -2.569 ($F=7.657$, $p=.001$) decrease in negative interaction in sons' marriage.

Overall, a son experiencing the death of a mother tended to have a positive effect on his marriage, especially if he did not have to caregive for her prior to her death. Although this model revealed several actor effects, no partner effects were identified, meaning that son's experiencing the death of an in-law did not have a significant impact on their negative marital interaction.

Son's positive interaction model. The main effect of a parent dying appeared to have no significant effect on sons' positive interaction in his marriage. When the variables for this model

were run using stepwise regression, no best model could be fit because there were no significant effects. This includes variables measuring both actor and partner effects.

Daughter's negative interaction model. The main effect of a parent dying appeared to have no impact on the daughter's view of negative interactions in her marriage. When the variables for this model were run using stepwise regression, no best model could be fit since there were no significant effects in the model. This included variables that measured both actor and partner effects.

Daughter's positive interaction model. The results of the stepwise analysis revealed that only the interaction effect between the death of the mother and mother-daughter relationship was significant ($b=.684$, $p=.029$). A daughter's negative interaction with her mother before death was related to an increase in positive marital interaction after her death. The main effects of having a mother or father die were not significant, and no other interaction terms were included in the best fitting model, indicating that they did not add to the model in a significant way. The best fitting model had an adjusted R^2 of .078 with a p-value of .029. No partner effects were identified in this model, which meant that a daughter experiencing the death of an in-law did not have a significant impact on marital interactions.

Discussion

Summary

The main hypothesis that marital satisfaction would decrease after the death of a parent was generally not supported by the results of this study. The overall results of the current study indicated that parental death or the death of an in-law has either no impact or a positive impact on marital satisfaction. The one major exception was among sons, whose negative marital interaction significantly decreased after the death of their mother.

These findings are contrary to past findings that indicated a negative relationship between these two variables (Umberson, 1995). A possible explanation for this discrepancy would be the measures used in the Umberson's study. Umberson's measures for marital satisfaction may have been more sensitive to change and were measuring another dimension of satisfaction than the ones used for this study. The current study examined negative and positive interaction, while Umberson examined social support from partner and relationship harmony. Specifically, Umberson was looking at questions like, "How much does your spouse make you feel loved and cared for?", "How much do you feel your partner makes too many demands on you?", and "My partner doesn't treat me as well as I deserve to be treated." These questions tap more into the emotional dimensions of the relationship, while the current study assesses negative and positive behaviors and interactions in the relationship. Thus, it is likely that the main reason these findings are not consistent with the results from Umberson's study (1995) is that the two studies measure different dimensions of marital dynamics.

Although the results of the study contradict Umberson's (1995) findings, they are consistent with other marital research, which suggests that marital satisfaction is fairly stable over the life course regardless of the transitions that occur (VanLaningham, Johnson, & Amato, 2001; Miller, 2000). In Miller's article (2000), he argues that marital relationships over the life course are characterized by homeostasis, or equilibrium. Using longitudinal data, VanLaningham and colleagues (2001) found that after a slight decline during the early years of marriage, relationships are relatively stable throughout the remainder of the life course and are resistant to changes brought about by life course transitions.

A good example of marital stability through life course transitions, even an "off time" transition, is the research on "Boomerang Kids". The findings from these studies indicate that

there is no consistent negative effect on marital satisfaction when an adult child returns home after being launched out into the world (Mitchell & Gee, 1996; Suito & Pillemer, 1987).

The second hypothesis that female adult children losing a mother to death will experience more distress in their marriage than male adult children losing a mother to death was partially supported by the finding that son's losing a mother to death caused a positive change in marital satisfaction. However, females were not negatively affected by the death of a mother in a significant way.

The third hypothesis that death of a mother will have more of an impact on marital satisfaction than the death of a father was partially supported by the findings, but the impact was in a positive not a negative direction.

Since the sample was community-based, rather than being a clinical sample of distressed couples, the level of marital quality was generally high among the majority of couples in the study. From an attachment perspective, this can be seen as an indirect measure of secure attachment in marriage (Brennan & Shaver, 1990). These findings may indicate that having a secure attachment with one's spouse prior to the death of a parent allows for more connection once the long term parental attachment figure is no longer available. It also indicates that losing a secure attachment with a mother, who is a common attachment figure, forces the son to reinvest in other important attachments. Therefore, other important attachments improve, in this case the marital relationship. More specifically, these findings suggest that in a generally happy marriage, the death of a parent may tend to evoke less sarcasm, criticism, and anger from the bereaved child's spouse. However, if this were a clinical sample, where the majority of the couples were not happy in their marriage, it would be anticipated that negative interaction would increase due

to the loss of a parent and having no other secure attachment to turn to for support and safety, which is similar to what Kaltreider and colleagues (1984) found in their study.

Another possible reason why negative interactions decrease in marriage when the son's mother dies is due to his wife's feeling that she is competing with her mother-in-law for her husband's time and emotional connection. Unfortunately, we were not able to measure the wife's prior relationship with her mother-in-law, but these results suggest the possible role of triangulation in the relationship between the spouses and the son's mother. If the wife's relationship with her mother-in-law was negative or the wife felt like she was sharing her husband emotionally with her mother-in-law, then it would not be surprising that when the mother-in-law died conflict between the son and his wife would decrease due to the relationship between husband and wife returning to a bilateral state (Nichols & Schwartz, 2001; Papero, 1995).

The fourth hypothesis that negative parent-child relationships prior to the death of that parent will contribute to a decline in marital satisfaction after the death of that parent was not supported by the results of this study. In fact, the results suggest that the exact opposite occurs. The results found that daughters who had more negative interactions with their mother was a buffer against any negative effects on interactions in the marriage. Additional support for this finding comes from several studies that have found that those who had a close relationship with a parent had a stronger grief reaction to the death of that parent than adults who felt distant to their parents (Douglas, 1990; Umberson and Chen 1994).

The last hypothesis that adult children who have been involved in caregiving for a parent prior to death will be more likely to not experience a decline in marital satisfaction was also not supported. In fact, sons who did not provide care for their parents experienced a decrease in

negative marital interactions following the death of a mother. This finding may be connected with the literature on the stressful nature of caregiving for a parent and how that stress may cause problems in the amount of time and energy available to work on the marital relationship. This stage of life for many couples is a time where they must face the responsibility of caring for their frail, elderly parents (Tornatore & Grant, 2002). Extensive assistance for aging parents has been shown to be a stressful experience for the adult child who is caregiving (Lowenstein & Gilbar, 2000)

In addition to the actor effects discussed above, the study also examined partner effects. This is an area that no other study has examined when studying parental death and marital satisfaction. The main finding was that death of a spouse's parent did not impact perceived marital satisfaction in a significant way.

Limitations

The major limitations of the study are a small sample size and the use of secondary data. Ultimately, the decision was made to sacrifice sample size of the USC data in order to use dyadic longitudinal data and proven measures of marital satisfaction and parent child relationships, which added richness and reliability to the study. It also provided the study a unique perspective by allowing the examination of both actor and partner effects. If we had a larger sample size, hierarchical regression would have been used to directly examine the impact that each interaction effect had on the model. However, using stepwise regression allowed us to test all the variables and indirectly examine which interaction effects had a significant impact on the model. Using this type of analysis allowed us the chance to analyze gender in separate models instead of using gender as a control variable in one regression model. This allowed us to examine how sons and daughters uniquely responded to the death of a parent.

The use of secondary data limited our ability to measure the cause of death and whether the death was expected or unexpected. It also limited our ability to measure the immediate effects of the death. There was also no direct measure of attachment, so marital satisfaction was used as an indirect measure of secure and insecure attachment. The results were limited to only measuring the effects from one to three years following the death, which might not be giving a complete picture of the effects of parental death.

Clinical Implications

The results of this study highlight the need for therapists to be sensitive to the grief process and normalize the experience for couples. The results also emphasize the importance of marital therapists to appreciate the power of homeostasis in long-term relationships. Rather than being shaken by significant changes, such as the death of a parent, the interactions of couples are remarkably stable and homeostatic. With this perspective, clinicians can more realistically help couples traverse the inevitable transitions that accompany marriage. They can help couples have realistic expectations about the effect that these transitions, such as the death of a parent, can have on their marital relationships.

In addition, putting the results of this study along side those of Umberson's study (1995), couples who are struggling in their marital relationship after the death of a parent probably are not having problems with the things they are doing in the relationship, like positive and negative interactions, but are more likely to be struggling with their expectations and feelings in the relationship. A model of therapy that emphasizes the emotional connection between a couple may be more useful than a skills based treatment.

These findings should also be a reminder to clinicians that triangulation in a marriage, especially mothers being triangulated into their son's marriages, can increase sarcasm, criticism,

and anger between husband and wife. As suggested by Bowenian theory (Papero, 1995), when working with distressed couples therapists should not overlook the impact that extended family may be having on the couples interactions with each other.

Future Research

Future research should examine a larger dyadic sample that follows couples from before the death to the first weeks and months following the death. Data should be collected at multiple time points during the first year following the death of a parent to have more time-sensitive data to analyze. Future research should also specifically exam the question of attachment and how attachment with parent and spouse plays into the relationships response to parental death. Future research can also expand the question to see how the different styles of attachment with parents and spouse impacts the grieving process.

The other area in need of additional research is on the effects of marital therapy on the grieving process following the death of a parent as a form of treatment for grief. A healthy satisfying marital relationship could buffer the effects of loss and death. If this is true marital therapy which is aimed at improving the relationship may decrease the symptoms of grief and loss.

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Appendix A

Marital Satisfaction Scale

3. Here are some things spouses or partners may do when they are together. (FOR EACH ITEM, CHECK THE BOX THAT BEST DESCRIBES HOW OFTEN YOU DO THESE THINGS).

When You Are With Your Spouse or Partner:	Hardly ever	Some- times	Fairly often	Quite frequently	Almost always
a. You calmly discuss something together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. One of you is sarcastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. You work together on something (dishes, yard work, hobbies, child care, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. One of you refuses to talk in a normal manner (e.g., shouting, or not talking)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. You laugh together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. You have a stimulating exchange of ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. You disagree about something important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. One of you becomes critical and belittling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. You have a good time together	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. One of you becomes angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>