Patterns and Outcomes of Bereavement Support-Seeking Among Older Adults with Complicated Grief and Bereavement-Related Depression

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ABSTRACT

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The dissertation aims to enhance knowledge about bereavement support-seeking among older adults with Complicated Grief (CG) and/or depression and to examine the outcomes of support received. This three-paper dissertation uses data from two studies of bereaved older adults: the Changing Lives of Older Couples (CLOC) Study and the Complicated Grief Treatment in Older Adults (CGTOA) Study. The dissertation draws upon Pescosolido and colleagues’ Network Episode Model to frame the exploration of support-seeking. Paper 1 is based on qualitative interviews with eight older adults with CG who completed participation in a National Institute of Mental Health (NIMH) funded randomized clinical trial of CG treatment, the CGTOA study, and seeks to better understand the bereavement support-seeking process. Several primary themes arose, including observing that grief was causing a great deal of emotional distress and role impairment, grief not meeting their own or others’ expectations of what grief “should be,” influences of social relationships on support-seeking, and a lack of effectiveness of support groups and/or care from mental health professionals. Papers 2 and 3 use secondary analyses of longitudinal surveys from the CLOC Study, a representative community sample of widowed older adults. Paper 2 describes support sought for grief at 6, 18, and 48 months post-widowhood, including religious leader, support group, and family doctor support, and examines the influence of social network variables, the presence of CG and depression, and other demographic (gender, education, age, race, income, and home ownership) and clinical variables (health satisfaction,
anxiety severity, attachment anxiety, attachment avoidance) on support sought. Approximately
20% of the sample sought multiple types of support concurrently. Social network, clinical and
demographic variables also varied across types of support sought. For example, the presence of
CG was associated with a greater likelihood of seeking support, and low instrumental support
increased the odds of going to family doctors for support with grief. There were also significant
associations between types of support sought. Paper 3 determined whether utilization of
bereavement supports at 6 months post-loss was associated with reductions in emotional distress
(grief, depression, or anxiety) at 18 months in widows with CG or depression in the CLOC
sample. Using a self-help or support group reduced grief symptoms, but did not significantly alter
depression or anxiety symptoms. Seeking support from a religious leader decreased depression,
but not grief or anxiety. Seeking support from a family doctor did not impact anxiety, depression
or grief. Discussion sections for each paper and a conclusion section for the entire dissertation
summarize study findings, identify limitations, and detail implications for practice, research, and
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Acknowledgements and Dedication

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Introduction to the Dissertation

Experiencing the death of a loved one is a near-universal part of human life, and, in the U.S., is especially frequent among adults aged 65 and older (Federal Interagency Forum on Aging Related Statistics, 2010). The number of bereaved older adults will only rise as the percentage of the U.S. population over age 65 continues to increase (Administration on Aging, 2007). Bereavement increases risk for poor physical outcomes in older adults, including weight loss, increased rates of illness (Stroebe, Schut, & Stroebe, 2007) and elevated risk of mortality (Manzoli et al., 2007). Strong emotional responses of sadness, yearning, and guilt are also common, but longitudinal studies show that for the majority of bereaved individuals the frequency and intensity of these feelings reduce dramatically within a year after the death (Bonanno, Moskowitz, Papa, & Folkman, 2005). Most mourners are able to accept the finality of the loss while also finding ways to feel a sense of ongoing connection to the lost loved one, and are able to function well in their work and social lives (Chentsova Dutton & Zisook, 2005).

A sizable minority, however, experience longer-term reactions to bereavement that are believed to be mental health disorders, including depression and Complicated Grief (CG) (Stroebe, et al., 2007). Though CG is not yet included as a mental disorder in the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual, the APA workgroup is considering including CG in the upcoming 5th Edition as “bereavement-related adjustment disorder” (American Psychiatric Association, 2011). Proposed symptoms of CG include:

- Persistent yearning/longing for the deceased, intense sorrow and emotional pain because of the death; preoccupation with the deceased person [or]…with the circumstances of the death; marked difficulty accepting the death; feeling shocked, stunned or emotionally numb over the loss; difficulty in positive reminiscing about the deceased, bitterness or anger related to the loss; maladaptive appraisals about oneself in relation to the deceased or the death (e.g., self-blame); excessive avoidance of reminders of the loss, difficulty trusting other people since the death; feeling alone or detached from other people since the death; feeling that life is meaningless or empty without the deceased, or the belief that one cannot function without the deceased; confusion
about one’s role in life or a diminished sense of one’s identity, and difficulty or reluctance to pursue interests since the loss or to plan for the future (American Psychiatric Association, 2011).

Though there is a high co-occurrence of complicated grief, depression, and other mental health disorders like anxiety disorders (Jacobs, et al., 1990; Simon, et al., 2007), CG has been found to constitute a distinct cluster of symptoms which can be distinguished from anxiety and depression (Horowitz, et al., 1997; Prigerson, et al., 1995). A recent population-based survey in Germany of 2,520 participants aged 14 to 95 years who had experienced the loss of a close friend or relative found that about 7% of those who experienced a major bereavement develop CG (Kersting, Brahler, Glaesmer, & Wagner, 2011). Smaller, non-representative samples of bereaved older adults have found rates between 10 and 20% (Jacobs, 1993; Middleton, Burnett, Raphael, & Martinek, 1996).

Major Depressive Disorder (MDD, or depression) is a period characterized by two weeks or more of sad, low mood, diminished interest or pleasure in activities, change in weight or appetite, insomnia or hypersomnia, loss of energy, low-self-esteem or strong guilt, reduced ability to concentrate, or recurrent suicidal thoughts (American Psychiatric Association, 1994). Among older adult widows and widowers, studies have identified found that rates of depression are highest during the first month post-bereavement (29-35%) (Clayton, 1979; Clayton, Halikas, & Maurice, 1972) and then decline to about 14% at 25 months (Zisook & Shuchter, 1993).

Older adults with CG or depression may benefit from support for their symptoms (Schut & Stroebe, 2005; Shear, Frank, Houck, & Reynolds, 2005), but little is known about support-seeking in these groups. As defined here and in other literature (Addington, Van Mastrigt, Hutchinson, & Addington, 2002), “support-seeking” includes seeking advice or care from any professional (mental health specialist or medical provider), semi-professional (e.g. religious leader) or non-professional (family member or friend). Most existing research on bereavement
support-seeking has been based on stage models of help-seeking (Andersen, 1968, 1995), which examine a single outcome of “used services” or “did not use services” (Bergman, et al., 2010; Caserta & Lund, 1992). However, considering use of multiple services may be important. An alternate theory, the Network Episode Model (NEM) proposes that help seeking may be more of a process, involving a complex, indirect pattern including multiple types of support. In addition, social networks are thought to have a major influence on support-seeking (Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998). No studies have applied the NEM to understanding bereavement service use in older adults with CG. Nor is much known about whether, and to what extent, support-seeking reduces distress in bereaved older adults with CG and/or depression in community samples.

**Specific Aims and Hypotheses of the Three Papers**

The overall aim of the dissertation is to enhance understanding of bereavement support-seeking among older adults with CG and/or depression and to examine the outcomes of support for received for grief. This 3-paper dissertation will use data from two studies of bereaved older adults. The first paper is an in-depth qualitative study of 8 older adults who completed participation in an NIMH-funded randomized clinical trial of CG therapy, the Complicated Grief Treatment in Older Adults (CGTOA) study (Paper 1) (PI: M.K. Shear, RO1MH60783). Papers 2 and 3 use secondary analyses of longitudinal surveys from the Changing Lives of Older Couples (CLOC) Study, a representative community sample of widowed older adults in the Detroit metropolitan area.

**Paper 1: Qualitative Data from the Complicated Grief in Older Adults (CGTOA) Study**

**Research question:** Among a group of adults aged 60 and over who enrolled in a therapy treatment study for Complicated Grief, what was the process by which they sought support for their grief symptoms?
Paper 2: Quantitative Data from the Changing Lives of Older Couples (CLOC) Study-

Characterization of Bereavement Support-Seeking

**Aim 1:** To identify the presence of CG, and its association with depression, in a representative sample of widowed older adults at 6, 18, and 48 months post-loss.

**H₁:** In keeping with previous literature, between 7 and 20% of older adults will meet criteria for CG at 6, 18, and 48 months post-loss. There will be some comorbidity of CG and depression, but not all of those with CG will meet criteria for depression.

**Aim 2:** To describe the configurations of services used for bereavement among widowed older adults from religious leaders, support groups, medical and mental health providers reported at 6, 18, and 48 months post loss.

**H₂:** In keeping with the Network Episode Model (NEM), several types of bereavement support seeking will be identified over the 6, 18 and 48 months of follow-up post loss, which will include both “single” service types and combinations of several services.

**Aim 3:** To determine whether social network variables, the presence of CG or depression, other clinical variables (measured at 6 months post-loss) and baseline demographic variables are associated with service use among widowed older adults reported at 18 months post-loss.

**H₃:** As proposed by the NEM, there will be variations in services utilized based on social network variables, including positive emotional support from family, friends, and children, instrumental support provided by network members, and frequency of contact with network members. Because greater need is associated with more service use, those who have CG or depression will be more likely to utilize all types of support. In keeping with previous literature, there will also be variations in service use by gender, race, health, socioeconomic status, age, education level, and attachment style.
**Paper 3: Quantitative Data from the Changing Lives of Older Couples (CLOC) Study**

**Impact of Bereavement Support-Seeking**

**Aim 1:** To describe bereavement support-seeking from family doctors, religious leaders, and self-help or support groups in a subgroup of widowed older adults with CG and/or depression in the CLOC sample.

**H1:** Because greater need has been associated with more service use, older adults with CG and/or depression will have high rates of service utilization, and will show high use all three types of services.

**Aim 2:** To determine whether, among widowed older adults with CG and/or depression in the CLOC sample, utilization of bereavement supports (religious leaders, self-help or support groups, or family doctors) between the death and 6 months post-loss is associated with reductions in emotional distress (grief, depression, or anxiety) at 18 months post-loss. High attrition between the 18 and 48 month interviews prevents examination of outcomes at 48 months.

**H2:** As there is not clear evidence for the efficacy of family doctors, self-help or support groups, or religious leaders in providing treatment to older adults with CG and/or depression, use of these support types between the death and 6 months post-loss will not be associated with reductions in grief, depression, or anxiety at 18 months post loss, when compared to outcomes among those who did not seek these services.

While existing data provide some information on general trends in bereavement support-seeking and on what services are sought (e.g. Bergman, Haley, & Small, 2010), more research is needed. First, almost all published studies are cross-sectional, leading to the possibility of endogeneity and difficulty ascertaining causal ordering. In addition, few studies distinguish between the support-seeking of those with and without severe bereavement responses such as CG or depression. There are indications that those with more severe grief symptoms (Bergman &
Haley, 2009; Bergman, et al., 2010; Picton, Cooper, Close, & Tobin, 2001) or more severe depressive symptoms (Bergman, et al., 2010) are more likely to seek support. However, while studies have examined support-seeking in those with depression diagnoses (Cherlin, et al., 2007; Stroebe & Stroebe, 1989) after bereavement, only one study has examined support-seeking in a group diagnosed with CG (Prigerson, et al., 2001). While those with CG of course have more severe grief symptoms, there may be unique help-seeking trajectories in this subpopulation. More complete information on the support-seeking process would identify places and ways to target and engage older adults with CG and/or depression in bereavement support, and may inform future studies on this topic. Community agencies providing bereavement support may also find this data useful in identifying populations in need.

Moreover, almost all existing data on the outcomes of support sought among those with bereavement-related distress is derived from randomized controlled trials (Forte, Hill, Pazder, & Feudtner, 2004; Shear, et al., 2005). Understanding how support-seeking impacts distress in community samples of older adults CG and depression would provide important information on the real-world effectiveness of available bereavement support. If a gap between support sought and need for support were established, and if widely used supports are found not to be effective, methods to engage distressed bereaved older adults in supports could then be developed.

Additionally, more research is needed on the application of the NEM to bereavement service use (Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998). Greater knowledge of multiple service use among older adults, and the influence of social networks on service use, may help explain some of the variance in professional bereavement support-seeking left unexplained by stage models tested to date. Rather than simply examining the association between demographic and clinical variables and support-seeking, understanding the why and how of bereavement support-seeking is needed. Combined with quantitative data on support-
seeking patterns, more information is needed from older adults with CG and depression on their subjective experience of support seeking, especially as no qualitative studies on support-seeking with this population seem to have been previously conducted.

The dissertation addresses many of these gaps in the literature by using prospective data collected from a large, representative sample to examine bereavement support-seeking among bereaved older adults, including multiple types of supports utilized, and to examine whether support-seeking has an impact on CG and depression. The use of both qualitative and quantitative methods in the three papers will provide detail on bereavement support seeking, and on its predictors and outcomes, and more in-depth understanding of the support-seeking experience in older adults with CG and depression. Though the qualitative and quantitative papers use participants from different geographic areas and with different types of loss, qualitative findings may provide deeper understanding of, and some potential explanations for, findings in the quantitative papers. Factors identified as driving service use in the qualitative papers (such as social support) were also considered as variables in the quantitative papers.
References


“I was just trying to stick it out until I realized that I couldn’t”:
A Phenomenological Investigation of Support Seeking Among Older Adults with Complicated Grief

Dissertation Paper 1
Introduction and Literature Review

Experiencing the death of a loved one is a near-universal part of human life, and, in the U.S., is especially frequent among adults aged 65 and older (Federal Interagency on Aging Related Statistics, 2010). Strong emotional responses of sadness and yearning are also common, but longitudinal studies show that for the majority of bereaved older spouses, the frequency and intensity of these feelings attenuate considerably within the first year after the death (Bonanno, Moskowitz, Papa, & Folkman, 2005). Most mourners are also able to continue to function well in day-to-day activities shortly after the death (Chentsova Dutton & Zisook, 2005). Indeed, loss of loved ones tends to be an expected part of aging, which may reduce the stress associated with these events (Carr, Nesse, & Wortman, 2006). A minority, however, experience longer-term reactions to bereavement that can be classified as mental health disorders, including Major Depressive Disorder (MDD, or depression), posttraumatic stress disorder (American Psychiatric Association, 1994) and Complicated Grief (CG) (Prigerson et al., 1995). Though CG is not yet included as a mental disorder in the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual, the APA workgroup is considering including CG in the upcoming 5th Edition as “bereavement-related adjustment disorder” (American Psychiatric Association, 2011). CG is characterized by intense yearning or longing for the deceased, intense sorrow and emotional pain regarding the death, and preoccupation with the deceased or the circumstances of the death. Other symptoms include difficulty accepting the death, intense anger or bitterness over the loss, a diminished sense of self without the loved one, a feeling that life is empty or meaningless, difficulty planning for the future, and disengagement in activities or relationships that were enjoyed before the loss (American Psychiatric Association, 2011; Shear, et al., 2011).

The APA workgroup suggests that CG not be diagnosed until 12 months after a death, and requires that severity and duration of symptoms must be outside the norms for mourning in
one’s culture (American Psychiatric Association, 2011). Though CG, depression, and other mental health disorders like anxiety often co-occur (Jacobs, et al., 1990; Simon, et al., 2007), CG has been found to constitute a distinct cluster of symptoms which can be distinguished from anxiety and depression (Shear et al., 2011; Horowitz, et al., 1997; Prigerson, Frank, et al., 1995). A recent population-based survey found that 6.7% of those who lost a loved one developed CG, and that those who were 61 and older had a significantly higher risk of developing CG than younger bereaved (Kersting, Brahler, Glaesmer, & Wagner, 2011). A higher cumulative burden of losses, diminished coping capacity, and diminished social resources may all account for this difference.

Preliminary evidence indicates that adults with CG can benefit from mental health treatment which specifically focuses on their symptoms (Schut & Stroebe, 2005; Shear, Frank, Houck, & Reynolds, 2005), but little is known about formal support-seeking in this population. Across mental disorders, there is a well-documented gap between the number of people suffering from mental disorders and the use of mental health treatment. In a large U.S. representative sample of adults, only 5.8% received mental health care via a specialist mental health care professional, while 30.8% of those surveyed met diagnostic criteria for a psychiatric condition (Kessler, et al., 1999). Moreover, the gap between need and mental health service use for older adults is even larger when compared to younger age groups (Bartels, 2002). For example, in one survey in Baltimore (Bogner, de Vries, Maulik, & Unützer, 2009), adults aged 60 years and older were only one-third as likely to consult a specialist in mental health compared to adults aged 40–59, even when controlling for type of disorder and past use of mental health services. The explanation for these differences is still being determined, and may be due either to cohort effects (e.g., different norms about the acceptability and perceived stigma of using mental health services) or to issues specific to chronological age (e.g., making physical health a priority over
mental health, or mobility constraints) (Bogner, et al., 2009). Aspects of the U.S. mental health care system may also contribute to low mental health service utilization among older adults, including fragmentation of the system of care, lack of matching of services to the preferences and needs of older adults, lack of awareness of available services, limited Medicare coverage for care, stigma, inadequacy of service provision (including lack of use of evidence based practices), a shortage of providers skilled in geriatric mental health care, and poor continuity of services (Bartels, 2003). The available literature suggests that a similar gap in service use could exist among those with CG. Analyzing a sample of 110 widowed adults interviewed about four months after their loss, Prigerson et al. (2001) found that only 33.3% of those with CG symptoms had used mental health services in the previous two months, though the study did not explore the reasons behind this finding. More data on bereavement service use among those with CG is needed.

The purpose of this study is to explore support seeking from professionals and groups for CG among older adults using semi-structured in-depth interviews. The key research question is: Among a group of adults aged 60 and over who enrolled in a therapy treatment study for Complicated Grief, what was the process by which they sought support for their grief symptoms? Qualitative research methods are appropriate because so little is known on this topic (Peters, 2010) and because the primary question is about a process of support seeking (Creswell, 2007; Peters, 2010); qualitative data can reveal nuances in an individual’s experience that are difficult to capture in quantitative data. Preliminary findings can help inform future quantitative studies of factors influencing bereavement service use in older adults with CG, including dissertation Paper 2. Moreover, qualitative research may be especially useful in mental health research, which covers sensitive topics with a population which does not always have a voice (Peters, 2010). A few qualitative studies have been conducted on care seeking for bereavement more broadly,
considering reasons for joining bereavement support groups (Picton, Cooper, Close, & Tobin, 2001) and preferences for support after the death of a loved one in palliative care (Benkel, et al., 2009) but none have examined support seeking specifically among older adults with CG.

Methods

Study Design

The qualitative method used was Husserl’s descriptive phenomenological approach (Husserl, 1931, 1970). Phenomenology seeks to identify the essence of an experience shared by participants (Creswell, 2007); the goal of this study is to understand the essence of support-seeking among older adults who sought treatment for CG via the same CG treatment study. Descriptive phenomenology focuses on a common lived, primarily internal, experience among participants, and differs from interpretive phenomenology, which emphasizes how narratives are shaped by larger historical, social, and political contexts (Lopez & Willis, 2004). Descriptive phenomenology may be most appropriate in studying aspects of experiences that have not been fully conceptualized in previous research (Lopez & Willis, 2004), such as bereavement support-seeking. In-depth interviews with individuals who share the same experience is the key method used in the phenomenological approach (Creswell, 2007). Phenomenology has been rather widely used previously as a method in qualitative data collection with older adults (e.g. McInnis & White, 2001).

All data collection was approved by the Institutional Review Board (IRB) of the New York State Psychiatric Institute, which has an authorization agreement with the Columbia University IRB. The IRB approved a waiver of signed consent for cases where participants preferred to do the interview over the telephone, but all participants reviewed a study consent form which described study procedures in detail. Consent forms emphasized the voluntary nature of participation and explained that all published findings would be deidentified.
Recruitment Site

I conducted in-depth cross-sectional semi-structured interviews with older adults who completed participation in an NIMH-funded randomized clinical trial of a 16 session CG treatment, the Complicated Grief Treatment in Older Adults (CGTOA) study (PI: M.K. Shear, RO1MH60783). For a description of enrollment criteria for the larger CGTOA study, see Appendix 2. Participants were recruited via radio and newspaper advertisement and from referrals from other mental health professionals. To avoid any contamination of activities on the treatment study, only those participants who had already completed all CGTOA study procedures were interviewed. Treatment study procedures end one year from the date of initial treatment study enrollment.

Sample Selection

Initial interviews began in May of 2010 and were completed in March of 2011. As of March 2011, approximately 45 people had completed all procedures on the CGTOA study. From this group, the purposeful sampling method (Creswell, 2007) was used to select a diverse, stratified group of 20 participants who varied by gender, type of loss (e.g., child, parent, partner), and race. Literature indicates that differences in the gender of participant, relationship to the deceased, and race or ethnicity may have an impact on grief symptoms (Stroebe, et al., 2007). Moreover, to be eligible participants were required to be 60 and over; some CGTOA participants were training cases under age 60. Participants who had conveyed to CGTOA study staff that they did not want any further contact from the study were also excluded from participation. Over a four month period, all potential participants were sent a letter describing the study, along with a card in a stamped, addressed envelope which they were asked to return if they were not interested in participating. CGTOA study participants had already provided contact information to that study. All those who did not return a card were then contacted by telephone and/or email.
by the author. In both written and verbal descriptions, the qualitative study was presented as affiliated with, but separate from, the CGTOA study, and it was emphasized that no one was required to participate. Of the 20 individuals contacted, seven were not reachable via telephone or email and four returned the mailed card stating that they did not wish to participate. One participant who agreed to participation was misidentified as being over 60 in the initial review of eligible participants and was excluded from the study. Once participants were reached via email or phone and agreed to participate, an initial interview was scheduled with the author at a time and location of their choosing. Participants did not receive compensation for participation.

Data from a total of 8 participants, aged 62 to 88, was analyzed. This sample size falls within that generally suggested by researchers; Morse (1994) has recommended that phenomenological researchers interview about six people. Demographic data are presented in Table 1. Time since the loss (at CGTOA study enrollment) ranged from .5 to 35.38 years. Six participants were White, one was African-American, and one was Hispanic. Six were women. The demographics of those interviewed roughly correspond to those of the larger CGTOA study sample, in which approximately 75% are White, 10% are Hispanic, 15% are African-American and 90% are female. All also had a history of major depressive disorder, and all but one had experienced a depressive episode after the death associated with their CG.

Data Collection

To obtain a detailed account of the support-seeking process for CG, a semi-structured interview was developed, based on a review of literature on qualitative interviewing techniques, and in consultation with other qualitative researchers (see Appendix 1). The author conducted all interviews. While outlined topics were discussed in all interviews, the participant was given maximum flexibility to describe their own experience. The use of prompts enabled the
interviewer to encourage participants to give more specific examples of their experiences, especially in cases where these examples were not offered immediately.

Interviews lasted, on average, 53 minutes, and ranged in length from 24 to 86 minutes. Six interviews were conducted in-person (four at the participant’s home, two in other quiet locations of the participants’ choosing) and two were held over the phone. Phone interviews were conducted when participants’ current location or schedule did not permit an in-person interview. Second interviews were conducted to ask follow-up questions and confirm preliminary findings with participants. Seven of the eight participants were reached for discussions of findings and follow-up questions; one had said that she did not wish to review findings, and also had health concerns that limited her ability to participate in interviews.

All interviews were conducted by the author and recorded digitally. Participants were assigned a unique case identification number which was linked to their interviews. The link between ID numbers and names was kept in a single password protected computer file on the author’s computer. Each interview was subsequently fully transcribed by the author using guidelines described by McLellan, MacQueen and Neidig (2003).

Data Analysis

All interviews were analyzed by the author using qualitative data management software ATLAS ti. Analysis by a single individual is common in the phenomenological approach, as it encourages immersion in the text (Giorgi, 2009). The analytic process described by Giorgi (1985, 2009) was used to create an in-depth description of the CG support-seeking experience. Giorgi’s method involves four steps: description, reduction, essences or structures, and intentionality. The process began with a reading of the entire transcript of each participant (description). The next step, reduction, involved reading each transcript closely to identify specific “meaning units” of the support-seeking experiences in participants’ own words. Reduction occurs both when a
concrete lived experience is identified and used as an example of a phenomenon and when the researcher seeks a meaning of the described experience. For example, the description “I thought ‘Well, I’m just going to wait this out.’” was labeled “the role of time.”

The third step involved reviewing each meaning unit to identify the psychological insights within them. Processes of reflection and imaginative variation allowed for categorizing the phenomenon’s essences or structures. Imaginative variation involves seeking possible meanings through imagination, changing frames of references, and considering the phenomenon with different perspectives. Imaginative variation allows one to reach a description of the essential structures of the phenomenon. For example, regarding the meaning unit “the role of time,” a memo reflected on the objective versus subjective sense of time, the idea of “time heals all wounds” and why there might be expectations of improvement in grief symptoms over time.

The fourth step involved synthesizing all the transformed meaning units into a consistent description of the participant’s experience of support seeking; moving beyond individual perceptions to an orientation to the world. Themes that were common across participants were then identified to create a general description of the grief support-seeking experience. Specifically, after themes were produced, transcript extracts were collected that supported each theme. The list of themes and related transcript extracts were read together to identify connecting themes. This process enabled the master themes to be identified. Transcript extracts that best identified each theme were noted.

Finally, the entire original transcripts were read again to ensure that final master themes accurately reflected the original material. At the end of the analysis process, as recommended by Maxwell (2005), any quotations to be included for publication were shared with participants to confirm their accuracy, determine that the account resonated with their subjective experiences, and ensure that interviewees were comfortable with their publication. Participants were informed
that any quotations could be omitted. However, all participants said they were comfortable with the quotations selected and none requested their removal.

Throughout the data collection and analysis process, as recommended by descriptive phenomenologists (Giorgi, 1985; Husserl, 1931; Lopez & Willis, 2004), the researcher attempted to “bracket out” her own experiences and assumptions. Gearing (2004) has noted that bracketing can refer both to “the process of setting aside, suspending, or holding in abeyance presuppositions surrounding a specific phenomenon” and “the process of focusing in on the essences and structure of the phenomenon to describe the immediate phenomenon or to understand the underlying universals of that phenomenon.” (p. 1433). Both types were utilized. Interviews were constructed in a way so as to not rely on researcher’s preconceptions; outlining specific probing questions before the interviews assisted in this process (see Appendix 1). The process of reviewing and coding data sought to render explicit the phenomena under study. To assist in bracketing, memos reflecting on each interview and on the data collection process were written by the investigator after each interview. Time was also taken before each interview to focus on the present experience, so that the investigator could be as open and non-reactive during interview as possible. Finally, identified themes were reviewed and discussed with colleagues, in an attempt to minimize the influence of the researcher’s own preconceptions.

Results

Participants

The study participants entered the larger CGTOA study in divergent ways. Two participants had never sought any sort of mental health treatment, including any grief-specific treatment, at any point in their lives. They heard about the CGTOA study and felt that it was something that could benefit them. Two participants had sought counseling in the past (before the death), but had never sought specific grief counseling before enrolling in the CGTOA study.
Another four participants sought professional treatment for grief after the death, both individual counseling and group support. Two of these participants had also sought counseling for other reasons before the death. Methods of hearing about the CGTOA study also varied. Three participants heard through a radio ad, one from an internet search, two from a friend who had gotten treatment, while two others heard about the study through providers they were seeing.

Table 1 provides descriptive information about the study sample.

### Table 1. Qualitative Study Participant Demographics (N=8)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean or n</th>
<th>SD or %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>72.6</td>
<td>7.9</td>
</tr>
<tr>
<td>Female Gender</td>
<td>6</td>
<td>75.0</td>
</tr>
<tr>
<td>White Race</td>
<td>6</td>
<td>75.0</td>
</tr>
<tr>
<td>Completed College</td>
<td>6</td>
<td>75.0</td>
</tr>
<tr>
<td>Lost a partner</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td>Lost a child</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Lost a parent</td>
<td>2</td>
<td>25.0</td>
</tr>
<tr>
<td>Lost a friend</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Time since the loss (years)</td>
<td>6.6</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Several master themes arose in analyses, which were experienced by all participants in their support-seeking process: 1) Observing that their grief was causing a great deal of emotional distress and role impairment 2) A realization that grief was not meeting their own or others expectations of what grief “should be”, 3) The role of social support- both a failure of existing social support and being told by others that they needed help, 4) A lack of effectiveness of support groups and/or care from mental health professionals; and 5) Reactions to the label of “complicated grief” and a sense that CG-specific treatment could be of help to them.
Grief Causing Distress

Many participants used very dire language to describe the level of suffering they experienced after their loss: terms like “enormously sad” “despair” “feeling lousy” “awful” a sense of “futility” “[going] on the downhill” “paralyzed” “desperate” “consumed in a negative way” “no joy…no optimism” and “want[ing] the pain to end.” These feelings were seen as resulting directly from the death of their loved one, and were quite different from the participants’ usual emotional experience. One participant said, for example, that her grief came over her suddenly, that “it just hit me.” Another said: “You go through life…and it’s just going along, and this was going to be it, and then all of a sudden you’re on a totally, totally different climate, trapped beneath.” When these intense emotions arose, they felt out of participants’ control or understanding. As one participant put it: “It was sort of free-fall. Going off the edge of the mountain and everything just going by you, and it’s not really the end but its having no control of anything…You don’t really have that firm grip.” Another said “It’s just like the whole world was still going and I was in the woods….And…I was frightened [by that].”

For most participants, the onset of symptoms seemed sudden and dramatic and occurred immediately after the death of their loved one. Yet for others, though they could see in retrospect that symptoms had been present for some time, they did not recognize them immediately. These participants tended to suppress or ignore their symptoms until some event forced them into awareness. As one participant said: “I wasn’t aware of it at the time. I was just numb…I didn’t realize. I thought I was doing fine.” Denying symptoms often acted as a sort of coping mechanism so that participants could continue to function. Denial was most common immediately after the loss. As one put it: “It was too much to sort through. So I wasn’t sorting through it.” Many of these participants also tried to use self-reliance, believing that grief was something they had to deal with “on their own.” As one described it: “Well, I’m not a person
who likes to go [for professional support]…It's not that I don’t believe in it, but I think I can handle…a lot of things.” Or, as another participant noted: “you just try to do the very best you can.” These participants ultimately found, though, that coping with grief on their own didn’t make the symptoms diminish. In these cases, emotional distress was often brought into awareness through specific events, including difficulty functioning at work or in relationships and changes in health. For example, one participant started having marked physical health problems: “I fell. I’d never fallen [before] in my life. I wasn’t paying attention to anything, I wasn’t driving well. I was very sick, over and over again. My hair turned grey in six weeks. I didn’t have the first grey hair, and [now] it was grey.” Finally, after many months, the participant said she “started putting the pieces together. And realizing that I was really in trouble.”

Not only intensity of symptoms, but their duration, played a significant role in symptom recognition. Many participants said that though they thought their symptoms would improve over time, instead grief remained and often even got worse. Getting better “seemed to be taking …too long.” As one participant noted: “I was just trying to stick it out until I realized that I couldn’t.” Indeed, the longer symptoms lasted, the longer they seemed to become part of the participants’ way of being in the world. As one participant said: “Since I carried it so long, it’s a little bit harder to cut loose from it…When it doesn’t improve over time then it starts to feel like a problem. Because it interferes with other things, you know, defeatism, futility, and so on, starts to overshadow everything you do.” Notably, the average time between the loss and CGTOA-study treatment seeking was years 6.60 years, while the median time was 2.26 years (Table 1).

Participants also expressed ambivalence about wanting to get better. For many, grief was a way of maintaining a link to the loved one. A lessening of grief was sometimes seen as indicting that the bereaved person would also lose a connection to the deceased, or a sign that they didn’t really love them. As one participant, who lost his wife, put it: “I…felt… ‘Am I doing
the right thing? Should I really want to make myself feel better?’...[My wife] was worth so much, and how could I even entertain that?’” For participants with this experience, a need to address their suffering ultimately outweighed this concern. The same participant added: “Yet, life is for the living.”

**Grief Not Meeting Expectations of Self and Others**

For all participants, the intensity of grief symptoms and their duration was different than what they, and other people in their lives, expected them to be. Many had lost other loved ones before the death that triggered their CG, and commented how much their CG varied from these other losses, that their CG was “not the customary thing.” In addition to comparing grief to their own experiences, participants told stories about others who had lost a similar kind of loved one (e.g. also lost a partner or a child), and how different these others’ reactions were to their own. One participant noted “I don’t know anyone who has reacted like me.” Sometimes there was self-judgment in the comparison to others, that participants’ grief reactions didn’t “deserve” to be as strong as they were. One woman, who had lost a close friend, said: “I had the kind of foolish notion that I would hear somebody else who’d be talking about...something so much worse. I mean, [loved one’s name omitted] was 80 when he died. So it wasn’t a tragedy, it wasn’t premature...So it’s not like someone whose child committed suicide or, you know, something like that.” Sometimes, on the other hand, there was a reaction to others who were not grieving as much. One participant, whose friend got remarried three months after his wife died, noted “I had a feeling he had no scruples. He had to be happy and he got this woman and there it was. I couldn’t think of doing that.” Another described a similar experience, where a recently widowed friend wanted to date her only a few weeks after his wife’s death. “So I’m going...how can you be thinking of this?”
Many participants also found that friends, family members, and even professionals were surprised by the duration and intensity of their grief, which influenced their ability and continuing willingness to be supportive to the participants. One participant noted this explicitly: “I wasn’t meeting anybody’s expectations. And, you know, they were devising grief from their own experience or their own reading or their own whatever. And I wasn’t meeting any of those criteria…And people just either…got tired of it or…they just, you know, didn’t want to deal with it.” Several participants mentioned, as months and sometimes years passed since the death, that friends and family told them “you should be over it by now.” As one participant described, friends and family would say: “You should be feeling better now…You should be moving on. You need to get out. You need to do this, you need to do that.” When, a year after her husband’s death, one participant people told acquaintances that she was still sad about it, they responded with “What do you mean [you’re still grieving], after a [whole] year!?”. These reactions often contributed to a feeling of being misunderstood, and also made participants’ feel even more concerned about their grief symptoms.

The Influence of Social Support

All participants relied on existing interpersonal supports to help them manage their grief symptoms, but this support was usually somehow insufficient. Though many participants wanted to maintain social relationships after the loss, all participants described experiences where this was difficult. Some participants experienced a marked withdrawal of certain close friends or relatives, who reduced communication soon after the loss. One participant described her friends’ separation from her as “loss on loss” noting that this “made it harder for me, not only because I didn’t have their support but also because it [became] another form of grieving for me…What I would have normally turned to wasn’t there anymore.” Another participant detailed how one friend, who she had previously supported greatly by, for example, making food for her when she
was ill, “never even sent a slice of bread.” Participants often felt disappointed and betrayed by these reactions.

In some cases, friends or family members remained in participants’ lives, but the support and understanding they provided was poor. In addition to the experience of being told they “should be over it by now” noted above, lack of skill in discussing grief was the most common social interaction described by participants. Others often noticed that the participant wasn’t doing well and wanted to be helpful but didn’t know how. As one participant described: “They don’t know what to say, [so] they feel uncomfortable…and frustrated. You want to say or do the right thing, and you don’t know what it is, and [so] you either back off or bumble.” A related unhelpful reaction was a sort of condescending, cheery reassurance. As one participant described: “A lot of people approached me with this false ‘you’re going to be all right’ kind of thing, [A] pat on the head. It’s almost patronizing. And at that time I was allergic to that.” Another said “Occasionally, what I felt more than anything else was a kind of pity.”

Feeling like others simply weren’t open to discussing participants’ feelings was also common. As one participant put it: “You just sort of try to sense it…I don’t want to just assume they’re not going to understand, but if I toss out [deceased loved one’s] name so many times and if they don’t want to talk about it, you move on and talk about the weather.” Changing the subject when something came up over their grief was mentioned by most participants. Many felt that grief was more difficult for family and friends to discuss than other emotions. As one participant noted, in American culture, grief “is something that nobody has any control over here…Our [culture] is so…diverse and so generalized that it no longer has any kind of pattern or meaning. So that when you experience grief there’s nothing that you can go to that gives you a sense of where you are…I think some of it [is in] Homer, the big Greek classics… And we don’t have anything like that.”
Participants also noted that they themselves contributed to their disconnection from others. Indeed, a symptom of CG is difficulty trusting others (American Psychiatric Association, 2011). As one participant said:

I didn’t call anybody, I didn’t talk to anybody because I didn’t have anything good to say. I wouldn’t have wanted to be around me, and I didn’t want to impose that on somebody else. And I was five seconds away from tears most of my waking day. Anything would trigger me. Who wants to be around that?…So I became more and more isolated. Partly my own doing, partly not.

Often participants withdrew especially from those who they felt didn’t understand them. The lack of social support therefore became a circular loop, where participants felt misunderstood and separated themselves further from others who were already uncertain of how to connect with them.

The effect of social relationships was not uniformly negative, however. Many of those who remained in participants’ lives influenced their support seeking. While two of the participants sought care for grief without any input from others (e.g. one heard a radio ad for the CGTOA study, felt it fit him, and scheduled an initial assessment), the remainder were told by others that they thought grief treatment would be useful. Three specific types of input were offered. For two participants, people they knew (usually friends or family, but, in one case, a medical provider) noticed grief symptoms and expressed concern. They said things like “You know, you really should get counseling.” Three other participants entered grief treatment because friends who had also lost a loved one recommended it. One participant described how, very soon after her loss, a good friend called her: “She [said]: “Look…I’ve had losses too, but tomorrow you’re going to get out of bed, you’re going to take a shower, and you’re going to call this number [for a grief counselor]” Finally, in one case, a participant was asked to enter her treatment because it was affecting her relationship with her partner. “He said to me one day ‘I don’t think this is going well…It’s taking a toll on me…Go…to a psychologist.’...So I got
scared…I thought ‘Well, [what if] he leaves? If he cannot take it any longer, [and] he decides ‘I’m leaving’? And I got petrified.’” She immediately started searching for grief treatment and came in for an initial interview with the CGTOA study a few days later. This participant noted that, if her partner hadn’t said anything, she probably would never have sought grief treatment. In general, then, recommendations from others, expressions of concern, and fear of a loss of the relationship all influenced support seeking for grief.

**Ineffectiveness of Professional Treatment**

While, as noted above, not all participants sought support from grief support groups or mental health professionals before enrolling in the CGTOA study, those who did so were often dissatisfied with what they received. Interestingly, none of the participants got ongoing support from a religious organization about their grief. As one noted “I know that after the funeral, the pastor from my parents’ church said that I could talk to him. But I didn’t know him, he was my parents’ pastor, and I had no previous relationship with him, so I didn’t feel comfortable doing that. You know, he’s a clergyman, he’s a not a psychiatrist, psychologist, anything like that, so I thought ‘Nah.’” Another, who lost her son, felt that religious support would actually make her grief worse: “At that time I had a really hard time trying to justify, I didn’t really want to hear that Mary sacrificed her son and it just wasn’t…No, I needed to work on this not from a religious point of view.” Another was very involved in her church but limited by health problems and some changes in the organization of her church from actually seeking that support: “My church is very supportive because of my handicap. They come and give me communion….But the difference being my pastor…they transferred him out of state. So we have two new ministers. And I don’t even know them cause I haven’t been to church to meet them.”

Participants who sought specialized mental health care often found the process challenging. Not being sure who to go to for grief treatment was a commonly cited problem. For
those who did find mental health support, care was often ineffective. Some participants describe a lack of fit with their therapist, that “something wasn’t clicking.” Several others commented that care wasn’t specialized enough, that it was “garden variety” rather than focused on grief. Similar to family and friends’ discomfort or lack of familiarity with grief, many mental health professionals seen by participants had difficulty discussing grief. As one participant described his short-lived experience with behavior therapy: “I think the whole thing’s premised on games! On some kind of action that has to occur. It really has very little to do with the grief itself, or understanding grief…All she seemed to be interested in was pulling me back in, without referring to grief at all.” Indeed, therapists rarely seemed comfortable talking about grief and very few specialized in it. One participant, while generally satisfied with her care, felt she got inaccurate information from her therapist (who provided Jungian analyses rather than grief-specific treatment): “Well, at the beginning he said things that were not true, but I guess they say that to everybody. Like ‘In three months you will feel better. In one year you will better.’ And three months and a year went by and I felt worse.” Others noted that lack of structure was a problem, that there was no real direction in treatment. All of these participants felt that they weren’t “getting anywhere” in treatment. Participants’ dissatisfaction seemed to be primarily with a lack of focus on grief in particular, rather than the specific treatment modality; participants were dissatisfied both when treatment was too structured and when it was not structured enough. Participants expressed a great deal of frustration with not finding treatment when they needed it, fostering a feeling of hopelessness that actually enhanced their grief symptoms; one called this a “double negative.”

Some participants never tried grief groups, with two noting that they simply didn’t like groups, in general. As one participant stated: “I don’t like any groups. No groups for me. I find it unproductive most of the time…and I really am not interested in that.” Those who did try grief
groups sometimes found that hearing about others’ losses seemed to add to their grief, rather than make them feel less alone. A related experience was a sense of comparison to others in the group that made their grief worse: “It was such a downer. These were people that were still years and years afterwards going to 2 and 3 meetings a week. And I couldn’t process the fact that this would be it forever...And I couldn’t go with that, that they were still in this after 7, 9 years. And I said ‘I don’t think this is something I want to pursue.’” Another had the opposite reaction, feeling that some of the other group members were not truly grieving: “Some of them were honestly sorrowful and felt that...Others it was kind of sub thing. The bereavement group was what they were looking for, that was a means of social contact which had very little to do actually with bereavement.” All these participants felt a lack of real connection to other members. Finally, some participants felt that the organization of the group impacted their interest in participating. Regularity of attendance was one issue. As one participant described: “I believe if there had been a little more continuity, if people had come more often. I don’t think it was that comfortable.” Another had concerns about the leader of the group: “a very well-meaning person, but I don’t think she understood very much... Each participant was a very particular individual person, and she never really made the effort, didn’t know how to make the effort, to kind of develop a group.” None of the participants went to grief groups for more than a few sessions, and most went once and then stopped.

Reactions to Complicated Grief and Complicated Grief-Specific Treatment

The importance of labeling symptoms as CG varied significantly by participant. None had heard of complicated grief until they heard about the CGTOA study. For some, having a name for symptoms was a powerful, important experience. These participants identified strongly with the label, making statements such as “I heard something that fit it exactly, I said ‘that’s it.’” Another said “It fit so well. It absolutely resonated.” These participants felt a huge sense of relief
both that they were not alone in their symptoms and that treatment existed for their conditions. One said “It was helpful to me to know that something that other people had experienced, that it seemed to be going on and on and on and on and on and on.” As one participant described her first reading an article about CG:

It was almost like I was reading about that they’d discovered gold because it validated something [for] me that was…just unnamed before. It told me that what I was experiencing A. Others experienced also, which really helped me…And…it also told me that [my problem] has been recognized and it can be treated…[Because] I had the key words, I had ‘complicated grief.’…When I read it, I knew. I knew I fit the criteria. I mean it was ‘Eureka!’…It was so wonderful that it was recognized [because] validity was there. I had almost all the symptoms that the paper described…. That was the key to everything, those two words.

Many of these participants also expressed a wish that they’d known about CG sooner, as they could then have gotten appropriate treatment more quickly, and others could have better understood their experience.

For others, though, the label of CG was irrelevant. They didn’t identify strongly with the term, and instead their focus was on getting treatment that they felt would be helpful. As one participant said “[I thought] nothing special. It sounded like a term that's used, that I wasn't familiar with. That's all…I really didn't think about the word.” Another said: “Whether they call it complicated grief or spaghetti sauce, it doesn’t matter. As long as we had a well-defined phenomenon here.” Another noted “Oh, I didn’t really think much about it. I’m not sure that it’s the right word that I would use. It doesn’t really matter to me.” Another said, when asked if she identified with the term “complicated grief” : “Not at all. I felt I loved so much. And I got so much love from [deceased partner] that it was….I just, I wanted help…[I knew I was having a] hard time. And I knew that that’s the place I needed to be. The title had nothing to do with it.”

Some of these participants actually had a strong negative reaction to the label of CG. As one stated: “Well, that’s not the appropriate term, but complicated almost makes it an accounting
Another said: “I thought it was a little bit artsy, you know? I mean, sounded to me, like contrived or something. But I knew what it meant…it didn’t sound too much belonging to psychiatry, but it was like a given name in sort of an artificial way or something.” Suggestions for other names included “super grief” “anxiety loss” or a name with the word “disorder” or “reaction” in it.

However, regardless of their feelings about the CG label, the distinction between CG and “normal” grief was clear in participants’ minds. As one stated: there is “normal grief [but] some people carry it all the time and some people never get over it.” Another said: “Complicated [grief], it’s just totally different. It is so totally different. I don’t even say apple and oranges or whatever. It just has to be handled differently.” Similarly, most participants felt a strong identification with CG-specific treatment. One noted “sounded exactly like my problem, you know?” And another noted that “Within five seconds of talking with [study PI’s name omitted, I was committed,” while another said that “what was appealing was that it was different from what I had done.” In all these cases, the identification of themselves as having CG seemed to result in a desire for CG-specific treatment.

**Discussion**

This study uses the descriptive phenomenological method to explore the grief support-seeking process among a group of bereaved older adults who sought care from a CG treatment study. Participants described several core experiences in their process, including having grief symptoms that were severe, impairing, and long lasting, a sense that grief symptoms not meeting expectations, insufficient support from family and friends, encouragement to get care from family and friends, ineffective support from grief support groups and mental health professionals, and a positive view of CG-specific treatment. The final stage of bracketing is reintegration,
which involves assimilating bracketed material (including both interviewer interpretations and previously published literature) with the identified phenomena and providing some interpretation. Existing models and theories provide some context for results.

Pescosolido’s Network-Episode Model (NEM) (Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998), and Thoits’ self-labeling theory (Thoits, 1985) may both enhance understanding of support seeking for CG. Both have been used to examine mental health support seeking in outpatient settings (Pescosolido, Wright, Alegria, & Vera, 1998; Thoits, 2011). Moreover, both view support-seeking as essentially a social process. The interaction between social relationships and professional support seeking may be especially salient in bereavement support-seeking, as evidence indicates that most bereaved individuals first seek support from family and friends, and then seek professional support when those resources are lacking in some way (Benkel, Wijk, & Molander, 2009)

The NEM (Pescosolido & Boyer, 1999; Pescosolido, Gardner, et al., 1998) is based on several assumptions. First, those with mental illness often consult with a range of individuals about their symptoms, including informal supports (like family members, friends, coworkers, religious leaders, and ethnic/traditional healers) and formal providers (like physicians and mental health professionals). Second, support-seeking is a dynamic process, involving a series of decisions, rather than a single event or choice. People experiencing mental health problems usually continue to seek advice regarding their concerns until the problems have reached a resolution. Finally, social network members play a key role in mental health service use. The availability of the social network (the number of people in the network and frequency of contact with them) determines the networks’ potential influence on access to, volume, and types of services used. However, it is the content of the social network (including norms like the beliefs, experiences, values and attitudes of those in the network about support-seeking), the sources of
instrumental and emotional support provided in the network, information and coercion given that actually influences support-seeking behavior. In general, then, the NEM emphasizes the importance of how available social networks influence support seeking (Pescosolido, 1992). Appendix 4 shows the NEM in more detail.

In keeping with the NEM (Pescosolido, 1992; Pescosolido, Gardner, et al., 1998), participants did not seek treatment in a linear way. Rather, they tried to get help with their grief from a variety of individuals, including family, friends, physicians, grief groups, and a number of mental health professionals until they found a treatment (the CGTOA study) that they felt met their needs. Four of the 8 participants had sought other professional support for grief before enrolling in the study. The fact that many entered grief treatment because of input from friends or other providers also fits with the NEM, as these social network members helped shape support-seeking behavior. However, data is not available in the current study from those who did not seek treatment because their social ties provided sufficient support; both mechanisms may be operating for older adults with CG. The study also provides preliminary information on how exactly social network members might encourage support-seeking—some had received grief treatment themselves, and recommended it; some observed distress in participants and expressed concern, and, in one case, a participant was told that her relationship might suffer if she did not seek care. Previous research revealed similar trends. Pescosolido and colleagues (Pescosolido, Gardner, et al., 1998) have found, for example, that those with severe mental illness are often encouraged to go to treatment by others and studies have found that having a relationship with someone who recommends seeking help, or who has themselves sought mental health care, was associated with positive expectations about mental health services and more positive attitudes to help seeking (Vogel, et al., 2007).
Self-labeling theory focuses more specifically on internal recognition of having a mental health condition (Thoits, 1985). According to Thoits, self-labeling begins when distressed individuals notice that their reactions are intense, recurrent, or prolonged compared to cultural norms; she calls this recognition of “emotional deviance.” The theory assumes that the person who self-labels internalizes the norms for behavior and perspectives of their larger culture, and can recognize when they are violating those norms. Often, awareness of discrepancy arises through comparison to others who have had similar experiences. Thoits refers to differences between private emotional experiences and societal views of what emotional reactions one “should” have as a condition of “norm-state discrepancy.” Certain categories of norms are given labels when norm-state discrepancy occurs, including the label of a mental illness. Thoits’ theory also operates under the assumption that most social actors want to conform to social expectations. Thus, when they self-observe that they have violated social norms, either in thoughts or behavior, they make attempts to conform again. Mental health support-seeking offers one avenue to do so, as treatment can help alter feelings to fit norms.

Participants detailed a process of recognizing that grief was causing distress, similar to that proposed by Thoits’ self-labeling theory (Thoits, 1985). As Thoits argues, situations where emotional reactions are prolonged and frequent tend to be labeled as a mental illness. All participants described their grief as both intense and long-lasting. Thoits also posited that mental illness labels are usually assigned as a result of social comparison. Study participants often engaged in a process of comparison to others who were grieving, noted that their grief was more severe than others’ reactions or from their previous experiences, and then identified their grief as a different (or “deviant”) response.

Also consistent with self-labeling theory, many participants noticed that family and friends viewed their reactions as unusual (or “socially undesirable”) and withdrew. This sudden
absence of, or judgment from, others who had previously supported them created a need to find support from other avenues. For study participants, and as hypothesized by Thoits, seeking professional support for grief often replaced lacking social support. The association between bereavement support-seeking and low family and friend support is also consistent with previous research. For example, in a qualitative study with 38 relatives of deceased cancer patients about their reasons for joining a bereavement support group, lack of support from family and friends was commonly identified (Picton, et al., 2001).

Findings also fit with other qualitative research. Howard (2006) interviewed 29 adults with a variety of mental health conditions about the process of identifying (and later deidentifying) with their conditions. She found that finding a label for one’s condition helped participants make sense of their experience and overcome feelings of being overwhelmed and out of control. Before finding the label, symptoms felt nebulous, while identification with labels provided a sense of order and presented a direction for treatment. Howard argues that the label allows for a creation of a cohesive narrative, where there is an explanation for past symptoms, an understanding of present experiences, and an idea of what to expect in the future. In the current study, the identification process was similar to in Howard’s sample, with the CG label providing a sense of comfort and order to many participants and allowing them to find effective CG-specific care.

Factors to consider when evaluating qualitative research include validity, reflexivity, rigor, credibility, trustworthiness, dependability, transferability, and confirmability (Maxwell, 1992; Peters, 2010; Sandelowski, 2002; Seale, 1999). Credibility and rigor were ensured through lengthy engagement with participants and member checks. Dependability was met through member checks and consultation with experts in qualitative analysis. Confirmability refers to uniform collection of information to increase the quality of the data. Confirmability was
achieved through using a semi-structured interview. I used bracketing to reduce assumptions about the reality of the lived experience of support seeking for CG. Moreover, to decrease the possibility of misunderstandings during the interviews, pre-understandings were examined by using probing questions (Dahlberg, Dahlberg, & Nystrom, 2008). Throughout, the interviews had depth, and revealed variations in the bereaved individuals’ experiences (Lindseth & Norberg, 2004). The interpretations are simply those with I found to be most likely; consultation with other qualitative researchers also occurred. According to Dahlberg and colleagues (2008), our pre-understanding can never be entirely eliminated, but kept in check so as not to dominate understanding. When conducting this study, I consistently tried to keep pre-understandings restrained through discussions with other qualitative researchers about my evolving understanding of the phenomenon under study. The findings in this study represent only one way of understanding meanings of support seeking for grief.

Limitations

The primary limitation of this study is one of reflexivity. I was an Independent Evaluator on the CGTOA study as part of her graduate research assistantship when interviews were conducted, and had already established a relationship with many participants in the CGTOA study through work conducting structured interviews with them. My preexisting relationship with participants and my own (two year) participation as an interviewer on the CGTOA study may have reduced my ability to “bracket out” my perceptions and affected my interpretation of results. In cases where I had interacted previously with participants, I had information about their loss and their response to treatment which may have prevented me from asking relevant content-specific questions. My previous role on the study may have also impacted what participants shared with me and what they omitted. In some cases, they may have been more forthcoming because they knew who I was and that I worked with a program with which they had positive
associations. In other cases, the fact that I worked with the study principal investigator, and that some of the findings would be shared with her (albeit in deidentified format) may have prevented them from sharing dissatisfactions. However, almost all participants described what they liked and hadn’t liked about their CGTOA study participation, even though the interview protocol did not cover this topic. This seems to suggest that participants were comfortable sharing their thoughts openly with me.

Validity may also be a concern. Not all of those who were contacted about the qualitative study agreed to participate in it. Those who refused may have had very different treatment experiences than those who participated. Moreover, phenomenology relies on participants’ use of language to describe their experience. Language can never perfectly capture experience, and is shaped by certain constructs and interpretations that may differ from those of the researcher and can never be fully understood by them. A further limitation is that the researcher’s exposure to theory and concepts before the beginning of data collection may have influenced the analysis and interpretation. While this is a failure of effective bracketing, most phenomenological researchers acknowledge that completely bracketing out all previous perceptions and assumptions is very challenging (Creswell, 2007; Moustakas, 1994).

In addition, because data were collected retrospectively (over a year since participant’s enrollment in the CGTOA), their description of their experiences may have been altered by memory and experience. My own act of asking participants to create narratives may have created a structure that was not there before our conversation. In particular, participants’ belief that CG is something unique that requires specialized treatment is an idea that is often reiterated by CGTOA study staff and therapists. Many participants ascribed a great deal of meaning to their process of treatment entry after the fact, so much so that one participant stated that she believed that her finding the study was partly due to her deceased father looking over her. The interview
results still have value and meaning if participant’s memories of events were indeed influenced by later experience, but descriptions may have varied if data was collected at the moment of treatment entry. Since I do not know if the timing of treatment entry was normative or not, it is difficult to say how much experiences may differ from those of others with CG not interviewed.

Finally, though generalizability is not a goal of qualitative research, transferability can be (Seale, 1999). Transferability involves consideration of whether the data could be applied to other situations. The study sample was made up of a very distinct group, and their treatment seeking may not be easily transferred to other populations. Participants were seeking treatment in a large urban area in the northeastern United States. Most had a long history of treatment-seeking, which might speak to specific cultural norms about the acceptability of mental health help-seeking. Many participants’ skepticism of using religious support may also reflect that all were from New York City, an urban, fairly secular part of the country. In addition, all were seeking treatment specifically through a research study; motivation to participate in research may be different than help seeking in a clinical setting (e.g. perhaps more motivated by altruism, or an interest in novel forms of care). Quite different findings may have been identified in older adults in the rural Southern United States, for example. All of these limitations may impact the transferability and credibility of the findings

**Implications**

The study findings have several potential practical applications. First, increasing awareness of CG, both among mental health providers and the general public, may assist in detection of the disorder and also lessen the feelings of isolation and misunderstanding experienced by and about those with CG. Many participants experienced judgments of symptoms from family and friends, which negatively impacted these relationships. Many participants also interacted with several mental health providers before finding the study, including providers
specializing in bereavement support, but only a few ever mentioned CG. While the importance of having a specific label for CG varied by participant, knowing that treatment was available for their condition was powerful for all of them. A few participants noted that the rejection or dismissal they received from friends and family about their condition was allayed once they shared knowledge of CG with them. If the sense of validation described is indeed important to recovery from CG, then greater community knowledge may be an important first step in engaging those with CG in care and in order to address their symptoms.

Participants suggested several ways to reach others in similar situations who had not yet sought care. These included a large-scale public relations effort, radio ads, newspaper ads and articles, television ads and news reports, information on websites, direct contact with bereaved individuals who may have CG through death certificate information or funeral homes, and making professionals more aware of CG and its treatment (including having a CG checklist available at intake visits). Specific training in identifying CG among those who are most likely to come into contact with bereaved individuals, including hospice and palliative care workers and nurses at hospitals and nursing homes, seems especially needed. All of these methods may be effective in increasing public and professional awareness of CG.

**Future Research**

As the role of social support and the severity of symptoms were reported as essential in treatment seeking, these variables were considered in dissertation Papers 2 and 3. More generally, participants’ experience of “waiting it out”- expecting their distress to get better on its own- may be unique to grief, and may make both internal perceptions of and reactions of others to complicated bereavement reactions different than those associated with other mental disorders. Because grief is a common human experience, and for most people grief does alleviate naturally with time, knowing when to wait and when not to wait may be quite difficult to determine.
Whether this same experience of waiting is important in other mental health conditions, like depression or anxiety disorders, requires more empirical attention. Some participants sought treatment fairly quickly for grief, but many CGTOA study participants did not seek professional treatment for years; one waited almost 40 years. All enrolled participants had symptoms continuously from the time of the loss, but Jacobs (1993) has written about delayed and absent grief, in which grief reactions do not appear for some time after a loss, if at all. The absence of pangs of grief is usually combined with severe emotional numbing and disbelief, severe symptomotology of other types (like pain syndromes), and virtually no other symptoms of disturbance. When there is a delay in the onset of grief symptoms, treatment seeking may also be delayed. In general, greater research attention to why some older adults seek grief treatment right away and others wait may contribute greatly to our understanding of service utilization for grief.

The notion of wanting to cope with grief on one’s own, expressed by many participants, may be specific to American culture, which tends to value autonomy more than other societies (Markus & Kitayama, 1991). In cultures outside of the United States, greater existing support, from family and friends or religious organizations, may be more available and widely utilized. There may also be variability within the United States; African-Americans often utilize group activities at churches to assist with their grief and these services may take the place of mental health services (Clements, et al., 2003). Though African-Americans and Whites appear to have similar rates of CG (Stroebe, Schut, & Stroebe, 2007) treatment seeking from mental health professionals by African-Americans is generally lower than among Whites (Neighbors, 1985). However, as this sample only included one African-American participant and African-Americans make up less than 10% of the larger CGTOA study, data could not be gathered on unique aspects of support seeking. Expectations for how long grief should last and what it should entail may also be culture-specific (Clements, et al., 2003). Interviews with grieving older adults in Non-
White, non-American cultures are needed. Participants also varied greatly in how much of their support seeking was motivated by internal perceptions of needing support and how much by information or encouragement from others. More exploration of the intersection of internal processes and external social or cultural influences on CG support-seeking, and when and how each mechanism may operate, is also needed.

**Conclusion**

While more research remains to be done, the study results reveal new details about the process by which a group of older adults who enrolled in a CG treatment study sought for their grief. Findings draw attention to the role of social support and to the importance of labeling symptoms in support-seeking for CG. It is hoped that this information may eventually be practically applied in order to increase the detection and effective treatment of CG.
References


The Influence of Social Networks, Complicated Grief, Depression, and Other Demographic and Clinical Variables on Bereavement Service Use Among Widowed Older Adults

Dissertation Paper 2
Introduction and Literature Review

Spousal bereavement is a common experience among older adults, with 42% of women and 14% of men aged 65 and over widows or widowers in 2008 (Federal Interagency Forum on Aging Related Statistics, 2010). Reactions of acute grief are most common after a loss; acute grief is characterized by strong emotional responses of sadness and yearning, that tend to attenuate considerably within a year after the death (Bonanno, Moskowitz, Papa, & Folkman, 2005). Importantly, the capacity for positive feelings is retained during acute grief (Chentsova Dutton & Zisook, 2005). Moreover, spousal loss among older adults may have very different meanings and outcomes than among younger adults. Older adults are more likely to have had previous experiences with loss. Spousal losses are also likely to be somewhat expected, as chronic illnesses, such as cardiovascular disease, are common older adults. The anticipated nature of spousal loss may reduce the stress associated with this event (Carr, Nesse, & Wortman, 2006). A minority of widowed older adults, however, experience problems in the wake of bereavement that can be classified as mental health disorders, including depression (American Psychiatric Association, 1994) and Complicated Grief (CG) (Stroebe, Schut, & Stroebe, 2007). Though CG is not included as a mental disorder in the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual, the APA workgroup has proposed the addition of CG in the upcoming 5th Edition as “bereavement-related adjustment disorder” (American Psychiatric Association, 2011).

A recent population-based survey found that about 7% of those who experienced a major bereavement develop CG (Kersting, Brahler, Glaesmer, & Wagner, 2011), though smaller, non-representative studies, primarily with widowed samples, have found rates of 10-20% (Jacobs, 1993; Middleton, Burnett, Raphael, & Martinek, 1996). Studies have found rates of depression of 12-16% at 13 months post-widowhood (Zisook, et al., 1997; Zisook & Shuchter, 1991).
Widowhood has been shown to have a negative impact on health in older adults, increasing risk for cancer, heart trouble, high blood pressure (Prigerson et al., 1997) and substance abuse (Chen et al., 1999), and widowhood has also been associated with excess mortality (Manzoli et al., 2007).

Support available to widowed older adults typically includes grief support groups (led by trained group leaders), widow-to-widow programs (led by other bereaved individuals) (Silverman, 1969), pastoral counseling, and psychotropic medication (Currier, Neimeyer, & Berman, 2008). A CG-specific psychotherapy has shown efficacy for a variety of losses in an randomized clinical trial (Shear, Frank, Houck, & Reynolds, 2005) and cognitive-behavioral therapy, antidepressant pharmacotherapy (including tricyclic antidepressants and selective serotonin reuptake inhibitors), and the antidepressant nortriptyline combined with interpersonal therapy have shown effectiveness for treating depression after various types of bereavement (Reynolds, et al., 1999; Zisook & Shuchter, 2001).

Yet though treatments are available for bereavement-related distress, little is known about bereavement support seeking in widowed older adults. There is a gap between need for mental health services and the use of services in the U.S. population as a whole, with only about one-third of those who need mental health care actually using services (Kessler, et al., 1999; Regier, et al., 1993). Studies of bereaved individuals of all ages which did not consider level of distress have found rates of help seeking varying from 3.0% to 33% (Billings & Kolton, 1999; Cherlin, et al., 2007; Currow, et al., 2008; Gamino, Sewell, Hogan, & Mason, 2009-2010; Roberts & McGilloway, 2008; Rynearson, 1995), while studies of bereavement help-seeking specifically among older adults found rates varying from 11.5%-52% (Caserta & Lund, 1992; Bergman & Haley, 2009; Bergman, Haley, & Small, 2010). Samples in these studies varied in geographic area sampled, services reported, type of loss reported, and time since loss.
Even less is known about support seeking in the bereaved subgroup with CG or depression, who are in greatest need of services. One study of bereavement support seeking in a depressed subgroup of 161 caregivers of patients with cancer enrolled with hospice found that 47.6% of those with depression used any bereavement services (Cherlin, et al., 2007). In another study of 110 widowed adults interviewed about 4 months after their loss, Prigerson et al. (2001) found that only 33.3% of those with CG used mental health services. However, interest in treatment among those with CG may be higher than actual use. In a study of 135 widowed older adults bereaved an average of 19.7 months (Johnson et al., 2009), 93.8% of those with CG said they would be interested in receiving treatment for grief from a bereavement support group, 93.8% were interested in psychotherapy and 81.3% in medication. This study did not collect data on actual rates of support-seeking.

Though data are preliminary, there is clearly a gap between bereavement-related distress and bereavement service use. Understanding more about what drives service use may help identify ways to reduce this gap. Several studies have examined what factors make some individuals more likely to use bereavement services than others. Higher depression, anxiety, and/or grief severity have been associated with greater bereavement service use (Bergman, et al., 2010; Caserta & Lund, 1992; Cherlin, et al., 2007; Gamino, et al., 2009-2010; Roberts & McGilloway, 2008; Rynearson, 1995), as has lower religiosity (Rynearson, 1984) and lower family and friend support (Benkel, Wijk, & Molander, 2009; Kaunonen, Tarkka, Paunonen, & Laippala, 1999). One study found African-Americans were likely to go to religious leaders for support with grief (Bergman, et al., 2010). Older women also report greater use of mental health services than older men, in general (Coulton & Frost, 1982), though at least one study found no gender difference in bereavement service use (Cherlin, et al., 2007). Other variables associated with lower levels of support-seeking in general population samples, and which may also apply to
bereavement support-seeking among widows, include poorer health (Mackenzie, Scott, & Mather, 2008), lower socioeconomic status (Mackenzie, et al., 2008), older age (Pescosolido, Wright, Alegria, & Vera, 1998), and lower educational attainment (Suchman, 1964). Attachment style may also be associated with help-seeking. Compared to those with secure attachment, those with attachment avoidance may be less likely to seek support from mental health professionals in times of emotional distress while those with anxious attachment may be more likely to seek support (Vogel & Wei, 2005; Shaffer, Vogel, & Wei, 2006).

Most of these studies have been based on Andersen’s Socio-behavioral Model (Andersen, 1968, 1995), which posits that decisions to seek help are determined by three individual-level factors: predispositions to use services, enabling resources, and perceived need. This model has generally focused on predictors of a single or a limited number of services in isolation. For example, a recent study (Bergman, et al., 2010) using the same sample as the current study (the Changing Lives of Older Couples (CLOC) study) applied the Andersen model to understanding bereavement service use at 6 months-post-loss. Three types of services were considered individually (from religious leaders, family doctors, and self-help or support groups), and a single “any service use” category was created. Approximately 52% of the sample used some bereavement service at 6 months. The authors found differences in use of each service by race, education level, and symptom severity. For example, Black participants and those with higher levels of depressive symptoms, anxiety, and grief were more likely to report having seen a minister, priest, or other clergy to help handle feelings of grief.

Though studies such as that by Bergman and colleagues provide extremely useful information on general trends in bereavement service utilization, they may not fully capture the complexities of bereavement service utilization. Possible interrelations among bereaved individuals’ service utilization may have been overlooked. For example, use of one service may
be associated with an increase, or a decrease, in use of another service. Considering interrelations among separate service types may contribute to understanding of how bereaved older adults’ choose services and may lead to a more efficient distribution of resources for this population. Moreover, empirical studies testing the Andersen models have explained only some (approximately 20%) of the variance in support-seeking for mental health conditions more generally (Mechanic, 1979; Stiffman, Pescosolido, & Cabassa, 2004). Researchers have therefore argued for a more comprehensive assessment of service use (Bookwala, et al., 2004; Choi, Morrow-Howell, & Proctor, 2006; Hong, 2010). This may be especially important in studying older adults, who often experience co-occurring health and mental health conditions and may therefore manifest complicated service use behaviors (Proctor, et al., 2003).

Pescosolido and colleagues’ Network Episode Model (NEM) provides a framework for understanding more complex service use (Pescosolido, 1992; Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998). The NEM has several main assumptions. First, those with signs of psychological distress consult with a range of both formal and informal supports, including family, friends, coworkers, ethnic/traditional healers, other service providers (e.g., physicians), and mental health professionals. Second, help-seeking is a dynamic process, involving a series of decisions, rather than a single event or choice. Thus, the NEM moves away from an individualistic focus on service needs towards a process-oriented understanding of dynamic pathways to care. Third, social networks are the principle mechanism driving service use. The availability of the social network (the number of people in the network and frequency of contact with them) determines the networks’ potential influence to affect service use. The NEM also takes the trajectory of symptoms, individual level characteristics like age and gender, and properties of the treatment system (e.g. providers’ training on symptom treatment) into account. However, it is the content of the social network (the beliefs, experiences, values and attitudes of
those in the network about support-seeking, the sources of instrumental and emotional support in
the network, information and coercion given (Kang, et al., 2007)) that actually influences help-
seeking behavior. If beliefs, attitudes, information, etc. are positive, service use is more likely,
and if they are negative, service use is less likely. Appendix 4 shows the NEM in more detail.
When applied to studying service use, the NEM (Pescosolido, 1992) provides a framework for a
comprehensive picture of service utilization by emphasizing two major points: (a) examining
overall patterns or combinations of multiple service uses and (b) considering how social
networks influence patterns of support seeking. Studies have applied the NEM to understanding
various types of bereavement service use among family caregivers (Bergman & Haley, 2009;
Hong, 2010) and to examining service use across sectors of care (psychiatric, medical, and
psychosocial services) in older adults with depression (Choi, et al., 2006), but the NEM has not
yet been applied to understanding bereavement support seeking specifically among older adults
with CG and/or depression. The reasons behind this are uncertain; it may be that the Andersen
model is simply more widely known and easily tested. Also, considering grief as a mental health
condition is a relatively new concept (Prigerson, et al., 1995) and studying service use for grief is
also fairly novel.

The current study will expand on the study by Bergman and colleagues (2010) that
applied the Andersen model to correlates of individual service types alone in a representative
sample of widowed older adults, the Changing Lives of Older Couples (CLOC) study, at 6
months post-loss. Instead, this study will use the NEM as a conceptual framework to guide an
analysis of help seeking in order adults using CLOC study data. The study will: (1) examine
configurations of bereavement service use types at 6, 18, and 48 months post-loss and (2)
consider the effect of social network variables on service use. Thus, the paper will contribute to a
more comprehensive understanding of bereavement service use by older adults. The study also adds consideration of the presence of CG and depression as determinants of service utilization. Specific aims and hypotheses are:

**Aim 1:** To identify the presence of CG, and its association with depression, in a representative sample of widowed older adults at 6, 18, and 48 months post-loss.

**H1:** In keeping with previous literature, between 7 and 20% of older adults will meet criteria for CG at 6, 18, and 48 months post-loss. There will be some comorbidity of CG and depression, but not all of those with CG will meet criteria for depression.

**Aim 2:** To describe the configurations of services used for bereavement among widowed older adults from religious leaders, support groups, medical and mental health providers reported at 6, 18, and 48 months post loss.

**H2:** In keeping with the Network Episode Model (NEM), several types of bereavement support seeking will be identified over the 6, 18 and 48 months of follow-up post loss, which will include both “single” service types and combinations of several services.

**Aim 3:** To determine whether social network variables, the presence of CG or depression, other clinical variables (measured at 6 months post-loss) and baseline demographic variables are associated with service use among widowed older adults reported at 18 months post-loss.

**H3:** As proposed by the NEM, there will be variations in services utilized based on social network variables, including positive emotional support from family, friends, and children, instrumental support provided by network members, and frequency of contact with network members. Because greater need is associated with more service use, those who have CG or depression will be more likely to utilize all types of support. In keeping with previous literature, there will also be variations in service use by gender, race, health, socioeconomic status, age, education level, and attachment style.
Methods

A subset of data from the Changing Lives of Older Couples (CLOC) study, a two-stage area probability sample of 1,532 married individuals from the Detroit Standard Metropolitan Statistical Area, was analyzed. Face to face baseline interviews were conducted from June 1987 to April 1988 by CLOC study staff with both members of the couple. To be eligible, husbands in all enrolled couples were required to be 65 or older. Details on the CLOC study have been published previously (e.g. Carr, Nesse, & Wortman, 2006).

A total of 335 respondents lost a spouse during the 5 years of the study; all had baseline interviews from before the loss. Nineteen of these widowed older adults died before they could be contacted, and 316 were contacted for possible interview. Of those contacted, 263 (83%) participated in at least one of the follow-up interviews conducted at 6 months (Wave 1) \(n=250\), 18 months (Wave 2) \(n=210\) and 48 months (Wave 3) \(n=106\) after their spouse's death. The entire data set was weighted to adjust for unequal probabilities of selection and differential response rate at baseline before conducting analyses. The final weighted sample for Wave 1 was made up of 211 widowed older adults, 178 widowed persons at Wave 2, and 85 at Wave 3. Of these participants, 46 were interviewed at Wave 1 only, 81 at Waves 1 and 2 only, 83 at all three Waves, two at Waves 2 and 3 only, and 12 at Wave 2 only. None were interviewed at Wave 3 only (all results weighted).

Though the Wave 3 sample is relatively small, having data from several follow-up points when considering number and types of bereavement services used allows for understanding of trajectories over time. Previous analyses of the CLOC data set (Carr, House, Wortman, Nesse, & Kessler, 2001) estimated logistic regression models to examine correlates of widowed participants’ nonparticipation in the Wave 1 and Wave 2 interviews. For Wave 1, older age and baseline anxiety increased risk of nonparticipation, and home ownership decreased risk of
nonparticipation. For models predicting Wave 2 nonparticipation (given that a person participated in the Wave 1 interview), sudden death of the spouse, months of forewarning, poorer baseline demographic, physical and mental health and higher Wave 1 levels of grief were evaluated as predictors, but no single variable was a significant predictor of attrition. Those who participated at Wave 3 are also younger, healthier, and less depressed than those who did not participate. However, logistic regressions which I conducted showed that neither support-seeking at Wave 1 ($\beta (SE)=.537 (.289)$, $p=.069$) nor Wave 2 ($\beta (SE)= -.314 (.312)$, $p=.314$) predicted study participation at Wave 3.

Initial descriptive analyses on service utilization included participants at all three Waves. Because of the variation in demographic and clinical variables, however, Wave 3 data were excluded from the analyses of demographic and clinical correlates of support. Instead, examination of the association between demographic and clinical variables and service utilization was limited to the 161 participants who were enrolled at both Wave 1 and Wave 2 and whom also had data available on support seeking. Support seeking at Wave 1 also did not predict study participation at Wave 2 ($\beta(SE)=-.154 (.337)$, $p=.648$).

A deidentified version of the dataset is publicly available through the Inter-University Consortium for Political and Social Research. The Columbia University Morningside Institutional Review Board also reviewed the proposed analyses and concluded that they qualified as exempt from further review.

**Measures**

**Dependent Variables:**

*Support-seeking:* Four items asked whether, to help handle feelings of grief, loneliness or missing their (husband/wife), participants had gone to a self-help group or support group for people who have lost a spouse; seen a minister, priest or other clergy for help; talked to their
family doctor about feelings of grief, loneliness or missing their (husband/wife), or had gone to a mental health professional for help-someone like a social worker or psychologist. Items referred to any use since the previous CLOC interview. Thus, at Wave 1, the items referred to use from the death to 6 months post loss, at Wave 2, the items referred to use from 6 to 18 months post-loss, and at Wave 3, the items referred to use from 18 to 48 months post-loss. Data on the number of visits for each support type, content of visits, and start date of visits was not collected.

Because very few participants sought support from a mental health professional, this item was omitted from the analyses of demographic and clinical correlates. All items were asked only if participants said they were experiencing any grief over their spouse’s death. Items were therefore not administered to four participants at Wave 1, one participant at Wave 2, and 18 participants at Wave 3. A single “any support sought” variable was also created, scored as “yes” if participants went to a family doctor, self-help or support group, and “no” if they did not seek any of these three services.

Independent Variables:

Demographic Variables

Race: Self-reported in two items: “Are you white, black, American Indian, Asian, or another race? (CHECK ALL THAT APPLY).” And “Are you Hispanic or Latino” (Yes/No). As almost the entire sample (99%) was White or Black, this item was dichotomized into a single “White” or “Non-White” variable. This item was administered at baseline.

Gender: A single categorical variable (male or female). Interviewer rated on observation at baseline.

Age: Self-reported single item, entered as a continuous variable. Because most of the sample was 65 or older, the variable was recentered so that age=age-65 for ease of interpretation. This item was administered at baseline.
**Education:** Measured as a single continuous variable. In keeping with previous literature in support utilization patterns (Wang, et al., 2005), this variable was transformed into a single categorical variable, where 0=11= “less than high school,” 12= high school/GED, 13-15= some college, 16 or greater= college or greater. Regression analyses then compared those who had not gradated high school to those with a high school education or greater. This item was administered at baseline.

**Income:** Income was measured at the baseline interview by asking respondents to indicate which of 10 categories most accurately captured their income. In keeping with previous CLOC analyses (e.g. Carr, et al., 2001), a continuous measure of income was derived by taking the midpoint of each of the 10 income categories, with Pareto estimate of the mean for the top income category. Because income distribution was skewed towards the lower income categories, the natural log of income was used.

**Home ownership:** This was a dichotomous variable, collected at each Wave, where 1=owns home and 0=does not own home. This variable has been used in previous CLOC study analyses (Carr, et al., 2000; Carr, et al., 2001) and has served as a proxy for financial stability.

**Social Network Variables:**

Social networks can be measured by different properties, including structure (the number of people an individual’s network and the frequency of contacts with ties), content (the beliefs, values and attitudes of those in the network), and function (the sources of instrumental and emotional support in the network, information and coercion given) (Kang, et al., 2007). Exploration of all of these network properties is limited somewhat by data available in the CLOC dataset, as the CLOC study was not designed to test the NEM. The study collected some information on the content of social networks (positive emotional support provided by family, friends, and children, instrumental support) but not on the attitudes, values, or experiences of
network members with bereavement help seeking. Data are also available on the frequency of contact with network members and the number network members to whom participants feel they can share feelings, but not the total number of individuals in the social network. Appendix 5 provides more detail on how selected variables correspond to principles of the NEM.

*Network size of close individuals:* A single item asks how many people there are in the participants’ life with whom they can really share their very private feelings and concerns. Wave 1 responses were considered. The median network size was two, and the modal network size was one, but the item had a few outliers (e.g. one participant answered “98”). Therefore, the item was top-coded at answers below the 95th percentile; six was the maximum score allowed.

*Frequency of contact with network members:* A single item asked “How often do you get together with friends, neighbors or relatives and do things like go out together or visit in each other's homes?” Answer choices were: *more than once a week* (1), *about once a week* (2), *1 to 3 times a month* (3), *less than once a month* (4), and *never* (5). The item was dichotomized into low contact (*never* and *less than once a month*) and high contact (all other categories). Wave 1 responses were analyzed.

*Religious participation:* A single item asked “How often do you usually attend religious services?” Responses ranged from *more than once a week* (1), *about once a week* (2), *1 to 3 times a month* (3), *less than once a month* (4), to *never* (5). The item was dichotomized into low participation (*never* and *less than once a month*) and high participation (*more than once a week*, *about once a week*, and *1 to 3 times a month*). Wave 1 responses were analyzed.

*Importance of religious beliefs:* Assessed with a single item: “In general, how important are religious or spiritual beliefs in your day-to-day life?” Response options were *very important* (1), *fairly important* (2), *not too important* (3), and *not at all important* (4). The item was
dichotomized into a single variable with values of “low importance” (*not at all important* and *not too important*) and “high importance” (*very important* and *fairly important*).

**Perceived positive emotional support from friends and relatives:** A composite rating created by CLOC researchers, from using the weighted mean of two questions: “On the whole, how much do your friends and relatives make you feel loved and cared for?” and “How much are your friends and relatives willing to listen when you need to talk about your worries or problems?” (alpha= .71). Higher scores indicate greater support. Wave 1 responses were analyzed.

**Perceived positive emotional support from children:** A composite rating created by CLOC researchers, using the weighted mean of two questions: “How much do your children make you feel loved and cared for?” and “How much are they willing to listen when you need to talk about your worries or problems?” (alpha=.70). Higher scores indicate greater support. Wave 1 responses were analyzed.

**Instrumental support:** The availability of instrumental support from family and friends was measured by averaging three questions: “If you needed extra help with general housework or home maintenance, how much could you count on friends or family members to help you?”; “If you needed extra money, how much could you count on someone, other than a lending institution, to lend or give you money?”; “If you were ill, how much could you count on someone to make sure you are taken care of?” (alpha=.64). Higher scores indicate greater support. Wave 1 responses were analyzed.

**Clinical Variables:**

**Health satisfaction:** A 3-item general health satisfaction index was created for the CLOC study based on the weighted mean of the items, with higher scores indicating greater satisfaction with health. One item requires reverse coding. Questions concerned: whether participants rated their
health as excellent, good, fair, or poor; the extent to which their health limited daily activities, and the extent to which they were satisfied with their health. This measure has good internal consistency (alpha=0.84). Wave 1 responses were analyzed.

**Complicated Grief present:** Items on the CLOC questionnaire corresponding to proposed CG criteria set (Shear, et al., 2011) which was validated in a sample of adults identified by an expert clinician as having CG were selected. When the CLOC study was developed, the concept of CG did not yet exist. However, the CLOC dataset includes many items on grief symptoms. Criteria proposed in the literature (Shear, et al., 2011) and factor analyses (principal component analysis, with varimax rotation) were used to select items. See Appendix 3 for more details; additional details available upon request. Items were recoded as “present” (often or very true) or “not present” (all other options). To meet criteria for CG, participants had to endorse at least one “B” criterion and two “C” criterion symptoms. All CG items were administered at Waves 1, 2, and 3.

**Depression present:** The CLOC dataset contains a variable at each Wave that codes depression as present or absent (Carr, et al., 2006). The depression code is derived from 15 survey questions (coded into 8 symptom categories) based on DSM-III criteria. These questions were administered at baseline, Waves 1, 2, and 3.

**Anxiety severity:** Anxiety was assessed with the ten items on the anxiety subscale of the Symptom Checklist 90-Revised (Derogatis & Cleary, 1977; Derogatis, Rickels, & Rock, 1976). The continuous scale scores have been standardized within the CLOC data set. Wave 1 responses were analyzed. The measure has high internal consistency (alpha= 0.86).

**Attachment was measured with two variables:**

**Attachment anxiety:** This scale was created by the CLOC researchers; items are focused on the relationship with the spouse. The original scale was titled “dependency on spouse” but “attachment anxiety” seemed to be a more accurate descriptor. Though there is no measure of
anxious attachment in the CLOC dataset, those who are highly dependent in romantic relationships tend to have attachment anxiety (Hazan & Shaver, 1987) and dependency on others has been associated with attachment anxiety (Fraley & Bonanno, 2004). The scale was made up of the weighted mean of four items: “The idea of losing my (husband/ wife) is terrifying to me”; “No one could ever take the place of my (husband/wife)”; “If my (husband/wife) died, it would be the worst thing that could happen to me”; “I would feel completely lost if I didn’t have my (husband/wife)” (alpha= .80). Higher values indicate higher attachment anxiety. These items were administered only at baseline (pre-death).

**Attachment avoidance:** This index was created by CLOC researchers, and based on the weighted mean of four items from Hirschfeld’s (1977) Autonomy Scale: “I don't need much from people”; “What people think of me doesn’t affect how I feel”; “What other people say doesn’t bother me”; “I don’t need other people to make me feel good” (alpha= .75). Higher scores indicate higher levels of attachment avoidance. This measure was also only administered at the baseline interview.

**Statistical Analyses**

Descriptive statistics were conducted in IBS SPSS, version 19, while all regression analyses were conducted using Stata statistical software, version 12. Descriptive statistics examined the types of bereavement support used by each participant. Descriptive statistics also examined the distributions of demographic variables (gender, age, income, home ownership, education, general health satisfaction, and race), clinical variables (the presence of CG, the presence of depression, anxiety severity, attachment anxiety, and attachment avoidance) and social network variables (instrumental support, network size, frequency of contact with network, emotional support from friends and relatives, emotional support from children, religious participation, religious beliefs). Chi-square and independent samples t-tests examined variations
in baseline demographic, Wave 1 clinical, and Wave 1 social network variables across the three types of support-seeking utilized (religious leaders, family doctors, and self-help or support groups).

All variables were then standardized (mean equal to zero, standard deviation equal to 1) to allow for more meaningful comparisons. I conducted logistical regression analyses using the `svy logit` procedure in Stata 12. All baseline demographic, Wave 1 social network, and Wave 1 clinical variables were used to predict services reported at Wave 2 service use type (support group, family doctor, or religious leader). As noted above, these items captured any services used between 6 and 18 months post-loss. The initial model examined the impact of all demographic, clinical, and social network variables on each service type used. Next, I controlled for the effect of each of using the other two service types individually. A final model estimated the effects of using all service types simultaneously.

As Wave 2 service use variables include use between Wave 1 and Wave 2, I also tested to see whether controlling for used reported at Wave 1 (that is, use between the death and 6 months post-loss), or creating a single “service use reported at either Wave 1 or Wave 2” variables impacted results. These analyses did not alter findings. Nor did entering demographic, clinical, and social network variables in separate blocks alter results, except that having depression was associated with slightly lower odds of using religious leaders (OR: .253, 95% CI: .0671-.957, p=.043). Interaction effects between network size and positive emotional support from children and friends/relatives, between CG and depression and social network variables, and between education and gender and CG and depression were also examined, but were not consistently associated with service use at Wave 2 when controlling for all other variables. Other potential predictors of service utilization, including hassles/negative support from children or friends and relatives, and grief self-management (e.g. distracting oneself by taking a walk or thinking about
the good things in life) were included in preliminary analyses but were dropped either because composite measures had low internal consistency, or because they were not significant predictors of service utilization at Wave 2 ($p > .05$) and inclusion of these variables did not impact the association between bereavement support-seeking and other variables.

**Results**

**Sociodemographics**

After applying weights, data was available from a total of 224 participants (Wave 1 (6 months post-loss)= 211, Wave 2 (18 months post-loss)= 178, Wave 3 (48 months post-loss)=85. **Table 1** describes demographic and clinical variables for the study sample at baseline (pre-loss) and Wave 1. The majority of the sample was White and female, and a sizable minority did not complete high school. A majority owned their own home at Wave 1. The sample also had high religious beliefs and religious participation, as a whole, with most scores closer to the higher end of these scales. Mean positive support scores from friends, relatives, and children were all also close to the maximum on these scales.
Table 1. CLOC Widowed Sample Demographic Variables (WEIGHTED)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
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<tr>
<td><strong>Baseline Values</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Age (at baseline)</td>
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<td></td>
<td>49-87</td>
<td>70.60</td>
<td>6.89</td>
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<tr>
<td>Male</td>
<td>65</td>
<td>29.2</td>
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<td></td>
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</tr>
<tr>
<td>Non-White Race</td>
<td>35</td>
<td>15.5</td>
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<tr>
<td>Education</td>
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<td></td>
</tr>
<tr>
<td>Total years</td>
<td>224</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>93</td>
<td>44.1</td>
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<td></td>
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<tr>
<td>Some college</td>
<td>34</td>
<td>16.3</td>
<td></td>
<td></td>
<td></td>
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<td>College or greater</td>
<td>21</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income (natural log of the midpoint)</td>
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<td>7.82-11.29</td>
<td>9.71</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Attachment avoidance</td>
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<td>0-3</td>
<td>1.42</td>
<td>0.88</td>
</tr>
<tr>
<td>Attachment anxiety</td>
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<td></td>
<td>0-3</td>
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<td>0.76</td>
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<tr>
<td><strong>Wave 1 Values</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Home ownership</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health satisfaction</td>
<td>211</td>
<td></td>
<td>1-5</td>
<td>3.55</td>
<td>0.84</td>
</tr>
<tr>
<td>High religious beliefs</td>
<td>211</td>
<td>89.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High religious participation</td>
<td>211</td>
<td>67.3</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Positive support from friends</td>
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<td>0-4</td>
<td>2.95</td>
<td>0.95</td>
</tr>
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<td>Positive support from children</td>
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<td></td>
<td>0-4</td>
<td>3.37</td>
<td>0.81</td>
</tr>
<tr>
<td>Anxiety severity</td>
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<td>10-31</td>
<td>12.88</td>
<td>3.91</td>
</tr>
<tr>
<td>Network size</td>
<td>211</td>
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<td>0-6</td>
<td>2.29</td>
<td>1.85</td>
</tr>
<tr>
<td>High frequency of contact</td>
<td>211</td>
<td>78.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental support</td>
<td>211</td>
<td></td>
<td>0-3</td>
<td>2.08</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Outcomes of Specific Aims

**Aim 1:** To identify the presence of CG, and its association with depression, in a representative sample of widowed older adults at 6, 18, and 48 months post-loss.

Tables 2a through 2d show the prevalence of CG and depression, and their overlap. One participant was missing data on either depression or CG at Wave 1 one was missing at Wave 2. Rates of CG are highest at Wave 1 and then decline over Waves 2 and Wave 3. The high attrition between Wave 2 and Wave 3 likely impact results. Among those who did participate at all three Waves, however, additional analyses (not shown) found that CG is also fairly stable; most (88%) of those who have CG at Wave 2 also had CG at Wave 1, while 75% of those who were CG negative at Wave 2 were also CG-negative at Wave 1. Of those who did not have CG at Wave 1,
97.2% also did not have CG at Wave 2 or Wave 3. Four participants met criteria for CG at all three Waves. Moreover, while a sizable minority of the sample had either CG or depression, not all those with CG had depression, nor did all of those with depression have CG (Tables 2b-2d). For example, at Wave 1, 35% of those with CG also had depression, while 65% did not, and 31% of those with depression did not have CG. Previous studies have found these conditions to be distinct (Horowitz, et al., 1997; Prigerson, et al., 1996; Prigerson & Jacobs, 2001).

Table 2a. Presence of CG at Each Wave

<table>
<thead>
<tr>
<th>Wave 1 (6 months)</th>
<th>Wave 2 (18 months)</th>
<th>Wave 3 (48 months)</th>
<th>Both W1 and W2 (n=164)</th>
<th>W2 and W3</th>
<th>W1 and W3</th>
<th>CG at all 3 Waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=211) n (%)</td>
<td>(n=178) n (%)</td>
<td>(n=85) n (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77 (36.4)</td>
<td>29 (16.1)</td>
<td>10 (11.5)</td>
<td>21 (12.9)</td>
<td>4 (4.8)</td>
<td>9 (10.7)</td>
<td>4 (4.7)</td>
</tr>
</tbody>
</table>

Table 2b. CG and Depression at Wave 1 (n=210)

| Complicated Grief | Depression | | | |
|-------------------|------------|----------------|----------------|----------------|----------------|
|                   | Positive n (%) | Negative n (%) | | | |
| Negative | n | % of those with CG | % of those with depression | % of total | 12 | 121 |
| % of those with CG | 9.0 | 30.8 | 5.7 | 91.0 | 70.8 | 57.6 |
| % of depression | | | | | | |
| % of total | | | | | | |
| Positive | n | % of those with CG | % of depression group | % of total | 27 | 50 |
| % of those with CG | 35.1 | 69.2 | 12.9 | 64.9 | 29.2 | 23.8 |
| % of depression group | | | | | | |
| % of total | | | | | | |

Table 2c. CG and Depression at Wave 2 (n=177)

<p>| Complicated Grief | Depression | | | |
|-------------------|------------|----------------|----------------|----------------|----------------|
|                   | Positive n (%) | Negative n (%) | | | |
| Negative | n | % of CG group | % of depression group | % of total | 11 | 138 |
| % of CG group | 7.4 | 57.9 | 6.2 | 92.6 | 87.3 | 78.0 |
| % of depression group | | | | | | |
| % of total | | | | | | |
| Positive | n | % of CG group | % of depression group | % of total | 8 | 20 |
| % of CG group | 28.6 | 42.1 | 4.5 | 71.4 | 12.7 | 11.3 |</p>
<table>
<thead>
<tr>
<th>Complicated Grief</th>
<th>Depression</th>
<th>Positive n (%)</th>
<th>Negative n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Negative</td>
<td>n</td>
<td>2</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>% of CG group</td>
<td>2.7</td>
<td>97.3</td>
</tr>
<tr>
<td></td>
<td>% of depression group</td>
<td>33.3</td>
<td>94.2</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>2.4</td>
<td>85.9</td>
</tr>
<tr>
<td>Positive</td>
<td>n</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>% of CG group</td>
<td>40.0</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>% of depression group</td>
<td>66.7</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>% of total</td>
<td>4.7</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Aim 2: To describe the configurations of services used for bereavement among widowed older adults from religious leaders, support groups, medical and mental health providers reported at 6, 18, and 48 months post loss.

Table 3 shows use of services over time. The high attrition in sample size between Wave 1 and Wave 3 limits the ability to draw conclusions from this data, but general trends are still of interest. Of those who did participate at each Wave, use of each service type was fairly stable. For example, of those who reported using family doctors at Wave 1, 56% reported doing so at Wave 2 and 50% reported doing so at Wave 3. Support groups use was most consistent; of those who reported using support groups at Wave 1, 75.0% reported doing so at Wave 2 and 100.0% reported doing so at Wave 3.
Table 3. Bereavement Service Use Across Waves

<table>
<thead>
<tr>
<th></th>
<th>Religious leader</th>
<th>Support group</th>
<th>Family doctor</th>
<th>Mental health</th>
<th>Religious leader</th>
<th>Support group</th>
<th>Family doctor</th>
<th>Mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>W1</td>
<td>W1</td>
<td>W1</td>
<td>W1</td>
<td>W1</td>
<td>W2</td>
<td>W2</td>
<td>W2</td>
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<tr>
<td>Religious leader W2</td>
<td>12</td>
<td>4</td>
<td>10</td>
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<td>12</td>
<td>6</td>
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<tr>
<td>% within row</td>
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<td>Support group W2</td>
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<td>6</td>
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<td>5</td>
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<td>% within row</td>
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<td>54.5</td>
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<td>11.1</td>
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<td>10.9</td>
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<td>50.0</td>
<td>56.4</td>
<td>50.0</td>
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<tr>
<td>Mental health W2</td>
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<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>% within row</td>
<td>28.6</td>
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<td>57.1</td>
<td>42.9</td>
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<td>3</td>
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<td>6</td>
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<td>Support group W3</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>% within row</td>
<td>8.3</td>
<td>58.3</td>
<td>41.7</td>
<td>23.1</td>
<td>8.3</td>
<td>58.3</td>
<td>41.7</td>
<td>23.1</td>
</tr>
<tr>
<td>% within column</td>
<td>9.1</td>
<td>100.0</td>
<td>27.8</td>
<td>100.0</td>
<td>9.1</td>
<td>100.0</td>
<td>27.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Family doctor W3</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>% within row</td>
<td>15.4</td>
<td>15.4</td>
<td>69.2</td>
<td>0</td>
<td>14.3</td>
<td>14.3</td>
<td>69.2</td>
<td>0</td>
</tr>
<tr>
<td>% within column</td>
<td>18.2</td>
<td>25.0</td>
<td>50.0</td>
<td>0</td>
<td>20.0</td>
<td>20.0</td>
<td>50.0</td>
<td>0</td>
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<tr>
<td>Mental health W3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>% within row</td>
<td>50.0</td>
<td>66.7</td>
<td>100.0</td>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>% within column</td>
<td>66.7</td>
<td>28.6</td>
<td>22.2</td>
<td>66.7</td>
<td>66.7</td>
<td>28.6</td>
<td>22.2</td>
<td>66.7</td>
</tr>
</tbody>
</table>

* W1= Wave 1, W2= Wave 2, W3=Wave 3

Data on support seeking was available from a total of 223 participants (weighted N). The sample included 207 participants reporting use at Wave 1, 177 at Wave 2, and 67 at Wave 3. Table 4a shows types of support use reported, while Table 4b shows the combinations of grief support identified at each Wave. The majority of participants did not seek any support for their grief. Of those who sought support, family doctors were by far the most common source. Moreover, a sizable minority of the entire bereaved sample (16.7% at Wave 1, 12.4% at Wave 2 and 22.4% at Wave 3) sought some combination of care. Moreover, as time since the death increased, the percentage of those not seeking care also increased. However, use of combinations of services also increased over time, and was highest at Wave 3.
### Table 4a. Use of Each Type of Grief Support Among the CLOC Sample (N=223)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wave 1 (6 mo.) (n=207)</th>
<th>Wave 2 (18 mo.) (n=177)</th>
<th>Wave 3 (48 mo.) (n=67)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>% of Total</td>
<td>n</td>
</tr>
<tr>
<td>No support sought</td>
<td>110</td>
<td>53.1</td>
<td>111</td>
</tr>
<tr>
<td>Support Sought:</td>
<td>97</td>
<td>46.9</td>
<td>66</td>
</tr>
<tr>
<td>Religious leader</td>
<td>47</td>
<td>48.5</td>
<td>23</td>
</tr>
<tr>
<td>Self-help or support group</td>
<td>16</td>
<td>16.5</td>
<td>13</td>
</tr>
<tr>
<td>Family doctor</td>
<td>66</td>
<td>68.0</td>
<td>47</td>
</tr>
<tr>
<td>Mental health professional</td>
<td>5</td>
<td>5.2</td>
<td>7</td>
</tr>
</tbody>
</table>

### Table 4b. Combinations of Grief Support

<table>
<thead>
<tr>
<th>Variable</th>
<th>Wave 1 (6 mo.) (n=207)</th>
<th>Wave 2 (18 mo.) (n=177)</th>
<th>Wave 3 (48 mo.) (n=67)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>% of Total</td>
<td>n</td>
</tr>
<tr>
<td>No support sought</td>
<td>110</td>
<td>53.1</td>
<td>111</td>
</tr>
<tr>
<td>Support Sought:</td>
<td>97</td>
<td>46.9</td>
<td>66</td>
</tr>
<tr>
<td>Family doctors alone</td>
<td>39</td>
<td>40.2</td>
<td>30</td>
</tr>
<tr>
<td>Religious Leader alone</td>
<td>24</td>
<td>24.7</td>
<td>12</td>
</tr>
<tr>
<td>Support group alone</td>
<td>5</td>
<td>5.2</td>
<td>2</td>
</tr>
<tr>
<td>Mental health professional alone</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Family doctor and religious leader</td>
<td>17</td>
<td>17.5</td>
<td>6</td>
</tr>
<tr>
<td>Support group and religious leader</td>
<td>1</td>
<td>1.0</td>
<td>1</td>
</tr>
<tr>
<td>Support group and family doctor</td>
<td>3</td>
<td>3.1</td>
<td>6</td>
</tr>
<tr>
<td>Family doctor and mental health professional</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Support group and mental health professional</td>
<td>1</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>Mental health professional and religious leader</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Support group, religious leader, and family doctor</td>
<td>5</td>
<td>5.2</td>
<td>1</td>
</tr>
<tr>
<td>Support group, mental health professional, and family doctor</td>
<td>1</td>
<td>1.0</td>
<td>1</td>
</tr>
<tr>
<td>Family doctor, religious leader, and mental health professional</td>
<td>1</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>All four services</td>
<td>1</td>
<td>1.0</td>
<td>0</td>
</tr>
</tbody>
</table>
Aim 3: To determine whether social network variables, the presence of CG or depression, other clinical variables (measured at 6 months post-loss) and baseline demographic variables are associated with service use among widowed older adults reported at 18 months post-loss.

Table 5 shows non-adjusted means and frequencies for demographic, social network and clinical variables by each of the support-seeking types reported at Wave 2. Chi-Square and t-tests compared demographic, clinical, and social network variables between those who used each service type and those who did not use that service. The presence of CG and depression was associated with differences in service use. Those who had CG were more likely than those without CG to seek any support for their grief ($\chi^2 = 18.61, p=.000$), to go to family doctors ($\chi^2=5.43, p=.020$), and to go to self-help or support groups($\chi^2=9.25, p=.002$), and were marginally more likely to go to religious leaders ($\chi^2=3.58, p=.059$). Those who had depression were more likely to seek any support ($\chi^2=12.05, p=.001$), to go to a family doctor ($\chi^2=8.65, p=.003$), and to go to a support group ($\chi^2=4.82, p=.028$), but were not more likely to go to a religious leader ($\chi^2=.317, p=.573$).

There were also significant differences by gender, with women more likely to use services. This trend was consistent for seeking any support ($\chi^2=9.58, p=.002$), for going to a family doctor ($\chi^2=8.03, p=.005$) and for going to a support group ($\chi^2=5.73, p=.017$). Moreover, those who went to religious leaders had higher religious participation at Wave 1 than those who did not seek any support ($\chi^2= 9.38, p=.002$). Those who sought any support for grief also had lower emotional support from friends and relatives ($t=2.34, p=.021$) than those who did not seek any support, though none of the specific types of support-seeking showed significant differences. Those who went to religious leaders had higher instrumental support than those who did not ($t=-2.92, p=.006$), though there were no differences across the other support service types.
Those who went to family doctors were more likely to have high religious beliefs than those who did not ($\chi^2=5.43, p=.02$), and those who went to religious leaders were marginally significantly more likely to have high religious beliefs ($\chi^2=3.36, p=.059$). Anxiety severity was also higher in those who sought any support ($t=-2.59, p=.011$) than in those who did not seek any support. Finally, those who went to family doctors had significantly higher attachment anxiety than those who did not ($t=-2.79, p=.006$). There were no significant differences in service use by health satisfaction, frequency of contact with network members, network size, home ownership, race, income, age, or education.
Table 5. Grief Support Seeking at Wave 2 Among CLOC Study Widows by Demographic, Social Network, and Clinical Variables

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Total sample (n=177)</th>
<th>No support sought Wave 2 (n=111)</th>
<th>Any support sought (n=66)</th>
<th>Went to Family Doctor (n=47)</th>
<th>Went to Religious Leader (n=23)</th>
<th>Went to Support Group (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>n (%) or</td>
<td>Mean (SD)</td>
<td>n (%) or</td>
<td>Mean (SD)</td>
<td>n (%) or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%)</td>
<td></td>
<td>(%)</td>
<td></td>
<td>(%)</td>
</tr>
<tr>
<td><strong>Demographic Variables:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Gender</td>
<td>51 (28.9)</td>
<td>41 (36.9)</td>
<td>10 (15.2)**</td>
<td>6 (12.8)**</td>
<td>4 (17.4)</td>
<td>0 (0.0)*</td>
</tr>
<tr>
<td>Education (&gt; h.s.)</td>
<td>104 (58.8)</td>
<td>63 (56.8)</td>
<td>41 (62.1)</td>
<td>26 (55.3)</td>
<td>17 (73.9)</td>
<td>11 (84.6)</td>
</tr>
<tr>
<td>Age</td>
<td>70.38 (6.94)</td>
<td>71.09 (6.48)</td>
<td>69.21 (7.55)</td>
<td>69.64 (6.80)</td>
<td>68.66 (8.68)</td>
<td>69.21 (7.55)</td>
</tr>
<tr>
<td>Non-White Race</td>
<td>28 (15.7)</td>
<td>17 (15.3)</td>
<td>11 (16.6)</td>
<td>9 (19.1)</td>
<td>5 (20.2)</td>
<td>2 (14.3)</td>
</tr>
<tr>
<td>Income (ln)</td>
<td>9.68 (0.72)</td>
<td>9.65 (0.71)</td>
<td>9.73 (0.73)</td>
<td>9.71 (0.72)</td>
<td>9.85 (0.68)</td>
<td>9.73 (0.95)</td>
</tr>
<tr>
<td>Home ownership</td>
<td>142 (87.0)</td>
<td>89 (88.1)</td>
<td>53 (85.3)</td>
<td>39 (88.6)</td>
<td>18 (78.3)</td>
<td>11 (91.7)</td>
</tr>
<tr>
<td><strong>Social Network Variables:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High religious participation</td>
<td>110 (67.0)</td>
<td>63 (61.8)</td>
<td>47 (75.8)</td>
<td>31 (71.5)</td>
<td>21 (93.9)**</td>
<td>9 (73.8)</td>
</tr>
<tr>
<td>High religious beliefs</td>
<td>144 (88.0)</td>
<td>86 (84.3)</td>
<td>58 (94.0)</td>
<td>42 (97.5)*</td>
<td>22 (97.8)</td>
<td>9 (78.1)</td>
</tr>
<tr>
<td>Positive emotional support from friends/relatives</td>
<td>2.94 (0.90)</td>
<td>3.08 (0.80)</td>
<td>2.70 (1.02)*</td>
<td>3.51 (0.80)</td>
<td>3.11 (0.60)</td>
<td>2.82 (1.24)</td>
</tr>
<tr>
<td>Positive emotional support from children</td>
<td>3.35 (0.83)</td>
<td>3.34 (0.84)</td>
<td>3.36 (0.81)</td>
<td>2.77 (0.98)</td>
<td>3.32 (0.71)</td>
<td>3.10 (1.16)</td>
</tr>
<tr>
<td>Network size</td>
<td>2.27 (1.82)</td>
<td>2.38 (1.79)</td>
<td>2.09 (1.88)</td>
<td>2.26 (1.97)</td>
<td>2.32 (2.01)</td>
<td>2.11 (2.21)</td>
</tr>
<tr>
<td>High frequency of contact</td>
<td>130 (79.6)</td>
<td>80 (78.9)</td>
<td>50 (80.6)</td>
<td>34 (77.2)</td>
<td>19 (81.4)</td>
<td>11 (95.8)</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>2.08 (0.82)</td>
<td>2.07 (0.84)</td>
<td>2.10 (0.78)</td>
<td>1.93 (0.84)</td>
<td>2.41 (0.57)**</td>
<td>2.09 (0.78)</td>
</tr>
<tr>
<td><strong>Clinical Variables:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health satisfaction</td>
<td>3.58 (0.82)</td>
<td>3.65 (0.80)</td>
<td>3.47 (0.85)</td>
<td>3.41 (0.84)</td>
<td>3.53 (0.70)</td>
<td>3.46 (1.08)</td>
</tr>
<tr>
<td>CG present</td>
<td>57 (34.6)</td>
<td>22 (21.8)</td>
<td>34 (55.4)**</td>
<td>21 (48.8)*</td>
<td>12 (52.2)</td>
<td>9 (75.0)**</td>
</tr>
<tr>
<td>Depression present</td>
<td>29 (17.0)</td>
<td>9 (8.7)</td>
<td>19 (29.8)**</td>
<td>14 (30.4)**</td>
<td>3 (13.0)</td>
<td>5 (38.5)*</td>
</tr>
<tr>
<td>Anxiety severity</td>
<td>12.66 (3.56)</td>
<td>11.94 (2.36)</td>
<td>13.84 (4.72)*</td>
<td>13.53 (4.19)</td>
<td>13.53 (4.38)</td>
<td>15.59 (6.48)</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>1.38 (0.87)</td>
<td>1.38 (0.85)</td>
<td>1.38 (0.91)</td>
<td>1.26 (0.87)</td>
<td>1.34 (0.92)</td>
<td>1.57 (0.68)</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>2.30 (0.80)</td>
<td>2.23 (0.87)</td>
<td>2.43 (0.63)</td>
<td>2.58 (0.59)**</td>
<td>2.23 (0.63)</td>
<td>2.21 (0.74)</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01 when compared to those who did not seek this type of support
Multivariate Analyses

Logistic regression analyses were then used to predict the contribution of each demographic and clinical variable on use of each type of service. The initial model examined the impact of all baseline demographic, and Wave 1 clinical, and social network variables on each type of bereavement service use at Wave 2 (Model 1). Additional models controlled for the effect of each of the other two service types individually (Models 2 and 3). A final model (Model 4) estimated the effects of all the service types simultaneously. Odds ratios and 95% Confidence Intervals are shown for all covariates in Model 4. However, for readability, in all other models, only statistically significant odds ratios are shown (Tables 6-8).

Associations between support types

Results showed that, consistent with the assumption of the NEM that those with emotional distress will seek multiple sources of support, often with specific pathways, there were significant associations between types of support seeking reported at Wave 2. Odds of seeking care from a family doctor were consistently higher among those who went to self-help or support groups than those who did not go to a group, and the reverse is also true; the odds of seeking care from a self-help or support group were higher among those who went to a family doctor than those who did not. Controlling for religious leader support alters associations somewhat. The odds ratio of seeking family doctor support among those using support groups increased from 25 to 40 when use of religious leaders was controlled for. Moreover, the odds of seeking family doctor support were higher among those who went to religious leaders than those who did not, and increased when use of self-help or support groups was controlled for. Similarly, the odds of using self-help or support groups among those using family doctors increased substantially (from an odds ratio of 107 to 223) when use of religious leader support was controlled for.
In contrast, the odds of using a self-help group were not significantly different for those who used religious leaders compared to those who do not, nor were the odds of using a religious leader significantly higher among those who use self-help or support groups than those who do not. The odds of going to a religious leader were higher among those using a family doctor than those who did not use a family doctor, but only when use of a support group was controlled for. The results indicate that we cannot simply examine bereavement service use types alone; rather, use of family doctors and self-help groups seems to be related to other types of services used.

**Influence of social network variables**

The effect of demographic, clinical, and social network variables remained stable across all four models. Though the coefficients and levels of statistical significance declined somewhat, controlling for additional services used did not substantially impact the association between these variables and each support type used. Some social network variables predicted service utilization. Specifically, the odds of attending a self-help or support group were significantly higher among those with high religious participation than those with low religious participation, and those with high frequency of contact with network members were also much more likely to attend support groups than those with low contact. Moreover, those with higher emotional support from children were more likely to go to family doctors.

Instrumental support operated in the opposite direction, so that those with lower instrumental support were more likely to go to family doctors. However, higher instrumental support was associated with greater odds of going to a religious leader. Given the relatively small sample size, it is noteworthy that that the associations were so strong, especially when controlling for so many other demographic and clinical factors. In addition, higher religious participation was also associated with a greater likelihood of seeking support from clergy, and
having high emotional support from children decreased the odds of going to a support group. Finally, having high religious beliefs decreased the odds of going to a support group. In contrast, religious beliefs were omitted from the model examining associations with religious leader support because all of those with high religious beliefs went to religious leader for grief support. Network size and emotional support from friends and relatives were not associated with any type of bereavement support seeking.

**The effect of complicated grief and depression**

Those with CG at Wave 1 were more likely to seek any support for their grief than to not seek any support at all, and, specifically, were more likely to go to a religious leader or to a support group at Wave 2. Those with CG were not more likely go to a family doctor for help with feelings of grief, however. The presence of depression did not increase odds of using any bereavement services.

**The effect of other demographic and clinical variables**

There were also differences across support seeking types by attachment anxiety, education level, income, gender, and race. Having a high school education or greater was associated with higher odds of using a support group or a religious leader, but lower odds of going to family doctor. Those with higher incomes were also more likely to go to family doctors. Moreover, race and gender were omitted from the regression with support group as the dependent variable because all those who used support groups were female and White. Female gender and race are clearly very highly associated with using a support group. Those with higher attachment anxiety were more likely to go to family doctors. Finally, those with higher health satisfaction were less likely to go to family doctors for help with grief. There were no differences in support seeking behavior by age, anxiety severity, home ownership, or attachment avoidance.
Table 6. Logistic Regression Analyses of Grief Support Seeking for Family Doctors, Predicting Wave 2 Service Use: Odds Ratios and 95% Confidence Intervals (N=161)

<table>
<thead>
<tr>
<th></th>
<th>Family Doctors</th>
<th>OR (95% CI)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
<td></td>
</tr>
<tr>
<td>Religious Leaders</td>
<td></td>
<td></td>
<td>2.969*</td>
<td>4.471*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[1.009, 8.741]</td>
<td>[1.409, 14.191]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-help or Support Group</td>
<td>24.594**</td>
<td></td>
<td>39.820**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[3.431, 176.285]</td>
<td></td>
<td>[4.361, 363.586]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demographic Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Gender</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.368</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.074, 1.845]</td>
<td></td>
</tr>
<tr>
<td>Education (&gt; h.s.)</td>
<td>n.s.</td>
<td>.322*</td>
<td>.377+</td>
<td>.267*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.108, .953]</td>
<td>[1.128, 1.108]</td>
<td>[0.082, .866]</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>1.002</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.938, 1.070]</td>
<td></td>
</tr>
<tr>
<td>Non-White Race</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>1.404</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.361, 5.450]</td>
<td></td>
</tr>
<tr>
<td>Income (ln)</td>
<td>1.631*</td>
<td>1.646*</td>
<td>1.630+</td>
<td>1.646+</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.009,2.636]</td>
<td>[1.002, 2.704]</td>
<td>[0.994, 2.672]</td>
<td>[0.965, 2.807]</td>
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<td>[0.397, 1.579]</td>
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<td>[1.086, 3.491]</td>
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<td>[1.045, 4.137]</td>
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<td>[0.115, 2.297]</td>
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<tr>
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<td>.606+</td>
<td>.565+</td>
<td>.547*</td>
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</tr>
<tr>
<td></td>
<td>[.353, 1.074]</td>
<td>[.354, 1.038]</td>
<td>[.310, 1.030]</td>
<td>[.301, .992]</td>
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<td>n.s.</td>
<td>.601+</td>
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<td>[.355, 1.037]</td>
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<td>[.341, 1.058]</td>
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</tr>
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<td>[.325, 2.722]</td>
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<td>n.s.</td>
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<td></td>
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<td>[0.479, 1.947]</td>
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<td>n.s.</td>
<td>.801</td>
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<td></td>
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<td></td>
<td></td>
<td>[.508, 1.265]</td>
<td></td>
</tr>
<tr>
<td>Attachment anxiety</td>
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<td>n.s.</td>
<td>1.559*</td>
<td>1.524*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[.965, 2.358]</td>
<td></td>
<td>[.992, 2.449]</td>
<td>[.955, 2.435]</td>
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</tr>
</tbody>
</table>

+p<.10, *p<.05, **p<.01
Table 7. Logistic Regression Analyses of Grief Support Seeking for Religious Leaders, Predicting Wave 2 Service Use: Odds Ratios and 95% Confidence Intervals (N=161)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
<td>OR (95% CI)</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Male Gender</td>
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<td>n.s.</td>
<td>n.s.</td>
<td>1.277 [.174, 9.366]</td>
</tr>
<tr>
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<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>1.062 [1.024, 10.617]</td>
</tr>
<tr>
<td>Age</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.966 [0.849, 1.089]</td>
</tr>
<tr>
<td>Non-White Race</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.974 [0.855, 1.101]</td>
</tr>
<tr>
<td>Income (ln)</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.990 [0.892, 1.101]</td>
</tr>
<tr>
<td>Home ownership</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.713 [0.527, 1.001]</td>
</tr>
<tr>
<td>Social Network Variables:</td>
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<td></td>
</tr>
<tr>
<td>High religious beliefs</td>
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<td>omitted</td>
<td>omitted</td>
<td>omitted</td>
</tr>
<tr>
<td>Emotional support from friends/relatives</td>
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<td>n.s.</td>
<td>n.s.</td>
<td>1.057 [0.547, 2.042]</td>
</tr>
<tr>
<td>Emotional support from children</td>
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<td>n.s.</td>
<td>n.s.</td>
<td>.689 [0.309, 1.537]</td>
</tr>
<tr>
<td>Network size</td>
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<td>n.s.</td>
<td>n.s.</td>
<td>.814 [0.533, 1.245]</td>
</tr>
<tr>
<td>High frequency of contact</td>
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<td>n.s.</td>
<td>n.s.</td>
<td>1.946 [1.116, 3.270]</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>2.162* [1.137, 4.112]</td>
<td>2.128* [1.113, 4.069]</td>
<td>2.618* [1.148, 5.969]</td>
<td>2.850* [1.255, 6.472]</td>
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<tr>
<td>Clinical Variables:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health satisfaction</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>.846 [0.420, 1.706]</td>
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<tr>
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<td>n.s.</td>
<td>n.s.</td>
<td>.331 [0.055, 1.998]</td>
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<tr>
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<td>n.s.</td>
<td>n.s.</td>
<td>1.785 [0.727, 4.383]</td>
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<tr>
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<td>n.s.</td>
<td>n.s.</td>
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<tr>
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<td>n.s.</td>
<td>n.s.</td>
<td>0.800 [0.450, 1.422]</td>
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</tbody>
</table>

*p<0.10, **p<0.05, ***p<0.01
Table 8. Logistic Regression Analyses of Grief Support Seeking for Support Groups, Predicting Wave 2 Service Use: Odds Ratios and 95% Confidence Intervals (N=161)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
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<tr>
<td></td>
<td>OR</td>
<td>(95% CI)</td>
<td>OR</td>
<td>(95% CI)</td>
</tr>
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<tr>
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<td>.562</td>
<td>[.063, 4.981]</td>
<td>.145+</td>
<td>[.017, 1.277]</td>
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<tr>
<td>Family Doctors</td>
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<tr>
<td></td>
<td>106.713**</td>
<td>[6.820,1669.746]</td>
<td>222.523**</td>
<td>[15.891,3116.101]</td>
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<td>Male Gender</td>
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</tr>
<tr>
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</tr>
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<td>[.351, 2.722]</td>
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<tr>
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<td>[.863, 49.389]</td>
<td>6.407**</td>
<td>[.505, 2.722]</td>
</tr>
<tr>
<td></td>
<td>11.586*</td>
<td>11.546*</td>
<td>26.990*</td>
<td>53.351*</td>
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<tr>
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<td>[.726, 1.933]</td>
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<tr>
<td>Em</td>
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<td>[.0902, 1.050]</td>
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<td>[.726, 1.933]</td>
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</tr>
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<td>11.586*</td>
<td>11.546*</td>
<td>26.990*</td>
<td>53.351*</td>
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<tr>
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<tr>
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<td></td>
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<td>[.102, 4.823]</td>
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<tr>
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<td>[.292, 1.770]</td>
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</table>

*p<0.05, **p<0.01, +<p.10
Overall, then, there are significant associations between different types of support seeking. The presence of CG increases the odds of attending self-help or support groups or going to religious leaders, though not use of a family doctor. Social network variables (particularly instrumental support, religious participation, and frequency of contact with network members) influence service use. There also appear to be differences in bereavement help-seeking behavior by several demographic variables, including gender and education level.

Discussion

The study applied the NEM as a conceptual framework to understand the process of service utilization among widowed older adults (Pescosolido, 1992). This is one of the first studies to apply the NEM to understanding bereavement service use in widowed older adults. This study is also the first to identify the presence of CG, and its association with depression, in the CLOC sample. Rates are comparable to other studies, and the presence of CG does seem to be associated with more bereavement service utilization. The study also described the configurations of services reported for bereavement among widowed older adults from religious leaders, support groups, medical and mental health providers at 6, 18, and 48 months post loss. All of these types of services were utilized, sometimes in combination, illustrating the importance of examining multiple service use in bereaved older adults. Finally, the study determined whether social network variables, the presence of CG or depression, clinical variables (measured at 6 months post-loss) and baseline demographic variables are associated with service use among widowed older adults at 18 months post-loss. As emphasized by the NEM, most social network properties (instrumental support, religious participation, emotional support from children, and frequency of contact with network members) were differentially associated with service utilization. Results demonstrate that previous studies which relied on the
Andersen model (1968, 1995) may not be gathering a complete picture of bereavement service use. The NEM seems to provide a more thorough understanding.

**Findings on Complicated Grief and Depression**

I identified rates of CG of 36% at 6 months post-loss, 16% at 18 months post loss, and 12% at 48 months post loss. Though these rates are higher than the 7% identified in a recent population based survey (Kersting, Braehler, Glaesmer, & Wagner, 2011), other surveys with older adults (in non-representative samples) have found rates ranging 10 to 20% (Jacobs, 1993; Middleton, Burnett, Raphael, & Martinek, 1996). The measure of CG is different than those in other studies, and was created post-hoc, but best efforts were made to develop a comparable measure. As proposed diagnostic criteria suggest that CG not be diagnosed until at least 12 months after a loss (American Psychiatric Association, 2011), the 16% prevalence identified at 18 months post-loss may be more reliable that the 6 month prevalence. Moreover, though the presence of CG was fairly stable over time among those who had the condition, the high attrition between Waves (especially between Wave 2 and Wave 3) makes findings unreliable. Future studies should examine the stability of CG longitudinally in other population-based samples.

Moreover, the comorbidity of depression and CG is similar to in other studies. For example, Prigerson et al. studied a sample of elderly recent widows and widowers and determined that 46% of those suffering from CG did not meet criteria for Major Depression. (Prigerson, Frank, et al., 1995). In another survey of bereaved older adults, only 37.5% of those with CG also met criteria for either Major Depressive, Posttraumatic or Panic Disorder, and 62.5% of those with either Major Depressive, Posttraumatic, or Panic Disorder did not meet criteria for CG (Zhang, El-Jawahri, & Prigerson, 2006). Similarly, in the current study, at 18 months post-loss, 71% of those with CG did not meet criteria for depression, and 58% of those with
depression did not meet criteria with CG. In keeping with previous research, the conditions are clearly distinct (Horowitz, et al., 1997; Prigerson, Frank, et al., 1995).

Finally, the presence of CG at Wave was associated with a greater likelihood of using religious leaders and self-help or support groups at Wave 2. Previous research has also found associations between grief severity and service use (Bergman, et al., 2010; Cherlin, et al., 2007). Thirty-four of the 77 participants (44.2%) with CG at Wave 1 used some support for grief at Wave 2; this is similar, though slightly higher, than the rate of 33% in the only other identified study of service use in those with CG (Prigerson, et al., 2001). Of those with depression, 29.8% used any bereavement service, which is slightly lower, but similar, to a previous study finding that 48% of family caregivers with depression used bereavement services (Cherlin, et al., 2007). Among those who used support groups, those with CG made up the majority (75%), while those with depression made up a sizable minority (39%).

**Applicability of the Network Episode Model to Bereavement Service Use**

**Use of multiple sources of bereavement support**

As hypothesized, distinct trends in use of professional and non-professional support for coping with grief were identified. While many bereaved individuals used single services alone, a nontrivial minority (15% at Wave 1, 11% at Wave 2, 13% at Wave 3) used combinations of several types of bereavement support-seeking. The finding that bereaved individuals used various types of services alone, as well as combinations of services, is consistent with other analyses of the NEM (Pescosolido, Wright, et al., 1998). The high use of support from religious leaders, rather than mental health professionals, also reinforces the NEM’s argument that both formal and community/lay sources of support are important in support-seeking for emotional distress (Pescosolido & Boyer, 1999). Greater application of the NEM and similar models, which
move away from the individualistic orientation of the Andersen model (1968, 1995) to a process-oriented focus, might enhance understanding in bereavement services research (Pescosolido & Boyer, 1999; Pescosolido, Gardner, et al., 1998).

Moreover, the significant associations identified between family doctor and self-help or support group care-seeking, and between use of clergy and family doctors, demonstrate the strong links between use of different types of services. While data on the timing of use is not available, it is possible that there is a specific pathway between services used, where family doctors are being seen for health reasons or general support, and then refer participants to self-help or support groups. Many participants may have seen their family doctors for many years and have an established relationship with them. Family doctors might therefore be considered members of the social network, and as useful sources of grief support. Or, participants may be more comfortable thinking about their grief symptoms as a physical rather than a mental health problem. It seems less likely that a support group leader or member would refer to family doctors.

The lack of association between use of support groups and use of religious professionals implies that religious leaders are not referring participants to support groups. The association between use of clergy and family doctors may also be the result of referrals (e.g. perhaps clergy suggested that bereaved individuals discuss symptoms with doctors) but is perhaps better accounted for by a general tendency towards help seeking among those who seek both types of support. Data on variables not available in the CLOC dataset, such as participants’ attitudes towards help seeking, would help test this hypothesis.

**Network content and service use**

The finding that social network variables are associated with service use also provides evidence for the NEM. Some social network variables seem to have differential influences on
service use, depending on the type. For example, higher emotional support from children was associated with lower odds of support group use but higher odds of using of religious leaders. In contrast, higher instrumental support was associated with higher odds of using religious leaders but lower odds of using family doctors. Those with higher instrumental support and higher emotional support from children may simply have more social capital. Consulting with religious leaders may be a natural extension of their already existing social connectedness. However, attending grief support groups and going to family doctors may be ways of partially filling needs not met by current social support. In past studies, lower social support has been associated with more use of support groups and other types of bereavement services (Benkel, et al., 2009; Kaunonen, et al., 1999).

Associations between service use and religious participation were more consistent; higher religious participation was associated with higher support group use, higher use of religious leaders and higher support group use. Those who are involved with religious organizations may simply be more active in their day to day lives (though it is noteworthy that associations appeared even when health satisfaction was controlled for). Or, those with high religious participation may be referred to services, or be told that services might benefit them, by the many individuals with whom they come into contact while attending religious services. There is some preliminary evidence for this type of association. A study (Dew, Bromet, Schulberg, Parkinson, & Curtis, 1991) of adults of all ages with symptoms of depression found that those who had sought help were more likely to have had friends or relatives recommend that they get help than those who had not sought services.
Network structure and service use

Higher frequency of contact with close network members was associated with higher support group use, but not associated with any other service use types. It is possible that those with more frequent interactions are more likely to have their grief noticed by others, and may therefore feel their symptoms require a support group. It is also possible that the chances of having conversations in which a grief support group would be suggested to them by others are greater with more frequent contact. Use of religious leaders and family doctors, on the other hand, may be more stable and less influenced by frequency of contacts. In addition, it is possible that another variable not considered in these analyses, like extroversion, is driving both support group use and frequency of contact with network members.

However, there were not significant associations between social network size and service use. Smaller networks have been associated with more mental health service use across conditions (Kang, et al., 2007) and smaller social network size has also been associated with higher perceived need for professional bereavement services (Bergman & Haley, 2009). The CLOC dataset did not capture a total picture of network size, however, which generally includes a more complete enumeration of friends, relatives, neighbors, and coworkers (Marsden, 1990). Instead, a single item asked how many people participants knew with whom they could really share their private feelings and concerns. It is therefore possible that variability was not great enough to allow for detection of associations between close network size and bereavement service use.

Moreover, some of the differences in associations of social network variables and service use may be accounted for social network norms, which were not measured in the CLOC dataset. Social network norms have been defined as “an elaborated and pervasive system...governing
behavior and interaction, a network of expectations that is imbedded throughout the cultural fabric of adult life” (Neugarten, Moore, & Lowe, 1965, p. 711). Social network norms are thought to operate by conveying attitudes about service use, by direct advice-giving, pressure, or encouragement by people in the social network, and through modeling of behavior by network members. The NEM proposes that individuals with social networks whose norms are positive regarding mental health service use should be more likely to utilize services, while individual whose networks have negative norms regarding service use should be less likely to utilize services. Social network norms do indeed appear to be associated with mental health service use. One study found that, across age groups and mental health conditions, having a relationship with someone who recommends seeking help, or has themselves sought mental health care (both indications of positive norms about service use) was associated with positive expectations about mental health services and more positive attitudes to help seeking (Vogel, Wade, Wester, Larson, & Hackler, 2007). There may be unmeasured differences in norms between those who use different types of support in the CLOC sample.

The Effect of Other Demographic and Clinical Variables

Bereavement-support seeking behavior was also shaped by demographic and clinical factors. The associations consistent with some previous research. For example, women were more likely to use support groups than to not use any services. Previous studies of mental health support seeking across conditions found that women are more likely than men to both acknowledge psychological problems and to seek professional help (Pescosolido, Wright, et al., 1998; Wang, et al., 2005). It is somewhat surprising that that there were not differences between men and women in use of family doctors or clergy. Self-help or support groups are the only type
that is focused specifically on grief, however, and women may be more open than men to help seeking for grief specifically.

Whites were also more likely to use support groups than to not use any services. Previous research shows that, in general, African Americans are less likely to seek mental health services than Whites (Neighbors, 1985), and non-White older adults with depression may be even less likely than White adults to engage in effective mental health care (Arean, Alvidrez, Nery, Estes, & Linkins, 2003). Racial differences may exist in attitudes toward seeking psychological help (Arean, et al., 2003). The finding that those with poorer health satisfaction were more likely to seek bereavement support from family doctors makes intuitive sense, though I was not able to identify any literature on this association. Individuals with low health satisfaction probably have more frequent contact with doctors to address their health concerns, and discussions of grief may become a part of those visits.

Those with higher levels of education were more likely to go to support groups than to not seek any support. Those with higher education may be more aware of support groups as an option for treatment. Scholars have proposed that the more highly educated generally consider mental-health focused support seeking as a more acceptable solution to problems that those with less education (Suchman, 1964). However, those who did not graduate high school were more likely to go to family doctors. Family doctors may be the source of care of which those with less education are most aware. There were no differences in education levels in grief support seeking from religious leaders, which may be used more often across education levels.

All of those who sought services from religious leaders had high religious beliefs. This finding is quite intuitive, as these individuals are likely to have strong faith in the helpfulness of support from their religious leaders. The association between lower religious beliefs self-help or
support group use is more difficult to interpret. Neimeyer and colleagues have argued that successful resolution of grief requires finding a sense of meaning (Neimeyer, 2000). Assuming that religious beliefs can provide meaning, those with lower religious beliefs might be looking for meaning elsewhere, such as at grief support groups. This finding requires further study.

The finding that those with higher attachment anxiety were more likely to seek family doctor support than to seek no support is similar to previous findings of more service use in those with anxious attachment styles (Vogel & Wei, 2005; Shaffer, et al., 2006). The lack of association between attachment avoidance style and any service use type was also similar to previous findings showing that those with this attachment style are not likely to use many services (Vogel & Wei, 2005; Shaffer, et al., 2006). As in other studies of service use, the measure of income was not significant, perhaps because Medicaid and Medicare made services more accessible (Pescosolido & Boyer, 1999). Also, income measures among older adults may not fully capture their lifetime socioeconomic status because of retirement and Social Security benefits; education level may be a more accurate indicator of overall social standing.

However, many findings were different to in previous studies of mental health service utilization patterns, including lack of association between service use and age (Pescosolido, Wright, et al., 1998) and health (Arean, et al., 2003). Nor was anxiety severity or the presence of depression associated with increased likelihood of seeking any type of support, though illness severity has been consistently been associated with mental health (Pescosolido, Wright, et al., 1998) and bereavment (Bergman, et al., 2010; Cherlin, et al., 2007) service use. It is possible that sample size limited power to detect these differences.
General Trends in Service Use

Identified trends in service use are similar to other literature. My finding that 50.9% of this widowed older adult sample sought support for their grief at 6 months after the death of their spouse, 37.4% sought care at 18 months, and 45.5% sought care at 48 months are similar to rates of service use in a prospective cohort study of 161 family caregivers of patients with cancer over 13 months post-loss, where 33% used some sort of bereavement service. Similar to in the CLOC study, this study considered bereavement services offered through hospice, professional counseling, support groups, through religious organizations, and through crisis intervention groups (Cherlin, et al., 2007).

Moreover, as time since the death increased, the percentage of those seeking care also decreased. This trend is in keeping with previous findings; in the same sample of family caregivers, for example, Cherlin and colleagues (2007) found that most used bereavement services within the first 6 months post loss. It is likely that this trend is influenced by declines in distress; prevalence of CG and depression also decreased in the sample over time. Most bereaved individuals show marked decreases in bereavement-related emotional distress within a few months after the death (Bonanno, et al., 2005).

Qualitative findings in dissertation Paper 1 also provide some explanation for results. The associations between social network variables and service use may have resulted from encouragement to seek care from others, referrals or information from network members, or from attitudes of network members (either positive or negative) to care. Moreover, in both papers, experiencing CG symptoms was an important catalyst for support-seeking.
Limitations

This research has several limitations. First, information about the use of bereavement services was available only via participant self-report and collected retrospectively. Though this is a common approach in survey data, these reported rates might be inaccurate. Second, the data provides few details on services provided, such as their duration, frequency, or exact timing of use. Those who went to a support group once would have been characterized in the same way as those who went 30 times. Nor is data available on whether multiple services were used concurrently or consecutively. Without detail on the timing of use, it is difficult to establish temporal sequencing. Inferring causality regarding the relationship between baseline demographic, Wave 1 social network and clinical variables and Wave 2 reported service use is challenging since the cases that reported using services at Wave 2 include cases where services were also used at Wave 1. Although separate analyses (not shown) indicated that controlling for service use reported at Wave 1 did not alter results, future research should collect more detail on the timing, duration, and content of bereavement service use in bereaved older adults. Future studies should also include larger sample sizes with sufficient statistical power to observe factors associated with the new onset of service utilization as well as cases where service use desists over time.

Third, though a CG-positive group was identified in the CLOC sample using a proposed, validated CG criteria set, this measure was created by the author and was not an intention of the initial study design. Consensus criteria for CG have not yet been established, and measures utilized vary widely across studies (Prigerson, Maciejewski, et al., 1995; Prigerson, Shear, Jacobs, & al., 2000). There is no clinical “gold standard” that can be used to validate the
identification of this CG-positive group in this sample, as there was no clinical interview to confirm the presence of CG. All analyses are therefore exploratory.

Fourth, as shown in Appendix 4, the NEM is very complex and the current analyses only examined a small component of it. Testing the complete NEM can be challenging, as it requires gathering detailed information about the distressed individual’s social and geographical location, personal health background, characteristics and trajectory of their illness, organizational constraints of available care, specifics about their social support system, details on the treatment systems from which care is received. This may include gathering data from agency administrators, providers, from the person experiencing emotional distress, and from members of their social network (Pescosolido & Boyer, 1999). The available data failed to capture many important aspects of support seeking that may have been essential to understanding use.

The CG-positive groups and help-seeking groups are both small, especially as time from the death increased. Moreover, though some missing cases were imputed by the CLOC researchers, a number of variables, including the service utilization and depression positive variables, had missing cases. Results cannot be considered stable, and there may have been insufficient power to detect differences in demographic, social network, or clinical variables across service use types. It is also possible that missing cases were not missing at random, and may therefore have impacted results. Moreover, the sample includes only those who lost a spouse and was collected in one, predominantly White, area of the United States starting in the 1980s. Therefore, results may not generalize to other types of loss or regions.

Period and cohort affects may also affect generalizability. Specific period effects include the fact that since the initiation of the CLOC study, pharmacological treatments for emotional distress of all kinds have been promoted greatly via direct-to-consumer advertising (Rosenthal,
Berndt, Donohue, Frank, & Epstein, 2002). Community programs promoting awareness, screening, and help seeking for mental disorders, especially depression, have also been developed (Jacobs, 1995). Between 1996 and 2005, for example, antidepressant use among American adults aged 65 and above increased from 9.8% to 13.7% (Olfson & Marcus, 2009). Possible cohort effects include the possibility that older adults in the CLOC sample, who grew up mostly in the 1930s, may have different attitudes about the acceptability of mental health care than older adults today, who grew up in the 1950s and 1960s. Mental health care seeking was stigmatized, and not very common, in the generation of older adults in the CLOC study (Bartels, 2003). Widowed older adults today may have quite different patterns of service use. More studies on bereavement service use in the current day should be conducted. Finally, there may be other variables that have an impact on service use that were not included in the CLOC dataset. For example, stigma has been found to have significant associations with help-seeking for mental health concerns in older adults (Bambauer & Prigerson, 2006; Palinkas, et al., 2007).

**Implications**

Despite these limitations, these results have important implications. First, the paper provides more nuanced data than has previous been available on widowed older adults’ use of diverse services. In particular, most of those who sought help did so from family doctors and religious leaders. This information is useful for bereavement service planning. Providers in these settings should be trained to recognize CG and depression, and to refer or intervene appropriately. Moreover, the significant associations identified between use of support groups and use of clinical professionals, and use of support groups and religious leaders, implies that attention should be paid to multiple sources of care and their interactions. As suggested by Pescosolido and colleagues, regarding mental health care more broadly (1998), services might also need be
reorganized, so that an network of family members, medical personal, and mental health
providers work together to meet individual needs. Researchers have begun integrating specialty
care for depression into primary care clinics, for example (Unützer, et al., 2002); similar
collaborative efforts in other settings may be useful for reaching older adults with bereavement-
related distress. Identification of support seeking types in different cultural subgroups may also
lead to more culturally relevant and therefore effective support provision (Pescosolido, Wright,
et al., 1998).

The identified impact of social network variables illustrates the importance of applying
the NEM to understanding bereavement service use. Interventions to enhance social support may
have the added benefit of increasing service utilization among those most in need. The finding
that there are significant differences by individual level factors like education and gender may be
useful to those wanting to engage particular subgroups in bereavement care. Efforts should be
targeted accordingly. Community agencies providing bereavement support may also find this
data useful in identifying populations in need. Results may assist provider and policy makers in
planning for more efficient entry of bereaved older adults into bereavement services.

Future studies should explore the application of the NEM to bereavement service
utilization in more detail. Future studies could collect detailed longitudinal data on timing of
service entry, duration of services, and on specific pathways into care. Such analyses would
provide more comprehensive data on where and when to intervene. Greater attention to the
possible simultaneous use of different service use in bereavement service utilization studies is
also needed. Ultimately, better understanding of bereavement service utilization may help target
and engage those in greatest need in effective care for their CG and depression. Future studies
could also consider additional social network properties, especially the influence of network norms (Neugarten, et al., 1965) and added detail on social network size.

Greater consensus on how best to measure bereavement service utilization (especially complex service utilization) is also needed. The NEM emphasizes the importance of doing so, but does not offer specific suggestions on methodology, and tests of the NEM vary widely in how they characterize service utilization. Future studies could also examine bereavement service use in older adults who have experienced a variety of losses (not just spousal loss) and consider other factors which might influence service use not available in the CLOC dataset, such the role of stigma in bereavement service use.

**Conclusion**

Most bereavement service research has considered factors associated with service use in individual sectors. However, among widowed older adults in this sample, a variety of services are used for grief, and there are significant associations between types of services used. In keeping with Pescosolido and colleagues’ NEM, service utilization types in this study were interrelated, implying that research which simply examines bereavement service use types alone may be missing important information about support-seeking behaviors among the bereaved. Family doctor and support group care were especially highly associated, even when controlling for a variety of demographic and clinical variables. Moreover, in keeping with the NEM, types of services used for grief were shaped by social network variables. Future research should collect more detail on service use specifically among older adults with CG and depression in larger samples, and should consider the influence of additional variables, such as social network norms, on bereavement service use.
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Outcomes of Bereavement Service Utilization Among Widowed Older Adults with Complicated Grief and Depression

Dissertation Paper 3
Introduction and Literature Review

Experiencing the death of a loved one is a universal part of human life, and, in the United States, it is especially common among adults aged 65 and older (Federal Interagency Forum on Aging Related Statistics, 2010). The number of bereaved older adults will only rise as the percentage of the U.S. population over age 65 increases (Administration on Aging, 2007). Though grief is characterized by strong emotional responses of sadness and yearning, longitudinal studies show that for the majority of bereaved individuals the frequency and intensity of these feelings reduce dramatically within a year after the death (Bonanno, Moskowitz, Papa, & Folkman, 2005) and capacity for positive feelings is retained (Chentsova Dutton & Zisook, 2005). A minority, however, experience problems in the wake of bereavement that can be classified as mental health disorders, including depression (American Psychiatric Association, 1994) and Complicated Grief (CG) (Stroebe, Schut, & Stroebe, 2007).

Though CG is not included as a mental disorder in the American Psychiatric Association’s (APA) Diagnostic and Statistical Manual, the APA workgroup has proposed the addition of CG in the upcoming 5th Edition as “bereavement-related adjustment disorder” (American Psychiatric Association, 2011). The disorder description includes symptoms of persistent yearning/longing for the deceased, preoccupation with the deceased person or with the circumstances of the death, marked difficulty accepting the death, bitterness or anger related to the loss, self-blame, excessive avoidance of reminders of the loss, feeling alone or detached from other people since the death, and feeling that life is meaningless or empty (American Psychiatric Association, 2011). The workgroup recommends that CG not be diagnosed until at least 12 months after a death, and the severity and duration of symptoms must be outside cultural norms. CG has been associated with negative health and mental outcomes, including weight loss,
increased risk for hypertension (Prigerson, et al., 2001), smoking (Neria, et al., 2007), sleep impairment (Prigerson, Frank, et al., 1995) and suicidal ideation (Szanto, Prigerson, Houck, Ehrenpreis, & Reynolds, 1997). A recent representative general population-based survey of participants aged 14 to 95 found that about 7% of those who experienced a major bereavement develop CG (Kersting, Brahler, Glaesmer, & Wagner, 2011).

Major Depressive Disorder (MDD, or depression) is a period of two weeks or more of a sad, low mood, diminished interest or pleasure in activities, change in weight or appetite, insomnia or hypersomnia, loss of energy, low-self-esteem or strong guilt, reduced ability to concentrate, or recurrent suicidal thoughts (American Psychiatric Association, 1994). Depression has been associated with impaired daily functioning, reduced social participation and poor general health in older adults (Beekman, et al., 2002). A representative national survey found that the lifetime prevalence of MDD is 16%, while 6.6% had experienced depression in the previous 12 months (Kessler, Berglund, et al., 2003). Women are almost twice as likely as men to experience depression in their lifetimes (Kessler, Berglund, et al., 2003). Studies have estimated rates of depression after losing a loved one of 29-35% at one month post-bereavement (Clayton, 1979; Clayton, Halikas, & Maurice, 1972), 20-32% at two months (Futterman, Gallagher, Thompson, Lovett, & Gilewski, 1990; Zisook, Paulus, Shuchter, & Judd, 1997; Zisook & Shuchter, 1993; Zisook & Shuchter, 1991), 12-16% at thirteen months (Zisook, et al., 1997; Zisook & Shuchter, 1991) and 14% at twenty-five months (Zisook & Shuchter, 1993).

A number of types of support are available to those with bereavement-related mental health conditions like CG and depression. These include grief support groups (led by trained group leaders), widow-to-widow programs (led by other bereaved individuals) (Silverman, 1969), psychoeducation, pastoral counseling, and psychotropic medication (Currier, Neimeyer, &
Unlike most psychotherapies, bereavement interventions are often practiced more as preventive aids to reduce future distress than as treatments to alleviate current distress. Researchers (Currier, et al., 2008; Schut & Stroebe, 2005) have distinguished between universal (primary), selective (secondary), and indicated (tertiary) interventions. Universal interventions target anyone who experiences the death of a loved one and do not distinguish based on functioning, risk factors, or current levels of distress. Selective interventions are not targeted at highly distressed grievers per se, but at those who may be at a higher risk of distress, such as those who lose a child violently. Indicated (or tertiary) interventions focus on those who manifest specific problems in reaction to loss, including depression or CG.

Several reviews have considered the efficacy of individual and group interventions for bereavement across a variety of outcomes (including depression symptoms, grief symptoms, general functioning) (Currier, et al., 2008; Forte, Hill, Pazder, & Feudtner, 2004; Jordan & Neimeyer, 2003; Neimeyer & Currier, 2009; Potocky, 1993; Schut, Stroebe, van den Bout, & Terheggen, 2001; Schut & Stroebe, 2005). Reviews have been limited by wide variation between studies, a lack of replication studies, flaws in study designs, and flaws in the reviews themselves, including departure from conventional meta-analytic procedures (Kato & Mann, 1999; Larson & Hoyt, 2007; Neimeyer, 2000). Reviewers have not yet reached a consensus on the effectiveness of bereavement interventions. However, almost all agree that universal interventions to bereaved individuals do not show evidence of efficacy, and that screening for high distress post-bereavement seemed to increase efficacy. Indeed, most bereaved individuals do not show long-term emotional distress (Bonanno, 2004) and about half show little or no grief or depression, even in the first months after loss (Bonanno, Moskowitz, Papa, & Folkman, 2005; Bonanno et al., 2002; Bonanno, Wortman, & Nesse, 2004). Bonanno and Lilienfeld (2008) have argued,
therefore, that there is little reason to believe that these resilient individuals would want or receive benefits from grief support. Rather, researchers conclude, bereavement interventions should be targeted at those in greatest need, rather than applied to all bereaved individuals or administered preventively before the death occurs (Currier, et al., 2008; Jordan & Neimeyer, 2003; Schut, et al., 2001; Schut & Stroebe, 2005).

Yet though those with CG or depression may possibly benefit from indicated grief interventions, research in this area is in its early stages. Both psychotherapy (especially cognitive-behavioral therapy) and antidepressant pharmacotherapy have been shown to be effective for treating depression after a death (Zisook & Shuchter, 2001). In a meta-analysis of bereavement interventions, Forte and colleagues (2004) found that prescribed pharmacotherapy (including tricyclic antidepressants, selective serotonin reuptake inhibitors, bupropion, and benzodiazepines) reduced symptoms of depression and improved sleep quality in the bereaved. Few randomized controlled trials (RCTs) of depression treatment after bereavement have been conducted, however, Interpersonal Therapy (IPT), a brief, manualized therapy that focuses on assessing and improving the client’s relationships with others (Klerman, Weissman, Rounseville, & Chevron, 1984), is one commonly used, effective counseling treatment for older adults with depression (Reynolds, et al., 1997). While there are few studies specifically on depression after bereavement, when combined with the antidepressant nortriptyline, IPT showed efficacy in an RCT in treating depression following a death in older adults (Reynolds, et al., 1999).

A few treatments have also been tested specifically for CG in RCTs across all ages, including a five-week, Internet-based cognitive behavioral therapy (Wagner, Knaevelsrud, & Maercker, 2006), consisting of several writing assignments (including recalling the story of the loss and drafting a letter to an imagined friend who has had a similar loss), which received
therapist feedback. Though there were only 55 clients with CG in the study, those assigned to the intervention did improve on measures of avoidance and of intrusive thoughts. Also, standard IPT includes grief as one of its primary targets. In this context, IPT focuses on reconstructing the patient’s relationship with the deceased, helping the patient reach a more realistic evaluation of the relationship and returning patients to activities in which they engaged before the deceased’s death. However, IPT does not appear to have much impact on CG symptoms (Reynolds, et al., 1999).

One of the few treatments that does show efficacy for CG is Shear and colleagues’ Complicated Grief Treatment (CGT) (Shear, Frank, Houck, & Reynolds, 2005), which draws from IPT strategies was and which is enhanced with techniques based on Dr. Edna Foa’s exposure therapy for PTSD (Foa, Rothbaum, Riggs, & Murdock, 1991). CGT includes techniques like “revisiting” the story of the death, an imaginal exercise similar to prolonged exposure, in which there is repetitive telling of the story of the death. In a RCT of the treatment, response rate was greater on average for those who received CGT than for those who received IPT. Among treatment completers, mean grief scores decreased significantly in CGT as compared to IPT (Shear, et al., 2005). CGT is currently being tested with older adults (PI: M.K. Shear, R01MH070741). Reviews of treatment for CG (Jacobs & Prigerson, 2000; Wittouck, Van Autreve, De Jaegere, Portzky, & van Heeringen, 2011) also conclude that cognitive-behavioral treatments showed promise for the condition, but found no significant effect of preventive interventions on CG symptoms.

Across studies, then, several specific treatments targeted at those with CG and depression have shown positive outcomes. However, most existing literature examines the impact of RCTs, rather than determining whether existing community-based supports help improve grief or
depression symptoms. By examining only empirically tested interventions, reviews exclude other sources of help, such as pastoral care and support offered by medical doctors. Moreover, mental health help seeking may be more of a dynamic process in which people try different routes until they find some resolution to their condition. Theories of mental health help-seeking have emphasized the importance of considering multiple sources of support. Pescosolido and colleagues’ Network Episode Model (NEM) (Pescosolido, 1992; Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998) posits that those with mental illness consult with a range of individuals, both formal and informal supports, including family, friends, coworkers, ethnic/traditional healers, other service providers, and mental health professionals (see Appendix 4). Indeed, studies have found that bereaved older adults often consult with religious leaders and family doctors (Caserta & Lund, 1992). For example, in a study of bereaved spousal caregivers of patients of three hospices in Florida (Bergman & Haley, 2009), among those who sought help with grief, receiving support from clergy was most common (55.7%), followed by help from a physician (49.2%), while receiving help from a psychologist or psychiatrist was least common (9.8%).

More data are needed to clarify the effectiveness of supports used by bereaved individuals outside of clinical trials, as it is these services to which most bereaved individuals have access. Few empirical tests of support groups appear to exist, and their results are very mixed (Barrett, 1978; Parkes, 1980; Vachon et al., 1980; Marmar et al., 1988; Silverman, 1986; Polak et al., 1975; Lieberman & Borman, 1979; Walls & Meyers, 1985; Lieberman & Videka-Sherman, 1986; Lund, Caserta, Utz, & de Vries, 2010; van der Houwen, et al., 2010). I was not able to identify any research on outcomes of bereaved older adults’ support from medical doctors, though many of the aforementioned meta-analyses considered the effectiveness of anti-
depressant medications, which doctors could prescribe. In a 2001 review, Schut et al. noted that support from religious professionals in community settings had never been empirically tested (Schut, et al., 2001), and this seems still to be the case. However, using religion to cope with loss has been found to be associated with less severe grief in widowed older adults (Ott, Lueger, Kelber, & Prigerson, 2007), which indicates some possible connection between the use of religious leader support and outcomes. Understanding how support-seeking from understudied sources like doctors, support groups, and religious leaders impacts distress in a community sample of widowed older adults with CG and/or depression would provide important information on the real-world effectiveness of available bereavement support.

**Aims**

To address gaps in the existing bereavement treatment outcomes literature, this paper utilizes secondary analyses of longitudinal surveys from the Changing Lives of Older Couples (CLOC) Study, a representative community sample of widowed older adults. The study has the following aims and hypotheses:

**Aim 1:** To describe bereavement support-seeking from family doctors, religious leaders, and self-help or support groups in a subgroup of widowed older adults with CG and/or depression in the CLOC sample.

**H1:** Because greater need has been associated with more service use, older adults with CG and/or depression will have high rates of service utilization, and will show high use all three types of services.

**Aim 2:** To determine whether, among widowed older adults with CG and/or depression in the CLOC sample, utilization of bereavement supports (religious leaders, self-help or support groups, or family doctors) between the death and 6 months post-loss is associated with reductions in
emotional distress (grief, depression, or anxiety) at 18 months post-loss. High attrition between the 18 and 48 month interviews prevents examination of outcomes at 48 months.

**H2:** As there is not clear evidence for the efficacy of family doctors, self-help or support groups, or religious leaders in providing treatment to older adults with CG and/or depression, use of these support types between the death and 6 months post-loss will not be associated with reductions in grief, depression, or anxiety at 18 months post loss, when compared to outcomes among those who did not seek these services.

**Methods**

The Changing Lives of Older Couples (CLOC) Study surveyed 1,532 married individuals from the Detroit Standard Metropolitan Statistical Area, using two-stage area probability sampling. Face to face interviews were conducted from June 1987 to April 1988 by CLOC study staff. To be eligible, husbands in all enrolled couples were required to be 65 or older. A total of 335 respondents lost a spouse during the 5 years of the study. Nineteen of these respondents died before they could be contacted, and 316 were contacted for possible interview. Of those contacted, 263 (83%) participated in at least one follow-up interviews conducted at 6 months (Wave 1), 18 months (Wave 2) and 48 months (Wave 3) after their spouse's death. All data was weighted to adjust for unequal probabilities of selection and differential response rate. A deidentified version of the dataset is publicly available through the Inter-University Consortium for Political and Social Research, and the study is described in other publications (e.g. Carr, Nesse, & Wortman, 2006). I was interested in outcomes among those with the greatest bereavement-related distress. Therefore, analyses were limited to those who had either CG or depression at Wave 1 or Wave 2 (N=118, weighted N= 97). Ninety-two of these participants also had data on bereavement service use.
In the publicly available dataset, missing values were imputed by the CLOC researchers using a Stochastic Proportional Missing Value Imputation procedure. First, the proportion of responses for each category for that variable was calculated. Next, a randomizing procedure was used to fill the missing value in with a random integer with frequencies proportionate to the frequency of that integer for the variable as a whole. This procedure does not use characteristics of the individual (which increases variance), but avoids introducing systematic error.

The Columbia University Morningside Institutional Review Board reviewed the proposed secondary analysis of the CLOC data, and concluded that these analyses qualify as exempt from further review.

**Measures**

Analyses were limited to those who met criteria for either CG or depression at either 6 months (Wave 1) or 18 months (Wave 2) after the death of their spouse, using two measures:

**Complicated grief present:** Items on the CLOC questionnaire corresponding to proposed CG criteria set (Shear, et al., 2011), which was validated in a sample of adults identified by an expert clinician as having CG, were selected. When the CLOC study was developed, the concept of CG did not yet exist. However, the CLOC dataset includes many items on grief symptoms. Criteria proposed in the literature (Shear, et al., 2011) and factor analyses (principal component analysis, with varimax rotation) were used to select items. See **Appendix 3** for more details; additional details available upon request. Items were recoded as “present” (*often or very true*) or “not present” (all other options). To meet criteria for CG, participants had to endorse at least one “B” criterion and two “C” criterion symptoms. All CG items were administered at Waves 1, 2, and 3.

**Depression present:** The CLOC dataset contains a variable regarding whether depression was present or absent at each wave. The criteria for diagnosis are taken from items 15 survey
questions (coded into 8 symptom categories) based on the DSM-III criteria. Participants must have at least five depressive symptoms during the same two-week period, at least one of which must be depressed mood or loss of interest. Items were administered at both Wave 1 and Wave 2.

**Dependent Variables:**

Different aspects of mental health may follow different trajectories over time, and examining only a general grief scale or global mental health scale may ignore differences across different reactions to loss, such as anxiety, depression, and grief (Prigerson, et al., 1996). Moreover, CG symptoms have been found in factor analyses to be distinct from anxiety and depression (Horowitz, et al., 1997; Prigerson, Frank, et al., 1995). To address this issue, this paper focuses on three different indicators of psychological well-being: depression severity, grief severity, and anxiety severity, assessed 18 months after the loss.

**Grief severity:** A 19-item global grief scale was developed and validated for the CLOC study after in-depth factor analysis (alpha=.88). Though the measure was not designed to measure CG specifically, scale items correspond closely to proposed CG criteria sets (American Psychiatric Association, 2011; Prigerson, Frank, et al., 1995; Prigerson, et al., 2009; Shear, et al., 2011). The scale scores have already been standardized within the CLOC data set. Higher scores indicate greater levels of depression. Grief severity at Wave 2 was considered.

**Depression severity:** Depression was measured using a subset of nine negative items from the 20-item Center for Epidemiologic Studies Depression (CES-D) scale. This measure of depression has been used in previously published work on the CLOC study (Carr, House, Wortman, Nesse, & Kessler, 2001) and has good internal consistency (alpha= 0.75). The scale scores have already been standardized within the CLOC data set. Depression severity at Wave 2 was considered. Higher scores indicate greater levels of depression.
Anxiety severity: Anxiety was assessed with ten items from the anxiety subscale of the Symptom Checklist 90-Revised (Derogatis & Cleary, 1977; Derogatis, Rickels, & Rock, 1976). The continuous scale scores have been standardized within the CLOC data set. The measure has high internal consistency (alpha= 0.86). Anxiety severity at Wave 2 was considered.

**Independent Variables:**

**Family doctor bereavement support-seeking:** A single yes/no item asked whether participants went to a family doctor to cope with feelings of grief, loneliness or missing their spouse since the death. This item captured any use between the death and the Wave 1 (6 month) interview.

**Support group support-seeking:** A single yes/no item asked whether participants went to a self-help group or support group for people who have lost a spouse to cope with feelings of grief since the death. This item captured any use between the death and the Wave 1 (6 month) interview.

**Religious leader bereavement support-seeking:** A single yes/no item asked whether participants had seen a minister, priest or other clergy for help with feelings of grief, loneliness or missing their spouse since the death. This item captured any use between the death and the Wave 1 (6 month) interview.

A fourth item asked whether participants had gone to a mental health professional for help—someone like a social worker or psychologist. However, mental health support seeking was omitted from the analyses as only four participants reporting using this service at Wave 1. All four participants also used at least one other type of support, so this omission should not have impacted results and did not reduce sample size. For all support-seeking variables, items were not asked if participants said they were not experiencing any grief over their spouse’s death, resulting in some missing cases (five at Wave 1).
Control variables:

I controlled for variables that might predict grief, depression, or anxiety outcomes. Previous analyses of the CLOC data indicated that race, social support, religiosity, sex, and socioeconomic status (total household income and education) might also influence outcomes (Carr, et al., 2000). These control variables have been utilized in other analyses of CLOC study outcomes (Carr, et al., 2000; Carr, et al., 2001). A recent review also indicated that pre-existing depression, religiosity, poor health, male gender, low social support and race may all be associated with differential bereavement outcomes (Stroebe, et al., 2007). Moreover, the NEM (Pescosolido, 1992; Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998) proposes that different properties of social networks, including the number of people in the network and support provided by network members, can influence help-seeking. Therefore, I controlled for several social network variables. More detail on how variables selected fit with the NEM can be found in Appendix 5. In addition, attachment relationship with the deceased (specifically, anxiety about separation from them) has been associated with increased distress post-loss (Bonanno, et al., 2002). Moreover, anxious attachment style (Bowlby, 1969; Overall, Fletcher, & Friesen, 2003; Hazan & Shaver, 1987) has been associated with increased likelihood of mental health support-seeking (Vogel & Wei, 2005; Shaffer, Vogel, & Wei, 2006). Therefore, I also controlled for attachment anxiety.

Race: Self-reported in two items: “Are you white, black, American Indian, Asian, or another race? (CHECK ALL THAT APPLY).” And “Are you Hispanic or Latino” (Yes/No). As almost the entire sample (99%) was White or Black, this item was dichotomized into a single “White or Non-White” variable. This item was administered at baseline.
**Gender:** A single categorical variable (male or female). Interviewer rated on observation at baseline.

**Education:** Measured as a single continuous variable of years of completed schooling, ranging from 3 to 17 years. This item was administered at baseline. In keeping with previous literature in support utilization patterns (Wang, et al., 2005), this variable was transformed into a single categorical variable, where 0=11="less than high school," 12= high school/GED, 13-15= some college, 16 or greater= college or greater. This item was administered at baseline.

**Income:** Income was measured at baseline by asking respondents indication which of 10 categories most accurately captured their income. In keeping with previous CLOC analyses (Carr, et al., 2001), a continuous measure of income was derived by taking the midpoint of each of the 10 income categories, with Pareto estimates of the mean for the top income category. Because income distribution was skewed towards the lower income categories, the natural log of income was used.

**Attachment anxiety:** This scale was created by the CLOC researchers; items are focused on the relationship with the spouse. The original scale was titled “dependency on spouse” but “attachment anxiety” seemed to be a more accurate descriptor. Though there is no measure of anxious attachment in the CLOC dataset, those who are highly dependent in romantic relationships tend to have attachment anxiety (Hazan & Shaver, 1987) and dependency on others has been associated with attachment anxiety (Fraley & Bonanno, 2004). The scale was made up of the weighted mean of four items: “The idea of losing my (husband/ wife) is terrifying to me”; “No one could ever take the place of my (husband/wife)”; “If my (husband/wife) died, it would be the worst thing that could happen to me”; “I would feel completely lost if I didn’t have my
(husband/wife)” (alpha= .80). Higher values indicate higher attachment anxiety. These items were administered only at baseline (pre-death).

*Network size of close individuals:* A single item asks how many people there are in the participants’ life with whom they can really share their very private feelings and concerns. Wave 1 responses were considered. The median network size was two, and the modal network size was one, but the item had a few outliers (e.g. one participant answered “98”). Therefore, the item was top-coded at answers below the 95th percentile; 6 was the maximum score allowed.

*Religious participation:* A single item asked, “How often do you usually attend religious services?” Responses ranged from *more than once a week* (1), *about once a week* (2), *1 to 3 times a month* (3), *less than once a month* (4), to *never* (5). The item was dichotomized into “low participation” (*never and less than once a month*) and “high participation” (*more than once a week, about once a week, and 1 to 3 times a month*). Wave 1 responses were analyzed.

*Importance of religious beliefs:* A single item asked: “In general, how important are religious or spiritual beliefs in your day-to-day life?” Response options were *very important* (1), *fairly important* (2), *not too important* (3), and *not at all important* (4). The item was dichotomized into values of “low importance” (*not at all important and not too important*) and “high importance” (*very important and fairly important*).

*Positive emotional support from friends and relatives:* A composite rating created by CLOC researchers, from using the weighted mean of two questions: “On the whole, how much do your friends and relatives make you feel loved and cared for?” and “How much are your friends and relatives willing to listen when you need to talk about your worries or problems?” (alpha= .71). Higher scores indicate greater support. Wave 1 responses were analyzed.
Positive emotional support from children: A composite rating created by CLOC researchers, using the weighted mean of two questions: “How much do your children make you feel loved and cared for?” and “How much are they willing to listen when you need to talk about your worries or problems?” (alpha=.70). Higher scores indicate greater support. Wave 1 responses were analyzed.

Instrumental support: Measured by averaging three questions: “If you needed extra help with general housework or home maintenance, how much could you count on friends or family members to help you?”; “If you needed extra money, how much could you count on someone, other than a lending institution, to lend or give you money?”; “If you were ill, how much could you count on someone to make sure you are taken care of?” (alpha=.64). Higher scores indicate greater support. Wave 1 responses were analyzed.

Confounding Variables:

I controlled for anxiety, depression, and grief severity at 6 months post-loss to help distinguish between states near the time of support seeking and changes after support seeking. Depression, anxiety, and grief severity were measured in the same way at six months as at 18 months (see description above).

Data Analysis

Descriptive statistics were conducted in IBS SPSS, version 19, while all regression analyses were conducted using Stata statistical software, version 12. I first conducted descriptive analyses to examine the range and central tendency of all variables. I also examined whether there was equivalent distribution of control variables across support seeking groups. Independent-samples t-tests compared the average change in depression severity, anxiety severity, and grief severity from Wave 1 to Wave 2, by each type of support sought (family
doctor, religious leader, and self-help or support group). Next, correlation analyses (Pearson’s correlation, two-tailed) were performed to examine the bivariate associations among all control and confounding variables.

Finally, separate multiple regression analyses were conducted using the `svy regress` procedure in Stata, with depression, anxiety, grief symptoms at Wave 2 entered as continuous dependent variables and with each type of bereavement support (religious leader, family doctor, self-help or support group) reported at Wave 1 as independent variables. Because many participants reported using more than one service, regression analyses controlled for the effects of each service type. Interactions between the three types of bereavement support were examined, but were not included in the final model because none were significant predictors of the outcomes. I also controlled for reported Wave 2 bereavement support of each type, but did not include these variables in the final model because doing so also did not impact outcomes.

All variables were standardized (mean equal to zero, standard deviation equal to 1) to allow for more meaningful comparisons. Other potential predictors of bereavement outcomes, including age, satisfaction with health, hassles/negative support from children, friends or relatives, avoidant attachment style, home ownership, and grief self-management were included in preliminary analyses but were dropped because they were not significant predictors of grief, depression, or anxiety severity at Wave 1 (\(p>.05\)) and because inclusion of these variables did not impact the association between bereavement support-seeking (of any type) and outcomes.

Results

A total of 97 widowed older adults (weighted sample size) had either depression or CG at Wave 1 or Wave 2. Table 1 provides demographic data on this sample and descriptive statistics.
for all control and confounding variables. The majority of the sample was female (73.3%) and White (85.4%), with an average age of 69.8.

Table 1. CLOC Widowed Sample Descriptives (WEIGHTED N=97)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (at baseline)</td>
<td></td>
<td></td>
<td>49-87</td>
<td>69.77</td>
<td>7.62</td>
</tr>
<tr>
<td>Female</td>
<td>71</td>
<td>73.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Race</td>
<td>83</td>
<td>85.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total years</td>
<td>41</td>
<td>42.7</td>
<td>3-17</td>
<td>11.44</td>
<td>2.78</td>
</tr>
<tr>
<td>Less than high school</td>
<td>26</td>
<td>26.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>26</td>
<td>26.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>18</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College or greater</td>
<td>11</td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income (natural log of the midpoint)</td>
<td></td>
<td></td>
<td>7.82-11.29</td>
<td>9.72</td>
<td>0.77</td>
</tr>
<tr>
<td>Anxiety severity (Wave 1)</td>
<td></td>
<td></td>
<td>10-31</td>
<td>14.50</td>
<td>4.86</td>
</tr>
<tr>
<td>Depression severity (Wave 1)</td>
<td></td>
<td></td>
<td>9-27</td>
<td>15.22</td>
<td>3.55</td>
</tr>
<tr>
<td>Grief severity (Wave 1)</td>
<td></td>
<td></td>
<td>24-74</td>
<td>48.04</td>
<td>11.02</td>
</tr>
<tr>
<td>High religious participation (Wave 1)</td>
<td>63</td>
<td>68.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High religious beliefs (Wave 1)</td>
<td>83</td>
<td>89.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive support from friends and relatives (Wave 1)</td>
<td></td>
<td></td>
<td>0-4</td>
<td>2.79</td>
<td>1.04</td>
</tr>
<tr>
<td>Positive support from children (Wave 1)</td>
<td></td>
<td></td>
<td>0-4</td>
<td>3.32</td>
<td>0.78</td>
</tr>
<tr>
<td>Instrumental Support (Wave 1)</td>
<td></td>
<td></td>
<td>0-3</td>
<td>2.02</td>
<td>0.81</td>
</tr>
<tr>
<td>Close network size (Wave 1)</td>
<td></td>
<td></td>
<td>0-6</td>
<td>2.20</td>
<td>1.87</td>
</tr>
<tr>
<td>Attachment anxiety (baseline)</td>
<td></td>
<td></td>
<td>0-3</td>
<td>2.48</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Tables 2a and 2b show the prevalence of CG and depression in this sample. Five cases were missing data on CG or depression at Wave 1, and three were missing data at Wave 2. Of the remaining cases, only a minority of the sample had both conditions (29.3% at Wave 1 and 11.4% at Wave 2) while 54.3% had CG alone at Wave 1 and 28.6% had CG alone at Wave 2. Thirteen percent had depression alone at Wave 1 and 15.7% had depression alone at Wave 2.
### Table 2a. CG and Depression at Wave 1 (N=92)

<table>
<thead>
<tr>
<th>Complicated Grief</th>
<th>Depression</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>% of CG group</td>
<td>% of depression group</td>
</tr>
<tr>
<td>Negative</td>
<td>12</td>
<td>80.0</td>
<td>30.8</td>
</tr>
<tr>
<td>Positive</td>
<td>27</td>
<td>35.1</td>
<td>69.2</td>
</tr>
</tbody>
</table>

### Table 2b. CG and Depression at Wave 2 (N=70)

<table>
<thead>
<tr>
<th>Complicated Grief</th>
<th>Depression</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>% of CG group</td>
<td>% of depression group</td>
</tr>
<tr>
<td>Negative</td>
<td>11</td>
<td>26.2</td>
<td>57.9</td>
</tr>
<tr>
<td>Positive</td>
<td>8</td>
<td>28.6</td>
<td>42.1</td>
</tr>
</tbody>
</table>

Table 3a provides detail on types of support utilized at Wave 1. Ninety-two of the 97 participants had data on bereavement-support seeking. Support from family doctors was by far the most widely used service, followed by support from religious leaders, and then from support groups. A sizable minority (40.2%) of this sample with CG and/or depression did not seek any support for their grief. Use of combinations of support was fairly high (Table 3b), with 40% of those who sought support using more than one service for grief. Seeking support from both family doctors and religious leaders was the most common combination. As noted above, because combination service use was fairly common, regression analyses controlled for the effects of each service type. Table 3c shows service by CG or depression positive status; those with both CG and depression were most likely to use family doctors, religious leaders, and support groups.
Table 3a. Use of Each Type of Grief Support Among the CLOC Sample with Depression and/or Complicated Grief Reported at 6 months Post-Bereavement (N=92)

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No support sought</td>
<td>37</td>
<td>40.2</td>
</tr>
<tr>
<td>Support Sought:</td>
<td>55</td>
<td>59.8</td>
</tr>
</tbody>
</table>

% of Support-Seekers

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious leader</td>
<td>25</td>
<td>45.5</td>
</tr>
<tr>
<td>Self-help or support group</td>
<td>13</td>
<td>23.6</td>
</tr>
<tr>
<td>Family doctor</td>
<td>43</td>
<td>78.2</td>
</tr>
</tbody>
</table>

Table 3b. Combinations of Grief Support Reported at 6 months Post-Bereavement (N=92)

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No support sought</td>
<td>37</td>
<td>40.2</td>
</tr>
<tr>
<td>Support Sought:</td>
<td>55</td>
<td>59.8</td>
</tr>
</tbody>
</table>

% of Support-Seekers

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family doctor alone</td>
<td>21</td>
<td>38.2</td>
</tr>
<tr>
<td>Religious leader alone</td>
<td>7</td>
<td>12.7</td>
</tr>
<tr>
<td>Support group alone</td>
<td>5</td>
<td>9.1</td>
</tr>
<tr>
<td>Family doctor and religious leader</td>
<td>14</td>
<td>25.5</td>
</tr>
<tr>
<td>Support group and religious leader</td>
<td>1</td>
<td>1.8</td>
</tr>
<tr>
<td>Support group and Family Doctor</td>
<td>4</td>
<td>7.3</td>
</tr>
<tr>
<td>Support group, religious leader, and family doctor</td>
<td>3</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table 3c. Use of Each Type of Grief Support Among the CLOC Sample by CG and Depression Status (N=92)

<table>
<thead>
<tr>
<th></th>
<th>Reported Using Family Doctor at Wave 1</th>
<th>Reported Using Religious Leader at Wave 1</th>
<th>Reported Using Support Group at Wave 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>CG alone at Wave 1 (n=50)</td>
<td>18 (36.0)</td>
<td>9 (18.0)</td>
<td>4 (8.0)</td>
</tr>
<tr>
<td>Depression alone at Wave 1 (n=12)</td>
<td>3 (25.0)</td>
<td>3 (25.0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Have both conditions at Wave 1 (n=27)</td>
<td>21 (77.8)</td>
<td>14 (51.9)</td>
<td>8 (29.6)</td>
</tr>
</tbody>
</table>

Tables 4a, 4b, and 4c show mean change in depression severity, anxiety severity, and grief severity from Wave 1 to Wave 2, by each type of support sought alone, using independent
samples $t$-tests. There were no significant differences in any of these outcome measures for any of the treatment types, with one exception. Those who sought care for their grief from self-help or support groups up to 6 months post-loss had a significantly greater change in their grief severity score (a reduction of 17 points) than those who did not (a reduction of 7 points).

Table 4a. Change in Anxiety, Depression, and Grief Severity From 6-Months to 18-Months Post-Bereavement by Religious Leader Support-Seeking Reported at Wave 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sought Religious Leader Support</th>
<th>Did Not Seek Religious Leader Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Depression Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Grief Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
</tbody>
</table>

Table 4b. Change in Anxiety, Depression, and Grief Severity From 6-Months to 18-Months Post-Bereavement by Family Doctor Support-Seeking Reported at Wave 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sought Family Doctor Support</th>
<th>Did Not Seek Family Doctor Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Depression Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Grief Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
</tbody>
</table>

Table 4c. Change in Anxiety, Depression, and Grief Severity From 6-Months to 18-Months Post-Bereavement by Support Group Support-Seeking Reported at Wave 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sought Support Group Support</th>
<th>Did Not Seek Support Group Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Depression Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
<tr>
<td>Grief Severity</td>
<td>Mean Change SD</td>
<td>Mean Change SD</td>
</tr>
</tbody>
</table>

Bivariate correlation analyses (Table 5) indicated participants with higher levels of education were also more likely to have higher incomes. Non-White participants reported lower
instrumental support and higher religious participation, and a statistically significant correlation was almost reached between Non-White race and lower education level (p=.065) and between Non-White race and lower income (p=.069). Those with higher incomes had higher positive emotional friend and relative support, higher instrumental support, and lower attachment anxiety. Positive emotional support from children, positive emotional friend and relative support, instrumental support, and network size were moderately correlated (r=.22-.48). Religious beliefs and participation were also highly correlated (r= 0.49). However, all variables were kept in regression models because I considered them to be conceptually distinct. Those with higher anxiety severity had lower emotional support from friends and weaker religious beliefs. Those with higher attachment anxiety had stronger religious beliefs. Those with higher depression severity had lower emotional support from children. Wave 1 anxiety severity, depression, and grief severity were also highly correlated, but controlling for Wave 1 symptom severity was important for model specification.
### Table 5. Bivariate Correlations of all Control and Confounding Variables

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Education</th>
<th>Non-White</th>
<th>Income</th>
<th>Higher religious participat.</th>
<th>Support from friends/relatives</th>
<th>Support from children</th>
<th>Network size</th>
<th>Instrumental support</th>
<th>Higher religious beliefs</th>
<th>Attachment anxiety</th>
<th>Anxiety severity</th>
<th>Grief severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Education level</td>
<td>0.030</td>
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</tr>
<tr>
<td>Non-White race</td>
<td>-0.055</td>
<td>-0.188</td>
<td>1</td>
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<td></td>
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<tr>
<td>Income (ln)</td>
<td>0.157</td>
<td>0.223*</td>
<td>-0.186</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Higher religious participation</td>
<td>0.086</td>
<td>0.051</td>
<td>0.216*</td>
<td>0.094</td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Support from friend/relatives</td>
<td>-0.134</td>
<td>0.032</td>
<td>0.057</td>
<td>0.309**</td>
<td>0.036</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Support from children</td>
<td>-0.091</td>
<td>-0.068</td>
<td>-0.160</td>
<td>0.049</td>
<td>-0.085</td>
<td>0.317**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Network size</td>
<td>-0.128</td>
<td>0.115</td>
<td>0.039</td>
<td>0.185</td>
<td>0.089</td>
<td>0.482**</td>
<td>0.195</td>
<td>1</td>
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<tr>
<td>Instrumental support</td>
<td>0.106</td>
<td>0.168</td>
<td>-0.231</td>
<td>0.294**</td>
<td>0.018</td>
<td>0.294**</td>
<td>0.225</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>Stronger religious beliefs</td>
<td>-0.050</td>
<td>-0.027</td>
<td>0.139</td>
<td>0.004</td>
<td>0.493**</td>
<td>0.126</td>
<td>0.176</td>
<td>0.109</td>
<td>-0.050</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>0.003</td>
<td>-0.107</td>
<td>0.134</td>
<td>-0.202*</td>
<td>0.118</td>
<td>-0.014</td>
<td>0.064</td>
<td>0.014</td>
<td>-0.191</td>
<td>0.407**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety severity</td>
<td>0.017</td>
<td>0.082</td>
<td>-0.157</td>
<td>-0.084</td>
<td>-0.184</td>
<td>-0.249*</td>
<td>-0.210</td>
<td>-0.029</td>
<td>-0.104</td>
<td>-0.211*</td>
<td>-0.112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grief severity</td>
<td>-0.068</td>
<td>0.065</td>
<td>-0.147</td>
<td>-0.100</td>
<td>-0.017</td>
<td>-0.193</td>
<td>0.005</td>
<td>-0.064</td>
<td>-0.130</td>
<td>0.039</td>
<td>0.107</td>
<td>0.403**</td>
<td>1</td>
</tr>
<tr>
<td>Depression severity</td>
<td>0.083</td>
<td>0.072</td>
<td>-0.013</td>
<td>-0.133</td>
<td>-0.038</td>
<td>-0.189</td>
<td>-0.230*</td>
<td>-0.043</td>
<td>-0.187</td>
<td>-0.090</td>
<td>0.016</td>
<td>0.616**</td>
<td>0.537**</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
There were some differences found in independent samples $t$-tests and Chi-Square tests by across control variables between those who did and did not seek different kinds of support (results not shown). Those who reported going to a family doctor at 18 months post-loss had significantly higher positive support from children (Mean(SD)=7.04 (1.36)) compared to those who did not seek this support (Mean(SD)= 6.30 (1.67) ; $t$=-2.26 , p=.026). Those who reported seeking self-help or support group support at 18 months post-loss also had significantly higher grief severity (Mean (SD)= 53.89(10.20)) compared to those who did not go to a group (Mean(SD)=25.07 (10.91) ; $t$=2.047 , p=.044). Those who reported seeking support from religious leaders were significantly more likely to have high religious participation (92.3%) compared to those who did not (59.6%) ($\chi^2$=4.964 , p=.026). Moreover, Non-Whites were significantly more likely to seek support from religious leaders than Whites (57.1% vs. 21.8%), $\chi^2$= 7.49, p=.006). There was also a difference in use of support groups across education levels, with only 2.5% of those with less than a high school education using support groups, 26.9% of those who graduated high school, 31.3% of those with some college, and 9.1% of those with college or greater using groups ($\chi^2$= 11.38, p=.010). There were no significant differences in any other control or confounding variables. I controlled for all variables that showed significant differences at 6 months in regression analyses.

Ordinary least square regression models included all the principle independent, control, and confounding variables (Table 6). Regressions indicated that reporting using a support group at Wave 1 reduced grief symptoms at Wave 2, but did not significantly alter depression or anxiety symptoms. Reporting support-seeking from a religious leader at Wave 1 was associated with lower depression at Wave 2, but not lower grief or anxiety. Reporting seeking support from a family doctor at Wave 1 did not impact anxiety, depression, or grief at Wave 2. Omitting
additional control variables and entering each bereavement type separately in models did not alter results, though Betas, Standard Errors, and p-values shifted slightly (results not shown).

Only a few other variables were significant predictors of outcomes in the complete models. Men had significantly lower anxiety and depression at 18 months than women. Depression severity at 6 months was highly associated with depression at 18 months, and grief at 6 months was almost significantly associated with depression (p=.056) at 18 months, though 6 month anxiety was not. There were not differences in outcomes between Whites and Non-Whites or by education level. Grief at 6 months was highly associated with higher grief at 18 months, though 6-month anxiety and depression were not. Smaller network size was also associated with significantly higher grief at 18 months, and there was a non-significant trend of higher attachment anxiety being associated with higher grief at 18 months (p=.067). Higher attachment anxiety and smaller network size were also associated with higher depression severity at 18 months, as was higher positive support from friends or relatives and lower instrumental support. Higher income, higher religious beliefs, and lower positive support from friends or relatives were associated with higher anxiety at 18 months. All three statistical models accounted for a sizable majority of the proportion of variability in the data, with R-squared values ranging from to .46 to .51.
Table 6. Ordinary Least Squares Regression Predicting the Effect of Bereavement Service Use Reported at 6 Month Follow-Up on Depressive, Anxiety, and Grief Symptoms at 18 Month-Follow-Up

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anxiety at Wave 2 β (95% CI)</th>
<th>Depression at Wave 2 β (95% CI)</th>
<th>Grief at Wave 2 β (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bereavement Service Use:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Went to Family Doctor up to Wave 1</td>
<td>-2.563 [-8.478, 3.352]</td>
<td>3.070 [0.365, 5.779]</td>
<td>3.472 [-1.868, 8.811]</td>
</tr>
<tr>
<td><strong>Confounding Variables:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety severity at Wave 1</td>
<td>0.175 [-0.048, 0.399]</td>
<td>-0.024 [-0.137, 0.089]</td>
<td>-1.50+ [-0.327, 0.028]</td>
</tr>
<tr>
<td>Grief severity at Wave 1</td>
<td>-0.60+ [-0.013, 0.527]</td>
<td>-0.68+ [-0.026, 0.362]</td>
<td>0.603** [0.340, 0.865]</td>
</tr>
<tr>
<td>Depression severity at Wave 1</td>
<td>-0.18 [-0.073, 0.436]</td>
<td>-0.285* [-0.061, 0.509]</td>
<td>-0.041 [-0.283, 0.200]</td>
</tr>
<tr>
<td><strong>Control Variables:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>-0.550 [-1.636, 2.736]</td>
<td>-1.441 [-3.423, 5.540]</td>
<td>-0.018 [-2.387, 2.351]</td>
</tr>
<tr>
<td>Income (natural log of the midpoint)</td>
<td>4.489* [0.702, 8.276]</td>
<td>3.23 [-2.317, 9.62]</td>
<td>-1.177 [-4.900, 2.545]</td>
</tr>
<tr>
<td>Positive emotional support from friends/relatives at Wave 1</td>
<td>0.0163</td>
<td>3.800* [1.326, 6.267]</td>
<td>-5.076, 7.41</td>
</tr>
<tr>
<td>Positive emotional support from children at Wave 1</td>
<td>-2.156*</td>
<td>-0.861</td>
<td>-0.826</td>
</tr>
<tr>
<td>Attachment anxiety at Baseline</td>
<td>-1.049 [-3.206, 1.107]</td>
<td>2.768** [0.946, 4.590]</td>
<td>1.364 [-0.661, 3.389]</td>
</tr>
<tr>
<td>Instrumental support at Wave 1</td>
<td>0.449 [-3.651, 1.262]</td>
<td>-1.067* [-1.884, -2.249]</td>
<td>-0.941+ [-2.022, 1.141]</td>
</tr>
<tr>
<td>Close network size at Wave 1</td>
<td>-0.614 [-2.069, 8.41]</td>
<td>-1.809* [-3.248, -3.370]</td>
<td>-1.697* [-3.211, -1.184]</td>
</tr>
</tbody>
</table>

R-squared values: -0.468 0.532 0.523

+ p ≤ .010,  * p ≤ .05,  ** p ≤ .01,
Discussion

This study offers several novel findings. First, I used prospective data to examine the impact of services used between a loss and six months post-loss on outcomes at 18 months. Therefore, assessments of service utilization allowed for some information on causal ordering. I examined the impact of several distinct service use types generally available in community settings. In addition, I examined outcomes of bereavement support in a population-based sample, rather than in the context of an RCT. The generalizability of findings may therefore be somewhat greater here than in previous research. Interestingly, the most widely used service (family doctors) was ineffective for grief, depression, and anxiety symptoms, while the only service that was effective for grief symptoms (support groups) was the least used.

Support-Seeking Among Older Adults with Complicated Grief and Depression

In this sample of older widowed adults with CG and/or depression, family doctors were by far the most widely used form of support (78% of support-seekers). Similar to previous findings with bereaved older adults (Bergman & Haley, 2009; Caserta & Lund, 1992), religious leaders were also a common source of support, with self-help or support groups utilized least frequently (24% of support-seekers). These findings are in keeping with the NEM’s (Pescosolido, 1992; Pescosolido & Boyer, 1999; Pescosolido, et al., 1998) premise that both formal and informal sources are common ways of seeking support for emotional distress. In addition, a sizable portion of the sample (40% of those who sought support) utilized multiple sources of support. The NEM also emphasizes the importance of examining combinations of multiple services. Strikingly, only about 60% of this highly distressed sample used any support for grief at all six months after their loss; there is clearly a gap between the need for services and their use. Methods to engage older adults with CG and/or depression in care are needed.
Outcomes of Service Use

Consistent with the study hypotheses, family doctor support at six months post-loss did not reduce grief, depression, or anxiety severity at 18 month follow-up. Contrary to the study hypotheses, seeking support from religious leaders appeared to decrease the severity of depression, while support groups reduced grief severity. However, in keeping with hypotheses, none of the service types impacted anxiety. Research shows that anxiety in older adults responds best to specialized treatment, including cognitive-behavioral therapy and pharmacotherapy, which is usually delivered by mental health professionals (Wetherell, 1998). Such expert care was likely beyond the expertise of family doctors, religious leaders, or support groups.

Past research on the efficacy of support groups is mixed. In a controlled study by Vachon et al. (1980), groups were led by widows trained to help the newly bereaved. The intervention did reduce emotional distress, but not until 24 months after the loss. Another study by Marmar et al. (1988) tested mutual support groups led by widows in trained with techniques described by Silverman (1986). The groups were as effective as brief psychotherapy for treating complicated bereavement. These widows were bereaved for 54 weeks on average; both symptom reduction and improvement of social reactions occurred. However, there was a higher dropout rate from the mutual support groups when compared to one-on-one psychotherapy. This finding does raise questions about the appropriateness of group interventions for all individuals in the early stages of bereavement (Jacobs, 1993). A study by Parkes (1980) of volunteer services provided via a hospice also used mutual support techniques. Trained widowed volunteers, supervised and supported by a psychiatrist, provided crisis intervention and friendship to bereaved family members considered to be at risk for poor adjustment. The outreach did not have an effect until one year after implementation, after which a treatment group demonstrated lower scores on
autonomic symptomology and the use of drugs, alcohol, and tobacco compared to a control
group with no intervention. Similarly effective results were found in support group interventions
for selected subpopulations, such as those whose relatives had died from cancer (Souter &
Moore, 1989). However, other studies did not show clear effects from support groups with
widows (e.g. Barrett, 1978; Polak et al., 1975; Lieberman & Borman, 1979; Walls & Meyers,
1985; Lieberman & Videka-Sherman, 1986; Lund, Caserta, Utz, & de Vries, 2010; van der
Houwen, et al., 2010).

While it remains unclear why some of these studies found effective results while others
did not, support groups are thought to operate by providing emotional and social support, and
may help fill gaps in the bereaved person’s existing social network (Vachon & Stylianos, 1988).
In the current study, self-help and support groups were the only service use type that is
specifically focused on grief, while family doctors and religious leaders would primarily be seen
for medical care and general spiritual support, respectively. CG and depression both require
specialized treatment, with cognitive behavioral therapy showing the strongest evidence of
efficacy for CG, and psychotherapy and antidepressant medications showing positive effects for
depression (Schut & Stroebe, 2005; Prigerson, Frank, et al., 1995; Reynolds, et al., 1999; Zisook
& Shuchter, 2001; Shear, et al., 2005; Wittouck, et al., 2011).

Though data on the content of support groups is unavailable in this study, it is possible
that the emphasis of support groups on grief made them effective for this sample with CG and/or
depression. The fact that support groups did not also reduce depression is unsurprising, as
support groups are unlikely to provide treatment for depression. Moreover, CG and depression
have distinct symptoms (Horowitz, et al., 1997; Prigerson, et al., 1996) and each require unique
treatments (Reynolds, et al., 1999; Shear, et al., 2005).
The finding that religious leaders reduced depression severity, while support groups and family doctors did not, is novel. To my knowledge, no published research has examined the impact of religious leader support on depression post-bereavement. Theory and research offer some possible explanation for this finding. Neimeyer has proposed that that successful coping after a death requires finding a sense of meaning in the loss and has argued for developing clinical interventions to enhance a sense of meaning (Neimeyer, 2000). Religious beliefs inherently create systems of meaning (Park, 2005). Consultation with religious leaders might therefore enhance a sense of meaning and reduce symptoms. Another possibility is that religious leader support provides some needed emotional support. Treatments using components of interpersonal therapy (IPT) has been found effective in treating depression in older adults (Sloane, Staples, & Schneider, 1985; Mossey, Knott, Higgins, & Talerico, 1996) and IPT has been found effective in treating depression after bereavement (though only in combination with antidepressant medication) (Reynolds, et al., 1999). Part of the focus of IPT is on enhancing social support (Klerman, et al., 1984). IPT and religious leader support might be affecting depression symptoms through similar mechanisms. Also, religious help may be implicitly tailored to one’s needs. Presumably bereaved individuals seek help from someone they know, who shares a religious denomination and perhaps views about life, death, the afterlife, etc. Therefore, religious support could be particularly appropriate help for some. The influence of religious leaders on depression symptoms requires further study.

The finding that support-seeking from family doctors did not reduce grief or depression symptoms is in keeping with findings from reviews, which show that many interventions for bereavement do not have reliable evidence of efficacy (Currier, et al., 2008; Forte, et al., 2004; Jordan & Neimeyer, 2003; Schut, et al., 2001). It is unlikely that participants were receiving
evidence-based grief support from their family doctors. Indeed, studies have shown that the quality of depression care in the primary care sector is lower than in the specialty mental health sector (Crystal, Sambamoorthi, Walkup, & Akincigil, 2003; Kessler, Barker, et al., 2003). Family doctors do have the capacity to prescribe antidepressant medications, which are effective for treating depression (Currier, et al., 2008; Forte, et al., 2004; Jordan & Neimeyer, 2003; Schut, et al., 2001). During the time period when CLOC participants were seeking help, though, medication use was lower than it is now (Olfson & Marcus, 2009). Even in the present-day, studies have also shown that primary care physicians often do not detect depression in older adults. For example, a survey of primary care providers found that just 33% used any sort of standard screener for depression (Glasser & Gravdal, 1997). Unfortunately, the CLOC study did not gather data on family doctors’ detection of depression or on how many family doctors prescribed medication. And even in cases where doctors did prescribe antidepressants, participants’ adherence may have been low. In general, older adults are less likely than younger adults to complete 30- or 60-day courses of antidepressants at a therapeutic dose (Unützer, et al., 1999).

Associations Between Control Variables and Service Use

Findings of higher depression severity in women than men is in keeping with previous findings (Kessler, Berglund, et al., 2003). Previous literature has also identified higher anxiety among older women than older men (Fuentes & Cox, 2000), a trend which is also present after the death of a spouse (Chen, et al., 1999). Our findings that men showed similar grief severity scores to women is in keeping with previous findings, which show no differences in grief symptoms between widows and widowers (Boelen & Van Den Bout, 2002).
It is more challenging to interpret the result that higher religious beliefs were associated with more anxiety. As noted above, Neimeyer and colleagues have proposed that that successful resolution of grief requires finding a sense of meaning (Neimeyer, 2000). Those who have difficulty adjusting to bereavement tend to have difficulty finding meaning in the loss, however. They might attempt to fall back on their religious beliefs to find this meaning, and feel increased anxiety if they are unable to do so. The finding that higher income was associated with higher anxiety is also difficult to interpret; perhaps those with higher incomes have better resources and higher expectations about improvement, and experience more anxiety when symptoms do not resolve. Both findings require replication. Moreover, the finding non-Whites had similar depression levels to Whites is inconsistent with previous findings, which found higher depression among African-Americans than Whites (Skarupski, et al., 2005). Limiting our sample only to those with CG and/or bereavement related depression may have skewed results, however.

The finding that lower positive emotional support was associated with higher anxiety has also been identified in previous literature (Zimet, Dahlem, Zimet, & Farley, 1988), and lower perceived social support has been associated with higher depression (Burke, Neimeyer, & McDevitt-Murphy, 2010; George, Blazer, Hughes, & Fowler, 1989). The finding that smaller close network size was associated with higher depression and grief severity is also in keeping with previous findings (Burke, et al., 2010). However, it is difficult to interpret the result that higher emotional positive support from friends was associated with higher depression severity at 18 months, especially when the opposite was true for anxiety severity. To my knowledge, this trend has not been identified in any other literature. It is possible that receiving positive emotional support but not finding it effective in reducing grief may lead to a feeling of helplessness that
enhances depression. Again, though, the small, highly distressed sample in this study may have skewed results.

Qualitative (dissertation Paper 1) findings may also provide some explanation for results, even though the sample was quite different. It is possible that identified associations between smaller social networks and lower instrumental support, and grief and depression symptoms, are bidirectional. Many family and friends of qualitative study participants became more distant as symptoms persisted, feeling unable to deal with their symptoms. The increasing social isolation then made symptoms worse, as an important coping resource was taken away. One participant described this as “loss on loss.” Also, though support groups were found effective for grief symptoms, many qualitative study participants did not want to use groups. Reported concerns included logistic difficulties traveling to the groups, dissatisfaction with group organization, and a negative sense of comparison to other members. Addressing these sorts of barriers might increase the use of support groups among bereaved individuals with CG and/or depression.

**Limitations**

The study has several limitations. Small sample size is perhaps the most significant. With only 97 widowed older adults in the analyses, it is possible that there was not sufficient power to detect changes in symptoms over time. Our sample was simply not large enough to have confidence in our findings. Therefore, results should not be considered stable. Exploring the impact of using individual mental health counseling on grief, depression, and anxiety symptoms would have been particularly relevant to the study research question, but because only four participants sought care from a mental health professional at Wave 1, the study had insufficient power to study outcomes among those who sought this care. Moreover, though some missing cases had been previously imputed by the CLOC researchers, a number of variables had missing
cases. It is possible that missing cases were not missing at random, and may therefore have biased results.

In addition, selection bias, rather than support-seeking itself, may account for outcomes. That is, those with more severe grief and depression may seek care from family doctors between the death and Wave 1, with this effect not entirely controlled for by Wave 1 grief or depression severity. Similarly, those with less severe grief and/or depression may seek care from support groups and religious professionals between the death and Wave 1. Limiting the sample to those who only have CG or depression and controlling for Wave 1 distress reduces the chances of selection bias, but it still may have occurred. In addition, information about the use of bereavement services was available only via participant self-report and collected retrospectively. Though this is a common approach in survey data, these reported rates might be inaccurate. Participants may have under or over-reported use. They may also have exhibited other behaviors that affected outcomes and which were correlated with service use, but were not included in the analyses, such as reading self-help books about bereavement, or talking with friends with similar losses.

It is possible that other additional, unmeasured, confounders may account for differences, such as a sense of self-efficacy. While we controlled for as many variables as possible, and in similar ways as in previous publications on outcomes in the CLOC study (Carr, et al., 2000; Carr, et al., 2001), some key variables may be not included in the final analyses. Moreover, it is possible that interactions between social network variables and symptoms may be influencing outcomes, but the study did not enough statistical power to examine this question. In general, identified changes in grief and depression outcomes may not be due solely to service use.
Another limitation is that the CLOC data provides no details on bereavement support, such as their duration, frequency, or exact timing of use. A single visit to a support group would have been characterized in the same way as multiple visits, even though some dose effect is likely. Nor is data available on whether those who used multiple services did so concurrently or consecutively. Similarly, services delivered immediately after the death may be less effective than those delivered at 6 months post-loss (or vice versa), but we only know that services were provided at some point between the death and the 6-month post-loss interview. In general, it is difficult to establish temporal sequencing and thus to infer causality. As analyses lack both a control group and random or matched assignment to treatment conditions, causal inference is particularly difficult. Though controlling for Wave 2 service use (results not shown) did not alter results, more detail on bereavement service use would strengthen analyses. Similarly, the 12 month gap between the Wave 1 and Wave 2 limits the ability to examine outcomes. It is possible that some services, like family doctors, received near the Wave 1 interview were effective when they were first administered, but that the effect disappeared by the time of the Wave 2 interview. It is also possible that the impact of services varies as time since the death increases. These analyses only followed participants to 18 months after a death. However, many of those with CG or depression might wait longer before seeking treatment, perhaps years. It is possible that support groups would not be as effective for grief, and religious leaders would not be as effective for depression, if services were delivered many years later.

Data on participants’ adherence to treatment and on the content of bereavement support provided would also be useful. Past literature indicates, for example, that cognitive behavioral techniques reduce CG symptoms (Wittouck, et al., 2011) and that IPT, cognitive behavioral therapy, and antidepressants may reduce depression after a bereavement (Zisook & Shuchter,
2001), but we do not know if participants received any of these treatments. Many might have discussed grief or depression with their family doctor, for example, but not gotten any treatment or follow-up about their symptoms, and may not have complied with recommended care. Future research should collect more detail on content of bereavement service use in older adults with CG and/or bereavement related depression.

Also, though a CG-positive group was identified in the CLOC sample, this measure was created by the author and was not an intention of the initial study design. Indeed, when the CLOC study was conducted, the concept of CG had not yet been developed. Even today, consensus criteria for CG have not yet been established by the DSM. There is no clinical “gold standard” that can be used to validate the identification of this group, as there was no clinical interview to confirm the presence of CG. Finally, the sample includes only those who lost a spouse, not other losses, and was collected in one area of the United States starting in the 1980s. Therefore, results may not generalize to other types of loss or to other regions of the country. Antidepressants are much more widely prescribed to older adults now than they were in the 1980s, for example (Zisook & Shuchter, 2001) and pharmacological treatments for depression has been widely promoted greatly via direct-to-consumer advertising (Rosenthal, Berndt, Donohue, Frank, & Epstein, 2002). Support from family doctors for depression (assuming antidepressants are prescribed) might now show evidence of efficacy as a result.

**Implications**

Despite these limitations, these results have important implications. The study provides preliminary evidence that support provided in the community, particularly from religious leaders and support groups, does appear to reduce depression and grief among older widowed adults with CG and/or depression. More information should be gathered on the techniques used by religious
leaders and support groups. RCTs could also examine outcomes for support groups and religious leader support. More data on current training of religious leaders and support group leaders could also be gathered. A recent study that interviewed clergy about their experiences with bereavement counseling (Williams, Cobb, Shiels, & Taylor, 2006) found that 66.3% of clergy desired additional training in care of the bereaved, while only 26% believed that their training was sufficiently broad. While many widowed older adults may seek support from religious leaders, and this support seems to be effective for depression, many religious leaders may benefit from further training. Bereavement support provision could be part of the core curricula within pastoral training programs.

Moreover, the study provides preliminary evidence that support from family doctors does not appear to be effective. However, the majority of depression care received by older patients in the U.S. is provided in the primary care sector (Harman, Crystal, Walkup, & Olfson, 2003) and older adults are generally more likely to seek support with mental health care from their primary care physician than from a mental health specialist (Bogner, de Vries, Maulik, & Unützer, 2009; Unützer, et al., 2000). Primary care providers should receive training on how to detect CG and depression, how to provide effective antidepressant pharmacotherapy for depression, and how and when to refer patients appropriately to individual counseling. Recently, researchers have begun integrating specialty care for depression into primary care clinics (Unützer, et al., 2002); these efforts could be expanded to reach older adults with CG as well, and could focus on screening and treating CG and depression that follows bereavement (rather than just on depression of all etiologies). Indeed, clinicians in any setting that provides services to bereaved older adults, including hospice, inpatient medical units, nursing homes, home health care, assisted living facilities, and community centers, could be trained to assess, treat, or
appropriately refer bereaved older adults. Referrals to self-help or support groups appear to be especially useful, though this finding should be replicated.

While some methods of support-seeking reduced depression, anxiety and grief, a sizable minority (40.2%) of this sample with CG and/or depression sought no support for their grief. Methods to engage older adults with depression and CG in effective care must be developed. Further outreach efforts are needed in this population. The finding that instrumental support, close network size, and positive emotional support from children affects outcomes implies that increasing understanding and support from social network members might help with symptom management. In general, greater public and professional awareness of depression and CG is needed. Public relations campaigns and training on recognizing and treating these conditions in educational programs for social workers, psychologists, nurses, physicians, clergy especially important. Training of clinicians in evidence-based treatment for CG and depression, including cognitive-behavioral therapies, is also needed.

Future research could also attempt to examine service use in a sample of older adults with CG that is more reliably recognized than in the current analyses. Several reliable measures of CG have been developed, including the Inventory of Complicated Grief-Revised (Prigerson, Maciejewski, et al., 1995). Future studies should examine the outcomes of mental health care specifically for bereaved older adults with CG or depression in community settings, and collect data on exactly what type of care is being provided. For example, are clinicians in the community providing evidence-based treatments, like Shear et al.’s CGT, or general, supportive interventions that lack evidence of efficacy? Moreover, it is possible that the effect of treatment operates in a sort of U-shaped curve, where those who have very little grief or depression and those who have extremely high grief and depression all do not benefit from treatment, while
those with moderate symptoms do. More research and clinical attention should be paid to this issue. Data on the number of sessions received and treatment drop-out rates among older adults with CG and/or depression is also important.

These results also require replication with larger samples and in other populations, both outside of the Detroit area and among older adults with other types of losses. Other populations could be respond very differently to services. Particular attention should be paid to outcomes in racial and ethnic minority groups and men, as the CLOC sample was primarily White and female. Should other studies find evidence of efficacy of self-help or support groups and religious leaders, greater attention could be paid to understanding the active ingredients of such care. Ultimately, these research efforts could greatly reduce the emotional distress experienced by bereaved older adults with CG and depression.

**Conclusion**

This study is the first I know of to examine the efficacy of bereavement support available in the community among older adults with CG and/or depression. Though results should be interpreted with caution, support groups appear to decrease grief symptoms, while religious leaders appear to decrease depression symptoms. Replication of these findings in larger samples and in the context of RCTs is needed. Should similar results be identified, attention should be paid to understanding the effective components of religious leader and support group care. Providers in community settings (especially in primary care, where many older adults seek mental health care) could increase referrals to effective services or could receive training to begin delivering effective care themselves.
References


Dissertation Conclusion

In a series of three papers, this dissertation has aimed to better understand bereavement service utilization and its outcomes among bereaved older adults, with a focus on complicated grief (CG) and depression. Pescosolido and colleague’s Network Episode Model (NEM) (Pescosolido, 1992; Pescosolido & Boyer, 1999; Pescosolido, Gardner, & Lubell, 1998) helped inform the dissertation questions and findings. Paper 1 explored bereavement service utilization through qualitative interviews with 8 older adults who had sought CG-specific treatment for their grief via a research study. Paper 2 identified the prevalence of CG in a population-based sample of widowed older adults (the Changing Lives of Older Couples (CLOC) Study), examined complexities of service utilization in the CLOC sample over time, and considered the impact of the presence of CG, the presence of depression, social network variables, and other demographic and clinical variables on service use. Paper 3 determined whether use of different bereavement services improved anxiety, depression, and grief outcomes among a subsample of the CLOC sample with CG and/or depression.

Paper 1 (qualitative) findings provide some possible explanations for Paper 2 and Paper 3 results. Paper 2 found that a sizable minority of bereaved individuals (15% at Wave 1, 11% at Wave 2, 13% at Wave 3) used combinations of several types of bereavement support-seeking, rather than utilizing one service alone. Similarly, most participants in Paper 1 reported using multiple services before entering a CG-specific treatment study, including grief counselors, grief support groups, psychologists and psychiatrists. Concurrent services were utilized primarily because care sought from these different sources was ineffective. Most providers knew very little about grief, and would tell participant’s things like “with some time, you will feel better.” When grief symptoms were not alleviated, participants’ lost trust in their providers. Indeed, Paper 3
also found that widely available community supports (family doctors and religious leaders) were not effective at reducing grief symptoms. Qualitative study participants continued to search for services until they identified those that seemed effective (in this case, a CG treatment study). The NEM also posits that people will continue to seek help with mental health problems until they use useful care (Pescosolido, Wright, Alegria, & Vera, 1998).

Also consistent with the NEM, Paper 2 and Paper 3 demonstrate the influence of social network variables on both bereavement support seeking and on grief, anxiety, and depression outcomes. Paper 1 again provides insights into these finding. Specifically, Paper 2 found that instrumental support, emotional support provided by children and frequency of contact with network members was associated with use of family doctor, support group, and religious leaders. If experiences of Paper 1 participants are all indicative, social network members may have influenced service use in a few specific ways. Those close to participants may have encouraged them to seek help because they were concerned about them. Or they may have done so because they themselves had found particular kinds treatment helpful, or because the network member was being negatively affected by symptoms, and wanted to decrease their own distress. Alternately, network members may have discouraged participants from getting certain types of help because they had poor experiences with or negative experiences with care.

The Paper 3 findings that smaller social networks of close friends and lower instrumental support at 6 months post-loss was associated with higher depression severity at 18 months post-loss, and that smaller networks at 6 months were associated with higher grief severity at 18 months, might also be partially explained by qualitative study results. It is possible that having fewer individuals they are close to and lower instrumental support could heighten grief symptoms and depression beyond their 6 month levels. There may be changes in social
relationships that enhance pre-existing feelings of isolation; feeling distant from others is a key symptom of CG (American Psychiatric Association, 2011; Shear et al., 2011) and depression and social isolation are significantly associated in older adults (Heikkinen & Kauppinen, 2004). However, qualitative study participants reported how, as time from the death increased, family and friends became more and more distant. They “got tired of” participants’ distress or “didn’t want to deal with it.” This experience contributed to a sense of being “unable to break free” from grief, and led participants to further isolate themselves. This experience often seemed to make grief worse. For example, one Paper 1 participant described loss of her friendships after her bereavement as “loss on loss.”

Though there were differences across papers in samples used and in primary research questions, several other commonalities arose. Use of self-help or support groups was fairly low both in the widowed CLOC sample (Paper 2) and in the subset with CG and/or depression (Paper 3), though Paper 2 found that support group use was higher among those with CG or depression than those without. However, though support groups are not used often, Paper 3 found that groups were effective at reducing grief symptoms among older adults with CG and/or depression; even more people with CG and depression should be using self-help or support groups than did so in the CLOC sample. In the qualitative study (Paper 1), participants talked about the importance of not feeling alone in their grief experience, and recognized that their symptoms were different from “normal” grief. Much of the treatment that qualitative study participants received did not focus specifically on grief, though participants were sure that was their most important emotional problem. Of the three support types studied in Paper 3 (self-help or support groups, family doctors, and religious leaders), support groups were the only type that focused specifically on grief. The acknowledgement and understanding of grief offered might be the
active ingredient in support groups’ effectiveness. Interestingly, in Paper 1, participants were also dissatisfied with the quality of support provided by groups. Lack of structure, lack of skill of group leaders, and lack of a sense of a cohesive group in grief support groups were all cited as issues. Several participants said they simply generally dislike groups. Altering the format or content to be more focused on those with CG or depression might reduce some of the barriers to use identified by qualitative study participants and increase the relatively low rates of utilization found in Papers 2 and 3.

Yet though some methods of support-seeking did reduce depression, anxiety and grief, Paper 3 found that a sizable minority (40.2%) of this sample with CG and/or depression did not seek any support for their grief. There is clearly a gap between the need for services and their use. Similarly, those in the qualitative study often delayed care seeking until the distress and impairment associated with symptoms could no longer be ignored. While Paper 1 did not thoroughly explore barriers to service use, reported reasons for delaying care included not recognizing how bad symptoms were, not liking the mode of available support (like groups), and feeling that they should be able to manage symptoms on their own. Future research should attempt to address these barriers.

Paper 2 also found that the presence of CG and low positive emotional support increased the likelihood of seeking care for bereavement, especially from support groups. Similarly, in the qualitative study, both social support and the severity of symptoms were identified by participants as important catalysts for support-seeking. Participants described their suffering from CG in dramatic terms, and CG interfered substantially in daily functioning and sometimes in health. For many participants, there was a failure of existing social support- a sense of
rejection, withdrawal, or judgment from friends and family, that made seeking other sources of support necessary to fill the gap left.

Each paper also makes unique contributions. Paper 1 demonstrates the applicability of Thoits’ self-labeling theory (Thoits, 1985) in treatment seeking for CG. However, because the theory focuses primarily on internal processes of symptom recognition, it could not be adequately explored in the quantitative papers. Paper 2 found that there were variations in types of support sought by gender, education, separation anxiety, and other variables. The small sample in the qualitative study does not allow for exploration of these differences, however. Paper 2 also demonstrated that there were significant associations between the use of different service types. Controlling for the use of each service type was important. Paper 3 did control for effects of all service types, but outcomes did not differ when service types were entered in regression models alone. Moreover, Paper 3 is the only paper which focuses specifically on the outcomes of support received, though Paper 1 participants’ reported dissatisfaction with care received prior to CG treatment study enrollment certainly implies that this care was not effective. Paper 3 found that religious leaders reduced grief symptoms, but no Paper 1 participants sought support from this type of provider.

In sum, the findings from this dissertation suggest that support seeking for older adults with CG and/or depression is a complex process, which often involves support-seeking from multiple sources. Papers 1 and 2 provide useful information on what leads older adults to seek help for bereavement, while Paper 3 reports on the benefits of that help. All papers demonstrate that the social environment plays a major role in care seeking. In general, the three papers indicate that greater application of the NEM and similar models, which move away from an
individualistic to a process-oriented focus, is needed in bereavement services research

**Dissertation Implications for Policy and Practice**

The practice and policy implications of dissertation findings should take into account several study limitations discussed in each paper, including possible recall bias, selection bias, and small sample size. Added limitations of the CLOC study analyses in Papers 2 and 3 include limited generalizability due to non-response rate, geographic location, and the collection of data starting in the late 1980s. The lack of a clinical “gold standard” to identify CG, and the lack of detail on the timing, duration, frequency of, and adherence to, bereavement services are also significant CLOC study limitations.

Notwithstanding these limitations, the findings from this dissertation may help inform policy and practice in several ways. First, the papers provide greater understanding of bereaved older adults’ use of diverse services. The finding that very few of those with CG and depression that very few sought specialty mental health services alone (identified in both Paper 1 and Paper 2), indicates the need to intervene outside of the mental health system. Older adults with CG and depression do not always enter specialized care for grief (be it grief support groups or specialized CG treatment offered by the CGTOA study) directly. Rather, these individuals appear to seek several services before, or simultaneous with, specialized grief care. Intervention efforts for CG and/or depression may therefore be targeted to other settings that often come into contact with bereaved older adults, especially primary care and religious organizations. Providers in these settings should be trained to recognize CG and depression, and to refer or intervene appropriately. Researchers have begun integrating specialty care for depression into primary care clinics, for example (Unützer et al., 2002); similar collaborative efforts in other settings may be useful for
reaching older adults with bereavement-related distress. Providers may be able to learn much from support group leaders, as their care does appear to be effective at reducing grief symptoms. Such efforts could also help improve early detection strategies for those in need of support. In general, greater public and professional awareness of depression and CG is needed.

Moreover, despite the dissatisfaction expressed by some qualitative study participants, support provided in the community, particularly from support groups and religious leaders, does appear to reduce depression and grief among older widowed adults with CG and/or depression. Though we do not have data on the content of this support, it does appear to be effective. More information should be gathered on the techniques used by religious leaders and self-help and support groups in community settings, and on the training of providers. Mental health professionals should receive additional training, especially for CG, preferably in evidence based-care like Shear et al.’s CGT (Shear et al., 2001; Shear, Frank, Houck, & Reynolds, 2005). Treatment should be provided both individually and in groups. Though Paper 3 found that groups were the only service effective for grief, they were also the least utilized. In Paper 1, several participants mentioned that they did not like groups, either because not liking being in groups in general, or because of a sense of comparison to other members. Matching treatment to the preferences of individuals has been found to increase engagement for mental health care across age groups (Eisenthal, Emery, Lazare, & Udin, 1979). The high use of religious leaders in Papers 2 and 3 indicates that perhaps there is already a match for some of those with depression.

In conclusion, the dissertation findings indicate the importance of disseminating evidenced based care for CG, ideally integrated into systems already being used by older adults, such as religious organizations and primary care practices.
Dissertation Implications for Future Research

A great deal of research remains to be done. First, the generalizability of these findings should be extended. These results require replication with larger samples and in other populations, both outside of the Detroit and New York City areas and among older adults with a variety of losses. Particular attention should be paid to outcomes in racial and ethnic minority groups and men, as both the CLOC sample and the qualitative study sample were primarily White and female.

Future studies could also conduct thorough tests of the NEM as it applies to bereavement service utilization. Greater attention should be paid to the possible simultaneous use of different services. Detailed longitudinal data on timing of service entry, duration of services, and on specific pathways into care could be collected. Such analyses would provide more comprehensive data on bereavement service use. Thorough data on details not available in the current analyses, including older adults’ network size and information about social network members’ attitudes, beliefs, and past experiences with bereavement service utilization would be especially helpful. Information about social network members would be most reliable if collected directly from social network members themselves, though this would present logistical challenges.

Studies could also attempt to examine service use in a sample of older adults with CG that is more reliably recognized that in the CLOC analyses. Several reliable measures of CG have been developed, including the Inventory of Complicated Grief-revised (Prigerson et al., 1995). Given the negative health and mental health sequelae of CG (Prigerson et al., 2001; Szanto, Prigerson, Houck, Ehrenpreis, & Reynolds, 1997), more detail is needed about service use in this population. In addition, studies could examine specific barriers to using care for older-
adults with CG. Qualitative interview may be especially useful for exploring perceived barriers. Past studies have identified a number of barriers to support-seeking for older adults with depression, including lack of access to trained providers (Bartels, 2003) perceptions of stigma for using mental health services (Johnson et al., 2009), prioritizing health conditions over mental health care (Mackenzie, Scott, & Mather, 2008), cost concerns (Bruce, Van Citters, & Bartels, 2005; Mackenzie, et al., 2008), and lack of perceived need for help (Andrews, Issakidis, & Carter, 2001; Klap, Unroe, & Unützer, 2003). The role of these factors in CG support-seeking should be examined as well.

Research should also examine the outcomes of mental health care specifically in community settings among older adults with CG and depression, and collect data on exactly what type of care is being provided. Should other studies find efficacy of self-help or support groups and religious leaders, greater attention could be paid to understanding the active ingredients of such care. Ultimately, better understanding of bereavement service utilization may help target and engage those in greatest need in effective care for their CG and depression.
References

Retrieved January 27, 2011,


APPENDIX 1: Qualitative Interview Topic Guide

Topics and questions covered in the two study interviews (note that specific questions and follow-up probes varied slightly based on participants’ responses):

Introduction:
I know it’s been over a year since you enrolled in the Complicated Grief Treatment Study, and I hope that things are going well for you now. As we talked about when we reviewed the consent form, I’ll be asking some questions about how you decided to seek treatment for your grief. If there’s anything you can’t remember about the time before you enrolled in the Complicated Grief Treatment Study, that’s completely okay. Do you have any questions before we start?
And how have you been lately?

**TOPIC 1: Decisions about seeking help for grief**
Okay, thank you so much for updating me. My first questions are about your experience after _______ (LOVED ONE) died.
Did anyone in your family or any of your friends try to help you cope with _______(LOVED ONE)’s loss?
   Probe: Who were they?
   Probe: How did they help you?
   Probe: How helpful were they?
Was there anything else you did that helped you to cope after ______ (LOVED ONE)’s loss?
   IF YES: Can you tell me about that?
In addition to the help you got from (family members/friends/other things), was there something more you thought you needed?
   IF YES: What was that? Can you tell me about that?
Do you remember when you first realized that you were having a hard time dealing with ______ (LOVED ONE)’s death?
   IF YES: Can you tell me about that?
Did anyone else tell you that they thought you were having a hard time/ or did you think they perceived you as having a hard time?
   Probe: Who was that?
Probe: Did you agree with them?
Was there a point at which you decided you wanted to get professional help with grief?
Probe: Tell me more about that. Did any experience or event lead to that point?
IF YES: Did you get help at that point?
   IF GOT HELP: Who did you get professional help from?
       How did you find the help?
           Probe: Did anyone else help you find the ______ (counselor, therapist, doctor, grief group, etc.)?
       How long did you see the ______ (counselor, therapist, doctor, grief group, etc.) for?
       How helpful were they to you?
       Probe: Did you feel you needed more assistance after seeing them?
       When did you stop going to the ______(counselor, therapist, doctor, grief group, etc.) ?
       What led you to stop going to the ________(counselor, therapist, doctor, grief group, etc.)?
           Probe: Was it a time limited group/ treatment that ended?
           Did you think you gotten as much as you could? Felt you’d moved on from there? Felt your experience was different from the others in treatment? Felt a lot better? Thought you’d rather cope on your own? Stopped in order to join the Complicated Grief Treatment research study?
IF DID NOT GET HELP: Did you ever feel like you wanted to get some help but something stopped you?
   IF YES: What stopped you?
       Probe: Was it feelings of worries about what others would think? Cost? Time? Transportation? Not knowing where to go/ what was available? Were other things a higher priority?
TOPIC 2: Decision to participate in the Complicated Grief Treatment in Older Adults (CGT-OA) Study

How did you first hear about the Complicated Grief Treatment in Older Adults study?
   Probe: Was it in a newspaper or radio ad?
   Probe: Did someone else tell you about the study?

What did you think about the study when you heard about it?
   Probe: Was there anything about the study that struck you or made you want to learn more?
   Probe: To what extent / how did you think that the study did or didn’t fit you?.
   Probe: Did anyone else encourage you to enroll in the study?
      IF YES: Who was that?

Was this the first time you’d heard of Complicated Grief?
   IF NO: When was the first time you’d heard of Complicated Grief?
      Probe: Did anyone else tell you about Complicated Grief?
         IF YES: Who was this?

How long was it between when you first heard about the Complicated Grief Treatment in Older Adults study and when you called to find out more about it?
   Probe: Why did you decide to call at the time that you did?

Did you have any particular expectations or hopes when you called?

How much did you think the study treatment might help?

Did you have any reservations or trepidations about calling?
   Probe: Was there anything that put you off or made you think you might not really want to do this?

Thank you. Is there anything else you’d like to say about your experience of seeking treatment for your grief?
APPENDIX 2: Complicated Grief Treatment in Older Adults (CGTOA)
Study Enrollment Criteria

In order to enroll in the larger CGTOA study, participants first complete a short (approximately 15 minute) telephone screen. Then, if they appear to have symptoms of CG and are otherwise eligible, they complete a longer, in-person baseline interview, which included both a grief assessment (the Inventory of Complicated Grief (Prigerson, Maciejewski, et al., 1995)and a depression assessment (using the Structured Clinical Interview for DSM-IV) (First, Spitzer, Gibbon, & Williams, 2002).

Eligibility criteria for enrollment in the CGTOA study were: (1) a death of a loved one had occurred at least 6 months previously, and (2) judged to have symptoms of complicated grief on the phone screen, (3) Aged 60 or older. Exclusion criteria were: (1) History of psychotic disorder or bipolar I disorder, and (2) Pending lawsuit or disability claim related to the death.
## APPENDIX 3: Criteria for Creation of CG-Positive Groups

<table>
<thead>
<tr>
<th>PROPOSED CG CRITERIA</th>
<th>CORRESPONDING CLOC ITEM(S) <em>(note: All refer to the past month)</em></th>
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<tbody>
<tr>
<td>B. At least one of the following symptoms of persistent intense acute grief has been present for a period longer than is expected by others in the person’s social or cultural environment</td>
<td>Have you found yourself longing to have (him/her) with you? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
</tr>
<tr>
<td>1. Persistent intense yearning or longing for the person who died</td>
<td>Have you felt empty inside, like an important part of you is missing? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>Has life seemed empty? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>Have you felt that life has lost its meaning? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
</tr>
<tr>
<td>2. Frequent intense feelings of loneliness or like life is empty or meaningless without the person who died</td>
<td>Have you felt like you wanted to die? <em>(Yes/No)</em></td>
</tr>
<tr>
<td></td>
<td>Did you attempt suicide?</td>
</tr>
<tr>
<td></td>
<td>Did you feel so low you thought about committing suicide?</td>
</tr>
<tr>
<td>3. Recurrent thoughts that it is unfair, meaningless or unbearable to have to live when a loved one has died, or a recurrent urge to die in order to find or to join the deceased</td>
<td>During the past month, have you had difficulty falling asleep because thoughts relating to him/her kept coming into your mind? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>During the past month, did you find that you couldn’t keep thoughts of your (husband/wife) out of your mind even when you wanted to? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<tr>
<td>4. Frequent preoccupying thoughts about the person who died, e.g. thoughts or images of the person intrude on usual activities or interfere with functioning</td>
<td>Since your (husband's/wife's) death, did you ever ask yourself &quot;Why me?&quot; or &quot;Why my (husband/wife)?&quot; *(1612, 4612,7612) <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>During the past month, have you felt afraid of what lies ahead for you? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>During the past month, have you felt worried about how you would manage your day-to-day affairs? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
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<td></td>
<td>In the last month, have you had any regrets about anything that happened between you and your (husband/wife) while (he/she) was still alive? <em>(Would you say no, never; yes, but rarely; yes, sometimes; or yes, often)</em></td>
</tr>
<tr>
<td>C. At least 2 of the following symptoms are present for at least a month:</td>
<td></td>
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<tr>
<td>1. Frequent troubling rumination about circumstances or consequences of the death, e.g. concerns about how or why the person died, or about not being able to manage without their loved one, thoughts of having let the deceased person down, etc.</td>
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<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
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<tbody>
<tr>
<td>During the past month, have you had any regrets about things you did or failed to do while (he/she) was alive?</td>
<td>Yes, often&lt;br&gt;During the past month, have you felt as though you couldn’t believe what was happening?</td>
</tr>
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</table>
APPENDIX 4: The Network Episode Model

### APPENDIX 5. Variable Selection and the Network Episode Model (NEM)

<table>
<thead>
<tr>
<th><strong>NEM Principle</strong> (taken from Pescosolido et al., 1998)</th>
<th><strong>Corresponding Variables</strong></th>
</tr>
</thead>
</table>
| All societies hold a vast reserve of people who can be and are consulted during an illness episode, including both lay and formal support | Consider use of support seeking for grief from:  
- Religious leaders  
- Self-help or support groups  
- Family doctors |
| The help seeking process is dynamic, with individuals combining a series of decisions over some stretch of time into "patterns" and "pathways." Considering multiple service use and their combinations is important. | Consider interactions between different types of services at 6, 18, and 48 months post-loss |
| The underlying mechanism at work in help-seeking is interaction in social networks. The availability of social networks (e.g. size, density) determines their potential to influence help-seeking. | Frequency of contact with network members  
- Close network size  
- Do not have data on the complete size of networks, their composition, density, duration, reciprocity, strength, or multiplexity |
| The content of social networks influences patterns of care. Content includes support provided, beliefs, values and experiences of network members | Positive emotional support from friends and relatives  
- Positive emotional support from children  
- Instrumental support  
- Do not have data on beliefs or values |
| Networks can either facilitate entry into care or delay the use of formal services, depending on their content. | Consider these associations in regression models |
| Help seeking is a dynamic process, involves a series of decisions. | Data on specific combinations of support used, and the decisions behind them, is not available. |