

**Cyber-Mourning: Toward a Psychological Understanding of
Grief on Social Media**

By

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**A Doctoral Project Submitted in Partial Fulfillment of the
Requirements of the Degree of Doctor of Psychology in the
Department of Psychology at Pace University**

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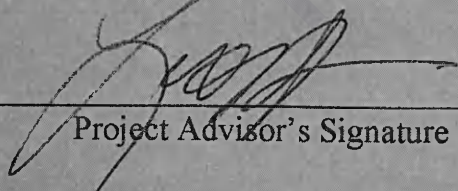
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PREVIEW

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PREVIEW

ABSTRACT

Grief researchers have shown that there are many variables that predict normal and complicated grief including attachment style, continuing bonds, and meaning-making. However, with the rise of technology and more specifically social media networking sites such as Facebook, there is a need to re-examine these predictors and outcomes through the lens of cyber-mourning.

The first aim of this study was to examine how cyber-mourning is defined and how it could be measured by ultimately creating a validated scale called the *Cyber-Mourning Scale*. The scale was developed from a questionnaire administered to a sample of 140 participants and yielded two subscales that distinguish between the behavioral aspects of cyber-mourning and the emotional aspects of cyber-mourning. Based on factor analysis, the first subscale, entitled the *Cyber-Mourning Behavior Subscale*, was found to have two factors: active (e.g., posting about the deceased person) and passive (e.g., reading posts about the deceased person) mourning behaviors. The total score for the subscale as well as the two factors were found to have good internal consistency. Also based on factor analysis, the second subscale, entitled the *Cyber-Mourning Emotions Subscale*, was found to have three factors that are consistent with the conceptual understanding of positive emotions (i.e., the comfort/happiness subscale), and also distinguish between negative emotions (i.e., sadness/discomfort subscale) and more conflicted emotions (i.e., guilt/anger subscale). The total score for the subscale as well as the three factors were found to have good internal consistency.

The second aim of the study was to explore the relationships between attachment avoidance, attachment anxiety, and complicated grief, through cyber-mourning and continuing bonds as potential mediators. The hypothesized serial mediation model was not supported;

however, there was a significant indirect association between cyber-mourning and complicated grief through continuing bonds, suggesting that posting about the deceased person, reading posts, or visiting their page may prolong the grief process, or that cyber-mourning behaviors may be a manifestation of continuing bonds.

The development of the Cyber-Mourning Scale suggested that cyber-mourning may not fit neatly with current conceptualizations of grief (offline) and should be treated as a separate and distinct construct. How an individual mourns online may be very different than how they mourn offline. Finally, the low incidence of complicated grief within the current sample may allow us to gain additional insights into normative grieving online.

Cyber-mourning: Towards a Psychological Understanding of Grief on Social Media

Chapter I: Introduction

Thanatology is the scientific study of death across disciplines, which includes exploring how thoughts, beliefs, and practices related to dying, death and mourning evolve (Gilbert, Sofka, Gilbert, & Noppe Cupit, 2012). Historically, Paleolithic cave drawings and Egyptian pyramids honored and told the story of the deceased (Doka, 2012). In modern times, with the rise of print and newspapers, obituaries have been the primary way to memorialize the dead (Carroll & Landry, 2010). However, with the boom of the world wide web and social media, Sofka (1997) argued that the centrality of technology supporting the psychological needs of bereaved individuals warranted a new term, *thanatechnology*.

Social media is defined as any technology that allows users to collaborate, create and share information, including networking, gaming, and video platforms (Elefant, 2011; O'Keeffe, Clarke-Pearson, & Media, 2011). The online social networks developed on social media platforms allow the exchange of information between people with the goal of cultivating relationships (Edosomwan, Prakasan, Kouame, Watson, & Seymour, 2011). As of 2016, Facebook remains the largest social networking site, with 79% of Internet users in the United States (68% of US population) reporting membership (Greenwood, Perrin, & Duggan, 2016). As the web became more accessible and people more connected, mourning was no longer limited to the realm of private experience, funeral/religious services, cemeteries, and bereavement counseling; the Internet offered a more public way to disseminate information, remember, and process the loss of the dead (Carroll & Landry, 2010).

Although mourning practices have changed over time, the underlying psychological processes at play have remained consistent. Psychological conceptualization of the mourning process began with Freud (1917), who suggested that the goal of mourning is to detach from the emotional ties connected to the deceased or lost object. Others (e.g., Horowitz, 1990; Lindemann, 1944) extended this view and posited that the bereaved individual must be freed from the bond with the deceased in order to readjust to the new world without that person and form new relationships. These ideas were followed by the development of grief models, which were first structured around linear stages (Bowlby & Parkes, 1970; Kübler-Ross, 1969), then later structured around tasks that suggested grief was a flexible, ongoing process (Worden, 2008).

The experience of bereavement is universal; however, there are individual differences in how people process and express grief. Attachment theory explains how the bonds developed between a young infant and his/her caregiver affect later development and relationships throughout the lifespan (Cassidy, 1999). Bowlby (1960, 1961, 1980) used attachment theory to compare grief experienced in adulthood to the anxiety experienced in infancy when an infant is separated from their caregiver. Attachment researchers have sought to classify and describe how the differences in early relationships form distinct patterns (e.g., Bartholomew & Horowitz, 1991; Fraley, Hudson, Heffernan, & Segal, 2015; Hazan & Shaver, 1994) in order to understand the personality characteristics that make some individuals better equipped to cope with loss, such as while in a state of bereavement.

Two factors informed by attachment theory that have been found to predict better adjustment among individuals following a loss are continuing bonds (Klass, Silverman, & Nickman, 1996) and meaning-making (Neimeyer, Baldwin, & Gillies, 2006). While early theorists (e.g. Freud) suggested that breaking bonds with the deceased was an important part of

the grief process, continuing bonds theorists believe that an ongoing inner relationship with the deceased is normal and adaptive (Klass, Silverman, & Nickman, 1996). In this view, the interdependence that weaves two close people in life is accepted in death as well. The relationship changes over time after the loss and is reconstructed in order to account for the loss of physical proximity. In quantitatively testing this theory, the question of whether it is best to relinquish or continue a bond with the deceased became more complicated and inconclusive, leading to the conclusion that researchers must move toward understanding how individual differences impact whether continuing or relinquishing bonds is helpful (Stroebe & Schut, 2005).

In the aftermath of stressful life situations, including grief, adaptive adjustment has been connected to meaning-making, or the ability to integrate the event into a coherent narrative or life story (Neimeyer et al., 2006). Greater meaning-making has consistently predicted better outcomes, including lower stress levels and fewer feelings of confusion and helplessness, across populations (e.g., Currier, Holland, & Neimeyer, 2006; Holland, Currier, & Neimeyer, 2006; Lichtenthal, Currier, Neimeyer, & Keesee, 2010; Uren & Wastell, 2002). Neimeyer et al. (2006) found that there was an interaction between ongoing attachment to the deceased and meaning making, where ongoing attachment predicted greater levels of distress only if the bereaved person was not able to attribute meaning to the loss. Thus, the process of integrating or understanding loss of a loved one may be more important than continued feelings of attachment in predicting adjustment after the loss.

In a recent article published by *The Atlantic*, Wilmot (2016) highlights some of these issues via her own narrative of grief following the death of her sister, Lauren. Lauren battled a rare neurological cancer and her last days were difficult. Instead of finding peace when reading well-intended messages from friends and family, she found her reactions much more complex.

Wilmot describes, “The majority of Facebook posts mourning Lauren’s death were full of “silver linings” comments that were so far removed from the horror of the reality that I found them isolating and offensive.” Based on these experiences, Wilmot describes that while social media has allowed for increased communication between people, sites like Facebook “are poorly suited for grief’s strangeness.” This strangeness of grief might reflect the juxtaposition of the universality and uniqueness of bereavement. As mourning becomes more public, there may be a risk of losing an appreciation for the fact that the same behaviors may be comforting to one person while causing distress in another. As some of Lauren’s friends and family attempted to find meaning amidst the loss by expressing their thoughts and feelings publicly, her sister struggled.

This study sought to bridge the gap between grief theory and modern practice through two aims. The first aim was to measure and operationally define cyber-mourning through the development of a new scale. This measure aimed to distinguish between the behavioral and emotional aspects of cyber-mourning immediately after the loss, at six months after, and at the current time. How are individuals observably cyber-mourning, and how are they feeling while they are cyber-mourning? Does this change over time? I sought to develop a scale that measures the behavioral and emotional components of cyber-mourning while also providing construct validity via open-ended questions.

The second aim was to test a mediational model to determine whether cyber-mourning was related to other constructs that have been found to be associated with traditional mourning and grief processes. The model suggested that the associations of attachment anxiety and avoidance with complicated grief would be mediated by cyber-mourning and continuing bonds, in sequence. What role does social media play in grief today? Can individual differences such as

attachment style predict who is more likely to express grief on social networks? Does social media allow for a new way to continue feeling a bond with the deceased and make sense of the loss? Given widespread use of technological media and the complicated emotional reactions online expressions of grief elicit, as described by Wilmot (2016), there was a need for exploring the connections between established psychological research on attachment, continuing bonds, meaning-making, and the use of social media.

Chapter II: Literature Review

Approaches to Grief

Definitions. According to the Center for the Advancement of Health (2004), “*bereavement* refers to the loss of a loved one by death and *grief* refers to the distress resulting from bereavement” (p. 498). Bereavement can include the psychological processes, experiences and expressions of grief leading up to, during, and after the death of a loved one. Grief or the emotional response to a death can vary in intensity, duration, and manifestation across individuals (Center for the Advancement of Health, 2004). Furthermore, *mourning* refers to how grief is expressed through actions and behavior, often in a specific cultural context (Stroebe, Stroebe, & Hansson, 1993). It is worthy to note that these terms are sometimes used interchangeably in some studies as well as vary in definition across studies.

Outcomes in grief research are often described in terms of *uncomplicated grief* (also referred to as normal grief) and *complicated grief* (sometimes referred to as prolonged grief or grief-non resolution). Uncomplicated grief is difficult to define because of the varied ways bereaved individuals grieve (Shuchter & Zisook, 1993). Shear and Mulhare (2008) make a distinction between *acute grief* and *integrated grief*. Acute grief lasts most of the day, every day for up to six months and is characterized by a sense of disbelief, difficulty accepting death, mixed

emotions, preoccupying thoughts of the deceased person, and a focus on bereavement activities. Integrated grief is described as an intermittent, primarily background state characterized by comprehension of death, positive emotions toward the deceased individual, accessible but less preoccupying thoughts of the deceased and a reestablished sense of engagement in life (Shear & Mulhare, 2008).

Complicated grief symptoms arise when bereaved individuals fail to move from acute grief to integrated grief (Lobb et al., 2010; Shear et al., 2007). Symptoms of complicated grief include separation distress as seen as constant searching for the deceased and intrusive thoughts about the deceased; as well as traumatic stress reactions such as feelings of shock, disbelief, anger, despair, sadness, and hopelessness experienced for a time longer than what is considered adaptive (Lobb et al., 2010). Furthermore, a number of authors proposed a distinct diagnosis for complicated grief, separate from major depressive disorder, adjustment disorder and posttraumatic stress disorder to be included starting in the Diagnostic and Statistical Manual of Mental Disorders-4 (Lichtenthal, Cruess, & Prigerson, 2004). Horowitz et al. (1997) concluded that criteria would include bereavement at 14 months that included intense intrusive thoughts related to the lost relationship and avoidance/failure to accept the loss. Currently in the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5), complicated grief is referred to as persistent complex bereavement disorder, which is outlined as persistent yearning, intense sorrow and preoccupation with the death for at least 12 months, as well as reactive distress to the death (e.g., marked difficulty accepting the death, disbelief, bitterness) and/or social identity disruption (e.g., a desire to die to be with deceased, difficulty trusting others, feeling alone or detached) that causes functional disruption (American Psychiatric Association, 2013).

Theories of grief. Historically, there have been two distinct ideologies about grief, which were influenced by modernist and romantic cultures (Stroebe, Gergen, Gergen, & Stroebe, 1992). The modernist view of grief, rooted in Freud's (1917) *Mourning and Melancholia*, is influenced by a cultural emphasis on efficiency and goal-directedness, where the goal of grief is to relinquish or break bonds with the deceased in order to return to normal functioning. The romanticist view of grief instead emphasizes deep love and connection that continues beyond death, with an understanding that the intensity of bonds after death corresponds to the significance of the relationship (Stroebe et al., 1992).

From the modernist perspective, Freud (1917) compares mourning and melancholia. While both are reactions to the loss of something, depression (melancholia) is regarded as pathological or related to a "disturbance of self-regard" (Freud, 1917, p. 244), rooted in a feeling of loss within, whereas in mourning the loss is external (Wayment & Vierthaler, 2002). In mourning, the libido, which drives behavior, attempts to maintain the psychological bond with the object, or loved one, even after they are no longer physically present. This creates a sense of longing or "hallucinatory wishful psychosis" (Freud, 1917, p. 244). Despite the resistance of the libido, reality consistently proves that the person no longer exists. Thus, the goal of grief is to detach the libido from the object or break the bond with the deceased in order to move forward and attach to a new person (Freud, 1917). Similarly, Lindemann (1944) believed that normal grief reactions ultimately allow the bereaved individual to confront reality and break the emotional bonds with the deceased. Lindemann (1944) described that the process of grief work includes "emancipation from the bondage to the deceased," readjusting to the world without the lost person, and forming new relationships through confronting, not avoiding, distressing emotions related to the loss (p. 190).

Continuing bonds. The modernist view of breaking bonds with the deceased was challenged by researchers who believed that an ongoing inner relationship with the deceased person, or *continuing bonds (CB)*, is normal and adaptive (Klass, Silverman, & Nickman, 1996). CB theorists take a stance of postmodernist consciousness, which seeks to embrace the various ways that individuals grieve and deemphasize the generalization of cultural practices (Stroebe et al., 1992). In this view, the interdependence that connects two people in life is also accepted in death. The relationship adapts and is reconstructed in order to account for the loss of physical proximity. The goal of continuing bonds is also for the bereaved individual to be “negotiating and renegotiating the meaning of loss over time” (Klass et al., 1996, p. 19).

Much of the literature and theory on continuing bonds is based on early qualitative research on grief (Klass et al., 1996), such as the finding that widows continued to have an ongoing sense of their husbands that did not diminish over time and they continued to “consult” with their husbands on important life matters (Glick, Weiss, & Parkes, 1974). This originally led researchers to assume that continuing bonds are positive for the grieving person (Klass, 2006). However, quantitative research has found that the consequences of CB are not necessarily positive when considered in relation to psychological outcomes. Further adding to the complexity, CB have been operationally defined in different ways. CB can refer to the continued relationship with the deceased, but can also manifest and be quantitatively measured as expressions (i.e., behaviors or activities) that suggest a continuing connection to the deceased, or perceptions of the deceased’s presence (Root & Exline, 2014). For example, a widow may keep her husband’s watch and consider his wishes when making decisions about her finances. She may also talk directly to him or occasionally dream of him.

Furthermore, Field and Filanosky (2009) examined several risk factors for complicated grief, which led them to distinguish between internal and external CB. The authors surveyed 502 bereaved participants and examined how they experienced CB. External CB, defined as illusions and hallucinations related to the deceased (e.g., “I thought I heard his voice this morning”) were associated with violent deaths and responsibility for death, and imply unresolved loss. Internal CBs, defined as using the deceased as an internal secure base, were associated with better adjustment and personal growth, and imply that the bereaved individual acknowledges the impossibility of regaining physical proximity to the deceased person. To better understand whether continuing bonds are adaptive (i.e., conducive to coping) or maladaptive (i.e., inhibiting coping), several moderators have been examined, including time since loss and type of loss (e.g., violent vs. non-violent death or expected vs. unexpected; Field & Filanosky, 2009) .

Attachment

Attachment theory explains how the bonds developed between a young infant and his/her caregiver relate to the bonds between adults in close relationships (Cassidy, 1999) and are therefore relevant constructs to further understanding individual differences in continuing bonds and adjustment after loss of a loved one (Klass & Silverman, 1996). Attachment behavior is any form of behavior that results in a person attaining or maintaining proximity to another individual who is perceived to provide security in the world (Bowlby, 1969). According to Bowlby (1969; 1973), an infant’s goal, as it has evolved, is to find and stay close to protection in order to best ensure survival. Equipped with attachment behaviors, or innate behaviors that increase the likelihood of attachment to the caregiver (e.g., the ability to respond to social stimuli such as smiling or crying), the infant must adapt to the environment based on the caregiver’s feedback (e.g., caregiver smiling back or hugging infant) in order to keep close proximity to her. This

instinctual need and interaction influences how the child interprets and predicts outcomes in his/her environment, and the child begins to develop internal working models, or a blueprint of how to understand and navigate the environment based on what the child learns about himself/herself and others (Bretherton, 1990). Although internal working models are constantly being revised in children, a generally stable attachment style develops and comes into play into adulthood, especially in times of stress or loss (Shaver, Collins, & Clark, 1996)

Ainsworth worked closely with Bowlby, and through direct observation sought to study how the interactions between an infant and her/his mother account for the formation of a strong bond to her, as well as explore the conditions that have adverse effects on personality development (Ainsworth & Bell, 1970). She developed a laboratory situation called the Strange Situation, which emerged from a series of direct observation studies and allowed for the study of mother-infant attachment in an experimental condition. The Strange Situation includes eight episodes that create a novel environment in which a child can explore, but that does not evoke intense fear. A stranger is gradually introduced to create unfamiliarity and each episode was designed to increasingly induce stress (Ainsworth & Bell, 1970).

Ainsworth, Bell, and Stayton (1971) observed three classifications of attachment in infants using the Strange Situation. The first, and what they called the normative group, was securely attached infants. These infants had mothers who are sensitive to their signals and tend to be accessible, cooperative, and accepting. In the Strange Situation, these infants were able to appropriately explore their environment, but maintain attachment behaviors such as keeping track of mother's whereabouts, interact with her from across the room, and occasionally seek to be picked up for short periods of time. The second observed pattern of attachment was insecure ambivalent. These infants occasionally used their mothers as a secure base for which to explore,

but other times explored independently or completely avoided their mothers. This avoidance may be used defensively as a way to cope with the stress of the Strange Situation, which reflects a response developed as a result of inconsistent primary care (i.e., sometimes needs are met, sometimes they are ignored). The third and final pattern was insecure avoidant attachment. Mothering is characterized by insensitivity or rejection. These infants did not seem to use their mothers as a secure base, as they may have learned that communication with the mother had no influence on her response. They may have explored actively and independently, but with little regard to the presence of the mother. These observations and system of classification provided empirical evidence for Bowlby's theory of attachment (Ainsworth, Bell, & Stayton, 1971).

Hazan and Shaver: Three patterns in adulthood. Before the 1980s, attachment was primarily studied in infants and children. Hazan and Shaver (1987) sought to extend the theory to close relationships in adulthood. The authors measured attachment by presenting three paragraphs describing how the three attachment types (secure, anxious/ambivalent, and avoidant) might manifest in adult relationships, and asking participants to choose which description sounded most like them. Results indicate that when asked to rate their attachment type, 56% of the adult participants identified themselves as secure, 25% as avoidant and 19% as anxious/ambivalent (Hazan and Shaver, 1987).

Summarizing their previous findings, Hazan and Shaver (1994) described the important role of close relationships in overall well-being and adjustment in adulthood. Similar to the diversity of an individual's experience with the attachment figure as an infant, either as responsive, inconsistently responsive, and consistently unresponsive, these differences are assumed to be found in adulthood relationships as well (Main, Kaplan, & Cassidy, 1985). Those with secure attachments in adulthood are able to find balance in their relationships and work life

as well as general dependence and independence. Anxious/ambivalent (preoccupied) attachment is characterized by the lack of confidence in the responsiveness of others. In adult romantic relationships, this manifests as easily falling in love, extreme jealousy, low self-esteem, and vulnerability to fear, anxiety and loneliness. Avoidant attachment is a reaction to chronic unresponsiveness of others. Avoidant adults prefer to avoid relationships as a defensive strategy. In adults this is shown in a fear of intimacy, remaining distant in close relationships, and pessimistic views on relationships (Hazan and Shaver, 1994).

Measuring adult attachment: four categories vs. two dimensions. Following this three category solution of adult attachment, Bartholomew (1990) proposed a four group model. Drawing on Bowlby's (1973) theory that suggested different working models of the self and other, Bartholomew described that an individual can have either a negative (high) or positive (low) model of themselves and of others. The four category model was tested among a group of young adults using semi-structured interview and self-report measures (Bartholomew & Horowitz, 1991). Four categories representing a theoretical idea or prototype emerged. The first category, secure, is characterized by having low dependence and low avoidance. These individuals are comfortable with intimacy and autonomy. The second category is preoccupied attachment, which is characterized by high dependence and low avoidance. Those who fall into the preoccupied category are preoccupied with gaining the approval of others but also have a sense that they are unworthy or unlovable. The third or fearful-avoidant category is characterized by high dependence and high avoidance. These individuals are likely to be fearful of intimacy and socially avoidant as a defensive mechanism. Finally, those in the dismissive-avoidant category are low in dependence and high in avoidance, and are often dismissing of intimacy and counter-dependent (Bartholomew & Horowitz, 1991).

Brennan, Clark, and Shaver (1998) sought to integrate and clarify the diverse and numerous self-report measures that had developed since Hazan and Shaver's (1987) original self-report questionnaire described above. The authors examined the existing self-report attachment measures and developed an inventory of 482 items used to assess adult attachment. Factor-analysis of the items resulted in the emergence of two independent factors that correspond closely to the *anxiety and avoidance* dimensions. Specifically, the first dimension, anxiety, refers to anxiety and vigilance in regard to the potential for rejection and abandonment. The second dimension, avoidance, refers to discomfort with closeness and dependency. Measuring attachment on these two dimensions implies that people tend to express different amounts of avoidance and anxiety (versus exhibiting behaviors that distinctly fall into one of four categories). However, it was found that when participants' self-report scores were clustered based on the two dimensions, the patterns could also be conceptualized based on the four category model (Bartholomew & Horowitz, 1991). Specifically, individuals low in anxiety and low in avoidance tend to correspond to the secure classification; individuals high in anxiety and low in avoidance tend to correspond to the preoccupied classification, individuals high in anxiety and high in avoidance fall in the fearful-avoidant classification, and those low in anxiety and high in avoidance tend to correspond to the dismissing-avoidant classification (Brennan et al., 1998). Despite this, it is recommended that differences are best measured and described on a continuum; as categorizing attachment style into four categories limits understanding of the nature of these differences (Fraley et al., 2015).

Attachment and Continuing Bonds in Mourning

Bowlby (1960; 1980) suggested that the anxiety and stress experienced with the loss of a caregiver in infancy is similar to bereavement in adults, where there are four phases of mourning,

including numbing, yearning/searching, disorganization/despair, and reorganization. This structure is used to understand how continuing bonds manifest in the mourning process (Field, Gao, & Paderna, 2005). Initially, after the loss of a significant person, the bereaved individual searches to recover the deceased, just as an infant searches for her/his caregiver in the Strange Situation. Early CB at this time of mourning can manifest as visiting places the dead frequented, hearing or seeing the dead in a crowd, or hearing the dead entering the home, which all represent attempts to regain physical proximity. These encounters can provide temporary relief or can cause additional stress (Field et al., 2005).

According to this paradigm, and viewed from an attachment perspective, during early phases of mourning, separation is not registered as irreversible or permanent and as a result the bereaved individual becomes temporarily disorganized as they struggle to make sense of their loved one's physical absence, leading to an internal conflict or discrepancy (Field et al., 2005). This is followed by a period of despair as the bereaved individual begins to accept the loss. During this process, as the internal working model, which was previously organized around physical proximity to the loved one, reorganizes around an internal connection to the deceased, the mental representation of the deceased becomes an internal secure base for the bereaved individual. In other words, the person accepts that proximity to the deceased is no longer physical, but psychological and internalized. After this point continuing bonds can be considered important for the bereaved individual to maintain proximity and a meaningful relationship with the deceased (Field et al., 2005).

There are mixed findings in the research regarding the general adaptiveness of CB. As a response to the debate over the adaptiveness of CB, Field et al. (2005) stress the importance of viewing CB as a multidimensional construct, where manifestations or expressions of CB are