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The Predictability of Facebook Memorial Page Participation on Grief

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Colleen Grote

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Walden University
2018

Abstract

The Predictability of Facebook Memorial Page Participation on Grief

by

Colleen Grote

MS, Western Illinois University, 2012

BS, Iowa State University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

As the world's largest social networking site, Facebook, continues to grow in popularity, it is imperative for counselors and counselor educators to better understand how online environments impact all facets of life, including death. Grief behaviors on Facebook have been a focus of scholars since the launch of the social networking site in 2004. Researchers have demonstrated that Facebook memorial pages have a significant impact on the social and cultural practices related to death and memorialization for Facebook users. However, despite a rapid rise in research related to online mourning, researchers have yet been able to establish the potential risk or benefit of engaging in online memorial pages and continuing bonds with the deceased. The purpose of this study was to increase understanding of the relationship between participation in Facebook memorial pages and grief symptom severity and persistence for adults living in the United States who have experienced the death loss of a friend or family member since 2009. The continuing bonds theory was used to guide the foundation of this study and interpret findings. Using online survey methods, data was collected from 225 Facebook users. Results of a multiple regression revealed no relationship between Facebook memorial page participation and grief severity but demonstrated a statistically significant relationship between Facebook memorial page participation and grief persistence. These findings are crucial to aiding social change related to an expansion of counselor awareness of the cultural implications of online mourning and the influence virtual mourning may have on appropriate diagnosis of grief related disorders.

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Chapter 1: Introduction to the Study

With more than 2.06 billion active users across the world, many consider the social networking site Facebook to be the largest and quickest growing community network on the Internet (Bodroža & Jovanović, 2016; Statista, 2017). Facebook allows individuals to communicate with others across the country, or even the world, through the sending and receiving of messages, videos, images, and other electronic communications (Guedes et al., 2016). The rapid growth of Facebook coupled with the ease of use offered by the social networking site has made it difficult for users to imagine a world without such digital connections (Bodroža & Jovanović, 2016).

In the United States alone, there are 214 million people registered with Facebook, who each spend an average of 39 minutes per day on the social networking site (Statista, 2017). As a result, Facebook is no longer a "separate universe" easily distinguished from "real lives" (Bodroža & Jovanović, 2016). Instead, Facebook is rapidly changing the way in which individuals interact as it becomes increasingly intermeshed with elements of everyday living: friendships, relationships, work, school, leisure activities, and even death (Bodroža & Jovanović, 2016; Brubaker, Hayes, & Dourish, 2013; Facebook, 2017; Kross et al., 2013; Sedghi, 2014).

Throughout the last several decades, anthropologists have studied death as a social phenomenon (Refslund Christensen & Gotved, 2015). Extending the sociocultural element of death to an online environment, researchers have argued that the understanding of grief and loss must now include awareness of the role of social networks (Refslund Christensen & Gotved, 2015). Social media sites such as Facebook

allow users to share information about their lived experiences (Refslund Christensen & Gotved, 2015). However, just as Facebook has become vital to our daily communication with others about positive life events, the social networking site now influences the way that individuals experience bereavement and express feelings of grief (Refslund Christensen & Gotved, 2015; Rossetto, Lannutti, & Strauman, 2015).

Social media networks have irrefutably integrated traditional grief practices into virtual methods of mourning (Refslund Christensen & Gotved, 2015). As a result, previous researchers cautioned that Facebook may blur the line between public and private mourning (Kuznetsova & Ronzhyn, 2016). The interconnectedness of users on Facebook means that the death of a Facebook user has the potential to impact individuals from a variety of geographical locations and those with both strong and weak relational ties with the deceased (Pennington, 2017; Walter, 2015). As such, individuals using Facebook may become involved in mourning practices even if they do not wish to participate in online elements of grieving (Kuznetsova & Ronzhyn, 2016). Attending to this need, Facebook now provides memorial pages as a virtual venue for grief support and memorialization, ensuring that only users who actively decide to seek online support to cope with grief are subject to material posted about the deceased (Kuznetsova & Ronzhyn, 2016; Rossetto et al., 2015). However, despite multiple changes to Facebook memorial practices, there continues be uncertainty regarding the potential benefit or detriment of continuing bonds with the deceased through online grief behaviors (Frost, 2014).

Recognizing the incipient role of Facebook memorial pages in grief, I focused my study on the role of Facebook memorial page participation on grief. Researchers have indicated several factors that may influence grief severity and persistence (Burke & Neimeyer, 2013; Herberman Mash, Fullerton, Shear, & Ursano, 2014; Palmer, Saviet, & Tourish, 2016; Sveen, Eilegård, Steineck, & Kreicbergs, 2014). With these predictive factors in mind, I examined the relationships between variables previously found to be predictive of grief among Facebook memorial page users. As such, I selected predictor variables of age, gender, race, type of death, bereavement length, and perceived emotional closeness to focus on the relationship between these variables and grief symptom severity and persistence.

In this chapter, I provide background information related to grief, mourning, and the development of Facebook memorial pages and identify the gap in the current literature. I present the problem statement and purpose of the study. Additionally, I present my research question and hypotheses and provide information about the theoretical framework and how it relates to the current study. Further, I provide a summary of the methodology and an explanation of the independent and dependent variables along with an overview of the assumptions of the study. I then highlight the specific scope of the research and discuss limitations and delimitations associated with the research design. Finally, I present information about the significance of the study and potential implications for positive social change that may result from the study.

Background

In response to the growing need for a functional grief platform for users,

Facebook created memorial pages in 2009 to attend to the requests of individuals looking

for a place of belonging following the loss of a friend or family member (Brubaker et al.,

2013). Facebook memorial pages are public Facebook pages created by registered

Facebook users to remember and memorialize an individual that has died (Klastrup,

2015). Facebook memorial pages allow bereaved individuals to maintain communication

with the deceased and share information about their loved one, supporting a continuation

of bonds between the deceased and those left behind (Brubaker et al., 2013; Church,

2013). Since the emergence of Facebook memorial pages, researchers have begun to

examine the role of Facebook on mourning and bereavement. Within the current

literature, researchers have predominately explored message content of posts made on

memorial pages. Additionally, most of the current research available on the role of

Facebook memorial pages in grief is qualitative in nature. After conducting an exhaustive

literature review, I found several articles specific to Facebook and mourning. However,

the findings of the articles demonstrated inconsistent conclusions regarding the benefit or

risk of participating in Facebook memorial pages following the death of a friend or loved

one. While I present several current articles, I have included some articles published prior

to 2013 due to their foundational and influential nature in this field of study.

To begin mapping online bereavement rituals, Carroll and Landry (2010)

conducted an online survey of 100 undergraduate students enrolled at a small, liberal arts

university in the Southeast United States. The researchers explored how and why younger individuals use the social networking sites MySpace and Facebook to maintain connections with the deceased. To support the survey, Carroll and Landy completed an ethnographic analysis of bereavement expressions using about 200 MySpace memorials. Through an analysis of the findings, they provided qualitative support to the empirical survey information. Carroll and Landry focused on the transition from private communications to public communications following a death loss and found that online social networking sites empower bereaved individuals who may otherwise feel marginalized by other forms of traditional memorialization. Carroll and Landry found that 45% of Facebook users immediately visited the page of the deceased after learning of the death, and 38% of those users reported joining Facebook groups formed around the deceased. The authors identified themes emerging from the research and indicated that users cited convenience and the ability to connect, find closure, revisit old memories, and avoid social awkwardness as reasons for using Facebook to grieve. Carroll and Landry suggested that a larger, more diverse sample of Facebook users would enhance generalizability of the findings. However, Carroll and Landry provided foundational information about the motivation to use Facebook memorial pages and presented additional support for the need to further research this area of virtual grief.

Getty et al. (2011) analyzed Facebook messages of friends and family members who experienced a death loss. Getty et al. included profile behaviors from both before the loss and after the passing in the analysis. The researchers obtained posts from the Facebook walls of 11 deceased individuals and focused on language patterns presented in

posts made by bereaved individuals. They examined posts made on Facebook walls 12 months before the death and all posts made from postdeath until April 2010. Postdeath posts ranged from a few weeks after the death to up to 3 years postloss. In all, Getty et al. collected 3,592 Facebook posts and analyzed each post using the Linguistic Inquiry and Word Count program. The researchers found that Facebook posts made postdeath contained more words related to grief and sorrow, while individuals also engaged in more collective orientations following the death supporting the communal aspects of grief. Getty et al. suggested that posts made on memorialized Facebook profiles function as front stage grieving similar to the kind of communication observed at traditional grieving events such as funerals. Getty et al. also concluded that individuals have a need to create a new kind of relationship with a deceased loved one, demonstrating how memorialized Facebook profiles provide an important setting for continuing bonds with the deceased. Getty et al. found results in support of the continuing bond theory, identifying that language used in posts after death were more immediate than prior to the death. However, the use of a convenience sample and the restricted nature of the profiles analyzed (researchers analyzed only profiles of individuals dying from unexpected events) limits the generalizability of this study.

Focusing on bereaved individuals, DeGroot (2012) examined how individuals use Facebook memorial pages during the grieving process to make sense of the loss and connect with the deceased. DeGroot sought to describe topics of communication used on Facebook memorial pages as well as the extent to which posted messages served grief-related functions for those posting them. DeGroot used a grounded theory method to

explore how individuals grieve by examining messages directed towards the deceased on Facebook memorial pages. Initially, DeGroot conducted an analysis of 10 Facebook memorial page walls to obtain tentative analytic categories. Next, DeGroot analyzed a second set of 10 Facebook memorial page walls to validate the identified categories. DeGroot used open and focused coding methods, which resulted in 12 primary categories: sense-making, shock, technology references, original and nonoriginal prose, spirituality, lamentations and questions, continuing bonds, emotional expressions, memories, presence, updates, appreciation, promises and requests, and eventual reunion. DeGroot suggested that interviews with the bereaved would allow for better understanding of the reasons behind the Facebook messages posted.

Expanding the literature from personal profiles to specific Facebook memorial pages, Forman, Kern, and Gil-Egui (2012) examined Facebook *R.I.P.* pages as a medium for participation and creation of online mourning communities. The researchers used a content analysis to determine if Facebook R.I.P. pages met Gallant, Boone, and Heap's (2007) five key heuristics for an online community: interactive creativity, selection hierarchy, identity construction, rewards and costs, and artistic forms. As Facebook limits search results to 550, the researchers used a sample size of 550. After discarding repeated memorial pages for celebrities as well as non-memorial Facebook pages that use the acronym R.I.P. in their title for an unknown reason, a total of 384 pages remained for the content analysis. Forman et al. found that Facebook R.I.P. pages constitute community in accordance with Gallant et al.'s five heuristics for online communities. As such, individuals are able to use Facebook as a means of interacting and communicating in

order to build social groups (Gallant et al., 2007) around issues such as death. Forman et al. suggested further examination of the positive benefits of online communication with the dead as well as an enhanced understanding of the support system created through the development of these memorial pages.

In another qualitative study, Kasket (2012) explored existential dimensions and questions related to how individuals live, how individuals interact with the living, how individuals die, how individuals interact with the dead, as well as who individuals are in an online environment after they die. Specifically, Kasket sought to answer questions pertaining to the nature of the digital being of Facebook profiles during life and after death. Kasket also examined the role of interacting with the deceased online and the influence this behavior may have on personal awareness of one's own immortality. Initially, Kasket sampled five Facebook memorial groups all designed to memorialize similar individuals, including late adolescents who died suddenly and who had lived in the English-speaking countries of the United States, the United Kingdom, and Canada. Kasket used qualitative document analysis to analyze page content. Next, Kasket contacted administrators of memorial pages at least 6 months postdeath. Kasket interviewed three respondents about their behaviors on memorial pages and continued interactions with the deceased in other virtual environments and used interpretative phenomenological analysis to highlight how individuals experience and construct meaning of virtual mourning. Kasket revealed four major themes, each with several subsidiary themes, including modes of address, beliefs about communication, experience

of continuing bond, and the nature and function of Facebook community. Kasket's

research provides additional support of the continuing bond theory.

To enhance understanding of the ways in which the digital landscape has altered

displays of grief, Church (2013) conducted a textual analysis of a digital memorials.

Church used Morris's (2006) history of traditional gravescapes to situate digital

memorials within a larger historical context. Church also used Jamieson and Campbell's

(1982) description of the rhetorical genre of eulogies as an analytic to complete a textual

analysis of Facebook memorial pages. Church found that the use of the Internet allows

individuals to communicate with the deceased, rather than with other mourners, while

still strengthening feelings of community among all mourners. As such, Facebook

memorial pages allow communication to continue between the bereaved and the deceased

by disabling the material restrictions typically associated with death. These findings

provide additional support for the need to examine continuing bond theory as it relates to

Facebook memorial pages.

Brubaker et al. (2013) conducted a qualitative study to examine the connection

between online memorialization practices and conventional grief and mourning rituals.

The researchers used personal networks and snowball sampling to recruit 16 participants

ages 24 to 57 who reported experiences on social networking sites related to death. The

researchers conducted open-ended interviews allowing respondents to provide

information that interested them, although there was a general focus on feelings related to

death, experiences with social media, and interactions with death on Facebook. Brubaker

et al. found three interrelated themes connected to the central idea that social networking

sites are becoming a growing platform for grief expression. They identified these themes

as the ways participants make sense of behaviors in relation to the deceased, unexpected

encounters with death and the deceased online, and respondents' views regarding the

ownership of profile pages after the death. Brubaker et al. confirmed conclusions other

researchers reported in previous studies that the bereaved communicate directly with the

deceased more often than towards survivors (Brubaker & Hayes, 2011). A primary

contribution of this research is an enhanced understanding of the role of social

networking sites in public grief that highlights the social expansion of grief and the need

for understanding social interactions that occur through online memorials.

Pennington (2013) conducted an inductive grounded theory study to examine how

college students use Facebook to interact with the profile page of a friend who has died.

Using a theoretical framework grounded in continuing bond theory, Pennington asserted

the importance of understanding how college students navigate bonds with deceased

individuals through Facebook profiles pages following the death. Pennington recruited

participants from a Midwestern university from a pool of students receiving course credit

for participating in university research. To qualify for the study, individuals had to be a

regular Facebook user, and Pennington identified regular Facebook users as individuals

with Facebook accounts more than 1 year old and who log into the social networking site

at least 5 times per week. Individuals also had to have a friend who died who also had a

Facebook profile, and the strength of the relationship did not matter (Pennington, 2013).

In Pennington's second wave of interviews, participants maintained a Facebook friend

status with the individual who had died to ensure substantial data collection. In total,

Pennington recruited 43 participants for the study with 29 participants participating in the first wave of interviews, and 14 participating in the second wave. Pennington analyzed the interviews and identified four dominant themes: unanimous agreement that someone is not defriended due to their death, a majority of individuals who visited Facebook profiles of the deceased did not post, a minority group of individuals ($n = 10$) who posted on the deceased's page, and frustration with friends and family trying to control pages of the deceased after death. Pennington's findings highlighted the importance of understanding the role of continuing bonds in Facebook grief.

Frost (2014) reviewed current research available about the ways in which adolescents express their grief on Facebook following the loss of a peer. Frost explored the appeal of Facebook to grieving adolescents and examined challenges presented for schools regarding social networking policies. Frost found three primary post types on Facebook memorial pages, including those of individuals who knew the deceased and were speaking directly to the deceased, those who knew the deceased and were writing to other group members, and those who did not know the deceased and were writing to the group. Motivations for creating and participating in Facebook memorial pages seem to be identifying with the death, drawing attention to the death, providing support, or raising awareness for a social event or specific illness (Frost, 2014). Frost suggested a need for additional cross-cultural research to examine if the reasons for using Facebook memorial pages following a death loss are the same worldwide. Further, Frost identified a lack of

empirical evidence regarding the positive or negative influence of Facebook memorial

page participation, highlighting a significant gap in the current literature.

Using a content analysis, Bouc, Han, and Pennington (2016) examined the

messages left by survivors on the Facebook pages of deceased friends and family. The

researchers were specifically interested in the frequency at which different message types

appeared on the Facebook walls of the deceased and how these messages change over

time. Bouc et al. limited the sample to 10 Facebook profiles of individuals who passed

away between the ages of 17 and 22 and who died between the years of 2009 and 2011.

The researchers included messages from 24 months predeath in the analysis, resulting in

a final sample of 2,533 messages posted by over 750 Facebook users. Bouc et al. adopted

12 codes from DeGroot's (2012) content categories of Facebook memorial wall groups

and used a total of 15 distinct codes in their analysis. The 15 themes included explicit

emotional expression, spirituality, creative expressions, asking questions, presence,

shared memories, character, relationship before death, dedication, making requests,

checking in, updates, eventual reunion, common expressions, and holiday greetings.

Bouc et al. grouped the codes into three larger categories, including processing the death,

remembering the deceased, and continuing the connection. Common phrases such as "I

love you" appeared most often surfacing in 72.6% of messages, and less than 1% (.06) of

all messages included question-asking (Bouc et al., 2016). When considering all

messages posted, messages of continued expression demonstrated statistically significant

differences from all other themes, increasing in frequency over time (Time 1 = 40.5%,

Time 2 = 48.7%, Time 3 = 53.6%, Time 4 = 48.4%, X2(3, N = 2533) = 21.80, $p < 0.001$),

demonstrating that Facebook users are primarily using memorial pages to maintain bonds with the deceased (Bouc et al., 2016).

While all these studies provide information about the content of Facebook memorial page posts, researchers know little about the motivations of users of Facebook memorial pages or the predictors of their grief experience as it relates to use of Facebook memorial pages. As such, there is a gap in the literature when examining which factors may be influential to grief symptom severity and persistence for those who choose to engage in Facebook memorial pages. Therefore, in this study, I focused on the role of Facebook page participation on grief for adults in the United States. This research is essential to assisting clinicians' and counselor educators' awareness of the role of social media, specifically Facebook memorial pages, in grief to enhance the understanding of the influence of continuing bonds on grief and improve the accuracy of diagnosis and treatment for the bereaved.

Problem Statement

Without quantitative information identifying the predictability of Facebook memorial page use on the severity and persistence of grief persistence for adults, counselors and counselor educators are at risk for being unresponsive to the role social media plays in traditional bereavement processes. Understanding the role of Facebook memorial pages in grief, in relation to the continuing bonds theory, is essential to ensuring accurate clinical diagnosis (Penman, Breen, Hewitt, & Prigerson, 2014; Prigerson et al., 2009). While most individuals resolve their grief between 6 and 24 months postloss without experiencing additional grief complications (Maciejewski,

Zhang, Block, & Prigerson, 2007; Milic, Muka, Ikram, Franco, & Tiemeier, 2017), the grieving process is inherently individualized and varies in persistence and severity (Sveen et al., 2014). Reeves (2011) found that postliminal rituals may occur for months and years following the death of a friend or family member and may include activities such as spreading ashes or visiting comforting places in remembrance of the deceased. Specific to Facebook memorial pages, Getty et al. (2012) found that respondents continued to make posts on Facebook 3 years after the death of a friend or loved one, while Kasket (2012) also found that users were still actively involved with Facebook memorial pages more than 6 months following a death loss.

Complicating effective counselor education and awareness regarding grief, the current literature is unclear about when a client meets the criteria for a diagnosis of pathological, prolonged, or complicated grief (Penman et al., 2014; Prigerson et al., 2009). In addition to other diagnostic criteria, the DSM-5 (2013) asserts that clinicians may only diagnosis persistent complex bereavement disorder (p. 789) if the severity of one's grief response goes beyond a timeframe of 12 months postloss. Additionally, clinicians may only apply a diagnosis of complex bereavement disorder if an individual's grief exceeds behaviors congruent with culturally accepted mourning rituals. As such, it is imperative that counselor educators enhance student awareness of the cultural norms associated with online grief and the role of Facebook memorial pages in relation to continuing bonds to help ensure accurate diagnosis of persistent complex bereavement.

With over 428 registered Facebook users dying every hour, it is possible that by the year 2065, the number of deceased Facebook users will outnumber the number of

living users (Hiscock, 2017). It is no surprise, therefore, that Facebook is rapidly

evolving as a critical element in virtual grief expression (Brubaker et al., 2013; Sedghi,

2014). However, despite demonstration of qualitative understandings of meaning and

attitudes associated with the use of Facebook memorial pages following the death of a

friend or family member, I was unable to find empirical evidence demonstrating the

positive or negative implications of participating in virtual memorials (see Frost,

2014). Additionally, although researchers have asserted a pathological quality to

continuing bonds with deceased individuals throughout most of the 20th century (Freud,

1922; James, 2014; Kübler-Ross, 1969), Klass (2006) contended that the continuing

bonds theory does not implicitly transition continued engagement with the deceased from

a pathological to an advantageous practice. While it is evident that continuing bonds are

occurring through social media (DeGroot, 2012; Pennington, 2013), it remains unknown

if continuing bonds are adaptive or maladaptive for grieving individuals (Boelen,

Stroebe, Schut, & Zijerveld, 2006).

Without an understanding of the potential influence of Facebook memorial pages

on grief, counseling professionals may fail to best meet the needs of individuals

experiencing bereavement. Failure to understand the role of participation in Facebook

memorial pages as a means of grief expression may limit the clinical understanding of the

implications of grieving through Facebook and evades attending to the concept of

continuing bonds in new-age grief resolution, which may impact accurate diagnoses of

grief disorders. Without the information obtained by this study, counselors will be unable

to access quantitative evidence of the function of Facebook memorial page participation

in grief practices of adults, which has the potential to further support the need for changes to the clinical definition and acceptance of modern grief resolution behaviors, which do not include "getting over" the loss (Kasket, 2012).

Purpose

The purpose of this study was to increase understanding of the role of participation in Facebook memorial pages on grief symptom severity and persistence for adults living in the United States who have experienced the death loss of a friend or family member since 2009. To address the identified gap in current literature, I used a quantitative method for this study. As I was not able to control for all factors contributing to an individual's grief, I used a multiple linear regression design to determine which factors influence grief severity and persistence.

Research Question and Hypotheses

Research Question (RQ): To what extent does the frequency of participation in Facebook memorial pages predict grief severity, as measured by Part I of the Texas Revised Inventory of Grief, and grief persistence, as measured by Part II of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling for age, gender, race, type of death, and bereavement length, and perceived emotional closeness as measured by the Scale of Emotional Closeness?

$H_0$1*:* There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom severity, as measured by Part I of the Texas Revised Inventory of Grief, for bereaved adults in the United States when

controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

$H_0 2$: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom severity, as measured by Part I of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

$H_a 1$: There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom persistence, as measured by Part II of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

$H_a 2$: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom persistence, as measured by Part II of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the

demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

Theoretical Framework

Traditionally, researchers have argued that for nonpathological grief resolution to occur, individuals needed to discontinue their relationship with deceased friends and family following their death (Kasket, 2012). Theorists have postulated that grieving individuals engage in a structured and terminal grief process that concludes when the bereaved detached themselves from the dead by reassigning energy from the deceased to something else (Freud, 1922; James, 2014; Stroebe & Schut, 2005). Additionally, the five stages of grief presented by Kubler-Ross (2009) conclude with the acceptance of the death, evidenced by "moving on" from the loss. Individuals display terminal grief processes through death rituals, such as ceremonies and funerals, which place time limits on bereavement and publicly commit an individual to complete the bereavement process (Gorer, 1967).

These models assert that, rather than attend to the loss, bereaved individuals must form new relationships and invest energy into alternative activities (Kasket, 2012). However, the materialization of technology and the influence the virtual world has on mourning behaviors is beginning to challenge conventional models of healthy coping following a death loss (Kasket, 2012). As a result, researchers are presenting new theories on grief and mourning and contesting traditional models of grief and recovery (Getty et al., 2011).

In the continuing bond theory, first developed by Klass, Silverman, and Nickman (1996), theorists have challenged the notion that an individual must simply get over the death of a friend or loved one to warrant effective psychological adjustment following the loss (Getty et al., 2011). Instead, they affirmed that while individuals alter relationships as a result of death, they do not dissolve the relationships (Getty et al., 2011). Klass (1996) identified that individuals tend to blur boundaries between the living and the dead, continuing an eternal bond with the deceased long after their death. Further, continuing bond theorists contended that bereaved individuals make purposeful decisions to alter the nature of the relationship instead of terminating the relational bond following a death loss (Getty et al., 2011).

Further supporting the need for enhanced awareness of the role of social media in grief is the unique nature of young adult bereavement. Despite the fact that approximately 22% to 30% of college undergraduate students are in the first 12 months of grieving the loss of a grandparent, parent, sibling, or close friend (Caiola, 2015), much of the understanding and assessment of grief derives from adult scales (Palmer et al., 2016). However, despite limited understanding of young adult bereavement, it is important for counselors and counselor educators to be able to provide support and resources that target the unique developmental needs of young adults (Palmer et al., 2016). Prior to the initiation of virtual grief practices, individuals often learned of someone's death through obituaries in the newspaper, television programs, phone calls, e-mail, and text messages (Brubaker & Hayes, 2011; Carroll & Landry, 2010). However, as the first online memorials appeared in 1995 (Carroll & Landry, 2010), young adults do not know a world

absent of online grieving (Hieftje, 2012). As such, it is essential that counselors and counselor educators recognize the practice of online grieving as a modern bereavement ritual and understand the potential risks and benefits of using online memorial pages to mourn the loss of a friend or family member.

There is an increasing recognition of the idea of a continuing bond as a normative function following a loss (Field, 2006). Since the development of the continuing bond theory in 1996, multiple researchers (Carroll & Landry, 2010; Field & Friedrichs, 2004; Kasket, 2012) have applied the continuing bonds theory to multiple contexts of bereavement (Irwin, 2015). As a result of its flexibility, the continuing bonds theory is applicable to multiple populations, including online mourners and social media networks (Irwin, 2015). Social media networks, such as Facebook, allow individuals to create and maintain an online presence even postmortem (Brubaker & Vertesi, 2010). Additionally, Facebook memorial pages provide mourners an opportunity to communicate with deceased individuals and other mourners simultaneously (Getty et al., 2011). As a result, relationships with the deceased are often reminiscent to when the individual was alive, supporting the continuing bond theory (Klass et al., 1996).

Nature of the Study

After reviewing the research problem and purpose, I proposed that a quantitative study would be most suited for my research study. Specifically, I employed a correlational design that allowed me to control for several factors that may influence the dependent variables (see Punch & Oancea, 2014). A correlational design allowed me to control for factors such as gender, race, age, type of death, duration since the death loss,

and perceived emotional closeness. As a result, I was able to determine the extent of the

relationship between the variables despite not being able to determine the extent to which

they create change (see Punch & Oancea, 2014).

Possible Types and Sources of Data

For this study, I sought to collect data from approximately 200 adults using

convenience sampling and snowball sampling techniques. To identify initial participants,

I used Facebook advertising to reach potential respondents (see Frankfort-Nachmias &

Nachmias, & DeWaard, 2015). By using snowball sampling techniques, I was able to ask

initial respondents to recommend others who met inclusion criteria and were willing to

participate in the study (Frankfort-Nachmias et al., 2015). Previous researchers (Boelen et

al., 2006; Brubaker, Hayes, & Dourish, 2012) have used purposeful sampling and

snowball sampling techniques to recruit participants from Facebook memorial pages.

Researchers have previously used probability sampling to generate a list of Facebook

memorial pages using keyword searches of *RIP* and *in memory of* and inviting members

of the identified memorial groups to participate in the survey (Kern, Forman, & Gil-Egui,

2013). McEwen and Scheaffer (2013) conducted Facebook research by beginning with a

convenience sample and later enlisting additional participants through snowball sampling

techniques. Similar to the approach used by McEwen and Scheaffer, I first employed

convenience sampling techniques and later implemented snowball sampling methods to

reach additional participants.

To implement a cross-sectional design, an online method of data collection was

most beneficial due to time and cost limitations associated with dissertation research

(Fielding, Lee, & Blank, 2008). I provided participants with a demographic survey to collect information related to age, gender, race, type of death, duration since the death loss, and self-reported participation in Facebook memorial pages. Next, respondents completed the Scale of Emotional Closeness (SEC) and the Texas-Revised Inventory of Grief (TRIG; Fashingbauer, Zisook, & DeVaul, 1987; Servaty-Seib & Pistole, 2006).

Possible Analytical Strategies

I used a multiple linear regression (see Cohen, Cohen, West, & Aiken, 2013) to analyze collected data. An extension of a simple linear regression, a multiple regression allows researchers to predict the value of a variable based on the value of at least two other variables. For this study, I predicted grief severity and grief persistence (the dependent variables) using age, gender, race, religion, duration since the death loss, and participation in Facebook memorial pages (the independent variables). Using a multiple regression allowed me to determine the overall fit of the model as well as the relative contribution of each of the independent variables to the total variance for both dependent variables.

Definitions

Through this study, I quantitatively examined the independent and dependent variables as related to possible predictors of grief among adults in the United States who participate in at least one Facebook memorial page. There were two dependent variables and seven independent variables. The following provides definitions of the dependent variables: grief severity and grief persistence, along with definitions of the independent

variables: age, gender, race, bereavement length, type of death, participation in Facebook memorial pages, and perceived emotional closeness.

Age: Age is "the length of time during which a being or thing has existed" (Ammer, n.d.). Age is a continuous variable. I obtained age data through self-report, in which participants selected their numerical age at the time of survey completion on the demographic questionnaire.

Bereavement length: Bereavement length is the time since the death loss occurred (Knowles & O'Connor, 2015). I obtained data on bereavement length through self-report by the participants. Respondents listed the month and year the deceased died. I then coded the obtained data into three categories: recent = a death experienced 0 to 6 months prior to survey completion; intermediate = a death experienced 7 to 14 months prior to survey completion; and prolonged = a death experienced more than 15 months prior to survey completion.

Facebook memorial page participation: Facebook memorial page participation specifically refers to the respondents' Facebook behavior. To belong to a Facebook Memorial Page, respondents must have liked at least one Facebook page created specifically for an individual who has died. Facebook memorial pages are private and created only postdeath (Facebook, 2017). Using a *yes* or *no* response option, respondents identified if they have liked at least one Facebook memorial page. To further measure participation, respondents identified the frequency with which they visit the memorial page. Respondents self-reported frequency by selecting one option from choices including *never, rarely, sometimes, frequently*, and *very frequently* (almost every day).

Gender: The definition of gender is "Either of the two sexes (male and female), especially when considered with reference to social and cultural differences rather than biological ones" (Oxford, 2017). The term gender also represents a large range of sexual identities that "do not correspond to established ideas of male and female" (Oxford University Press, 2017). Currently, there is no standard for gender inclusion categories (Dholakia, 2016). To ensure inclusiveness consistent with the gender options provided by Facebook, I measured gender as a categorical variable. I obtained gender information through self-report on the demographic questionnaire. Respondents selected male, female, transgender, other, or prefer not to disclose.

Grief persistence: Grief persistence is the level of grief intensity experienced by the respondent at the time they complete the survey. Milic et al. (2017) further defined grief persistence as the failure to reduce grief intensity 6 to 12 months postdeath loss. I used Part II of the TRIG to measure grief persistence (Fashingbauer et al., 1987). To obtain data related to grief persistence, respondents completed the 13-items of part II of the TRIG, which assessed respondents' current thoughts and feelings related to grief (Montano et al., 2016).

Grief severity: Grief severity is the level of intensity of an individual's grief at the time of the death loss. I measured grief severity using the Part I of the TRIG (Fashingbauer et al., 1987). Part-I of the TRIG is comprised of eight items designed to assesses loss-related cognitions, affect, and behaviors at the time of the death (Montano, Lewey, O'Toole, & Graves, (2016).

Perceived emotional closeness: Perceived emotional closeness is an individual's personal interpretation of his or her level of emotional openness and understanding in the relationship with the deceased individual (Servaty-Seib & Pistole, 2006). Respondents completed the SEC, a 6-item scale, to measure scores of emotional closeness with the deceased.

Race: Race is the self-identification of social representation that is not constructed by biological, genetic, or anthropological components (U.S. Census Bureau, 2017). I obtained race information through the self-report of respondents on the demographic questionnaire. Considered a categorical variable, respondents selected from the following: White or Caucasian, Black or African American, Hispanic, Asian, or Other. Race is a categorical variable. I collapsed multirace responses into the Other category.

Type of death: For this study, I defined the type of death as expected or unexpected. An expected death is a death anticipated by a doctor and a death for which a doctor will be able to issue a medical certificate detailing the cause of death (Broderick Committee, 1971). An unexpected death can also occur from illness, but may also result from natural causes, accidents, or suicide (McClatchey, Vonk, Lee, & Bride, 2014). Type of death is a dichotomous variable reported by respondents by selecting *expected* or *unexpected*.

Assumptions

I made several key assumptions with this study. First, I assumed that participants would be honest in their survey responses. I was hopeful that the anonymity offered would increase participants' ability to respond truthfully to the survey questions.

Similarly, I assumed that participants who identified as members of a Facebook memorial page were, in fact, members of such a group. As Facebook memorial pages are accessible to Facebook users who have not liked the page and I did not ask participants to provide a link to any specific memorial pages, I could not be positive of respondents' memorial page participation status. I also assumed that the respondents would sufficiently represent the population of adult Facebook memorial page users in the United States to allow for generalizations about the obtained results. Finally, I assumed that all other factors not measured would not explain any differences in the independent variables I am measuring.

Scope and Delimitations

Delimitations of the study included the age of participants, the time since the death loss, and the exclusion of virtual cemeteries or memorials outside of Facebook memorial pages. Adolescents experience grief differently than adults, and adolescents do not yet have the social or emotional maturity to fully integrate and process death (Hirooka, Fukahori, Ozawa, & Akita, 2017; Malone, 2016). As such, I only included adults aged 18 and older in the current study. There was no maximum age for participation. I decided to limit bereavement length to deaths occurring no earlier than 2009 to ensure that grief rituals used prior to the advent of Facebook memorial pages would not serve as another potential factor. Finally, although there are several virtual sites available for mourning, I only sampled Facebook users who participate in memorial pages hosted by Facebook. These delimitations may influence the generalizability of the findings.

Limitations

The current study is not without limitations. Limitations of the study included the use of convenience sampling, the obtained sample, and the self-report nature of the assessments (see Etikan, Musa, & Alkassim, 2016). The use of convenience sampling and the sample size ($n = 153$) may limit my ability to generalize results. Additionally, convenience sampling does not ensure a diversified sample (Frankfort-Nachmias et al., 2015). Additionally, although I sought participants from across the United States, the lack of geographic specificity may have served as a possible limitation. The self-report nature of this study was another potential limitation (see Frankfort et al., 2015). As respondents self-selected to participate, it is possible that only respondents more comfortable with their grief chose to participate in the study.

Significance

Through my literature review, I have revealed a significant amount of qualitative research dedicated to enhancing the understanding of the meaning associated with creating and participating in Facebook memorial pages. However, quantitative research regarding the impact of participation on Facebook memorial pages is necessary to enhance understanding of the positive or negative implications of the use of Facebook memorial pages for bereaved individuals (Frost, 2014). Researchers have contended that while some online grief behaviors may benefit the bereaved, others may place individuals at risk (Rossetto et al., 2015). By conducting this research, I have learned more about the

extent to which Facebook memorial pages influence grieving for those who use these memorials.

When considering the positive implications of online mourning, maintaining access to the deceased through ongoing opportunities to connect the living and the dead may lead to more adaptive grief outcomes (DeGroot, 2012; Klass et al., 1996). Additionally, virtual memorials, such as Facebook memorial pages, may assist individuals in creating important rituals, promote social connections, and unite bereaved individuals despite geographical barriers (Sanderson & Cheon, 2010). Further, virtual memorials provide a safe place for individuals who feel disenfranchised to mourn (Carroll & Landry, 2010). However, these examples of continued bonds with deceased individuals are only beneficial and adaptive if the bereaved individual identifies that the bond with the deceased is internal and not tangible (Field, 2006). Additionally, the bereaved must recognize that the bond is different than it was when the deceased was living (Klass, 2001). Failure to accept these distinctions can result in maladaptive continued bonds and may enhance risks for complicated grief (Field, 2006; Field, Gao, & Paderna, 2005).

Social media use intensifies the potential for maladaptive continued bonds by providing bereaved individuals constant accessibility to the life of the deceased (DeGroot, 2012). Additionally, social networking sites, such as Facebook, enhance opportunities for physical isolation among individuals in mourning and limit the ability for bereaved individuals to seek additional grief supports (Smartwood, Veach, Kuhne, Lee, & Ji, 2011). As such, the research question begins to address the gap of limited

empirical evidence identifying the positive or negative impact of participating in Facebook memorial pages following the death of a friend or loved one.

Researchers have identified that many bereaved individuals maintain relationships with the deceased, which may be indicative of a relatively normal element of bereavement (Klass, 1993; Marwit & Klass, 1996; Silverman & Nickman, 1996; Root & Exline, 2014). However, a review of the empirical literature revealed contradictory findings of the role of continuing bonds in grief resolution (Stroebe & Schut, 2005; Root & Exline, 2014). Qualitative researchers have characterized continuing bonds as typically positive and helpful for bereaved individuals (Nowatzi & Kalischuck, 2009) while quantitative studies have suggested that engaging in continuing bonds correlates with increased distress at various times following the death loss (Field & Friedrichs, 2004). Social and cultural views on acceptable means of mourning may also play a role in how individuals perceive their own experiences with continuing bonds (Root & Exline, 2014). Further, it is unclear how the perceived positive or negative nature of the predeath relationship impacts the role of continuing bonds for the bereaved (Root & Exline, 2014).

While a continuing bond may play an essential role in coping for a bereaved individual, it is possible that continuing bonds may signify the denial of the death loss, ultimately hindering grief resolution (Root & Exline, 2014). Previously, researchers have indicated that the current literature on continuing bonds is too narrow to provide a clear picture of the impact of continuing bonds following the loss of a friend or loved one (Root & Exline, 2014). As such, through this research, I sought to create social change regarding the understanding of the role of Facebook memorial pages and continuing

bonds in the grief resolution process for adults to ensure that counselors and counselor educators understand how to attend to client participation in Facebook memorial pages and ensure accurate diagnosis of grief-related disorders. Increasing awareness of the role of continuing bonds, particularly through Facebook memorial pages, is necessary to ensure ethical assessment and diagnosis, as the positive or negative implications of continuing bonds may influence the perception of symptomology related to diagnostic criteria for disorders such as prolonged grief disorder. Therefore, it is imperative to expand the understanding of the impact of Facebook memorial page participation on continuing bonds as well as the role this behavior plays in the grief process for adults to ensure the provision of knowledgeable and ethical services for bereaved individuals.

Summary

Since their materialization in 2009, researchers have evaluated Facebook memorial pages on an increasingly basis. However, despite research focused on motivation, linguistics, relationships with the deceased, trolling, and a variety of other virtual grief behavior (Bouc et al., 2016; Brubaker et al., 2013; Church, 2013; DeGroot, 2014; Kasket, 2012; Pennington, 2013, 2014, 2017), there is a distinct gap in the literature pertaining to the positive or negative consequences associated with participating in Facebook memorial pages (Frost, 2014; Ware, 2016). With this study, I sought to expand the current body of literature through a quantitative examination of the predictability of Facebook memorial page participation on grief symptom severity and

persistence for adults in the United States. In Chapter 2, I provide a thorough review of the current empirical literature related to grief, social networks, and Facebook.

Chapter 2: Literature Review

With over 1.2 billion daily users, Facebook is the largest social networking site in the world (Facebook, 2017). Individuals across the globe log on to the social networking site to share details about their daily lives with others through the use of written posts, pictures, and videos (Brubaker et al., 2013). However, in addition to serving as a technology of life, Facebook, which archives digital identities of users, has become a technology of death (Giaxoglou, 2015). Researchers have estimated that each day, between 8,000 and 10,000 registered Facebook users across the world die, leaving behind their friends, family, and a personal digital legacy (Ambrosino, 2016; Brubaker et al., 2013). In response to the rapid rise of social media us in life as well as death, researchers have begun to examine how bereaved Facebook users engage in activities through social networking sites to memorialize the dead (Brubaker & Hayes 2011; Carroll & Landry, 2010; DeGroot, 2012) and the ways in which Facebook has expanded death-related experiences (Brubaker et al., 2013; Kern et al., 2013; Sanderson & Cheon, 2010).

A review of the current empirical literature has revealed inconsistent findings related to the benefits and risks associated with maintaining connections with the deceased through online memorials (Rossetto et al., 2015). While researchers have demonstrated potential benefits associated with virtual grieving (Carroll & Landry, 2010; Sanderson & Cheong, 2010), there are conceivable difficulties resulting from mourning online (Kern et al., 2013). Online memorials offer advantages for the bereaved, including the absence of physical time and space boundaries (DeGroot, 2012). Facebook memorial pages allow the bereaved to create an accessible outlet for grief and promote the

continuation of connections with the deceased (Bouc et al., 2016). While some Facebook

users feel supported by having open access to the memorial page of the deceased

(Brubaker et al., 2013; Pennington, 2013, 2014), other bereaved individuals have reported

that it is more painful to have access to the deceased's Facebook profile (Morehouse &

Crandall, 2014; Pennington, 2013, 2014; Rossetto et al., 2015). The strength of the

perceived relationship between the deceased and the bereaved, the time since the death

loss, and the time individuals spend on Facebook may serve as explanations for the

disconnect between identifying online access to memorial pages as harmful or helpful

(Pennington, 2017). Therefore, the aim of this study was to identify the influence of

participation with Facebook memorial pages on grief symptom severity and persistence

for adults when attending to perceived emotional closeness, time since the death loss, and

time spent on Facebook.

In this chapter, I focus on providing a detailed background of the research

problem discussed in Chapter 1. I begin with defining key elements of grief. I then

highlight the unique challenges of experiencing grief during young adulthood. Next, I

discuss historical clinical approaches to grief and current challenges to these models. I

then provide an overview of the continuing bonds theory as it relates to this study.

Further, I provide an overview of social networking sites, emphasizing the emergence

and current status of Facebook. I then provide a synopsis of memorialization and ritual

behaviors following death. Finally, I provide information on cybermemorials and the

development, implementation, and propensities associated with Facebook memorial

pages.

Literature Search Strategy

To develop the literature review, I accessed multidisciplinary databases and various search engines to obtain journals, published dissertations, and government articles. The online sources I used include Google Scholar, EBSCOhost Research Databases, ProQuest, Taylor and Francis, and other scholarly journals in diversified fields. I conducted searches using keyword terms, including *Facebook, memorial pages, grief, virtual mourning, bereavement, social networking sites,* and *continuing bonds*. I also used various combinations of these keyword terms in Boolean searches. I primarily used articles published between 2013 and 2017. However, I included a smaller percentage of seminal works and sources published prior to 2013 that supported the theoretical framework, and other older works that contained information still relevant to this study.

Literature Review

Grief and Mourning

Grief and loss are fundamental elements of life (Hall, 2014). Loss occurs when a negative event, as perceived by the individual, has the potential to result in long-term changes to an individual's relationships and perceptions of the world (Corless et al., 2014). Although closely connected, central elements of loss are distinguishable and used differently (Stroebe, Schut, & Boerner, 2017). Three primary terms associated with loss include bereavement, grief, and mourning. Bereavement refers to being in a state of loss or the objective situation of a person who has recently experienced the loss of a close friend or family member (Balk, 2011; Stroebe et al., 2017). Grief is a response to an

anticipated or unexpected loss and the reaction of being bereaved (Balk, Zaengle, & Corr, 2011; Corless et al., 2014). Grief incorporates the emotional experiencing of a variety of psychological, cognitive, behavioral, social, and somatic reactions resulting from the loss (Stroebe et al., 2017). Mourning refers to the expressions of grief (Balk et al., 2011). Mourning includes behaviors influenced by social and cultural beliefs as well as social expectations (Stroebe et al., 2017). These social and cultural norms differ across groups but serve as a guideline for how bereaved individuals should behave within their communities (Stroebe et al., 2017). Mourning encompasses various customs and rituals, including funeral and burial proceedings (Stroebe et al., 2017). In addition to being an expression of one's grief, mourning can be a demonstration of potential growth and development of a new meaning-making experience for the bereaved (Corless et al., 2014). However, many cultures still characterize death as a traumatic experience accompanied by negative reactions of fear, pain, anxiety, and sadness (Korai & Souiden, 2017; Levy, 2015).

The online execution of mourning, the external element of loss, is gaining popularity (McEwen & Scheaffer, 2013). Coined in 1997 by Sofka, the term *thanatechnology* describes the way in which mourners use technology, specifically the internet, to display grief (Bassett, 2015; Goldschmidt, 2013). Facebook users are now able to mourn virtually by connecting with the deceased's friends and family, honoring the deceased's life, and engaging in memory-sharing and support from other Facebook users (Brubaker & Hayes, 2011; Carroll & Landry, 2010; Getty et al., 2011; Hogan & Quan-Haase, 2010; Stone, 2010). This method of virtual mourning allows the bereaved

the ability to engage in public displays of mourning while simultaneously negotiating internal reactions to grief through the continuation of an online relationship with the dead (McEwen & Scheaffer, 2013).

Although the phenomenon of grief is a universal construct, various cultures express grief and mourning in a multiple of ways (Granek & Peleg-Sagy, 2017). Culture, race, ethnicity, socioeconomic status (SES), gender, religion, age, and other contextual factors influence the experience and expression of grief and mourning for the bereaved (Granek & Peleg-Sagy, 2017). Researchers examining grief experiences and outcomes found that women display greater psychological symptoms during bereavement when compared to men (Granek, 2015). Additionally, individuals with lower SES demonstrate greater difficulty with loss and receive a diagnosis of complicated grief more often than their higher-SES counterparts (Nam, 2012). Finally, women and less-educated individuals are more likely to score higher on measures of complicated grief more often than men and highly educated people (Chiu et al., 2011; Newson, Boelen, Hek, Hofman, & Tiemeier, 2011).

Grief manifests in physical, emotional, cognitive, behavioral, and spiritual expressions in response to the loss of people, projects, and possessions (Hall, 2014). While grieving, the bereaved experience a complex life transition that involves attending to biopsychosocial symptoms of depressed mood, strained family relationships, and poor concentration (Currier, Irish, Neimeyer, & Foster, 2015). Further, the bereaved must reconstruct their attachment to the deceased in the absence of their physical presence (Neimeyer & Thompson, 2014).

While death is irreducibly physical, there is an inevitable social disruption when someone dies (Walter, Hourizi, Moncur, & Pitsillides, 2012). As such, the process of grief as a response to bereavement involves a restructuring of social engagement, with both the living and with the deceased (Döveling, 2015; Walter et al., 2012). The emergence of Facebook, however, has altered the concrete restructuring of these relationships, as the bereaved are now able to maintain relationships with the deceased through the use of wall postings, picture and video sharing, and other virtual interactions on the Facebook profile or memorial page of the deceased (Bouc et al., 2016; McEwen & Scheaffer, 2013; Pennington, 2016).

While grieving, individuals may seek social support (Döveling, 2015). Grief rarely occurs in an isolated state, but rather as a phenomenon influenced by social customs (Döveling, 2015; Jakoby, 2012). As such, a social construct is essential to conceptualizing grief (Döveling, 2015). The search for social inclusion while mourning has resulted in an increase in the public nature of the grieving process during the last decade (Walter et al., 2012). Advancements of the Internet have popularized communal and public expressions of grief, as online mourning facilitates access to others who are grieving (Frost, 2014; Walter et al., 2012; Walter, 2015). Social media sites influence the way bereaved individuals experience a death loss and provide a setting for communal grief, support, and coping (Rossetto et al., 2015). However, discrepancies related to the potential benefits and drawbacks associated with the practice of using Facebook memorial pages following the loss of a friend or loved one demonstrates the continual

evolution of grief behaviors and socially-relevant responses to the bereaved (Rossetto et al., 2015).

Grief in Young Adulthood

Young adulthood is defined as a transitional stage of development which occurs between adolescence and adulthood (Palmer et al., 2016). Young adulthood is characterized by several challenges faced by both adolescents and adults (Herberman Mash, Fullerton, & Ursano, 2013). For many young adults, primary caregivers are considered to be a critical element to their daily lives as many remain dependent on the presence and assistance of their parents (Kaiser, 2015). Simultaneously, young adults are often attempting to manage their personal growth which may include the development of new relationships, the responsibility of college and employment, and the experience of major life milestones including marriage, the birth of a child, or the purchase of a home (Palmer et al., 2016). These developmental conversions can greatly influence the challenges experienced by young adults when a friend or family member dies (Palmer et al., 2016).

Young adulthood is a time when individuals explore various roles in a means of solidifying their personal identities and finding purpose in life (Mash, Fullerton, Shear, & Ursano, 2014). Identity formation, which begins in adolescence but becomes increasingly complex during young adulthood, often consists of decisions related to religious association, career choices, and cultural exploration (Marchant & O'Donohoe, 2014). While developing their autonomy, young adults often distance themselves from their support systems as they leave for college or pursue employment (Herberman Mash et al.,

2013). Social relationships, therefore, are important to young adults and are often essential to helping young adults attend to the challenges associated with this developmental time period (Miething et al., 2016). Friendships begin to fulfill functions previously supported by family members and serve as a protective factor against maladjustment (Buote et al., 2007; Miething et al., 2016; Waldrip, Malcolm, & Jensen☐ Campbell, 2008).

The death of a friend or family member can significantly impact young adults' ability to attend to developmental tasks effectively (Palmer et al., 2016). Unfortunately, however, for many young adults, death is a familiar concept. Each year, almost 2 million American youth lose a sibling and 3.5% of young adults reported losing a parent prior to age 18 (Balk, Walker, & Baker, 2010). By the time young adults reach college age, the majority have experienced the death of a friend or family member (Herberman Mash et al., 2013). In fact, between 22% and 30% of college undergraduate students have experienced the loss of a parent, grandparent, sibling, or close friend within the last twelve months (Caiola, 2015). For 80% of these students, the loss involved a primary or extended family member while 60% have experienced the loss of a friend (Herberman Mash et al., 2013).

Grief in young adulthood may interfere with occupational and social tasks typically associated with this developmental period (Mash et al., 2014). Developmental tasks, which often include marrying later than previous generations, seeking more educational experiences, and delaying moving away from home, have widened the gap between completion of adolescent tasks to successful entry to young adulthood

(Huberman Mash et al., 2013). As a result, young adults are less likely to have formed stable family and work roles (Huberman Mash et al., 2013). A loss at this stage of development, therefore, has the potential to significantly influence identity achievement (Huberman Mash et al., 2013). While the influence grief is multifaceted and touches nearly every aspect of everyday life, one of the most significant impacts of grief is its effect on relationships (Palmer et al., 2016). This is particularly problematic during young adulthood when the primary developmental task is to create meaningful, loving, and intimate relationships (Erikson, 1950, Huitt, 2008). Young adults who experience a loss typically experience a second stressor when emerging serious and long-term relationships end due to the stress associated with grief (Huitt, 2008).

Problematic grief responses in young adults often go unrecognized (Mash, Fullerton, Shear, & Ursano, 2014). In addition to the lack of recognition of grief, college students often fail to seek professional help despite reporting "long-term effects" in areas of academic, social, and psychological functioning (Cox, Dean, & Kowalski, 2015). A recent study by Cox et al. (2015) revealed that while 25 (21.4%) grieving college students at public, Southeastern 4-year institution indicated difficulties resulting from grief, only 4 students sought psychological services on campus. The physical and emotional distance students have from family and close friends amplifies feelings of isolation (Battle, Greer, Ortiz-Hernandez, & Todd, 2013). Further, young adults typically surround themselves with similar-age individuals who have minimal experience with death and, as a result, serve as a poor support system for grieving individuals (Battle et al., 2013). In addition to strained relationships, young adults experiencing grief may suffer more physical and

emotional health concerns, evidenced by increased visits to physicians and increased use of alcohol, drugs, and tobacco following the loss (Brent et al., 2009; Mash et al., 2014).

Historical Approaches to Grief

In his paper *Mourning and Melancholia* (1917), Freud provided one of the most significant theoretical influences on the psychology of grief. However, Freud (1917) was not the first to study the phenomenon of grief in relation to the social sciences (Granek, 2010). Throughout the 17th century, individuals believed that grief could make an individual mad and result in premature death (Granek, 2010). Rush (1812/1947), an American physician, suggested that, while grieving individuals were not necessarily ill, the bereaved experienced several emotional and physical symptoms which included aphasia, fever, memory loss, and the development of gray hair. To "heal" the grief experienced by these individuals, Rush suggested the bereaved use remedies such as opium, crying, bloodletting and purges (Rush 1812/1947).

In their 1872 book on emotional expression, Darwin and Ekman (1972) described the manifestation of grief in detail. Darwin and Ekman discussed the involuntary aspects of crying as well as the facial expressions that occur during grief. In doing so, they differentiated between what they labeled as active grief and passive grief, noting that active grief is more frantic in presentation than a passive, or depressive, expression of grief. Later, Shand (1914) produced the first detailed study about the psychology of grief which discussed "the laws of sorrow." Shand identified four primary grief reactions: (a) active grief directed aggressively to the world; (b) depressive grief; (3) grief suppressed by self-control; and (4) frantic grief. In addition to these grief reactions, Shand discussed

additional elements of grief such as the trauma associated with unexpected death, the need for social support following a loss, and individuals' choice to continue the relationship with the deceased. These factors parallel the current research, which identifies emotional closeness, nature of the death, and online support as influencing elements of grief severity (Pennington, 2017).

Despite these early portrayals of grief from a psychological construct, Freud's psychoanalytic theories arguably had the most influential impact on contemporary grief research (Granek, 2010). While lecturing at Clark University in 1909, Freud introduced the concepts of everyday life as a source for psychoanalysis and a continuum between health and psychosis (Granek, 2010). In presenting these, Freud opened the door for emotions, such as grief, once thought to be outside of the scope of study and highlighted these emotions as valid objects of psychological research (Granek, 2010). Simultaneously, Freud effectively distorted the distinction between normal and abnormal and introduced the concept of using psychological constructs to assess everyday events, such as grief (Granek, 2010).

In his later work *Mourning and Melancholi*, Freud (1922) suggested that the mourner had the task of disengaging emotionally from the deceased to ensure healthy healing and effective attachment to other relationships. Freud asserted that grief work involved a three-stage process in which the bereaved broke ties with the deceased (Hall, 2014). During this process, the bereaved would first discontinue the bond that attached the bereaved and the deceased, adjust to life without the deceased, and finally form new relationships (Hall, 2014). To complete these functions Freud alleged that the bereaved

must engage in an energetic process of both acknowledging and expressing emotions associated with loss, including anger and guilt (Hall, 2014). The grief work model emphasized that the bereaved must move on as quickly as possible to avoid an increased risk of developing physical and mental illnesses that could complicate the ability to complete grief work and resume a normal level of functioning (Freud, 1922; Hall, 2014). In the Western world, this conceptualization meant that those who failed to disconnect with the deceased were at risk for developing a psychiatric illness (Granek, 2010).

Approaching grief from a psychobiological framework, Linderman (1944) viewed grief as a psychiatric-medical problem (Miles, 2015). Linderman described what he called the syndrome of acute grief which highlighted normal and abnormal emotional responses to grief (Miles, 2015). Grief, according to Linderman, was comprised of five responses: (a) preoccupation with thoughts about the deceased; (b) guilt; (c) hostility; (d) somatic pain; and (e) changes to typical patterns of behavior. Similar to Freud's (1917/1922) earlier conceptualization, Linderman asserted that delaying or distorting grief could result in mental and physical complications for the bereaved. Additionally, Linderman proposed that the bereaved must break bonds with the deceased and form new relationships in order to resolve grief (Miles, 2015). Despite a lack of empirical evidence, Linderman's conceptualization of grief had a significant influence on subsequent models of grief (Granek, 2010; Miles, 2015).

Expanding upon Linderman's (1944) model, Caplan (1964) presented the crisis model of grief. Caplan suggested that bereaved individuals experience a crisis as a result of loss that typically resolved within 4 to 6 weeks (Miles, 2015). Caplan proposed

psychiatric treatment for individuals who did not successfully resolve their grief within this timeframe (Miles, 2015). Together with Linderman's model, Caplan's crisis theory implied that grief was a short-lived experience and radically influenced treatment of the bereaved for years (Miles, 2015).

Stage Theory

Several theorists including Bowlby, Parkes, and Kübler-Ross have expanded upon Freud's (1917/1922) initial conceptualization of the grieving process and developed stage models of grief congruent with constructs of Freud's grief work (Catania-Opris, 2016). Despite differing sequences and events, stage-models of grief suggest bereaved individuals progress through grief in identifiable and predictable emotional stages (Stroebe et al., 2017). Additionally, stage models are united in end goals of accepting loss and restructuring life without the deceased (Catania-Opris, 2016). Presented by Kübler-Ross in 1969, the stage model of grief is one of the most widely recognized theories of grief (Stroebe et al., 2017).

Kübler-Ross. Kübler-Ross's (1969) article "On Death and Dying" is often associated with the emergence of stage theory (Stroebe et al., 2017). Documenting her observations of the adjustments experienced by 200 dying patients, Kübler-Ross suggested a five-stage process experienced by dying individuals (Stroebe et al., 2017). These five stages include: grieving, denial, anger, bargaining, depression, and acceptance (Kübler-Ross, 1969).

Denial, the first stage of grief, may appear similar to disbelief for someone who is dying (Kübler-Ross & Kessler, 2014). However, for the bereaved, denial is more

symbolic as opposed to literal (Corr, 2015; Kübler-Ross & Kessler, 2014). As such, the

bereaved can logically comprehend that the deceased will not return, but often has trouble

accepting the loss (Corr, 2015). Individuals in denial may make statements such as "I

can't believe she is dead," because the loss is too much for their psyche (Kübler-Ross &

Kessler, 2014, p.8). Denial, according to Kübler-Ross and Kessler (2014), helps

individuals survive the loss by pacing the grief process and allowing individuals to numb

themselves to the loss (p.10).

Anger, the second stage of grief, arises when an individual is feeling safe enough

to survive whatever may occur following the loss (Kübler-Ross & Kessler, 2014).

According to Kübler-Ross (1969), anger is a necessary component of grief, and without

experiencing anger, individuals will struggle to heal from the loss. Perceived as a

strength, anger is an immediate emotion that reveals additional feelings, including pain

(Kübler-Ross & Kessler, 2014, p.16).

The third stage of grief is known as bargaining (Kübler-Ross, 1969). Bargaining

is a valuable release from the pain associated with grief (Kübler-Ross & Kessler, 2014).

Over time, bargaining changes as individuals strive to adjust to the loss and attempt to

make order of the chaos resulting from the death (Corr, 2015; Kübler-Ross & Kessler,

2014). However, individuals eventually realize that the death is permanent, and the

deceased will not return (Kübler-Ross & Kessler, 2014, p. 20).

Following the third stage, individuals enter what is known as the depression stage

(Kübler-Ross, 1969). Differentiated from mental illness, depression as the fourth stage of

grief is an appropriate response to loss which will dissipate once it has served its purpose

in the loss process (Kübler-Ross & Kessler, 2014). Normal depression during grief, therefore, is not a clinical concern and should be an invited process of grief by the bereaved (Kübler-Ross & Kessler, 2014).

The fifth and final stage of grief is acceptance (Kübler-Ross, 1969). Acceptance is the recognition that the deceased is physically gone and that this is a new, permanent reality (Kübler-Ross & Kessler, 2014). Acceptance does not mean that an individual is ok with the loss, but rather that the bereaved is learning to live with the loss (Kübler-Ross & Kessler, 2014). Through acceptance, the bereaved begins to retract energy from the loss and reinvest in other aspects of life (Kübler-Ross & Kessler, 2014).

Exposing the terrible conditions and treatment experienced by terminally-ill patients, "On Death and Dying" successfully enhanced the care for dying individuals (Friedman & James, 2008). However, the model presented by Kübler-Ross (1969) implied that failure to complete any of the five stages would result in an assortment of complications for the bereaved (Hall, 2017). Further, although Kübler-Ross was the first to present a stage model theory of grief, other theorists followed her lead (Friedman & James, 2008).

Bowlby. While Freud's (1922) initial grief model emphasized the termination of the relationship following death, Bowlby (1969) viewed mourning as a biological multi-phase response to the threat of the loss of a significant relationship (Malkinson, 2017). Setting the stage for the development of attachment theory, Bowlby highlighted human characteristics of relationship management which includes the making and breaking of relationships throughout the lifecycle (Malkinson, 2017). Bowlby emphasized that grief

involves the breaking of the attachment and proposed four key phases of mourning. These phases include: numbing, yearning, and searching, disorganization and despair, and reorganization (Miles, 2015). While Bowlby did not imply that the stages are lineal, clinicians continue to use the four stages to provide a framework for the bereaved (Miles, 2015).

Bowlby (1969/1980) viewed grief as a form of separation anxiety in which the motivation is to reestablish proximity with the lost person or object (Klass, 2015). In bereavement, however, the separation is permanent and the attempt to restore proximity is nonfunctional (Klass, 2015). Despite the inaptness of attempts to restore connections, bereaved individuals engage in behaviors congruent with connecting with the deceased until they gradually extinguish as a result of phases designed to help break bonds with the deceased (Klass, 2015). Bowlby (1980) emphasized that healthy mourning occurs through the provision of space, time, validation, acknowledgement, rituals, and the ability to fully experience the loss without hurrying (Granek, 2013). Pathological mourning, according to Bowlby, happens only when none of these conditions transpire (Granek, 2013). For Bowlby, the focus of pathological grief shifted from symptoms and duration to the obstruction in experiencing grief which, as a result, inhibited the development of relationships and personal growth (Granek, 2013). Bowlby also suggested that factors such as the age and sex of the bereaved, the identity of the deceased, and circumstances of the death can all influence mourning (Miles, 2015). Further, it is important to accentuate that Bowlby was vague in his argument related to relationships with the deceased (Stroebe & Schut, 2005). Bowlby did not explicitly acknowledge an opinion on

the argument for whether the bereaved must disengage from or continue an attachment with the deceased to promote adaptive grieving (Stroebe & Schut, 2005). Rather, Bowlby simply conceded that the ultimate goal of grief was to change the nature of the bond, rather than dissolve it (Strobe & Schut, 2005), a concept that preemptively endorses the continuing bonds theory.

Influenced by the work of Bowlby, Parks (1972) also identified several phases of grief: shock and numbness, yearning and protest, disorganization, and reorganization (Miles, 2015). These stages, according to Parks, are not linear or clearly defined, resulting in a grief experience influenced by several variables (Miles, 2015). Initially, Parkes viewed grief as an acute stress response. Later, Parks conceptualized that grief is a life transition in which the bereaved changes their view of the world (Miles, 2015).

Challenges to Stage Models

Freud's (1917/1922) description of grief as a process in which the bereaved must break ties with the deceased as a part of healthy grief, influenced clinical intervention for almost half a century (Hall, 2014). However, the empirical literature has not produced evidence that stages of grief exist or that grief is a linear and terminal process (Friedman & James, 2008). Rather, grief is a widely experienced and expected response to loss. The conversation of "breaking bonds" has transformed into a dialogue about how the bereaved reconstruct their relationships with the deceased rather than terminate them (Miles, 2015). The endorsement of grief-specific stages places the bereaved at risk for being in conflict with their personal grief reactions and emotions as they may not align

with the process outlines by traditional stage models (Friedman & James, 2008; Hall,

2014).

Although stage-models remain prominent among healthcare professionals and

researchers, there has been an increase in opposition to the prescriptive nature of such

models (Stroebe et al., 2017). Knowing that bereavement is associated with negative

physical and emotional health outcomes, it is essential to understand the current

bereavement literature and theoretical underpinnings of adaptive coping following the

loss of a loved one (Stroebe et al., 2017).

Early models of grief have received criticism for being too inflexible (Hall, 2014).

For the duration of the 20th century, researchers considered grief to be a methodical and

terminal process (James, 2014). As a result, contemporary thanatology is beginning to

challenge traditional interpretations of mourning (Neimeyer, 2014). Having reached the

one-hundred-year mark since Freud's (1917) publication of Mourning and Melancholia,

it is important to reflect on current understandings of adaptive and maladaptive coping

(Stroebe, Schut, & Boerner, 2017b).

Stage models, such as the one proposed by Kübler-Ross (1969), promote the idea

that, following the death of a friend or family member, bereaved individuals transition

through a pattern of specific and observable reactions over time (Stroebe et al., 2017).

Literal interpretations of the model presented by Kübler-Ross have resulted in a common

misbelief that in order to adapt effectively to loss, an individual must follow the five

specific stages (Stroebe et al., 2017). However, despite concerns that stage theory

developed in the absence of sound empirical evidence, lacks clarity, and is unable to

assist in identifying individuals as risk for complicated grief, stage theory remains

difficult to extricate as a preferred approach to grief work among professionals and the

bereaved (Hall, 2014; Stroebe et al., 2017). The simplicity of Kübler-Ross's model is in

stark opposition to the emotional obscurity associated with death (Stroebe et al., 2017).

The appeal of stage theory, therefore, rests in its perceived ability to provide bereaved

individuals with an understanding of what to expect as well as a promise of eventual

"recovery" from the loss (Friedman & James, 2008; Hall, 2014).

Researchers have long-stated that bereavement is one of the most stressful life

events (Holmes & Rahe, 1967). Despite the significance of loss, however, there are

various ways in which individuals experience grief (Bonanno et al., 2002). Freud's

(1922) conceptualization of grief work resulted in the classification of grief as a

pathology, instigating the need for psychological interventions designed to heal the

bereaved as quickly as possible (Roberts, Thomas, & Morgan, 2016). Therefore, theories

such as Kübler-Ross's stage model of grief appeal to those wanting to get over the death

loss. However, Kübler-Ross (2014) recently acknowledged that there has been a gross

misinterpretation of the five stages of grief and affirmed that there is no typical response

to loss (Kübler-Ross & Kessler, 2014).

Grief, according to Kübler-Ross and Kessler (2014), is not comprised of prescribed,

linear, or expected stages as interpreted following the initial release of "On Death and

Dying." Rather, grief and mourning are subject to historical, social, and cultural

circumstances that influence the understanding and application of grief and mourning in

everyday life (Granek, 2011; Kübler-Ross & Kessler, 2014). The inability to attend to the

diverse and highly personal experience of grief, influenced by a variety of physical, social, psychological, and spiritual needs following the death of a friend or family member, are some of the key challenges to the one-size-fits-all approaches of stage models and traditional grief theories (Hall, 2014). Even Freud, following the death of his daughter and grandson, refuted his initial claims that healthy grief involves breaking the bonds of love (Miles, 2015). Additionally, technological developments, such as the internet, are indisputably influencing current theories of grief.

Continuing Bonds

The theory of continuing bonds contests the finality of the grieving process represented by previous theories (James, 2014). First constructed by Klass et al., (1996), the theory of continuing bonds asserts that relationships between the bereaved and the deceased do not end after death. Rather, relationships continually evolve post-mortem and allow the bereaved to maintain relationships overtime (Klass et al., 1996). A continuing bond, therefore, is ''the presence of an ongoing inner relationship with the deceased person by the bereaved individual'' (Stroebe & Schut, 2005, p. 477). Through continuing bonds, relationships do not end; rather the bereaved alter the nature of the relationship with the deceased following their death (Stillion & Attig, 2014, p. 36).

As social animals, humans are predisposed to pursue and develop relationships with others (McFarland & Ployhart, 2015). The relationships humans form extend beyond the limits of life, resulting in emotional relationships between the bereaved and the deceased (Bailey, Bell, & Kennedy, 2015). Consistent with the constructionist model of grief, the continuing bonds theory asserts that the bereaved are in a continual stage of

emotional fluctuation with the deceased (Bailey et al., 2015). Grief, therefore, is not terminal, but rather a constantly evolving social and emotional relationship between the living and the dead (Bailey et al., 2015). Continuing bonds serve as an expression of how individuals create and maintain a relationship with the deceased (Bailey et al., 2015; Klass et al., 1996).

The continuing bond materializes as an interactive connection with the deceased when individuals perceive the enduring presence of the deceased or try to engage in direct communication with the deceased following their death (Foster et al., 2011; Silverman & Nickman, 1996; Root & Exline, 2014). Bereaved individuals exhibiting continuing bonds maintain an interactive connection with the deceased, intermittently accessing the presence of the deceased to obtain guidance, manage stress, and engage in conversations to seek comfort (Currier et al., 2015). Continuing bonds may be represented in a variety of forms and are expressed in a multitude of ways in the bereavement literature (Root & Exline, 2014). Maintaining memories of the deceased, reminiscing about the deceased through storytelling, looking through photographs, and preserving possessions that previously belonged to the deceased were traditional expressions of continuing bonds (Currier et al., 2015). Other traditional demonstrations of continuing bonds included visiting physical gravesites of the deceased, talking aloud to the deceased, or continuing to celebrate anniversaries, birthdays, or other memorial events (Klass et al., 1996). Continuing bonds may also include internalizing characteristics of the deceased (Klass, 1993; Russac, Steighner & Canto, 2002). The bereaved may, therefore, perceive the deceased to have an influence on their current life

(Klass, 1993). The bereaved may engage in activities previously enjoyed by the deceased or view the deceased as a role model (Foster et al., 2011). Internalizing a positive connection with the deceased as a means of guiding future behavior may encourage the bereaved to pursue personal life goals to honor the deceased or continue the legacy left by the deceased (Currier et al., 2015).

The theory of continuing bonds is inherently flexible in its application of multiple situations and populations (Irwin, 2015). As such, this study sought to expand the application of continuing bonds to social media, examining the practice of continuing bonds in Facebook memorial pages. Resulting from the development of Web 2.0 technology, continuing bonds are now present in a variety of online forms (DeGroot, 2014; Frost, 2014; Rossetto et al., 2015). Bereaved individuals are now writing on the virtual wall of deceased friends and family members, posting pictures, and reliving memories in an online environment (Brubaker & Hayes, 2011). Visiting the Facebook page of a deceased loved one is comparable to traditional expressions of continuing bonds, as many compare the experience of visiting an online memorial page of the deceased to visiting a cemetery or other physical memorial site (Castro & Gonzalez, 2013). Similarly, writing messages online to the deceased is analogous to having a conversation at a gravesite or other special place of mourning (Castro & Gonzalez, 2013).

Irwin (2015) found that Facebook memorial pages provide an innovative and public environment for maintaining continuing bonds with the deceased. Irwin (2015) identified that the bereaved have transcended traditional limitations of space and time to continue relationships with the deceased online. Analogous with traditional continuing

bonds practices, Facebook users seek guidance from beyond the grave as well as and reunification with the deceased (Irwin, 2015). Facebook users also post messages to the deceased and engage in conversations with the deceased online (Irwin, 2015). The online behaviors of mourners demonstrates the creation of a "paranormal copresence" between the bereaved and the deceased (Irwin, 2015, p. 7).

Following the initial conceptualization of continuing bonds theory, Klass (2006) expressed concern with the apparent misinterpretation of the original theory (Irwin, 2015). Klass asserted that that the original claim of the continuing bonds theory did not suggest the level of benefit in bereavement adjustment, but, rather, noted that researchers must not focus on simply the presence or absence of the phenomenon of continuing interactions with the dead (Bowlby, 1980; Irwin, 2015; Klass et al., 1996; Rosenblat, 1983). Rather, Klass emphasized that, as stated in his original work, "we need to be open to both the positive and negative consequences of this activity" (Klass et al., 1996, p. 72).

Mourning Rituals

In Western industrialized societies, grief and mourning happen within a psychological model that encompasses a process through which individuals in mourning do grief work (Granek & Peleg-Sagy 2017). Grief work involves the active mourning of the loss of a loved one and may include talking about the loss, seeking professional counseling services, utilizing medication to cope, and engaging in death rituals (Granek & Peleg-Sagy, 2017). Rituals are psychologically organized, culturally traditional, developmental trademarks of the human species (Watson-Jones & Legare, 2016). Death related rituals consist of ceremonies that directly involve at least one person and use

symbols related to the loss (Reeves, 2011). Rituals may also directly or indirectly involve

others (Reeves, 2011). Ritualistic behaviors often entail enhanced meaning and emotion

focused on a specific situation or event distinct from ordinary activities (Reeves, 2011).

Examples of rituals related to death include dealing with the deceased's remains, wakes,

funerals, burials and gathering celebrations (Brooten et al., 2016). These rituals help the

bereaved acknowledge the death, deal with grief, accept the loss, maintain a connection

with the deceased, and continue their own functioning (Granek, 2013).

  The impact of rituals has the ability to transfer across generations making rituals a

paradigm that foster a sense of continuity of experience from the past to the future

(Fiese, 2007; Migliorini, Rania, Tassara, & Cardinali, 2016). Engaging in rituals fulfills a

variety of purposes associated with communal living (Legare & Watson-Jones 2015).

Rituals provide a means of identification for group members and allow group members to

demonstrate commitment to in-group values (Legare & Watson-Jones, 2015). Rituals are

often expensive both financially and emotionally (Legare & Watson-Jones, 2015). As

such, participating in communal rituals creates an attachment among group members and

fosters the permanency of social groups (Legare & Watson-Jones, 2015).

  Rituals in the face of loss are present across time and culture (Norton & Gino,

2014). As a result, ritual behaviors differ across cultures, religions, race, and ethnicity

(Brooten et al., 2016). The pressure to devise rituals to accompany negative life events

results in a variety of mourning behaviors that, consequently, are often contradictory

(Norton & Gino, 2014). For example, Tibetan Buddhists view crying at the death of

someone to be disruptive while Catholic Latinos welcome the practice and view it has a

sign of respect (Norton & Gino, 2014). Additionally, Jewish males prefer to grow a beard during times of mourning while Hindu ritual stresses the importance of hair removal while mourning (Norton & Gino, 2014). Ritualistic behavior manifests not just in religious practice, however, but is present across domains of human life (Norton & Gino, 2014). Rituals provide order and stability while marking change— especially in times of chaos and disorder (Romanoff, 1998; Turner, 1969). Cultural factors such as peer behavior, employment, and media exposure may influence the way individuals deal with death (Rosenblatt, 2015). As such, younger generations may be less likely to adhere to traditional death rituals and may modify rituals in relation to the age of the deceased (Brooten et al., 2016; Rosenblatt, 2015). For individuals who practice mourning rituals from other cultures, including acts of self-mutilation, the ceasing of bathing, hair growth, or other outward expressions of grief, the repercussions experienced by traditional American policies may serve to enhance the negative experience of mourning (Rosenblatt, 2015).

Regardless of the specificity of the action or the loss memorialized by the event, mourners universally use rituals to reestablish feelings of control following a loss (Norton & Gino, 2013). Rituals define the death by attending to the identity of the deceased, the cause of death, the relationships the bereaved had with others, and the meaning of life (Rosenblatt, 2015). Failure to complete death rituals can result in feelings of guilt and an inability to move forward in life following the loss (Rosenblatt, 2015). Socially, there is an immense pressure to engage in death rituals (Rosenblatt, 2015). Mourners often

engage in death rituals despite not believing in the ritual practice to avoid judgement from society as a bad or dangerous person (Rosenblatt, 2015).

Klastrup (2015) observed similar behavior in her evaluation of Facebook memorial pages. Klastrup identified that strangers accessed the online memorial pages of deceased Facebook users to make condolences without identifying any personal connection to the deceased. Six percent of the posters made specific comments which highlighted that they did not know the deceased at all (Klastrup, 2015). Similarly, DeGroot and Leith (2015) observed the use of social media memorial pages by fans following the death of a television character. Parasocial relationships, such as the relationships formed between television characters and television viewers, mimic face-to-face relationships, but do not require the individuals to ever meet (DeGroot & Leith, 2015). Despite the absence of a physical relationship between the bereaved and the deceased, DeGroot and Leith (2015) found that, following the death of a television character, viewers accessed social media sites to engage in emotional expressions of grief and reminisce about the actor. The advent and expansion of Facebook creates a world in which parasocial relationships are increasingly easy to develop and maintain (Baek, Bae, & Jang, 2013), making it essential to continue to explore the role of continuing bonds both between close friends and amongst parasocial internet relationships.

Across cultures and historical time periods, there has been a variety of communicative behaviors between the living and dead (Graham, Gibbs & Aceti, 2013). Bonaparte's 1804 Decree of 23 Prairial Year XII governed rules that remained consistent throughout time (Ariès, 1981). The rules established by the Decree determined that

individuals would bury bodies next to one another, no one would unearth or reuse burial sites for a predetermined amount of time, that communities would establish cemeteries in a certain area, that trees and shrubbery would fill cemeteries, and that individuals would purchase gravesites to adorn with monuments (Ariès, 1981; Graham, Arnold, Kohn, & Gibbs, 2015). These rules have seemingly transcended into the virtual world, as the first virtual mourning sites included options to purchase shrubbery and placed the memorial of the deceased in a dedicated online burial plot, providing mourners with options to further adorn the online grave with flowers and monuments (Roberts & Vidal, 2000).

As early as 1909, individuals recognized rituals as religious and social endeavors designed to help individuals cross the threshold, or limen, from one status to another (van Gennep, 1960). As such, rituals developed for major life transitions including birth, marriage, initiations into new communities, and death (Reeves, 2011). Expanding on van Gennep's work, Turner (1969) identified three distinct phases of ritual. Continuing the threshold metaphor, Turner described the first stage as a symbolic behavior which represented the detachment of the bereaved from an earlier fixed point in the social structure or from a set of cultural conditions (Reeves, 2011). The second phase occurred as the bereaved possessed characteristics that were ambiguous and belonged neither to the state in which the deceased existed or in the cultural realm that is to come (Reeves, 2011; Turner, 1969). Finally, the third stage transpired when the bereaved demonstrated stability by returning to functioning with rights and obligations within a defined structure (Reeves, 2011; Turner, 1969). Although rituals exist for limen events, ritual behaviors differ as a result of the primary grievers' ritual phase (Reeves, 2011). For example,

preliminal rituals, such as the Catholic practice of Anointing of the Sick, may occur as

individuals prepare for the death. Liminal rituals, such as funerals, take place

immediately following the death. Postliminal rituals may occur for months and years

following the death and may include events such as spreading ashes or visiting

comforting places in remembrance of the deceased (Reeves, 2011).

In response to emerging developments in art, culture, and technology, the

traditions used to represent death, the dead, and mourning following the loss of a loved

one have evolved throughout history (Cann, 2014; Graham, et al., 2013). Pre-

industrialized societies engaged in communal mourning (Walter, 2015). Living in small,

rural areas, these communities were comprised of large families and the rates of child and

infant mortality were high (Walter, 2015). As such, the death of a child would leave an

entire household, including parents and siblings of the deceased in mourning (Walter,

2015). Due to the small size of the community, even non-relatives knew of the deceased

and participated in grief-related events (Walter, 2015). As such, the mourning process

was a shared experience (Walter, 2015). At this time, the bereaved withdrew from society

to allow time to grieve the dead and engage in the liminal state of mourning (Cann,

2014). During this time, the bereaved would wear clothing symbolic of grieving and

excuse themselves from social and occupational obligations for a period of time (Cann,

2014). After a short time, the bereaved would re-enter daily life and engage in

remembrance activities to honor the dead on a regular basis (Cann, 2014).

Gravescapes developed to honor the deceased and construct how the bereaved

would remember the deceased following their death (Church, 2013). Mourners adorned

burial sites with mementos of the deceased, implying the belief that the deceased could, perhaps, take their possessions with them to an afterlife (Church, 2013). Memento mori displays dominated cemeteries during the 19th century, expressing to viewers that life is fragile (Church, 2013). The elaborate funerals, specific mourning etiquette, and public displays of grief highlight the romanticism of death present during this time (Graham et al., 2015).

The invention of photography during the 19th century allowed for the encapsulation of individuals dead or alive, blurring the lines between life and death (Sherlock, 2013). Photographers in 19th century England captured images of the dead immediately following their death, creating images of their loved one for bereaved family members (Kearl, 1989). Similarly, Brady used photography to capture images of the hundreds of thousands of Americans slain during the Civil War (Faust, 2008). Displaying the images at his New York gallery, Brady was one of the first to bring home the war and make images of death accessible to the masses (Faust, 2008).

In part due to the advancements made during the Industrial Revolution and the sheer increase in deceased bodies during the Civil war, the mourning process in America quickly became commercialized (Cann, 2014). Funerals became the norm for families, providing a time for relatives and friends of the deceased to gather together and share memories (Cann, 2014; Norton & Gino, 2014). During the funeral, mourners typically displayed pictures of the deceased and individuals took turns sharing stories of their times with the deceased (Norton & Gino, 2014). The funeral traditionally ended with the burial of the deceased (Norton & Gino, 2014). Following the funeral, pictures and

remembrances of the deceased would disappear and conversations related to the deceased declined in frequency (Norton & Gino, 2014).

Death and mourning became a much more private issue as the West entered the Victorian era (Bennet & Huberman, 2015; Walter, 2015). Advancements in technology resulted in greater longevity and geographical mobility which meant that the typical death was now of an older person rather than a child and greater geographical distance often separated mourners (Bennet & Huberman, 2015; Walter, 2015). Physical exclusion from other mourners coupled with a decline in traditional mourning rituals such as dress that outwardly symbolized grief meant that an individual could experience mourning while peers, co-workers, and neighbors remained oblivious about the loss (Walter, 2015).

The isolation that accompanied grief began to take a toll on mourners during the second half of the 20th century and mourners began seeking support in alternative ways (Walter, 2015). Individuals in mourning began to seek professional help from counselors to attend to issues related to grieving (Walter, 2015). Provided in individual or group formats, grief counseling served to validate the feelings experienced by the bereaved, challenging feelings criticized by others due to societal notions (e.g. "you should be over it by now") (Walter, 2015). In addition, the first online grief groups began to appear in the 1990s, allowing mourners to access support at any time and from any place (Walter, 2015).

An expansion of mass media, celebrity culture, and the internet marked the late 20th century (Walter, 2015). As a result, individuals could, for the first time, engage in acts of mourning for high profile deaths regardless of physical or emotional closeness to

the deceased (Walter, 2015). Mourners developed large-scale shines for victims who became known to thousands through news and media outlets (Walter, 2015). Unlike the mandatory mourning of rulers and heroes, the death of celebrities, disaster victims, and victims of crimes and other tragic circumstances, challenged the notion that grief should be a private occurrence (Walter, 2015).

Expanding the public act of mourning, the internet afforded the opportunity for individuals to create and maintain relationships online (Egnoto, Sirianni, Ortega, & Stefanone, 2014). As a result, individuals began connecting with others in ways that were not possible before (Egnoto et al., 2014). These social relationships now connect mourners with others throughout the world, including other mourners as well as the dead (Walter, 2015). The ease and pervasiveness of mobile technology has resulted in a full-circle of mourning behaviors (Walter, 2015). As mourners can now access grief material any time of any day, memorials are no longer a singular physical time or space event (Walter et al., 2012). Rather, similar to pre-industrial villages, mourning is once again visible to all and experienced in a communal fashion (Walter, 2015).

American mourners remember the deceased in a variety of ways (Irwin, 2015). Traditionally, memorial practices included funerals, physical gravestones, epitaphs, and written documents (Irwin, 2015). Without rituals and memorial traditions, memories of the deceased diminish quickly (Smith, 1996). Smith (1996) asserted that only through memorialization is the memory of the deceased extended beyond the lifetimes of those that can remember them through experience. Immortality, therefore, transpires through memorializing the dead and creating a shared meaning among the bereaved through

which there is a reinforcement of social and symbolic relationships (Irwin, 2015). The establishment of social networks serves to enhance the ability to engage in public remembrances and maintain continued bonds with the deceased (Irwin, 2015).

Social Networks

The internet is an interconnected set of networks which allows computers and other devices to connect to each other (Campbell-Kelly & Garcia-Swartz, 2013). Even before internet use became the mainstream occurrence it is today, individuals were using the internet to make connections in virtual spaces (Gottlieb & Kleiner, 2016). Launched in the 1970s, CompuServe and Bulletin Board System (BBS) were among the first online meeting sites available to the general public (Gottlieb & Kleiner, 2016). These online meeting sites allowed users to communicate in a central system through which they could download files, access information, share materials, play games, and post messages (Digital Trends Staff, 2016). Individuals used CompuServe and BBS into the 1980s and 1990s when the popularity of the internet exploded (Digital Trends Staff, 2016).

Officially launched in 1993, the World Wide Web became an avenue to access information through the internet (Campbell-Kelly & Garcia-Swartz, 2013). Almost instantly, social media emerged (Digital Trends Staff, 2016). Online services such as Microsoft Service Network and America Online emerged and allowed members to connect with other users and chat through online messages either individually or in groups (Brooks & Cox, 2017). The new millennium brought an increase of social media outlets, including the launch of Friendster in 2002, Linkedin and MySpace in 2003, and Facebook in 2004 (Carrol & Landry, 2010; Digital Trends Staff, 2016; Facebook, 2017).

Online social networking sites (SNS) are continually changing the ways in which human beings interact with one another (Kross et al., 2013). Social networking sites are online services that allow users to "(a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a connection, and (c) view and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2007, p. 211). More simply, social networking sites are online environments where a user can generate a personal network connecting themselves to other users, especially close friends and family (Lenhart & Madden, 2007; Subrahmanyam, Reich, Waechter, & Espinoza, 2008).

In addition to being a varied collection of digital platforms through which individuals communicate and interact, social media represents a unique context for communication that is vastly different from traditional (face-to-face) and even other digital (email) means of interacting (McFarland & Ployhart, 2015). Social networking sites such as Facebook, Twitter, and Instagram have revolutionized the ways users connect with another, communicate, and cultivate relationships (Derks & Bakker, 2013; McFarland & Ployhart, 2015).

Although new social media websites launch constantly, all social media networks share an underlying platform based on technology known as Web 2.0 (McFarland & Ployhart, 2015). Web 2.0 is an internet structure that allows a large number of users to contribute to the creation, management, and distribution of online content (McFarland & Ployhart, 2015). As such, individuals are no longer simply obtaining information from the internet, they are a part of its creation (McFarland & Ployhart, 2015). As a result,

social media has become an online community that makes communication between users more accessible, interactive, and unpredictable when compared with Web 1.0 and traditional means of interaction (McFarland & Ployhart, 2015). The increased accessibility to the dynamic communications offered through Web 2.0 has resulted in the emergence of social networking sites as a fundamental method of communicating about interpersonal relationships (Fox & Moreland, 2015).

Nearly 65% of American adults use SNS (Perrin, 2015). This number rises to 90%, however, when examining the social media use of young adults age 18-29 (Perrin, 2015). Regardless of age, men and women tend to use SNS at similar rates, with 68% of all women reporting logging on to SNS compared to 62% of all men (Perrin, 2015). Additionally, racial differences in social media use are not notable, as 65% of Whites, 65% of Hispanics, and 56% of African-Americans actively use social media (Perrin, 2015).

The amount of time spent online by young adults is perhaps most revealing (Shapiro & Margolin, 2014). Many young adults begin and end their day by checking social media (Shapiro & Margolin, 2014). The rate at which young adults are using social media is concerning, as the use of social networking sites frequently disrupts solitary activities and engagement in face-to-face interactions (Shapiro & Margolin, 2014). Young adults between the ages of 16 and 24 now spend an average of 27 hours and 36 minutes per week online (Luckerson, 2015). Further, young adults spend an estimated 30% of time engaging in social media interaction (Asano, 2017). The average person, therefore, is spending almost two hours, or 116 minutes, a day on social media (Asano,

2017). Over a lifetime, the average person will spend 5 years and 4 months interacting with social networking sites (Asano, 2017). Young adult users are currently using Facebook, the world's largest social networking site, for an average of 35 minutes each day (Asano, 2017; Lincoln & Robards, 2017).

Facebook

Originally created in 2004, Mark Zuckerberg and his roommates initially designed Facebook to help Harvard University students connect with one another (Lincoln & Robards, 2017). However, over the last thirteen years, the social networking site has rapidly expanded and infiltrated the daily lives of users across the world (Brubaker et al., 2013; Lincoln & Robards, 2014; Lincoln & Robards, 2017). Utilized more often than any other social networking site, Facebook has revolutionized the way in which individuals communicate with one another about virtually every aspect of their lives (Lincoln & Robards, 2017).

To use Facebook, an individual creates an account on the website Facebook.com. The individual provides basic personal information such as name, birth date, email address, and a selected password and then receives account access (Caers et al., 2013). Once an account is active, an individual can begin to connect with other people (Dalsgaard, 2016). These connections are known as Facebook 'friends' (Dalsgaard, 2016). These friends are the essence of Facebook, as the function of social networking is for users to create themselves through storytelling and sharing moments for their networked audience (Androutsopoulos, 2014). However, friending, while reciprocal by both users, is not necessary procured offline (Giaxoglou, 2014). Users may select to

'friend' family members, classmates, work colleagues, acquaintances, and even complete strangers (Giaxoglou, 2014). The reasons for friending someone on Facebook vary widely among users as does the meaning that users attribute to the friend category on the site (Miller, 2011).

Facebook standardizes accounts to ensure that users can easily access features and find desired data (Caers et al., 2013). There are two primary pages for each Facebook user: a profile and the newsfeed (Androutsopoulos, 2014). Often called the wall, the profile page is where Facebook users present themselves to others (Caers et al., 2013). On their profile, users can add a small photo to represent themselves and a large cover photo that spans across the top of their profile page. Under this section, users can make posts about anything they would like to share with their friends (Caers et al., 2013). Termed a wall event by Androutsopoulos (2014), once a user has posted a status on their profile, others can respond through commenting, liking, or sharing the post (Caers et al., 2013; Giaxoglou, 2014). The updated social plug-ins, introduced in 2009 and redesigned in 2013, have expanded to include options for users to react using Love, Haha, Wow, Sad, or Angry options (Krug, 2016). As such, individuals are able to present themselves online for their networked audience, and, through the interactive reactions of their friends, create and re-create stories, communities, and personal identities online (Giaxoglou, 2014). Similarly, users can access their homepage, or newsfeed, to obtain access to status updates and other activities posted by their networked friends. The newsfeed then serves as a chronological account of what users have been doing for the past several hours (Caers et al., 2013).

For many users, Facebook has become an fundamental part of their lives (Giaxoglou, 2014). Facebook has transformed the ways in which individuals communicate with one another daily (Lincoln & Robards, 2017). Active Facebook users have come to accept the social networking site as a framework for interactions with others through a specified format of messages, wall postings, and the sharing of videos, images, and links to external sources (Giaxoglou, 2014). Facebook blurs the lines of what is private and what is public, allowing users to post any information they choose and receive comments on these posts from anyone in their networked audience (Giaxoglou, 2014; Lincoln & Robards, 2017). When significant life events occur, users are able to access their profiles and reflect on their Facebook page, which has become a narrative for their life (Lincoln & Robards, 2017). As a result, Facebook has become a critical site for users to create, share, reflect, and revise their life narratives (Lincoln & Robards, 2017).

The development, amelioration, and expansion of Facebook has been one of the most influential and significant social trends in the last decade (Caers et al., 2013). Although there is empirical literature related to other social networking sites, including Friendster and MySpace, the emergence of Facebook has had a profound impact on the landscape of the internet (Lincoln & Robards, 2017). While Facebook serves as a transient site for self-presentation and a technological narrative of life, the social networking site also establishes a technology of death as the site archives digital information, interactions, and narratives that survive long after one dies (Varis & Spotti, 2011). Additionally, social networking sites often serve as a collection for and of digital

memories and tributes to the dead, creating an expansion of technologically-related death culture (Haverinen, 2014).

Since its emergence, there have been numerous articles published on various aspects of the social media site (Caers et al., 2013). Seeking to examine the social phenomenon of Facebook, researchers in psychology, education, law, communication studies, and a variety of other disciplines have used Facebook as a means of better understanding the social world we live in (Lincoln & Robards, 2017; Miller, 2011). A growing body of literature (Brubaker et al., 2013; Carroll & Landry, 2010; Dobler, 2009; Giaxoglou, 2014; McEwen & Scheaffer, 2013; Sanderson & Cheong, 2010; Smartwood, et al., 2011; Varis & Spotti, 2011) presents a consensus that Web 2.0 technology and social networking sites are having a significant impact on the social and cultural practices related to death and memorialization (Giaxoglou, 2014). However, small sample sizes and counties included in the studies limits the scope of many such articles (Caers et al., 2013). Additionally, Facebook is constantly updating and changing designs and features, making it necessary to revisit research and integrate research findings as Facebook evolves (Caers et al., 2013).

Cybermemorials

For many, virtual worlds represent a very real space that is interrelated to physical life (Braman, Dudley, & Vincenti, 2017). Social networking sites facilitate connections with other users and serve as an extension of everyday interactions (Braman et al., 2017). As the real world and virtual spaces become increasingly intertwined, the exchanges that occur online become more frequent and progressively personal (Braman et al., 2017).

With the displacement of so many real-world practices to online venues, the expression

of grief and mourning is no exception (Lopes, Maciel, & Pereira, 2014).

Shortly after the advent of virtual platforms for mourning, Sofka (1997)

conceived the term thanatechnology to describe the way in which individuals use the

internet to demonstrate feelings of grief following the death of a loved one. In doing so,

Sofka highlighted how mourners use online resources to commemorate the dead and

obtain various means of support: informational, emotional, and instrumental (Graham et

al., 2015). Further, and a bit premonitorily, Sofka explained how virtual spaces provide a

variety of mourning outlets for the bereaved including story-telling, sharing of emotions,

and memorializing the dead (Graham et al., 2015).

Memorialization is a universal human practice that, as technology advances, is

becoming increasingly interconnected with our digital lives (Moncur & Kirk, 2014).

However, the act of grieving online remains a relatively new phenomenon (Malenkovich,

2013). Historically, grief was a shared experience in which the bereaved gathered

together in the same physical space to mourn the loss of a member of the community

(Walter, 2015). Changes to geographical access and increases in suburbanization have

resulted in profound new social frameworks for mourning (Walter, 2015). Death now

impacts individuals who may live in various cities, states, or even continents (Walter,

2015). As a result, geographical distances often detach primary mourners from others

mourning the deceased, creating fragmented social networks and increasing the privacy

of grief (Walter, 2015). The emergence of complex technologies and virtual interfaces,

however, allows for the communal process of grief to take place online through digital

memorials (Lopes et al., 2014). Social networks, such as Facebook, have transformed the grieving process (Brubaker et al., 2013) as online mourning continues to provide a new form of memorializing the dead and establishes a virtual grief culture (Walter, 2015).

Ritualized mourning process such as funerals and obituaries control the time and space in which grieving occurs (Carlton, 2016). When mourning occurs online, the digital foundation of these ritual behaviors significantly alters the boundaries of time and space (Carlton, 2016). In cybermourning, the grief experience transitions from an attempt to replace the loss to a reformation of the experience (Hartman, 2012). For example, in traditional mourning, individuals may place a picture of the deceased in a prominent place only to hide it away over time (Hartman, 2012). Cybermourning, however, allows individuals to add and tag photographs of the deceased online posthumously (Hartman, 2012). As such, tagged photographs connect in a virtual world, linking all photographs of the deceased, and creating, in essence, a new identity for the deceased as online mourners share these images (Hartman, 2012).

The first online networks for grief emerged in the 1990s in the form of cyber memorials, web memorials, and virtual cemeteries (Giaxoglou, 2014). One of the first, and most long-standing, virtual memorial pages is the World-Wide Cemetery (WWC, n.d.). The World-Wide Cemetery launched in 1995 and remains functional today (WWC, n.d.). The website invites individuals to "transform your obituary or eulogy into a dedicated, named internet page, freely accessible forever" (WWC, n.d). The site goes on to promote the ease of use, noting that users do not have to pay recurring fees, remember passwords, or endure advertisements (WWC, n.d.). Those wishing to create a virtual

memorial for their loved one pay a one-time fee of ninety dollars and guaranteed access

to the memorial for 100 years (WWC, n.d.). Other early examples of web memorials

include Virtual Memorial Gardens, Garden of Remembrance, and Dearly Departed (de

Vries & Rutherford, 2004).

In the early stages of online mourning, individuals could post personal messages

to their deceased loved ones on websites known as cemeteries. (Roberts & Vidal, 2000).

Roberts and Vidal (2000) compared virtual cemeteries to traditional cemeteries, noting

that just as one could visit a grave, so, too, could an individual visit an online memorial.

Additionally, the text-based nature of early virtual cemeteries provided a similar

appearance to a traditional obituaries or gravestone inscription (Roberts & Vidal, 2000).

Postings to online memorials at this time required mourners to send demographic

information, a small fee, and a body of text through an e-mail server (Roberts & Vidal,

2000). Early online memorials had limited functionality but provided the bereaved a

constructive space in which to mourn and share the bereavement experience with others

(Gulotta, Gerritsen, Kelliher, & Forlizzi, 2016). However, as early as the year 2000,

researchers identified distinctions between web memorials and traditional mourning

rituals which include (a) the flexibility to post to an online memorial at any time; (b) the

ability for those who feel disenfranchised to post without restriction and engage in public

mourning rituals without being denied access; (c) access to visit and re-visit memorials

for any reason, and; (d) the option to share the memorial with others despite geographical

distances (Roberts & Vidal, 2000).

Information technology facilitates the construction, maintenance, and access of virtual memorials (Maddrell, 2012). Online memorialization merges traditional postmortem activities and rituals with new technologies, allowing users to post updates, share memories, and preserve relationships with the dead (Brubaker & Hayes, 2011; Egnoto, et al., 2014). Virtual memorials assist the bereaved in making sense of the loss and in sustaining relationships with the deceased (DeGroot, 2012). Regardless of personal idiosyncrasies, virtual cemeteries serve three ultimate functions for the bereaved: to enhance relationships with the living, create new virtual communities, and continue bonds with the deceased, (Roberts, 2004).

Technology provides the bereaved with the ability to experience a relationship with the deceased through their online presence reminiscent of when they were living (Getty et al., 2011). Early virtual memorials were often private and shared among those with common loss experiences (Maddrell, 2012). In the 1990s, sharing web memorials was difficult to do beyond one's immediate social circle (Maddrell, 2012; Roberts, 2004). However, the rapid expansion of the internet has resulted in an increase of death-related services and options for creating virtual memorials. By creating a space in which the bereaved can interact, create narrative, make meaning of the loss, and engage in practical applications of continuing bonds, online memorials serve as therapeutic environments for those in mourning (Bailey et al., 2015; James, 2014; Kasket, 2012).

Technological advancements have made access to the internet much easier for users across the world. In response to enhanced access, a shift in general responses to grief occurred as those in mourning began to seek support through online groups in which

they were already a member (Falconer, Sachsenweger, Gibson, & Norman, 2011). In the

wake of the 2007 Virginia Tech and the 2008 Northern Illinois University shootings,

researchers noticed the effects of increased access to online applications and the impact

on grief almost immediately (Vicary & Fraley, 2010). Following the events, almost 90%

of students joined a Facebook group related to the shootings, 80% of students used

instant messaging options to discuss the shootings online, and more than 60% of students

engaged in conversations about the shootings and subsequent trauma on their Facebook

walls (Vicary & Fraley, 2010). A majority of students reported membership in a

Facebook group as a form of temporary, yet significant, relief following the shootings

(Vicary & Fraley, 2010).

Smartphones now serve as personal computers for millions of users (Carroll et al.,

2013; Culp-Ressler, 2013). The technology afforded by smartphones has had significant

impact on traditional relationships (Beal, 2015; Misra, Cheng, Genevie, & Yuan, 2016).

Users are now able to exist in a persistent state of absent presence, meaning an individual

can be physically present in one environment while simultaneously engrossed in a virtual

world somewhere else (Misra et al., 2016). This type of dual-presence provides mourners

an opportunity to manifest continuing bonds in a multitude of platforms following the

death of a loved one. Traditionally, mourners visit the grave or other locations that

generate feelings of closeness to the deceased (Pennington, 2017). The bereaved may also

talk to friends about the deceased and maintain an inner dialogue with the deceased

(Pennington, 2017). However, while these rituals remain possible, technological

advancements have produced counterparts to such behaviors. More specifically, visiting

the Facebook profile of the deceased now replaces the need to visit a physical grave,

talking with friends now occurs through making posts to Facebook pages, and inner

dialogues with the deceased now take place by sending private messages through social

media applications (Pennington, 2017). Each of these behaviors plays a role in supporting

the bereaved and continuing bonds with the deceased (Pennington, 2013).

Facebook Memorial Pages

With more than one billion active monthly users, Facebook is the world's largest

social networking site (Bouc et al., 2016; Facebook 2017). Facebook's mission is "to give

people the power to share and make the world more open and connected" (Facebook,

2017). However, upon its initial conception, the creators of Facebook had not considered

how this mission would extend to bereaved users (McCallig, 2014; McEwen & Scheaffer,

2013). It was not until a Facebook user and colleague died unexpectedly in 2005 that

Facebook established a procedure for memorializing a Facebook account (McEwen &

Scheaffer, 2013). Initially, to memorialize the Facebook account of a deceased user, an

immediate family member or Facebook friend had to report the death directly to

Facebook (McEwen & Scheaffer, 2013). Facebook staff would then verify the death and

memorialize the account of the deceased- meaning that the account would remain as the

user left it and users would not be able to add or delete any friends to the page (McEwen

& Scheaffer, 2013). After thirty days, Facebook would permanently deactivate the

deceased user's account (McEwen & Scheaffer, 2013).

Facebook did not change the memorialization procedure until 2007 following the

shooting at Virginia Tech University and the multitude of requests received by Facebook

to keep the accounts of the victims active indefinitely (McEwen & Scheaffer, 2013). In response to the advocacy of individuals in mourning, Facebook changed the process of memorializing to allow a deceased user's account to remain active and enable the bereaved to continue their online relationship with the deceased through Facebook (McEwen & Scheaffer, 2013; Vicary & Fraley, 2010; Wortham, 2010).

While many users appreciated being able to access the Facebook page of friends and family that had died, others were outraged that they continued to receive messages from Facebook asking them to connect with dead users or reminding them of upcoming birthdays (Topping, 2009). In response, Facebook launched memorial pages, a setting that allowed friends and family to report the death of a user and request deactivation of the page rather than deletion (Topping, 2009). In doing so, Facebook allowed users to provide proof of death and then transformed the deceased user's page into a tribute page (Topping, 2009). This updated process of memorialization meant that only friends previously accepted by the deceased user would be able to find and see the profile page (Topping, 2009). Facebook also prevented anyone from logging into the deceased user's page but continued to allow users to make posts on the wall as a means of remembrance of the deceased (Topping, 2009). Friends and family could still request the account deletion, but memorialization became the default for all users' accounts (Leaver, 2013).

In 2017, Facebook again updated the process of memorialization (Koktan, 2017). Accounts of deceased users are now known as memorialized accounts. Following their death, the deceased user's posts and pictures remain untouched and Facebook staff adds the word "remembering" under the profile image of the deceased (Koktan, 2017).

Facebook removed the deceased user's information from algorithms suggesting friendship with other users or prompting birthday reminders (Facebook, 2017). If the deceased selected a legacy contact prior to their passing, the legacy contact will receive a message notifying them of their ability to access and edit the page (Facebook, 2017). However, legacy contacts are unable to see private messages, remove photos or posts, or delete friends (Facebook, 2017). The legacy contact is also not able to delete the deceased user's account (Facebook, 2017). Alternatively, in place of choosing a legacy contact, a Facebook user can select to have their account deleted upon their death (Facebook, 2017). However, even if the deceased user requested deletion, any active Facebook user can create a separate memorial page through which to memorialize the deceased (Koktan, 2017).

As a result of the multiple renovations to memorialization procedures, two distinct types of pages exist for deceased Facebook users: the original profile of the deceased and memorial pages established by friends or loved ones following their passing (Kern et al., 2013). The original profile of the deceased allows individuals who were previously acknowledged by the deceased as friends to access the page and engage in ritualistic acts of remembrance comparable to traditional behaviors associated with wakes and funerals (Kern et al., 2013). However, Facebook users create public memorial pages strictly to remember and memorialize and individual (Klastrup, 2015). Dissimilar to Facebook profile pages, which are accessible only to users who friended' the deceased prior to death, mourners create memorial pages post-death and access is typically unrestricted (Klastrup, 2015). Friends, family members, or even strangers of the deceased often create

memorial pages in an attempt to create a public place to grieve (Marwick & Ellison, 2012). Therefore, it is not uncommon to have a variety of social-emotional relationships with the deceased expressed on these pages (Klastrup, 2015). Further, memorial pages provide specific technological advantages for the bereaved which include: public or private page creator status, posts and comments, and likes (Marwick & Ellison, 2012). The page creator status allows an individual to create the page without their personal name attached, therefore, allowing the page to have a title such as "RIP Jane Doe" (Marwick & Ellison, 2012). Further, memorial pages allow users to post text, pictures, videos, and external links to the page and "like" both the page and individual comments and posts (Marwick & Ellison, 2012). The ability to like the memorial page also provides a quantitative metric which continuously and prominently displays the number of users attached to the page (Marwick & Ellison, 2012).

Regardless of the format used by mourners, however, it is evident that Facebook grieving behavior is distinct from traditional mourning (Kern et al., 2013). Virtual grief expressions, such as those emitted on Facebook, are public, cybernetic, direct, are everlasting (Kern et al., 2013). As a result of the dialog that occurs amid mourners, within mourners, and between mourners and the deceased, the dead never really die (Kern et al., 2013). Rather, the bereaved create a continuing bond by maintaining a continuous relationship state through digital interchanges (Kern et al., 2013).

As the popularity of Facebook continues to rise, so, too, does the number of users who have died since creating their Facebook accounts. In response, Facebook has had to attend to the way in which the social networking site attends to the deaths of users

(McCallig, 2014). As the practice of posting on the social networking pages of deceased users is no longer an uncommon ritual, Facebook has responded by adapting their policies on virtual memorialization numerous times to best meet the needs of users. Online communities are now participating in grieving rituals that emulate traditional mourning practices. With the number of deceased Facebook users predicted to outnumber the number of living users by the year 2098 (Brown, 2016), it is essential to expand upon the current literature related to Facebook memorial pages. Facebook's recognition of the need to allow users to select to maintain or delete profiles after death demonstrates the recognition that different users see online mourning as either helpful or harmful when experiencing death and navigating the grief process (Pennington, 2017).

Congruent with the disconnect experienced by Facebook users, previous research also demonstrates discrepancies in the field of online mourning (Pennington, 2017). While some users report feeling comforted by having access to the profile page of the deceased (Brubaker et al., 2013; Pennington, 2013, 2014), others identify experiencing pain as a result of such access (Morehouse & Crandall, 2014; Pennington, 2013, 2014; Rossetto et al., 2015). Facebook, therefore, serves as a prime resource for research as it presents questions about emotions and behaviors experienced by mourners as they navigate social networks following the loss of a loved one. Regardless of the perception of benefit, exposure to continuing bond activities is unavoidable in the interconnected world we live in (Pennington, 2013).

Continuing Bonds Now

Continuing bonds perform a complex role in psychological adjustment for the bereaved (Currier et al., 2015). While the existing research on the potential benefit and impact of utilizing online means as a part of the grief process is extensive, mitigating factors (relational closeness, time since death, and Facebook use) may influence outcomes and perceptions of benefit by those grieving the death of a Facebook friend (Pennington, 2017). With contradictory findings across various studies, the existing empirical literature illustrates a multifaceted representation of the role of continuing bonds in bereavement (Root & Exline, 2014). While several studies have confirmed the positive psychological effects of grieving online (Beretsky, 2012; Kern et al., 2013), others have indicated that Facebook may negatively influence the bereaved by decreasing mood and enhancing loneliness (Sagioglou & Greitemeyer, 2014; Song et al., 2014).

The majority of research related to online bereavement has analyzed content generated by the users themselves through content analyses (Pennington, 2017). Researchers have examined grief content and themes, (Brubaker & Hayes, 2011; DeVries & Rutherford, 2004; Roberts & Vidal, 2000) and the closeness of the mourners engaging in story sharing (Blando, Graves-Ferrick & Goecke, 2004; DeVries & Rutherford, 2004; Klaassens & Bijlsma, 2014; Nager & DeVries, 2004). Others have explored the language of grief online (Brubaker, Kivran-Swaine, Taber, & Hayes, 2012); the ways in which the bereaved communicate with the deceased (Carroll & Landry, 2010; Church, 2013); and

the role of social interactions of online mourning (DeGroot, 2009; Klaassens & Bijlsma, 2014).

Seeking to describe topics of communication used on Facebook memorial pages, DeGroot (2012) researched bereaved individuals to examine how mourners use Facebook memorial pages during the grieving process to make sense of the loss and connect with the deceased. Using grounded theory, DeGroot researched 20 Facebook memorial pages to explore ways in which individuals grieve on the social networking site. DeGroot developed twelve primary categories of grief-related function: sensemaking, shock, technology references, original and non-original prose, spirituality, lamentations and questions, continuing bonds, emotional expressions, memories, presence, updates, appreciation, promises and requests, and eventual reunion. DeGroot found one benefit of Facebook to be the ability to allow users to make sense of the death and work through grief on their own terms while renegotiating their relationship with the deceased, a key element of the continuing bonds theory (Silverman & Klass, 1996).

Expanding on the work of DeGroot (2012), Bouc et al., (2016) used content analysis to examine the messages left by survivors on the Facebook pages of deceased friends and family. The researchers were specifically interested in the frequency at which different message types appeared on the Facebook walls of the deceased and how these messages change over time. Bouc et al. adopted 12 codes from DeGroot's (2012) content categories of Facebook memorial wall groups and developed 15 total content categories. The fifteen themes included: explicit emotional expression, spirituality, creative expressions, asking questions, presence, shared memories, character, relationship

before death, dedication, making requests, checking in, updates, eventual reunion, common expressions, and holiday greetings. DeGroot collapsed the 15 codes into three larger categories: processing the death, remembering the deceased, and continuing the connection. Common phrases, such as "I love you" occurred most often, appearing in 72.6% of messages. Less than 1% (.06) of all messages included question-asking. When considering all messages left, messages of continued expression demonstrated statistically significant differences from all other themes, increasing in frequency over time, demonstrating that Facebook users are primarily using memorial pages to maintain bonds with the deceased.

Facebook profile pages allow users to maintain connections with the deceased by viewing their profile just as the deceased left it. Qualitative interviews with Midwestern college students indicated that, despite frustration or unhappiness associated with viewing the page, mourners maintained virtual connections with the deceased, fearing it would be wrong to "de-friend someone just because they died" (Pennington, 2013, p. 625). Expanding this work, Pennington (2014) found time and relational closeness to be primary factors influencing the amount of support felt by mourners connecting with Facebook profiles of the deceased. Bouc et al., (2016) also studied time as a factor and found that mourners engage most with profiles of the deceased in the months immediately following the death.

Language used by mourners is also dependent on the time since the death (Getty et al., 2011). A qualitative analysis of the language of posts made on Facebook demonstrated that the bereaved use more immediate language following the death. The

immediacy of the language indicated that the bereaved were not trying to distract themselves from the death, but rather learn how to create a new relationship with the deceased (Getty et al., 2011). Similarly, individuals write in second-person more often when communicating with the deceased (Kern et al., 2013). The internet allows individuals to communicate directly with the deceased while still strengthening feelings of community among other mourners, disabling the traditional restrictions typically associated with death (Church, 2013).

In line with continuing bonds theory, researchers have found that Facebook pages are beneficial for mourners with large social networks who may be unable to visit the physical grave of the deceased (Kasket, 2012; Pennington, 2013). Frost (2014) explored the ways in which adolescents express grief on Facebook and found that individuals engage in the creation and participation of Facebook memorial pages to identify with the death, draw attention to the death, provide support, or raise awareness for a social event or specific illness. Further, Frost identified a lack of empirical evidence regarding the positive or negative influence of Facebook memorial page participation, highlighting a significant gap in the current literature.

The Current Study

Research related to Facebook has doubled in the past five years (Bouc, et al., 2016; Brubaker et al., 2013; Church,2013; DeGroot,2012; 2014, Kasket,2012; Marwick & Ellison, 2012; Pennington, 2013, 2014). However, while research has highlighted some potential benefits social media sites present for the bereaved (Carroll & Landry, 2010; Sanderson & Cheong, 2010), there is also the potential for problematic effects (Kern et

al., 2013). Rossetto et al. (2015) also found that Facebook can be beneficial for some users in mourning while it can impede the grief process for others. Similarly, Morehouse and Crandall (2014) found that virtual grief rituals prevent the bereaved from engaging in traditional mourning ceremonies and prevent effective coping.

The inconsistent findings emerging across studies highlight the need to continue to explore the role of continuing bonds in a variety of formats. It is possible that Facebook may not offer supportive benefits for all mourners equally, emphasizing the need to understand factors influencing these distinctions in the grieving process (Pennington, 2017). Additionally, relatively few studies have used theory to examine grief in online environments and fewer yet have focused specifically on Facebook memorial pages (Kern et al., 2013; Pennington, 2017).

The current body of literature has enhanced understanding of the content generated online following the loss of a loved one but has not explored the role of online grieving behaviors on the persistence and severity of grief symptoms among survivors. As such, this study sought to add to the current literature through the use of quantitative methods focused on enhancing understanding of the predictability of participation on Facebook memorial pages on grief symptom severity and persistence for young adults.

The current study addressed the question of the extent to which the frequency of participation in Facebook memorial pages predicts grief symptomology for bereaved adults. After reviewing the current literature, I identified several factors recognized as possible influencing factors on the severity and persistence of grief experienced by the bereaved. Expanding upon the current empirical literature and these identified factors, I

controlled for gender, race, relationship with the deceased, type of death, and bereavement length to help detect at-risk subgroups of mourners and enhance awareness of the role of Facebook memorial pages in grief behavior.

Young Adulthood

Unfortunately, young adults experience several challenging responses to death (Mash, et al., 2014). By the time they reach college, most individuals have experienced the death of a loved one (ERCM, 2007). The death of a family member or friend is associated with an increased risk for several negative outcomes for young adults (Hirooka et al., 2017). The challenges associated with grief may present as depression, anxiety, post-traumatic stress, lower academic success, poor self-esteem, increased use of alcohol or other substances, and higher rates of self-harm (e.g. Brent et al., 2012; Bylund Grenklo et al. 2014). Further, researchers have found that young adults that experience a loss may have a prolonged grieving process (Sveen, et al., 2014). The extended grieving process and high rate of death experienced by young adults warrants attention as young adults may encounter academic, developmental, occupational, and social difficulty as a result of grief (Sveen et al., 2014).

Gender

A review of the literature revealed conflicting findings related to the role of gender in grieving. While some researchers have found gender to be a significant factor in grief, others have found no significant differences in psychological distress between men and women (Burke & Neimeyer, 2013). For example, although Momartin, Silove, Manicavasagar, and Steel (2004) found gender to be unrelated to grief in their study of

126 Bosnian refugees in Australia, Burns, Prigerson, Quinn, Abernethy, and Currow (2017) found that male caregivers were more likely than females to have not 'moved on' during 13 and 60 months following a loss. In their study of 57 bereaved parents, Lang and Gottlieb (1993) found that bereaved mothers experienced greater grief intensity than fathers. Conversely, Spooren, Henderick, and Jannes (2000) sampled 85 parents bereaved by motor vehicle accidents and found no significant differences in grief between mothers and fathers regarding general distress. Women were, however, more likely to develop complicated grief and increased grief-related complications (Spooren et al., 2000). Although researchers have demonstrated discrepancies among findings when attending to gender differences, evidence reveals that women are more prone to complicated and intense grief reactions (Burke & Neimeyer, 2013). Nevertheless, despite the report of gender differences, many researchers failed to eliminate possible confounding variables (Li, Stroebe, Chan, & Chow, 2014). For example, Hazzard, Weston, and Gutterres (1992) found that bereaved parents experience more guilt related to losing a son than a daughter, but the boys in the study died more suddenly than the girls (Li et al., 2014).

Klastrup's (2015) analysis of six Danish "Rest in Peace" (RIP) Facebook memorial pages was the first to report on gender representation on RIP pages. Klastrup found that about 70% of online commenters on RIP pages were female while about 30% were male. Walter (2011) also observed a division of gender in his study of online comments in response to the death of a celebrity. Walter found 51% of commenters to be identifiably female and only 4% to be identifiably male. The research of Doka and Martin (2010) provides a possible explanation for these findings (Klastrup, 2015). Doka and

Martin found that women are more likely to grieve intuitively, finding strategies to share

their affect while morning. Men, however, are more inclined to approach grief

instrumentally, expressing grief more cognitively and through physical reactions (Doka

& Martin, 2010). As Facebook memorial pages provide a community in which mourners

can express grief socially but not tangibly, it is possible that these forms of mourning

behaviors are more attractive to women (Klastrup, 2015). Interestingly, young white

males represent significantly more than any other demographic group on Facebook RIP

pages, with three times more RIP pages dedicated to men than to women (Kern et al.,

2013).

Race

The literature on the influence of race on grief is also inconsistent (Burke &

Neimeyer, 2013). A sample of 506 young adults found that African Americans

experienced more grief than Caucasian Americans, particularly in areas of separation

distress (Neimeyer, Baldwin, & Gillies, 2006). Similarly, Goldsmith, Morrison,

Vanderwerker, and Prigerson, (2008) fond that in two samples – 222 cancer patients and

their caregivers and 316 bereaved individuals – that African Americans had a higher

prevalence of prolonged grief disorder than White Americans. A study of 252 bereaved

individuals infected with HIV revealed that African Americans and Hispanics reported

higher levels of grief than Caucasians (Tarakeshwar, Hansen, Kochman, and Sikkema,

2005). Examining bereaved college students, Laurie and Neimeyer (2008) found that race

(African American) was a predictor of complicated grief, even when controlling for

variables such as bereavement length and cause of death (Burke & Neimeyer, 2013).

Conversely, other researchers have found that race is not a risk factor for complicated grief (Burke & Neimeyer, 2013). Following the 2001 attacks on the World Trade center, Adams and Boscarino (2005) found no association between severity of grief, prevalence of post-traumatic stress disorder (PTSD), and race. Fitzpatrick & Tran (2002) found that bereavement significantly impacted the health of White Americans but did not observe bereavement effects among African Americans. A study of 35 family members of Veterans who died of a terminal illness revealed that Caucasians had higher levels of intense grief when compared to African Americans (Burke, Neimeyer, Bottomley, & Smigelsky, 2017).

The discrepant findings of the influence of race on grief warranted additional investigation of the possible interaction between race and other factors on grief for young adults. Minority young adults may be more likely than their Caucasian peers to experience the death of a friend or family member (Cousins, Servaty-Seib, & Lockman, 2017). Despite the rate of death for African Americans being 30% higher than that of Caucasians (Hoyert, Heron, Murphy, & Kung, 2006), the deaths of young White males dominate Facebook memorial pages (Kern et al., 2013). Further, although racial differences are not notable in generalized social media use (Perrin, 2015), the race of Facebook memorial page users is disproportionate with 74% of users identifying as White and 26% identifying as another racial group (14% African American, 5% Hispanic, 5% Asian, and 1% mixed or undetermined race; Kern et al., 2013).

Relationship

In addition to examining the grief process of adults, the current study investigated the perceived relationship between the bereaved and the deceased. A limited amount of empirical research is available concerning the influence of the relationship with the deceased on the development of grief symptoms among the bereaved (Mash et al., 2014). Studying bereaved college students at a Christian University, Walker, Hathcoat, and Noppe (2012) found that closeness to the deceased was significantly related to negative social and academic changes. Despite an increase in mental health problems, decreased motivation, and diminished concentration, bereaved students did not demonstrate in increased utilization of bereavement resources such as on and off campus counseling (Walker et al., 2012). Similar to findings by Noppe and Servaty-Seib (2010), Walker et al., found that despite not accessing resources, bereaved students did report experiencing a slight increase in social support following a death loss. This increased in perceived social support contradicts Balk's (1997) findings that bereaved college students are likely to feel isolated from their peers. However, it cannot go ignored that Balk (1997) conducted his research prior to the development of Facebook and the rise of social networking, which could potentially factor into the feelings of support experienced by bereaved students.

Sveen et al. (2014) studied 174 Swedish young adults and found that after losing a sibling to cancer, young adults reported feeling as if they had not "worked through" their grief 2-9 years following the death (Sveen et al., 2014). Mash et al. (2013) found that bereaved siblings reported a greater relationship depth to the deceased. While some

consider the sibling bond to be one of the most important connections in one's life (Bowlby, 1969; Cicirelli, 1995), other types of relationships may also influence the intensity of grief for young adults (Balk et al., 2011).

Regardless of the type of relationship, bereaved individuals who reported a higher level of depth in their relationship with the deceased experienced complicated grief at elevated levels compared to those who reported low depth (Mash et al., 2013). Vicary and Fraley (2010) examined grief reactions following the mass shooting at Virginia Tech University and found that students that knew one of the victims scored higher on PTSD symptom scales. However, other researchers have found that negative relationships can also influence grief. Feigelman, Jordan, and Gorman (2009) surveyed 540 bereaved parents and found that parents who identified having a negative relationship with their deceased child had more intense grief reactions than those that reported a positive relationship. Similarly, Klingspon, Holland, Neimeyer, and Lichtenthal (2015) described conflict and unresolved issues with the deceased and identified this unfinished business as a significant predictor of the development of complicated grief among college students.

The role of relationships is an essential element of understanding grief. Regardless of the genetic relationship, researchers have found an association between the perceived emotional closeness between the bereaved and the deceased and higher levels of suffering during times of mourning (Bottomley, Smigelsky, Floyd, & Neimeyer, 2017; Dyregrov, Frykholm, Lilled, Broberg, & Holmberg, 2003; Servaty-Seib & Pistole, 2007). These findings support the assertion that the perceived emotional closeness of the

relationship with the deceased is more influential to grief reactions than genetic relation

or kinship (Bottomley et al., 2017; Brent et al., 1992; Cleiren, Diekstra, Kerkhof, & van

der Wal, 1994).

The role of emotional closeness is important to consider when examining the role

of Facebook memorial page participation, as Facebook users are forming relationships

online and reporting the strength of these relationships to be comparable to relationships

developed offline (Hampton, Goulet, Rainie, & Purcell, 2011). Over half of all Facebook

users have more than 200 friends (Smith, 2014). Further, 27% of young adults age 18-29

have more than 500 friends on Facebook (Smith, 2014). Online relationships are often

comprised of both strong tie and weak tie relationships, with strong tie relationships

having a larger influence on grief (Egnoto et al., 2014). However, Klastrup's (2015)

study of Facebook RIP pages identified that even individuals that did not know the

deceased commented on memorial pages. Similarly, Carroll and Landry (2010) found

that 60% of surveyed college-aged Facebook users had visited the Facebook page of a

deceased acquaintance, but only 10% had posted on the page.

Type of Death

Several researchers have examined the role of type of death in relation to grief

(Burke & Neimeyer, 2013). Although researchers have revealed diversified findings, in

studies in which the cause of death predicted complicated grief, violent death resulted in

more intense grief than death related to illness (Burke & Neimeyer, 2013). Individuals

bereaved by traumatic death, such as those resulting from murder, suicide, or drug use,

may feel stigmatized and more isolated than other mourners (Chapple, Ziebland, & Hawton, 2015; Cvinar, 2005; Guy and Holloway 2007; Sveen and Walby 2008).

A study of 309 bereaved parents and spouses revealed that those bereaved by motor vehicle accidents and suicide suffered greater grief reactions (Cleiren, 1993). Suicide survivors reported being most disturbed by the loss (Cleiren, 1993). A qualitative review of 41 studies of survivors of suicide and other means of death found that suicide survivors were similar to other bereaved individuals in regard to overall mental health, PTSD, depression, anxiety, suicidal ideation, and general grief (Feigelman et al., 2009; Sveen & Walby, 2008) However, those bereaved by suicide described feeling increased shame, stigma, rejection, blaming, and a desire to hide the cause of death (Feigelman et al., 2009; Sveen & Walby, 2008).

Gamino, Sewell, and Easterling (2000) discovered similar results when they compared 85 bereaved individuals and found that those bereaved by traumatic means displayed more grief than those bereaved by illness. Currier, Holland, Coleman, and Neimeyer (2007) also found in their exploration of 1723 bereaved college students that violent deaths resulted in more severe grief reactions among mourners when compared to those bereaved by illness, anticipated death, or natural circumstances regardless of anticipation. Violent death was not found to be a predictor of complicated grief in Prigerson et al.'s (2002) study of 151 bereaved psychiatric patients.

The rise in cell phone use, 24-hour news coverage, and social media has expanded the landscape for dramatic and recurring coverage of traumatic deaths (Johnsen, Laberg, Matthiessen, Dyregrov, & Dyregrov, 2015; Turvey, 2012). This intense and prolonged

access to information about the death can often increase symptom severity among the bereaved (Holman, Garfin, & Silver, 2014). Following the attacks on the United States on September 11, 2001, 43% of the bereaved screened positive for symptoms of complicated grief (Neria et al., 2007). The media coverage produced by these acts of violence can result in increased feelings of anger and isolation for the bereaved (Johnsen et al., 2015). However, Facebook memorial pages honoring individuals who died suddenly as the result of traumatic circumstances such as suicide, violence, or accidents represent just under 50% (42.36) of the current memorial pages on Facebook (Kern et al., 2013).

Bereavement Length

While most individuals do not experience additional grief complications and resolve their grief between 6 and 24 months post-loss (Maciejewski, Zhang, Block, Prigerson, 2007; Milic et al., 2017), the grieving process in inherently individualized and varies in persistence and severity (Sveen et al., 2014). Similar to other predictors of grief, researchers have also revealed discrepant findings related to the length of time since the death. Feigelman et al. (2009) demonstrated the importance of time since the death loss and identified this variable as the strongest predictor of grief difficulty. Earlier research by Callahan (2000), however, found time since the death to be secondary to exposure to the body as the most influential predictor of grief.

Feigelman et al. (2009) proposed a possible explanation for the discrepancy, noting that Callahan (2000) explored a shorter time-span as well as a mixed-group of bereaved individuals compared to Feigelman et al.'s examination of bereaved parents over a longer time span. Lannen, Wolfe, Prigerson, Onelov, and Wolfe (2008) also

surveyed bereaved parents and found that 26% of parents had not "worked through" their grief 4-9 years following the loss of a child to cancer. Parents with unresolved grief were more likely to express concerns related to anxiety and depression (Lannen et al., 2008).

More recently, Sveen et al. (2014) examined 174 bereaved siblings and found that increased duration since the loss was associated with greater "working through" grief. However, 2 to 9 years post-loss, over half of the respondents reported that they had not yet "worked through" their grief. Conducting a six-year longitudinal study, Milic et al. (2017) found lower baseline levels of grief severity to be the only determinant of grief persistence.

Researchers have found similar behavioral patterns in the use of virtual mourning over time. Bouc et al. (2016) conducted a content analysis on 2533 messages posted on the Facebook pages of deceased users and found that posts immediately following the death focused on shared memories, character of the deceased, and the relationship prior to the death. As time progressed, mourners posted messages that focused more on normalcy in the relationship, including posts to make requests, check-in with the deceased, provide updates, and discuss eventual reunion with the deceased (Bouc et al., 2016).

Facebook memorial pages provide mourners with an opportunity to maintain a relationship with the deceased by providing a pace to virtually communicate (Pennington, 2016). DeGroot (2008) found that Facebook users post messages in an attempt to maintain ties with the deceased, demonstrating the presence of continuing bonds (Pennington, 2016). Further, Pennington (2016) identified that Facebook users are

unwilling to unfriend someone simply because the user has died, leaving them virtually connected to the deceased. As a result, it is important to expand the literature to better understand the role of Facebook page participation on grief overtime and the impact time may have on behavior consistent with continuing bond theory.

Summary

While research on grief has been in circulation for over 100 years, the now pervasive nature of online social networking sites is changing the way in which individuals experience grief. Facebook brings together individuals from all types of relationships (Egnoto et al., 2014). Facebook allows users to maintain both close tie and weak tie relationships with minimal time and effort (Egnoto et al., 2014). As a result, however, individuals are now experiencing grief in a way in which it was not previously possible (Egnoto et al., 2014).

Prior to the advent of online mourning, individuals would grieve only for a small number of close friends and family members. Today, through social media, individuals receive death information about friends, family, and even strangers. In response, social media users are rapidly developing social norms for displaying and experiencing grief in an online culture (Egnoto et al., 2014; Klastrup, 2015). While researchers continue to enhance the empirical literature related to Facebook and mourning, there is a distinct absence of quantitative research demonstrating the influence of participation on Facebook memorial pages on the severity and persistence of grief for bereaved young adults (Pennington, 2014).

Further, while it is evident that continuing bonds are occurring through social media (DeGroot, 2012; Pennington, 2013), it remains unknown if continuing bonds are adaptive or maladaptive for grieving individuals (Boelen et al., 2006). Strobe and Schut (2005) denounced the inconclusiveness of the literature on continuing bonds, stating "neither can we categorically conclude that continuing, nor that relinquishing bonds will be helpful to bereaved persons in coming to terms with their grief" (p. 489). Rather, Strobe and Schut (2005) advocated that researchers should work to ascertain which sub-groups of the bereaved may benefit from maintaining versus renouncing their relationship with the deceased. As such, this study sought to add to the depth of the current literature and expand understanding of the role of continuing bonds in grief by examining the influence of participation in Facebook memorial pages by adults while controlling for variables including gender, race, relationship with the deceased, type of death, and bereavement length.

Chapter 3: Research Method

As previously stated in Chapter 1, Facebook memorial pages serve as a primary platform in the virtual grieving landscape, connecting those in mourning and providing a place for individuals, both familiar and unfamiliar with the deceased, to share memories and participate in communal grief processes (Marwick & Ellison, 2012). Following the loss of a friend or family member, many bereaved individuals now choose to remain connected with the deceased through Facebook in an attempt to maintain the relationship (Pennington, 2013). Facebook memorial pages provide bereaved individuals with a virtual space in which to share memories and engage in communications about and with the deceased (Kern et al., 2013).

My purpose for this research was to explore the influence of participating in Facebook memorial pages on grief symptom severity and persistence when controlling for variables including age, gender, race, type of death, emotional closeness, and bereavement length. In Chapter 3, I discuss the research design used to address this purpose. Specifically, I provide information about the target population of the study, the sampling and data collection procedures, the instruments used, and the data analysis strategy developed to address the purpose of the study. In addition, I discuss internal and external threats to validity as well as ethical considerations of all participants.

Operational Definitions of Variables

For this study, I provided distinctions between grief, mourning, and bereavement. Grief, or the reaction of being bereaved, is a human condition in which an individual responds to a predictable or unanticipated loss (Balk et al., 2011; Barron, Dyregrov,

Abdallah, & Jindal-Snape, 2015; Corless et al., 2014). Grief incorporates the emotional

experiencing of a variety of psychological, cognitive, behavioral, social, and somatic

reactions as a result of the loss (Stroebe et al., 2017). Bereavement is a state of loss and

the adjustment that occurs in response to the loss (Balk et al., 2011; Barron et al., 2015).

Simply defined, mourning is the outward expression of grief (Balk et al., 2011). Table 1

shows the operant definitions of all variables in this study.

Table 1

Operant Definitions of Variables

Variable	Definition	Level of measurement	Type
Age	Defined by self-report of age in number of years	Continuous	IV
Gender	Defined by self-report of five options: male, female, transgender, other, prefer not to disclose	Categorical	IV
Race	Defined by self-report of five options: White or Caucasian, Black or African American, Hispanic, Asian, or Other	Categorical	IV
Bereavement length	Defined by self-report of the year the deceased died and categorized as: recent, intermediate, prolonged	Ordinal	IV

Table Continues

Variable	Definition	Level of measurement	Type
Type of death	Defined as expected or unexpected	Dichotomous	IV
Perceived emotional closeness with the deceased	Defined by scores on the 7-item SEC	Continuous	IV
Grief persistence	Defined by 8 items on Part I of the TRIG and 13 items on Part II of the TRIG	Continuous	DV
Grief Severity	Obtained by determining the orthogonal measures of Parts I and II of the TRIG	Continuous	DV

Research Question

In this study, I sought to answer the following research question:

RQ: To what extent does the frequency of participation in Facebook memorial pages predict grief severity, as measured by Part I of the TRIG, and grief persistence, as measured by Part II of the TRIG, for bereaved adults in the United States when controlling for age, gender, race, type of death, and bereavement length, and perceived emotional closeness as measured by the SEC?

Hypotheses

I hypothesized that there is a relationship between participation in online Facebook memorial pages and grief symptom severity and persistence as measured by the TRIG for bereaved adults in the United States when controlling for age, gender, race, perceived relationship with the deceased, type of death, and bereavement length, and perceived emotional closeness as measured by the SEC. After an exhaustive literature review, I was unable to predict the direction of this relationship, as researchers have presented inconsistent findings related to the influence of Facebook participation on grief (Carroll & Landry, 2010; DeGroot, 2012; Field, 2006; Rossetto et al., 2015)

H_a1: There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom severity, as measured by Part I of the TRIG, for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC

H_a2: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom severity, as measured by Part I of the TRIG for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC.

H_b1: There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom persistence, as measured by Part II of the TRIG, for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC.

H_b2: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom persistence, as measured by Part II of the TRIG, for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC.

Research Design and Rationale

In this quantitative study, I used a survey design to investigate the predictability of participation on Facebook memorial pages on grief symptom severity and persistence among adults in the United States. Independent variables for the study included participation in Facebook memorial pages, age, gender, race, perceived relationship with the deceased, type of death, and bereavement length. I measured the dependent variables grief severity and grief persistence as scores I obtain from the TRIG. As my purpose for this study was to identify statistical relationships rather than explore feelings, attitudes, or perceptions, I used a quantitative design to answer the research questions. A researcher's objective when using quantitative research is to categorize features, count them, and use statistical analysis to explain the data (McCusker & Gunaydin, 2015). When conducting quantitative research, researchers know in advance the information they are seeking, and they carefully design all aspects of the study before collecting data (McCusker & Gunaydin, 2015). I obtained data for this quantitative study from participant responses to a demographic questionnaire, the TRIG, and the SEC. I used information obtained from the demographic questionnaire and the measurement instruments' numerical data to accurately test the research hypothesis. To reduce costs and enhance the speed of data collection, I used a cross-sectional design and collect data at one point in time rather than at multiple time intervals during a significant period of time (see Dixon, Singleton, & Straits, 2015).

Since I sought to explore relationships between Facebook memorial page use, grief severity, and grief persistence, a quantitative survey design using an online, self-administrated questionnaire was appropriate. Survey research asks people questions to obtain information (Tandoc, Ferrucci, & Duffy, 2015). Researchers then code responses in numerical form to allow for statistical analysis (Tandoc et al., 2015). As the target population for this study consisted of only Internet users with access to Facebook, I used online surveys and a self-administered format. Survey methods are noninvasive and provide participants with an opportunity to provide honest responses regarding sensitive material (Beck & Konnert, 2007; Wagner, Knaevelsrud, & Maercker, 2006). Using online research methods allowed me to contact a wider population, limit costs, and collect data quickly (see Tolstikova & Chartier, 2010).

Methodology

Population

The target population for this study was adults who reside in the United States and had participated in a Facebook memorial page at the time of data collection. Members of a Facebook memorial page are registered Facebook users who report currently or previously liking a Facebook page created to memorialize a deceased individual. Facebook memorial pages are public online pages created by registered Facebook users specifically to remember and memorialize an individual that has died (Klastrup, 2015). Facebook memorial pages are unrestricted and accessible to anyone with a registered Facebook account.

Sampling and Sampling Procedures

My objective for this proposed research study was to generalize the quantitative findings to the population from the obtained sample (Onwuegbuzie & Collins, 2007). As such, outcomes of the current study will allow me to make inferences about Facebook memorial page users' grief processes. To ensure that I met this objective, it was important that I implemented an appropriate sampling strategy. Previous researchers examining social media and grief have used a variety of sampling strategies. Pennington (2013) used convenience sampling to recruit participants from a Midwestern university from a pool of individuals receiving course credit for research participation. Marwick and Ellison (2012) completed a qualitative study exploring the meaning of Facebook page participation. Marwick and Ellison obtained access to 37 memorial pages by using the Facebook search bar, Google inquiries, and obituary searches. Additionally, Brubaker et al. (2013) used personal networks and snowball sampling to interview 16 individuals in the United States about their experiences with death on social networking sites.

For the current study, I used convenience sampling and snowball sampling procedures (Etikan et al., 2016). While there are alternative sampling strategies available, simple random sampling and systemic sampling are inappropriate due to the large population that I intended to research (Frankfort-Nachmias et al., 2015). Simple random samples are samples in which all members of the population have an equal chance of selection and sampling occurs in one stage with participants selected independent of one another (Sudman, 2013). Systematic sampling, an adaptation of simple random sampling,

uses a list of the working population to systematically choose every *x* member to include in the sample (Rea & Parker, 2014). As the number of users active on Facebook memorial pages is constantly changing, I am unable to make a list of all Facebook memorial page members (Frankfort-Nachmias et al., 2015). Therefore, simple random sampling and systemic sampling methods were not appropriate for this study.

Convenience sampling, also known as accidental sampling, is a type of nonprobability sampling (Etikan et al., 2016). In convenience sampling, potential participants are based on practical criteria such as ease of accessibility, availability at a specific time, or willingness to participate (Etikan et al., 2016). As my primary intention of this study was focused on Facebook memorial page participation, the infinite nature of the target population made it impossible for me to sample the entire population of Facebook memorial page users. As such, using convenience sampling allowed me to collect information from respondents that are accessible and willing to participate (Etikan et al., 2016). In addition to convenience sampling, I used snowball sampling methods to access additional participants. Snowball sampling, a subsection of a purposive sample, occurs by asking participants to recommend someone else who might be willing to participate in the current study (Dixon et al., 2015). As such, I used convenience and snowball sampling methods to obtain data for the current study.

To achieve this sampling method, I began by creating Facebook advertisements to recruit potential participants. I used Facebook algorithms to target Facebook advertisements to my intended demographic of adult Facebook users. I also created a Facebook page to provide potential respondents with a link to the survey. Using Facebook, I sent the survey

link to individuals in my personal and professional networks. I then employed snowball

sampling methods by asking respondents to invite others to participate. I continued with

these sampling methods until I obtained the necessary sample size.

In addition to determining an appropriate sampling strategy, it is important to

identify the proper sample size for a research study (Onwuegbuzie & Collins, 2007). The

sample size is a significant element to research design, as it also serves to determine the

extent to which researchers can make statistical generalizations (Onwuegbuzie & Collins,

2007). Using G*power and testing for a linear multiple regression fixed model, R^2

deviation from zero with an effect size of 0.15 and power of 0.95, and seven predictors, I

determined that a sample size of 153 was necessary for this study. To ensure that I obtained

an appropriate sample size, I sought to oversample and aim for a sample size of 200 for the

current study.

Procedures for Recruitment

Seeking to examine the relationship between Facebook memorial page participation

and grief, I used the social networking site Facebook to recruit participants. I recruited

initial participants through paid Facebook advertisements and a Facebook page created to

provide potential respondents with information about the study. I disseminated a link to the

survey on my personal and professional Facebook pages as well as in public Facebook

groups. Additionally, I used paid Facebook advertisements to target Facebook users by

country and age through the use of Facebook algorithms. Using paid Facebook

advertisements can help protect the anonymity of participants, as only Facebook users

matching the targeted profiles would be able to see the advertisement (Kosinski, Matz, Gosling, Popov, & Stillwell, 2015).

Finally, I employed snowball sampling methods to ensure expand the scope of the study and increase sample size (Benfield & Szlemko, 2006). Snowball sampling is more effective than other sampling methods in contacting participants from various geographical locations (Baltar & Brunet, 2012). For this study, I did not ask participants to report their specific location within the United States or to identify the name of the Facebook memorial page they belong to. Therefore, it is impossible to determine the specific reach of this study. Demographic information reported on the month and year of the death loss, however, suggested that not all respondents belonged to the same Facebook memorial page.

 Further, compared to traditional snowball sampling methods, virtual snowball sampling produces higher response rates and expands the sample by increasing the representation of various ages and professions (Baltar & Brunet, 2012). Baltar and Brunet (2012) found that Facebook was more effective in expanding sample size than traditional snowball sampling procedures.

Although snowball sampling is also one of the most cost-effective ways to reach Facebook participants, snowball sampling methods do not meet the gold standard of randomized sampling due to the risk of biases (Kosinski et al., 2015). The first participants to respond to the survey may excessively impact the composition of the sample, as individuals are more likely to interact with people who share similar interests and beliefs (Kosinski et al., 2015; McPherson, Smith-Lovin, & Cook, 2001). However, most psychological research relies on ad hoc samples rather than true random samples (Kosinski

et al., 2015). Further, the size and diversity of Facebook users inherently helps minimize the disadvantages of using snowball sampling methods (Kosinski et al., 2015). Additionally, as I was not offering any incentives for participation, respondents participated as a result of intrinsic motivation, resulting in higher quality data (Kosinski et al., 2015). Finally, while it was impossible to protect against the possibility that snowball sampling may have resulted in a disproportionate number of respondents belonging to the same Facebook memorial page, I attempted to reduce bias by starting with a dissimilar group of initial participants (Morgan, 2008), that I obtained using paid Facebook advertisements as an initial means of recruitment.

Inclusion criteria for the study specified that the participant must be at least 18 years old, able to read and understand written information in English, be a registered Facebook user, participate in a Facebook memorial page, and be willing to answer questions honestly. Responses from participants who did not meet inclusion criteria were not used during data analysis.

Data Collection

Research questions determine the method of data collection. For this study, I used an online method of data collection. I used Facebook advertising and snowball sampling methods to identify potential participants. Prior to beginning the survey, I provided potential participants with informed consent which outlined the purpose of the study, the possible risks and benefits associated with participation, my role in the study, and an estimated time for survey completion. I notified participants about the voluntary nature of the study and informed participants that they were able to leave the survey at any time. I

also provided participants with contact information for my dissertation chair, the Institutional Review Board (IRB), and myself. Further, I informed participants of procedures related to confidentiality and made aware that, to protect the anonymity of all participants, I would not be collecting identifiable information. The informed consent document also detailed the storage procedures for electronic data, describing that I will store data on my personal computer (PC) for five years following the completion of the research. After this time, I will destroy the data. Once gathered, I provided participants with an initial demographic survey to collect information related to age, gender, race, Facebook account status, participation in Facebook memorial page(s), type of death loss, and bereavement length. After providing demographic information, participants completed the SEC and the TRIG (Fashingbauer et al., 1987; Servaty-Seib, & Pistole, 2006).

Instrumentation

Demographic Questionnaire

Respondents completed demographic questions. The first demographic question read "What is your age in years?" Age is a continuous variable. I provided respondents with a drop-down option for selecting their age in years.

The next demographic question asked respondents "What is your gender?" Currently, Facebook provides users with 58 options for gender identification (Milch, 2016). As I was seeking to survey only Facebook users, it was important that I provided similar gender response options. However, gender inclusion categories are continuously evolving, and researchers have not yet developed an exhaustive list of all response

options (Dholakia, 2016). Therefore, I adapted the two-step approach suggested by the

Williams Institute to ensure accuracy and inclusiveness (Dholakia, 2016). As such,

available responses included the following choices: male, female, transgender, other,

prefer not to disclose. Twenty-six of the 58 gender options offered by Facebook contain

the pre-fix "trans" (Facebook, 2017). Further, 0.6% of American adults identify as

transgender, demonstrating the need for a transgender option on the demographic survey.

Additionally, the other option that was be available for respondents corresponded with

Facebook's custom gender option (Dholkia, 2016). Gender is a categorical variable.

Next, I measured race by asking participants "Which racial group do you most

identify with?" I used the term race instead of ethnicity, as the U.S. Census Bureau

(2014) considers race to be the self-identification of social representation and not

constructed by biological, genetic, or anthropological components. Response choices

included: White or Caucasian, Black or African American, Hispanic, Asian, or Other.

Race is a categorical variable. I collapsed multi-race responses into the Other category.

Participants then responded to the question "Have you liked at least one Facebook

memorial page created to memorialize the death of an individual?" Respondents

indicated yes or no in response to the question. Seeking to obtain more information

related to participation on Facebook memorial pages, participants then responded to the

question "How often do you visit the memorial page?" Although categorical choices to

measure Facebook use may artificially truncate variance and reduce measurement

precision, researchers have found that self-report measures of time spent on Facebook

can be valuable in estimating actual time spent on the social network (Junco, 2013).

Despite large discrepancies between self-reported and actual time on Facebook, there was a strong positive correlation found between the two (Junco, 2013). Students over-estimated the time spent on Facebook by an average factor of five (Junco, 2013). However, over-estimates were consistent and students who reported utilizing Facebook more spent more actual time on the social networking site than students who self-reported less utilization (Junco, 2013). Therefore, while it is possible that respondents may have inaccurately assessed their time spent on Facebook memorial pages, researchers have found that respondents are able to estimate their Facebook habits to some degree (Junco, 2013). As such, Facebook memorial page participation is a categorical variable for this study. I coded frequency using a five-point positively anchored Likert scale extending from *never* to *very frequently* (almost every day). For these analyses, I coded *never* as 1; *rarely* as 2; *sometimes* as 3; *frequently* as 4; and *very frequently* (almost every day) as 5.

Next, respondents answered "What month and year did the deceased die?" Time since the death loss is an important factor, as current literature is still unclear on when a diagnosis of pathological, prolonged, or complicated grief is appropriate to make (Penman, Breen, Hewitt, & Prigerson, 2014; Prigerson et al., 2009). Additionally, Prigerson et al. (2009) found three subtypes for prolonged grief disorder (PGD): acute - meeting symptom criteria for PGD during zero to six months post-loss; delayed - meeting PGD symptom criteria at six to 12 months post-loss but not prior to 6 months post-loss; and persistent - meeting symptom criteria for PGD at both 0-6 months post-loss and six to 12 months post-loss. Prigerson et al. did not find acute PGD to be significantly associated with negative outcomes 12 to 24 months post-loss (Prigerson et al., 2009).

However, delayed PGD was significantly associated with poor quality of life and suicide ideation while persistent PGD was significantly associated with suicidal ideation, poor quality of life, and mental disorders (Prigerson et al., 2009). Maciejewski et al. (2007) found that negative grief indicators of disbelief, yearning, anger, depression, and acceptance all peak around 6 months post-loss and challenged that individuals exhibiting high levels of these indicators may warrant additional attention.

Consequently, I manipulated time since the death loss in accordance with the current consensus in the literature which defines six months as the cutoff for pathological grief and in conjunction with the criteria established by the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5, American Psychiatric Association, 2013) which asserts that a diagnosis of persistent complex bereavement disorder for adults requires the death to have occurred at least 12 months prior (Penman et al., 2014). As such, bereavement length is a categorical variable. Using the data provided by respondents, I then determined the duration since the death in number of months. I grouped responses into three categories including recent, a death experienced zero to six months prior to survey completion; intermediate, a death experienced 7 to 14 months prior to survey completion; and prolonged, a death experienced more than 15 months prior to survey completion. I used a 15-month cutoff for prolonged bereavement length to avoid the 12-month anniversary of the death, which researchers have found correlates with greater grief symptomology (Penman et al., 2014; Horowitz et al., 2003). Additionally, to enhance the quality of the data, I retained ordinal data related to bereavement length in addition to these designated categories.

Finally, respondents responded to the question "how did the deceased die?" Participants chose from two responses, "expectedly" or "unexpectedly." An unexpected death is a death which doctors do not anticipate and occurs quickly (Hui, 2015). Unexpected death is the result of accident, homicide, or suicide (McClatchey et al., 2014). Expected death results from long-term illness, such as cancer (McClatchey et al., 2014). Researchers have found violent unexpected death resulting from fatal accidents, homicide, or suicide to be associated with poor mental health outcomes, including posttraumatic stress disorder (PTSD), depression, and complicated grief among survivors (Burke, Neimeyer, Young, Bonin, & Davis, 2014). Type of death is a dichotomous variable.

Scale of Emotional Closeness.

For years, researchers studying bereavement have made claims that grief reactions among mourners vary as a result of the closeness of the personal relationship between the bereaved and the dead rather than the genetic relatedness or familial affiliation (Brent et al., 1992; Cleiren et al., 1994). As a result of its ease of measurement, bereavement researchers have more commonly studied kinship (Bottomley et al., 2017). However, the grief process of young adults challenges the usefulness of kinship as a predictor of grief reactions, as young adults report more severe grief reactions following the death of a friend when compared to the death of an extended family member (Holland & Neimeyer, 2011; Servaty-Seib & Pistole, 2007). However, Servaty-Seib and Pistole (2007) found relationship category was not a significant predictor of grief reactions.

Aside from the specific nature of the relationship, researchers have found emotional closeness, and conflict between the deceased and the bereaved prior the death to be important factors associated with the grief response (Holland & Neimeyer, 2011; Mash et al., 2014; Servaty-Seib & Pistole, 2006). Researchers have found the perceived closeness between the bereaved and the deceased to be associated with increased distress during times of bereavement (Dyregrov, et al., 2003; Servaty-Seib & Pistole, 2007). In a sample of 442 students age 18 to 23 from a Midwest Christian university, researchers found that high levels of perceived closeness were associated with negative academic consequences, social disengagement, and an increase in mental health problems (Walker et al., 2012). Conversely, Gamino et al. (1998) and Mash et al. (2014) theorized that conflicted relationships with the deceased contribute to difficult grief responses as the bereaved often experiences an initial absence of expressed grief, followed later by guilt and persistent negative feelings.

In a study of 157 young adults at the University of Massachusetts at Amherst who had lost an immediate family member (15.3%; $n = 17$), other relative (38.9%; $n = 61$), or close friend (43.2%; $n = 68$) within the past three years, Mash et al., (2014) found higher relationship depth to be associated with increased levels of complicated grief. However, Mash et al. found levels of dependency to influence depressive symptoms, independent of depth or conflict in the relationship (Mash et al., 2014). Researchers did not find a significant correlation between conflict and complicated grief or depression among the bereaved (Mash et al., 2014). The discrepant and inconclusive findings related to the role of perceived closeness on grief reactions warrant the inclusion of perceived emotional

closeness as an independent variable for this study. I used the Scale of Emotional

Closeness (SEC; Servaty-Seib, & Pistole, 2006) to measure perceived emotional

closeness as a continuous variable.

I used the SEC to assess respondents' subjective interpretation of their bond with

the deceased. Emotional closeness is an individual's subjective account of their levels of

emotional openness and understanding in their relationship with the deceased individual

(Servaty-Seib, & Pistole, 2006). The concise, seven-item scale is an easy to administer

questionnaire that assesses the emotional closeness between the participant and the

deceased individual (Servaty-Seib, & Pistole, 2006). A 6-point Likert-scale ranging from

(1) very strongly disagree to (7) very strongly agree provides ratings for all items, with

higher scores indicating greater emotional closeness (Servaty-Seib, & Pistole, 2006). For

this study, I asked respondents to consider their relationship with the deceased pre-death

while answering the questions. A review of items used by researchers in the area of

emotional closeness established Face validity of the SEC (Servaty-Seib, & Pistole, 2006).

I assessed reliability using Cronbach's alpha. Cronbach's alpha revealed a score of .87

with a mean inter-item correlation of .47 (Servaty-Seib, & Pistole, 2006).

The Texas Revised Inventory of Grief.

The TRIG is a brief questionnaire developed to measure the intensity of an

individual's negative grief reactions (Fashingbauer et al., 1987; Servaty-Seib, & Pistole,

2006). Although there are other measures designed to specifically measure grief, the

Marwit and Meuser Caregiver Grief Inventory (Sanders, Marwit, Meuser, & Harrington,

2007) and the Inventory of Complicated Grief—Revised (Prigerson & & Jacobs, 2001),

measure specific areas of grief such as grief among caregivers of individuals with illness resulting in progressive memory loss or complicated grief (Montano et al., 2016). The TRIG, however, is a more general measurement of grief expression and is one of the most commonly used measures in grief studies (Montano et al., 2016). Designed in two distinct sections, the TRIG assesses loss- related cognitions, affect, and behaviors of both Past Behaviors (Part I) and Present Feelings (Part II) (Fashingbauer et al., 1987; Futterman, Holland, Brown, Thompson, & Gallagher-Thompson, 2010; Montano et al., 2016).

Part I of the TRIG is comprised of eight items designed to assess feelings and behavior related to grief at the time of death (Montano et al., 2016; Servaty-Seib, & Pistole, 2006). Part II is comprised of 13 items focused on the individual's current thoughts and feelings related to grief (Montano et al., 2016; Servaty-Seib, & Pistole, 2006). Initial alpha coefficients established by Faschingbauer Zisook, and DeVaul (1987) were .77 for Past Behaviors and .86 for Present Feelings.

Sample items from the TRIG include: "after this person died, I found it hard to get along with certain people" (Part I) and "It is painful to recall memories of how h/she used to be" (Part II). All items in Part I use a five-point Likert scale with scores ranging from (1) completely false to (5) completely true (Servaty-Seib, & Pistole, 2006). Part II, however, is comprised of true-false responses (Servaty-Seib, & Pistole, 2006). Higher scores are correlated with more powerful negative grief reactions (Servaty-Seib, & Pistole, 2006).

Evidence supporting the validity of the TRIG enhances the assessment's practical application in the study of grief (Futterman et al., 2010). The original manual reported the use of an exploratory factor analysis to obtain construct validity using single items with factor loadings above 0.40 (Fashingbauer et al., 1987; Schoulte et al., 2012). A positive correlation of three distinct scores from the TRIG with depressive symptoms further demonstrates validity (Futterman et al., 2010). Correlation of these factors suggests that the assessment effectively measures levels of psychological distress following a death loss (Futterman et al., 2010). Researchers evaluated discriminant validity of the TRIG to assess the measure's ability to obtain scores reflective of expected outcomes when comparing normal and pathological grief (Faschingbauer, et al., 1987). Researchers found that individuals with low grief scores display less severe symptoms when compared to other respondents (Faschingbauer et al., 1987). Initially, the TRIG demonstrated high levels of internal consistency with an alpha range of 0.74 to 0.89 (Nam & Eack, 2012).

Futterman et al., (2010) reported that the TRIG demonstrated differences in scores between women and men, noting that women reported more significant levels of grief than men (Montano et al., 2016). Additionally, the emotional closeness of the relationship between the respondent and the deceased was significantly related to the severity of grief reported on the TRIG (Futterman et al., 2010; Montano et al., 2016). Respondents who reported enhanced emotional closeness with the deceased also reported higher levels of grief, while respondents less emotionally connected to the deceased reported lower levels of grief on the TRIG (Futterman et al., 2010; Montano et al., 2016).

Data Analysis

After obtaining data, I performed data analysis to obtain descriptive statistics. I calculated the frequency, mean, standard deviation (SD), kurtosis and skewness of the variables. To test for normality, I conducted a Shapiro-Wilk test and apply a z-test using the skewness and kurtosis of the distribution and (Kim, 2013). Skewness is a is a measure of the asymmetry (Kim, 2013). Kurtosis is a measure of peakedness of a distribution (Kim, 2013). West et al. (1996) proposed a reference of significant departure from normality as an absolute skew value > 2 and an absolute kurtosis (proper) value > 7. As the evaluations for skewness and kurtosis passed, I did not need to perform transformations to normalize the distribution and avoid a false rejection (Kim, 2013). As my final sample size was 225, I rejected the null hypothesis at absolute z-value greater than 3.29, which corresponds with an alpha level 0.05, and concluded the distribution of the sample is non-normal (Kim, 2013). I also used SPSS to create a normal probability plot to identity any outliers.

Next, I conducted a chi-square test to determine if there was a relationship between the variables. I also conducted a Pearson correlation analysis to identify the relationships between the variables. To complete data analysis, I conducted the multiple linear regression to control for confounding factors.

For the multiple linear regression, I coded the dichotomous and ordinal variables. I also created dummy variables for the demographic variables gender and race as these two variables are strictly categorical and contain more than two potential values. An

extension of a simple linear regression, a multiple regression predicts the value of a variable based on the value of at least two other variables. For this study, I sought to predict grief severity and grief persistence (the dependent variables) using age, gender, race, duration since the death loss, bereavement length, and participation in Facebook memorial pages (the independent variables). Using a multiple linear regression allowed me to determine the overall fit of the model as well as the relative contribution of each of the independent variables to the total variance.

There are four key assumptions of multiple linear regression (Osborne & Waters, 2002). First, the linearity assumption asserts that there must be a relationship between the outcome variables and the independent variables. I tested the linearity assumption using scatterplots. Next, the assumption of multivariate normality assumes that the residuals (errors between observed and predicted values) are normally distributed. Errors, in a regression model, are the difference between respondents' observed values on the response variable and the values predicted by the true regression model for the entire population (Williams, Grajales, & Kurkiewicz, 2013). I assessed multivariate normality using the goodness of fit test on each of the residuals as well as looking at a histogram.

Thirdly, multiple regression assumes that this is no multicollinearity (Osborne & Waters, 2002). That is, the independent variables are not highly correlated with one another (Osborne & Waters, 2002). Multicollinearity is the presence of correlations between more than two predictors (Williams et al., 2013). I tested the no multicollinearity assumption using Variance Inflation Factor (VIF) values. However, as the primary purpose of this analysis was prediction, multicollinearity was not a

significant problem, as multicollinearity does not detrimentally impact the prediction of grief (Williams et al., 2013).

Finally, multiple regression assumes homoscedasticity, which asserts that the variance of error terms are similar across the values of each of the independent variables (Osborne & Waters, 2002). I used a plot of standardized residuals compared to predicted values to demonstrate equal distribution across all values of the independent variables (Osborne & Waters, 2002).

Threats to Validity

The current study is not without limitations and threats to validity. Factors that may interfere with the generalizability, inferences, and explanations of study results are threats to internal and external validity (Creswell, 2013). External threats to validity may impact my ability to generalize findings to a wider population (Creswell, 2013). Internal threats to validity, however, may affect the conclusions of the study and provide alternative explanations for the obtained results (Creswell, 2013). One limitation and threat to external validity of the study included the use of convenience sampling. Additional limitations and threats to internal validity included the obtained sample and the self-report nature of the assessments. The obtained sample size ($n = 225$) is not representative of the Facebook population at large. However, although any sample of Internet users is not representative of the population in general (Carroll & Landry, 2010), the population with Internet access is what mattered most of this study of Facebook mourners. As previously discussed, convenience sampling is another limitation the generalizability of the obtained results (Frankfort-Nachmias et al., 2015). The sampling

design also resulted in a non-representative sample of various demographic variables. In Chapter 5, I further discuss the absence of a diversified sample in regard to gender, age, race, bereavement duration since the death loss, type of death loss, or perceived emotional closeness with the deceased, as previous researchers have demonstrated differences in grief practices among these groups (Ware, 2016).

Another limitation of this study was the self-report nature of the survey. Researchers have found significant differences between self-reported and actual behaviors (Junco, 2013). Specific to Facebook, previous self-report measures of frequency of Facebook use vary among studies (Junco, 2013). Previous researchers have measured frequency of Facebook use in minutes per day (Ellison et al., 2011; Junco, 2012a, 2012b; Kalpidou, Costin, & Morris, 2011; Kujath, 2011), individual number of logins to Facebook per day (Junco, 2012a, 2012b; Roblyer, McDaniel, Webb, Herman, & Witty, 2010), and individual number of logins to Facebook "yesterday" (Junco, 2012a, 2012b). In addition to these limitations, delimitations of the proposed study included the time since the death loss, age of participants, and the exclusion of virtual cemeteries or memorials outside of Facebook memorial pages.

Ethical Considerations

Prior to beginning data collection, I received approval from The Institutional Review Board (IRB). The approval number assigned to this study is 02-15-18-0303894. The IRB required that I informed respondents of all potential risks, that I strived to minimize potential risks, and that I provided all participants with informed consent prior to engaging in a research study. To ensure ethical protection of all participants in the prosed study, I adhered to all IRB protocols. Additionally, I executed efforts to minimize potential bias.

This study addressed grief, a sensitive topic that may have necessitated a referral to therapeutic services during or after participation in the study. Beck and Konnert (2007) found that 65.1% of individuals reported being receptive to grief research within one year after a loss. Additionally, thirteen percent of these individuals stated that grief research would be acceptable within the first month following a loss (Beck & Konnert, 2007). While participation in surveys about grief may evoke unexpected emotions (Cook & Bosley, 1995), negative or re-traumatizing reactions are rare (Collogan, Tuma, & Fleischman, 2004). To address the risk associated with assessing grief, I provided all participants with a list of the national crisis hotline number to assist respondents in accessing mental health providers in their area if needed as a result of participating in the study. I included a written statement that read: *Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as stress, becoming upset, or being reminded of the loved one that has died. Being in this study*

would not pose risk to your safety or wellbeing. Due to the sensitive nature of the

questions being asked, the following contact information is available for use by all

participants. Crisis Call Center: 1-800-273-8255 The Crisis Call Center is a national

organization that provides services to individuals in any type of crisis 24 hours a day,

365 days per year.

Additionally, informed consent information addressed guidelines related to

background information, research procedures, the voluntary nature of the study, potential

risks and benefits of participation, compensation, privacy, researcher contact information,

and instructions for providing consent (Laureate Education, n.d., b). As outlined in the

informed consent, I ensured confidentiality through the use of online encryption tools

when providing web surveys.

Summary

Facebook memorial pages launched in 2009 (Facebook, 2017). Since this time,

researchers have examined the motivation for creating Facebook memorial pages, the

language used to express grief online, and the impact of social media on individual grief

experiences (Frost, 2014; Pennington, 2013; Ware, 2016). However, there continues to be

a distinct absence in research examining the positive or negative implications of grieving

on Facebook memorial pages (Frost, 2014; Ware, 2016). This study sought to expand

research on this topic through an examination the predictability of Facebook memorial

page participation on grief symptom severity and persistence for adults in the United

States. Throughout chapter three, I discussed the quantitative survey method design that I

used to address the research question. I presented information on the target population

and sampling and data collection procedures. I defined the variables of the study and clarified the measurement instruments I intend to use, justifying my decision to select these instruments. Furthermore, I provided information related to the ethical considerations of all participants. In Chapter 4, I provide information related to the data collection procedures, an overview of the obtained sample, and report the findings of the statistical analysis conducted on the obtained data.

Chapter 4: Results

To begin this chapter, I provide a brief review of the purpose of this study, the research question, and the hypotheses. Next, I describe the elements of data collection, including the data collection process, demographic characteristics of the sample, and the representativeness of the sample. Following information about data collection, I present the results of the study, which include descriptive statistics, an evaluation of statistical assumptions appropriate for the study, and findings of the statistical analysis. Finally, I provide a summary of the findings.

Purpose

When a Facebook user dies, their personal data becomes uniquely preserved and simultaneously extended through memorialization (Graham et al., 2015). As such, Facebook users are able to engage in behaviors congruent with the continuing bonds theory, "talking" to the deceased as if they were still living (Keye, 2017). Bollmer (2013) asserted that the information acquired from the profiles of deceased Facebook users and shared among the deceased's friends and family postmortem creates a realistic replacement of the deceased's identity. Facebook, therefore, is no longer simply a platform through which to communicate with the living, rather the social networking site has emerged as a place to memorialize and continue to connect with the deceased (Kern et al., 2012).

Despite this awareness, there remains a lack of understanding of the influence of Facebook memorial pages on the grief process for adults. Based on the gap in knowledge related to the role of Facebook memorial pages on grief and the impact these cultural

implications may have on mental health diagnoses, the purpose of this quantitative study was to examine the role of participation in Facebook memorial pages on grief symptom severity and persistence for adults living in the United States who have experienced the death loss of a friend or family member since 2009.

Research Question and Hypotheses

Constructed with knowledge of factors that may influence grief symptom severity and duration for adults, I had one primary research questions for this study.

RQ1: To what extent does the frequency of participation in Facebook memorial pages predict grief severity, as measured by Part I of the TRIG, and grief persistence, as measured by Part II of the TRIG, for bereaved adults in the United States when controlling for age, gender, race, type of death, and bereavement length, and perceived emotional closeness as measured by the SEC?

My hypotheses for this research question were as follows:

$H_0$1: There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom severity, as measured by Part I of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

$H_0$2: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a

regression model including the grief symptom severity, as measured by Part I of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

H_a1: There is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom persistence, as measured by Part II of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

H_a2: There is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom persistence, as measured by Part II of the Texas Revised Inventory of Grief, for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the Scale of Emotional Closeness.

In this chapter, I describe the process of data collection, disclose the results of the study, and discuss discrepancies that occurred between the plan I identified in Chapter 3 and the actual process of data collection and analysis. Additionally, I consider response

rates and characteristics of participants and consider the results of the study and report the findings, which include descriptive statistics, a multiple regression analysis, and additional statistical information. Finally, using the obtained results, I impart an analysis of my hypothesis, interpret the obtained data, present implications for future research, and provide an overall summary of the findings based on the research question.

Throughout this chapter, I provide thorough information regarding data collection, data analysis, and results of this study. Findings of this study indicated a rejection of the first alternative hypothesis and an acceptance of the second alternative hypothesis. However, the sample for this study consisted primarily of White women between the ages of 28 and 48 years old. In this study, there was a stark underrepresentation of other demographic categories, which made it impossible to determine conclusions about them. As such, while I further discuss these limitations and the impact the sample had on my findings in Chapter 5, it is important to acknowledge that while I rejected the first alternative hypothesis and accepted the second alternative hypothesis, these finding are the result of the homogenous nature of the study, and future research may serve to further examine the impact of Facebook memorial page participation on grief severity and duration for additional demographic groups.

Data Collection

As specified in Chapter 3, I used an online method of data collection for this study. I created a demographic survey to gather information related to identified factors that may influence grief for adults. Additionally, I obtained written consent from the authors of the TRIG and the SEC to use these measures in my online survey. Prior to

initiating data collection procedures, I applied for, and received, permission from Walden University's IRB. Once I obtained permission, I began the process of participant recruitment and data collection. Using convenience sampling and snowball sampling methods through Facebook, data collection took approximately four weeks.

I began data collection by creating a public Facebook page with information about the study and a direct link to the survey. Further, I created paid Facebook advertisements using algorithms to target adults living in the United States and posted the formal invitation to participate along with a direct link to the survey. The Facebook advertisement cost $25.00 and reached approximately 1,023 Facebook users between ages 18 and 65 years old in the United States.

Twenty-four of these Facebook users clicked a link to the survey and two individuals "liked" the Facebook page about the study. As responses were confidential, I am unable to determine how many of these 26 individuals who clicked the link or liked the Facebook page completed the survey. Due to the nature of online snowball sampling, it is impossible to estimate the total reach of the survey. Facebook users shared my initial invitation to participate 46 times. Facebook estimates that more than 200,000,000 registered users are between the ages of 18 and 65 years old and live in the United States. The settings of the survey ensured that I had no identifying information about individuals who responded to the survey. Upon completing data collection, I received a total of 370 survey responses. However, of the total responses, only 225 individuals met criteria and completed the survey, resulting in a completion rate of approximately 61%.

Conducting research through Facebook is often fairly straightforward and typically results in robust findings (Kosinski et al., 2015). Due to the nature of the size and scope of Facebook, diverse samples of participants are relatively easy to obtain (Kosinski et al., 2015). However, it is important to consider that using online sampling methods inherently excludes some populations (i.e,. those living without internet access; Kosinski et al., 2015). For this study, the intended population was Facebook users, so the exclusion of non-Internet users during data collection was not a concern. Additionally, while I used snowball sampling during data collection, this method of recruitment can result in biases, as the initial participants may disproportionately impact the entire composition of the sample (Kosinski et al., 2015; Kurant, Markopoulou, & Thiran, 2011). However, in addition to the size and diversity of Facebook, I used paid Facebook advertisements to help minimize the potential shortcomings of snowball sampling.

As outlined in Chapter 3, I planned to use convenience and snowball sampling methods through Facebook by using paid Facebook advertisements, sharing the survey link, and inviting others to share the survey link with their social network. As such, I did not experience any major inconsistencies between my intentions for participant recruitment, data collection, and my actual execution of these objectives. One minor discrepancy between my plan for implementation and my actual data collection procedure was obtaining the necessary sample size in approximately four weeks as opposed to the initial six I intended data collection would require.

Results

Intending to gain awareness of the predictor factors that may influence grief severity and duration for adults using Facebook memorial pages, I used survey methodology to collect data from Facebook users across the United States. I collected data online through the social networking site Facebook. In total, I obtained 370 responses to the survey. However, prior to completing data analysis, I exported raw data from survey monkey to Microsoft Excel to clean the data and remove surveys that did not meet inclusion criteria or were incomplete. After data cleaning, 225 total surveys remained for data analysis. Next, I applied numerical coding to the survey responses to ensure accurate data analysis. I calculated average scores of Part I of the TRIG to determine average scores for grief severity. I then calculated average scores for Part II of the TRIG to determine average scores for grief persistence. Finally, I calculated average scores from the SEC to determine average scores for perceived emotional closeness.

Using IBM SPSS Version 24, I used the data to run a multiple regression analysis. The output data of the multiple regression included descriptive statistics and a Pearson correlation test, as well as an Analysis of Variance (ANOVA). In addition to this analysis, I also ran a Chi-Square test to determine if a relationship existed between the input variables. The following section provides results of descriptive statistics, statistical assumptions, statistical analysis, and tables of the findings.

Sample Descriptive

For this study, I surveyed registered Facebook users. To qualify for this study, Facebook users needed to have an active Facebook account, be at least 18 years old, live

in the United States, and participate in at least one Facebook memorial page. There is

currently no way of calculating the total number of Facebook users who belong to at least

one Facebook memorial page. However, a summary produced by Facebook estimates that

paid Facebook advertisements reached approximately 1,389 Facebook users over the age

of 18 living in the United States. It is uncertain how the use of snowball sampling

impacted the total number of users reached using snowball sampling procedures. In total,

370 Facebook users responded to the survey. The survey asked about demographic

information including the respondent's age, gender, race, level of participation on

Facebook memorial pages, perceived emotional closeness, type of death, and duration

since the death loss.

Descriptive Statistics

Researchers use descriptive statistics to summarize large amounts of data and

organize the results (Holcomb, 2016). Most frequently, researchers report the mean and

standard deviation of the variables (Gravetter & Wallnau, 2016). Researchers may also

include normality measures of skewness and kurtosis (Cain, Zhang, & Yuan, 2017). For

this study, I conducted descriptive statistics on the independent and dependent variables

to obtain the mean, standard deviation, skewness, and kurtosis. (see Table 2).

Table 2

Descriptive Statistics

	M	SD	Skewness	Kurtosis
Age (in years)	38.09	10.761	1.150	.569
Bereavement Length (in months)	38.35	32.19	.690	-0.780
Type of Death			-1.7	.887
Facebook Memorial Page Participation	2.24	.904	.531	.258
Perceived Emotional Closeness	2.898	.941	.051	-.751
Grief Severity	2.337	1.15	.478	-.917
Grief Persistence	2.836	1.02	.053	-.907

Age. For this study, I measured age as a continuous independent variable. Age generated a range of 22 to 72 years ($M = 38.09$, $SD = 10.761$). The average age of all respondents was 38.09 years old. Tests of kurtosis and skewness revealed results of a skewness of 1.150 (SE=.163) and kurtosis of .569 (SE=.325). According to Fields (2013), a score of 0 for skewness and kurtosis indicates a normal distribution. Acceptable values for kurtosis and skewness are any values between -2 and 2 (Fields, 2013). Therefore, I determined the variable age is acceptable as having a normal distribution within the specified limits.

Race. I measured Race as a categorical variable. Selections options for race included White/Caucasian, which I coded as 1; Black/African American which I coded as

2; Hispanic, which I coded as 3; Asian, which I coded as 4; and Other, which I coded as 5. Of the 225 responses, 90.3 % ($n = 204$) of respondents identified as White/Caucasian, 5.3 percent ($n = 12$) of respondents identified as Black/African American, 2.2% ($n = 5$) identified as Hispanic, 1.3 percent ($n = 3$) identified as Asian, and 0.8 percent ($n = 2$) identified as Other. Respondents who selected Other identified as Native Hawaiian ($n = 1$), and Biracial ($n = 1$). As response rates were low for several of the categories, I re-categorized race into two groups as White/Caucasian and Other for the multiple regression. The combined Other category represents 9.7% ($n = 21$) of the sample.

Gender. I also measured Gender as a categorical variable. Of the eligible responses, 92 percent ($n = 208$) of respondents identified as female, 6.2 percent ($n = 14$) of respondents identified as male, and 0.4 percent ($n = 1$) of respondents identified as transgender. Two respondents selected to not disclose their gender and one respondent did not respond to this question. As response rates were low for the male and transgender categories, I re-categorized gender into two groups as Female and Non-Female for the multiple regression. The combined Non-Female category represents 6% ($n = 15$) of the sample.

Bereavement length. I measured bereavement length as both a categorical and a continuous variable. The continuous data allows for a more thorough overview of bereavement length. However, categorical data on bereavement length is important to obtain, as categorical markers are an essential element of diagnostic criteria for grief and bereavement disorders.

As discussed in chapter 3, I categorized bereavement length in accordance with criteria established by the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5, American Psychiatric Association, 2013) and the current literature. I categorized bereavement length into three categories coded as recent, a death experienced zero to six months prior to survey completion; intermediate, a death experienced 7 to 14 months prior to survey completion; and prolonged, a death experienced more than 15 months prior to survey completion. I chose to use a 15-month cutoff for prolonged bereavement length as a means of avoiding the 12-month anniversary of the death, which researchers have found to correlate with more intense grief symptomology (Penman et al., 2014; Horowitz et al., 2003).

While I collected categorical data on bereavement length, I chose to code bereavement length as a continuous variable for data analysis in this study. Respondents reported a range of bereavement length from 0 months to 110 months (M=38.35, SD=32.19). The mean for bereavement length was 38.35 months, or 3 years and 2 months. Tests of kurtosis and skewness revealed results of a skewness of .690 (SE=.162) and kurtosis of -.780 (SE=.323). Given the skewness and kurtosis are within the tolerable limits, I determined that the distribution represents a normal curve.

Type of death. Respondents selected between expected or unexpected as the options for type of death. A total of 17.7% (*n* = 40) of respondents reported that the deceased died expectedly while 82.3% (*n* = 185) responded that the deceased's death was unexpected. Tests of kurtosis and skewness revealed results of a skewness of -1.7

(SE=.162) and kurtosis of .887 (SE=.323) which are within the tolerable limits, so I determined that the distribution represents a normal curve.

Facebook memorial page participation. Another independent variable, Facebook memorial page participation, consisted of five response options including *never* that I coded as 1; *rarely* that I coded as 2; *sometimes* that I coded as 3; *frequently* that I coded as 4; and *very frequently* (almost every day) that I coded as 5. Responses for the frequency of participation in Facebook memorial pages ranged from *never* to *very frequently* (almost every day).

Descriptive statistics for Facebook memorial page participation revealed that 20.8% (*n* = 47) of respondents reported visiting the Facebook memorial page *never*, 42.9% (*n* = 97) of respondents reported visiting the Facebook memorial page *rarely*, 28.8% (*n* = 65) of respondents reported visiting the Facebook memorial page *sometimes*, 5.3% (*n* = 12) of respondents reported visiting the Facebook memorial page *frequently*, and 1.8 % (*n* = 4) of respondents reported visiting the Facebook memorial page reported visiting the page *very frequently* (nearly every day). Tests of kurtosis and skewness revealed results of a skewness of .531(SE=.162) and kurtosis of .258 (SE=.323) which are within the tolerable limits, so I determined that the distribution represents a normal curve.

Perceived emotional closeness. Perceived emotional closeness to the deceased served as the final independent variable. Perceived emotional closeness is a continuous variable, obtained using the six-item Scale of Emotional Closeness (SEC). Results from the SEC revealed scores ranging from 1 (low perceived emotional closeness) to 5 (high

perceived emotional closeness). The average score reported was 2.9 ($M = 2.898$, SD =

.941). Tests of kurtosis and skewness revealed results of a skewness of .051(SE = .180)

and kurtosis of -.751 (SE=.357). Given the skewness and kurtosis are within the tolerable

limits, I determined that the distribution represents a normal curve.

Grief severity. I measured the first dependent variable, grief severity, using

scores from the first part of the TRIG. Averaging the 8 item 5-point Likert-scale,

respondents reported scores ranging from 1 to 5, with an average score of 2.337 ($M =$

2.337, SD 1.15). The skewness was .478(SE =.175) and kurtosis was -.917 (SE =.349), so

I determined that the distribution represented a normal curve.

Grief persistence. I measured the second dependent variable, grief persistence,

using scores from the second part of the TRIG. Averaging the 13 item 5-point Likert-

scale, respondents reported scores ranging from 1 to 5, with an average score of 2.836 (M

= 2.836, SD 1.02). The skewness was-.053 (SE =.175) and kurtosis was -.907 (SE =.349),

and I determined this distribution represents a normal curve.

Statistical Analysis and Findings

Chi-Square. Upon completing the descriptive statistics, I conducted multiple

Chi-square tests to examine any possible associations between the variables. Variables

included in the Chi-square tests included: age, race, gender, bereavement length, type of

death, perceived emotional closeness, and Facebook memorial page participation. Results

of the Chi-Square test indicated an association between perceived emotional closeness

and Facebook memorial page participation. While these findings assert that there is an

association between the two variables, other measures of multicollinearity demonstrate

that the relationship is not a significant factor. Results of the Chi-Square test indicated no other significant relationships between any of the variables.

Gender. The Chi-square test for gender and age yielded a χ^2 (1) = 2.153, p = .142 thus indicating that there is no association between gender and age. The Chi-square test for gender and race yielded a χ^2 (1) = .114, p = .763, thus indicating that there is no association between gender and race. The Chi-square test for gender and bereavement length yielded a χ^2 (2) = 1.901, p = .386, thus indicating that there is no association between gender and bereavement length. The Chi-square test for gender and type of death yielded a χ^2 (1) = .125, p =.724, thus indicating that there is no association between gender and type of death. The Chi-square test for gender and Facebook memorial page participation yielded a χ^2 (4) = 7.996, p =.092, thus indicating that there is no association between gender and Facebook memorial page participation. The Chi-Square test for gender and perceived emotional closeness yielded a χ^2 (2) = 3.020, p =.221, thus indicating that there is no association between gender and perceived emotional closeness.

Race. The Chi-square test for race and age yielded a χ^2 (1) = .523, p =.470, thus indicating that there is no association between race and age The Chi-square test for race and type of death yielded a χ^2 (1) = .409, p =.523, thus indicating that there is no association between race and type of death. The Chi-square test for race and Facebook memorial page participation yielded a χ^2 (4) = 4.916, p =.296, thus indicating that there is no association between race and Facebook memorial page participation. The Chi-square test for race and bereavement length yielded a χ^2 (2) = 3.722, p =.155, thus indicating that there is no association between race and bereavement length. The Chi-square test for

race and perceived emotional closeness yielded a χ^2 (2) = 2.777, p = .249, thus indicating that there is no association between race and perceived emotional closeness.

Bereavement length. The Chi-square test for bereavement length and age yielded a χ^2 (2) = .104, p = .949, thus indicating that there is no association between bereavement length and age. The Chi-square test for bereavement length and type of death yielded a χ^2 (2) = .578, p =.749, thus indicating that there is no association between bereavement length and type of death. The Chi-square test for bereavement length and Facebook memorial page participation yielded a χ^2 (8) = 6.715, p =.568, thus indicating that there is no association between bereavement length and Facebook memorial page participation. The Chi-square test for bereavement length and perceived emotional closeness yielded a χ^2 (4) = 3.911, p =.498, thus indicating that there is no association between type of death and perceived emotional closeness.

Type of death. The Chi-square test for type of death and age yielded a χ^2 (1) = 3.522, p = .061, thus indicating that there is no association between type of death and age. The Chi-square test for type of death and Facebook memorial page participation yielded a χ^2 (4) = 4.834, p =.305, thus indicating that there is no association between type of death and Facebook memorial page participation. The Chi-square test for type of death and perceived emotional closeness yielded a χ^2 (2) = 2.195, p = .334, thus indicating that there is no association between type of death and perceived emotional closeness.

Facebook memorial page participation. The Chi-square test for Facebook memorial page participation and age yielded a χ^2 (1) = 3.522, p = .139, thus indicating that there is no association between Facebook memorial page participation and age. The

Chi-square test for Facebook memorial page participation and perceived emotional closeness yielded a χ^2 (4) = 34.839, p = .000, thus indicating that there is an association between Facebook memorial page participation and perceived emotional closeness.

Pearson Correlation

Grief severity. Generated as a part of my multiple regression, I used the Pearson correlation table to analyze relationships between variables (Fields, 2013). Considering the relationship between predictor variables and the dependent variable grief severity, the strongest correlation occurred between grief severity and perceived emotional closeness. Results indicated a positive significant relationship between respondent's perceived emotional closeness to the deceased and grief severity scores (r (216) = .698, p = .000).

I then explored relationships between all nominal and ordinal predictor variables and the dependent variable, grief severity. I did not include gender and race in the Pearson correlation, as gender is a dichotomous variable and the number of Non-White/Caucasian respondents was small (*n*=21) so I recoded race into a dichotomous variable as well, White/Caucasian and Non-White/Caucasian.

First, between the independent variable bereavement length, the results yielded that there was also a statistically significant correlation between bereavement length and grief severity (r (223) = .211 p = .003). Additionally, when considering the independent variable Facebook memorial page participation, there was a statistically significant correlation between Facebook memorial page participation and grief severity (r (223) = .392 p = .000).

Between the predictor variable, age and grief severity, the results yielded that there was not a statistically significant relationship (r (221) = -.111, p = .130). Further, results revealed that there was not a statistically significant relationship between type of death and grief severity (r (223) = .076 p = .298).

Grief persistence. Considering the dependent variable grief persistence, the strongest correlation occurred between grief persistence and perceived emotional closeness. Results indicated a statistically significant positive relationship between respondent's perceived emotional closeness with the deceased and scores for grief persistence (r (215) = .743, p = .000).

Next, I examined relationships between all nominal and ordinal predictor variables and the dependent variable, grief severity. Just as I did with the dependent variable grief severity, I did not include gender and race in the Pearson correlation. As stated previously, I did include these two variables because gender is a dichotomous variable and the number of Non-White/Caucasian respondents was small ($n = 21$) so I recoded race into a dichotomous variable as well, White/Caucasian and Non-White/Caucasian.

The relationship between Facebook memorial page participation and grief persistence was the only other relationship found to be statistically significant. A Pearson correlation revealed a statistically significant positive relationship between Facebook memorial page participation and grief persistence (r (223) =.452; p = .000).

Between age and grief persistence, there was not a statistically significant relationship (r (223) = -.50, p = .499). Additionally, there was no statistically significant

relationship between bereavement length and grief persistence (r (221) = .127 p = .079).

Finally, there was not a statistically significant relationship between type of death and

grief persistence (r (223) = .052, p = .475).

Independent variables. In addition to examining the relationships between the

dependent variables and the independent variables. Results of the Pearson correlation

revealed multiple statistically significant relationships between the independent variables.

Results indicated that the strongest relationship among the independent variables

occurred between perceived emotional closeness and Facebook memorial page

participation (r (214) = .438, p = .000). (see Table 3).

Table 3

Correlations

Variables	1	2	3	4	5	6	7
1. Emotional closeness	-						
2. Age	.048	-					
3. Facebook participation	.438**	.155*	-				
4. Type of death	-.098	-.209**	-.031	-			
5. Bereavement length	.039	-.094	.148*	.163*	-		
6. Grief severity	.698**	-.111	.392**	.076	.211**	-	
7. Grief persistence	.743**	-.050	.452**	.052	.127	.798**	-

Note. ** *p* < .01. * *p* < .05

Multiple Linear Regression

      Statistical assumptions. There are several key assumptions made in multiple

regression (Field, 2013). First, the assumption of multivariate normality assumes that the

residuals are all normally distributed (Field, 2013). I tested this assumption for both

dependent variables by creating P-P plots of the data, which revealed a normal

distribution (see Figure 1 and Figure 2).

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Q1toQ8Severity

Figure 1. P-P plot for grief severity.
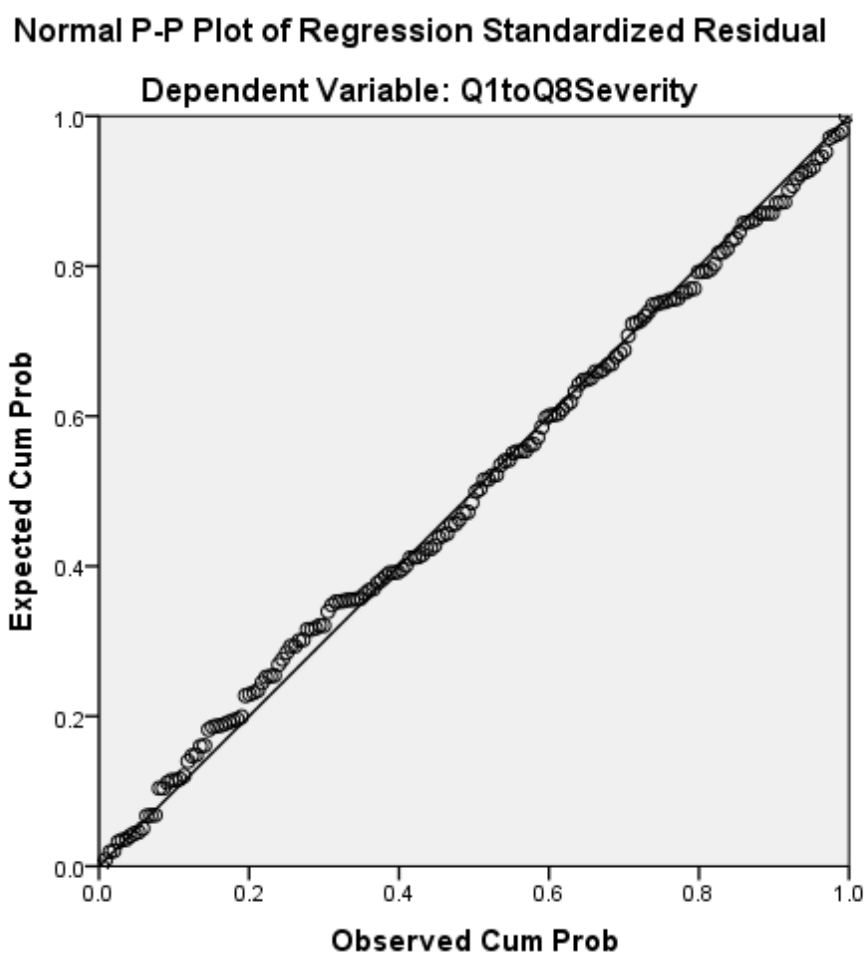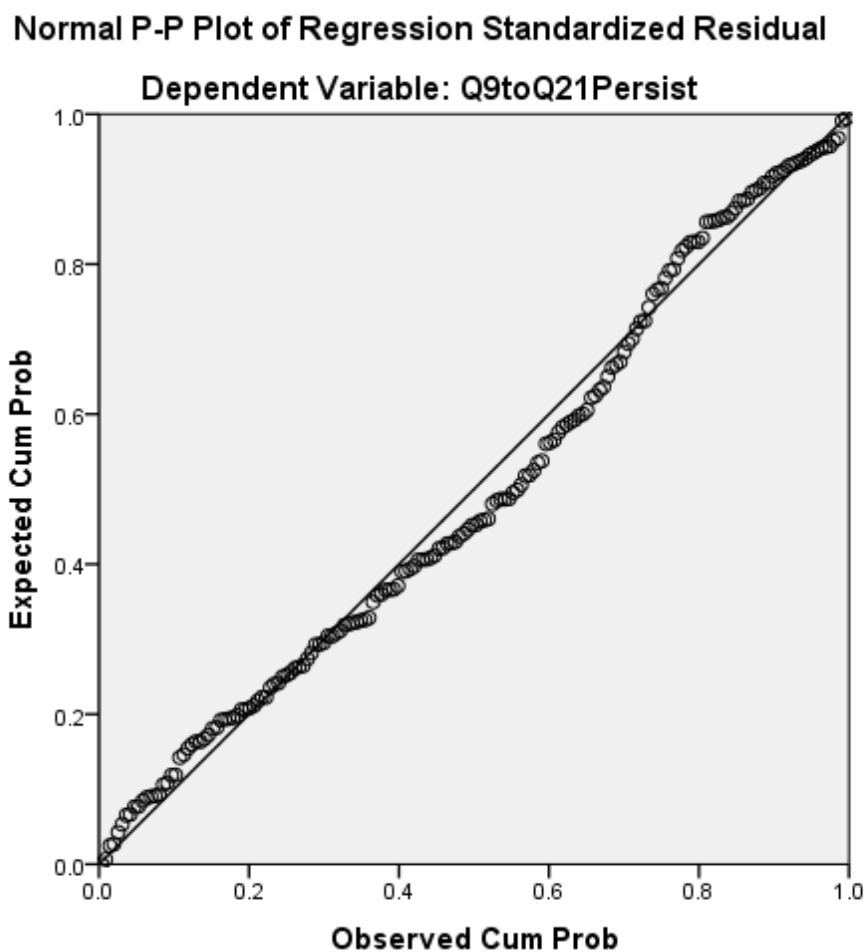
Figure 2. P-P plot for grief persistence.

Next, the assumption of homoscedasticity asserts that the variance of error is similar across all of the independent variables (Field, 2013). I tested the assumption of homoscedasticity using scatterplots, which demonstrated no obvious patterns and equal distribution of data points above and below zero on both the x and y-axis, confirming that

the data met the assumption of homoscedasticity for each multiple regression (Field, 2013).

Finally, with multiple regression, the researcher assumes that the independent variables are not highly correlated with each other, known as the no multicollinearity assumption (Field, 2013). To test this assumption, I reviewed the VIF values of the coefficients in both sets of data (Field, 2013). Each of the VIF values were below 10, confirming that the assumption of no multicollinearity for both multiple regressions (Field, 2013; see Table 4).

Table 4

VIF Values

	Grief severity	Grief persistence
Age	1.207	1.207
Gender	1.264	1.261
Race	1.008	1.007
Facebook memorial page Participation	1.297	1.274
Type of death	1.132	1.103
Bereavement length	1.077	1.007
Perceived emotional closeness	1.25	1.251

Grief severity. The multiple regression analysis yielded a significance, indicating a relationship between the independent variables and the dependent variable, grief

severity, $F_{(7,170)} = 33.345$, (p=.000) with an R^2 value = .579 and an adjusted R^2 value = .561. This result indicated that the model using all independent variables of age, gender, race, perceived emotional closeness, type of death, bereavement length, and Facebook memorial page participation explained 56.1% of the variance in the dependent variable, grief severity. However, in reviewing the coefficients, only four of the seven predictor variables provided a statistically significant contribution to the value of grief severity.

Variables that demonstrated statistical significance included perceived emotional closeness to the deceased, bereavement length, gender, and age. The strongest predictor, perceived emotional closeness to the deceased, demonstrated a very strong influence on grief severity (B = .808, p = .000). Next, age also demonstrated a strong influence on grief severity (B = -.018, p = .002). Gender (B = .617, p = .017) and bereavement length (B = .004, p = .038) also demonstrated statistical significance.

While the multiple regression analysis yielded significant results, the research question of this study focuses on the relationship of Facebook memorial page participation on grief severity when controlling for all other independent variables. As such, based upon this analysis, I accepted the first null hypothesis which asserted that there is no statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including scores for grief symptom severity as measured by Part I of the TRIG for bereaved adults in the United States when controlling age, gender, race, type of death, bereavement length as measured by the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC.

Grief persistence. The second multiple regression analysis yielded a significance, indicating a positive relationship between the independent variables and the dependent variable, grief persistence, $F (7,170) = 37.752$, p=.000 with an R^2 value = .609 and an adjusted R^2 value = .592. These results indicated that the model using all independent variables: age, gender, race, perceived emotional closeness, type of death, bereavement length, and Facebook memorial page participation explained 59.2% of the variance in the dependent variable, grief persistence. However, in reviewing the coefficients, only two of the seven predictor variables had a statistically significant contribution to the change in the value of grief persistence.

Perceived emotional closeness to the deceased was the strongest predictor of grief persistence (Adjusted R^2 = .495, B = .749, p = .000). Participation in Facebook memorial pages also demonstrated statistically significant predictability of grief persistence (Adjusted R^2 = .565, B = .177, p = .004). The remaining five variables were non-significant predictors (p > .05) for grief persistence.

As Facebook memorial page participation demonstrated statistically significant predictability of grief persistence, I rejected the second null hypothesis and accepted the second alternative hypothesis, which stated that there is a statistically significant relationship between participation in online memorial Facebook pages as measured by the demographic questionnaire and a regression model including the grief symptom persistence as measured by Part II of the TRIG for bereaved adults in the United States when controlling for age, gender, race, type of death, bereavement length as measured by

the demographic questionnaire, and perceived emotional closeness to the deceased as measured by the SEC.

Summary

For this study, I conducted a multiple linear regression to determine what, if any, relationship exists between Facebook memorial page participation and grief. After conducting an exhaustive literature review, I also included predictor variables of age, gender, race, bereavement length, type of death, and perceived emotional closeness, which previous researchers have found to impact grief (Burke & Neimeyer, 2013; Burke et al., 2017; Mash et al., 2014; Milic et al., 2017).

After completing data analysis, results from the first multiple regression examining the dependent variable grief severity yielded that I accept the first the null hypothesis, thus rejecting the first alternative hypothesis. These results confirm that there is not a statistically significant relationship between the predictor variable Facebook memorial page participation and grief severity. However, results from the second multiple regression examining the dependent variable grief persistence yielded that I reject the second the null hypothesis, thus accepting the second alternative hypothesis. These results confirm that there is a statistically significant relationship between Facebook memorial page participation and grief persistence.

In Chapter 5, I provide an interpretation of the findings, describing in what ways the findings extend knowledge of the role of Facebook in the grief process for adults in the United States. I also present information related to the limitations of the study and provide recommendations for future research to further enhance knowledge of the role of

social media and grief. Lastly, I describe the implications for social change resulting from this study and summarize the fundamental findings of this research study.

Chapter 5: Discussion, Conclusions, and Recommendations

Although Facebook continues to gain attention among scholarly researchers, few

studies have addressed on the role of Facebook after death (Willis & Ferrucci, 2017).

While many typically avoid the topic of death in social exchanges, Facebook has created

a social networking world in which interactions with the deceased are almost as common

as interactions with the living (Willis & Ferrucci, 2017). As such, just as other

researchers (e.g., Cheung, Chiu, & Lee, 2011; Ellison, Steinfield, & Lampe, 2007;

Nadkarni & Hofmann, 2012) have explored how behaviors on Facebook impact an

individual's offline behaviors, it is imperative to extend this understanding to how online

mourning behaviors influence grief symptomology. The purpose of this study, therefore,

was to increase counselor and counselor educators' awareness of the influence of

Facebook memorial page participation on grief symptom severity and persistence for

adults living in the United States who have experienced the death loss of a friend or

family member since 2009.

Using a quantitative method, I conducted an online survey of registered Facebook

users. I used convenience and snowball sampling methods to reach adults living in the

United States who liked the Facebook memorial page of a friend or family member who

had died between January 2009 and March 2018. After excluding surveys that did not

meet all of the inclusion criteria, I used 225 surveys for data analysis. As I presented in

Chapter 4, results of a multiple linear regression revealed that while there is not a

statistically significant relationship between Facebook memorial page participation and

grief severity, there is a statistically significant relationship between the Facebook memorial page participation and grief persistence.

Interpretation of the Findings

As I discussed in Chapter 2, grief is a universal experience and a topic essential to human existence (Kern et al., 2013; Wagner, 2018). Previous researchers have found that a variety of factors, including race, culture, SES, gender, religion, and age may impact the experience and manifestation of grief and mourning for the bereaved (Granek & Peleg-Sagy, 2017). Additionally, researchers have found that factors related specifically to the death, including the type of death, time since the death, and one's emotional relationship with the deceased may influence the grief process for the bereaved (Burke & Neimeyer, 2013; Mash et al., 2014; Sveen et al., 2014). With previous research in mind, I selected seven independent variables for this study, which included age, gender, race, perceived emotional closeness with the deceased, type of death, bereavement length, and Facebook memorial page participation. After collecting data, I used a multiple linear regression to examine the influence of these variables on grief severity and persistence. An analysis of the obtained data revealed several noteworthy results.

Respondents

Before exploring the obtained results and the implications of these specific findings, it is important to consider the inferences of these findings in reference to the obtained sample. As mentioned earlier, my sample consisted of a vastly homogenous sample of White women between the ages of 28 and 48 years old. While the absence of significant representation of other genders or races makes it difficult to generalize the

findings of this study beyond female White American adults, it is essential to examine the role of gender on social media behavior at large to better understand the variance in response rates between males and females.

When considering the role of gender on typical social media use, women between the ages of 18 and 29 years old are the most frequent users of social networking sites (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Additionally, men and women use Facebook differently (Grant, 2017). While men tend to use social media as a means to gather information, women are more likely to use social networks to share information and stay connected with friends and family (Grant, 2017). When creating social networking accounts, men are more often seeking to develop new relationships while women focus more on maintaining existing relationships (Muscanell & Guadagno, 2012).

Specifically related to Facebook memorial page use, Kuznetsova and Ronzhyn (2016) found in a sample of 541 Facebook users (55.1% male, 44.9% female) that fewer women than men found it inappropriate to create a Facebook memorial page after someone dies. Additionally, female Facebook users reported greater tolerance for writing to the deceased postmortem and tagging the deceased in online activity. Male Facebook users also reported being more tolerant than women to the deletion of Facebook accounts following the death of a friend or family member. Further, the more friends Facebook users reported having was positively correlated with accepting attitudes towards Facebook memorial pages. Kuznetsova and Ronzhyn found all gender differences in Facebook memorial page preferences and activity to be statistically significant.

While I cannot make inferences regarding the specific reason that I received responses primarily from White women, it is possible that, as previous researchers have identified (Kuznetsova & Ronzhyn, 2016; Muscanell & Guadagno, 2012), this subset of the population is more interested in the topic of Facebook memorial pages because of their related online motivations and behaviors. Further, Facebook uses more than 100,000 factors to create algorithms that determine what each user sees on his or her individual newsfeed (Oremus, 2016). Due to the proprietary nature of Facebook's data, it is impossible to know what each and every user is seeing (Meyer, 2016) and how this individualized content may impact their experience with memorial pages as well as with the advertisement used for recruitment during this study. I was unable to receive a response from Facebook regarding the potential influence of such algorithms on this study. Regardless of the reason for the resulting sample, it is imperative to assess the implications of these findings with the understanding of the homogenous nature of the current sample. As I discuss later in the chapter, additional research may help to expand awareness of the role of gender in regard to Facebook memorial pages and grief outcomes.

Perceived Emotional Closeness

A Pearson correlation demonstrated a statistically significant ($r = .761$, $r^2 = .579$, $p = .000$) positive relationship between perceived emotional closeness and grief severity. A second Pearson correlation demonstrated a statistically significant ($r = .780$, $r^2 = .609$, $p = .000$) positive relationship between perceived emotional closeness and grief persistence. These results are consistent with previous research by Mash et al. (2013)

who asserted that, regardless of the kinship relationship, individuals who reported a higher level of intensity in their relationships with the deceased also experienced more complicated grief than those with less profound relationships.

Additionally, results of a multiple linear regression showed that perceived emotional closeness to the deceased was also the strongest predictor of both grief severity and grief persistence when included in a model with several other key variables. These findings suggest that the perceived relationship between the bereaved and the deceased may be a crucial element to understanding grief severity and persistence for adults. These findings are consistent with previous research by Servaty-Seib and Pistole (2007), who demonstrated that perceived emotional closeness significantly predicted past and present grief intensity in a sample of adolescents.

When examining the impact of perceived emotional closeness on grief, some researchers (e.g., Bottomley et al., 2017) have asserted that perceived emotional closeness to the deceased is more influential to grief than a genetic relationship. Although I did not examine the influence of biological relationship or kinship, findings from this study enhance support for the idea that perceived emotional closeness to the deceased is a salient indicator of grief, both past and present (Archer, 1999; Servaty-Seib & Pistole, 2007). Further supporting these findings, Futterman (2010) reported that scores on the TRIG were significantly related to the emotional closeness between the respondent and the deceased.

As I mentioned in Chapter 2, Hampton et al. (2011) asserted that Facebook users are creating and maintaining online relationships that are comparable in strength to

offline relationships. Although it was not a central focus in this study, data analysis

presented that perceived emotional closeness has a statistically significant positive

relationship with Facebook memorial page participation ($r = .438$, $p = .000$).

Additionally, approximately 20% ($n = 47$) respondents in this study reported never

visiting the Facebook memorial page but still reported an average grief persistence score

of 2.34. The mean score for grief persistence among all categories of Facebook memorial

page participation was 2.898. Considering previous findings reported by Kalstrup (2015),

who found that respondents commented on memorial pages even when they did not know

the deceased, and Carroll and Landry (2010), who asserted that only 10% of college

students who visited a memorial page actually posted on the page, it may be beneficial to

further explore the relationship between perceived emotional closeness and the frequency

of visiting Facebook memorials.

Gender

Results of a multiple linear regression indicated that gender is a statistically

significant predictor of grief severity. A second multiple linear regression, however,

showed that gender is not a statistically significant predictor of grief persistence. While

important to highlight, I cannot use the observations on gender in this study to make any

statistical conclusions. However, these mixed findings are relevant to the field of grief, as

they echo previous research that reveals similar uncertainty about the influence of gender

on grief (Burke & Neimeyer, 2013). While Prigerson et al. (2017) reported that male

caregivers reported more grief symptoms at 13 and 60 months following the death loss,

Spooren et al. (2000) suggested that women are more likely to exhibit more long-term grief reactions and develop complicated grief.

Additionally, just as Klastrup (2015) and Walter (2011) observed large discrepancies in gender representation when researching memorial pages, respondents for this study were predominately female ($n = 209$). The large number of female respondents aligns with the research of Doka and Martin (2010) who asserted that women may be more likely to seek social support while grieving while their male counterparts may be more physical in their grief expression. Further, Klastrup (2015) concluded that due to differences in grief expression by gender, women may be more likely to engage in online mourning via Facebook memorial pages. Also, Futterman (2010) reported that the TRIG demonstrated differences in scores between men and women, with women reporting more significant levels of grief (Futterman et al., 2010). The large number of female respondents in this study support the idea that Facebook memorial page users may be more likely to be female.

Bereavement Length

Results of the data analysis also revealed a statistically significant relationship between bereavement length and grief severity. Similar to the findings related to gender, I cannot use the observations on bereavement length in this study to make any statistical conclusions as data analysis revealed a large standard deviation. However, these results are important to consider when examining grief in a larger scale.

The positive relationship between bereavement length and grief severity may present as counterintuitive, but it mirrors findings by Fleming and Balmer (1996) and

Servaty-Seib and Pistole (2007). Fleming and Balmer (1996) asserted that time since the death is not a clear-cut predictor of grief intensity scores for adolescents. Additionally, Servaty-Seib and Pistole (2007) suggested that adolescents may report higher initial grief scores on the TRIG for several reasons. Adolescents, as they move further away from the time of the initial death loss, may overemphasize the impact of the loss in retrospect, may realize the extent of their initial grief and report scores more accurately later on, or may experience that the memory of the historical grief is more severe than the current grief experience (Servaty-Seib and Pistole, 2007).

However, a meta-analysis of the TRIG revealed a statistically significant negative relationship between bereavement length and the reliability of part I of the TRIG (Montano, Lewey, O'Toole, & Graves, 2015). As such, researchers argued that the more time that passes since the death loss, the more unreliable the scores on Part I of the TRIG become. Respondents in this study reported a bereavement length ranging from zero months to 110 months. As such, it may have been difficult for respondents to accurately recall historical grief experiences.

Age, Race, and Type of Death

Pearson correlations displayed no statistically significant correlations between age and grief severity and grief persistence. Additionally, no statistically significant correlations appeared between type of death and grief severity or persistence. Interestingly, results of the multiple linear regression revealed that age demonstrated strong predictability for grief severity but displayed no predictability for grief persistence.

Results revealed no significant relationship between race and either grief severity or grief persistence. The literature on the influence of race on grief is varied. Some researchers (e.g. Goldsmith et al., 2008; Laurie & Neimeyer, 2008) have reported that African Americans experience more distressing grief for longer time periods than Caucasian respondents. However, Burke et al. (2017) recently found Caucasians to have higher levels of intense grief when compared to African Americans. The sample in this study was predominately White ($n = 204$) which may impact the ability to generalize findings about the influence of race on grief severity and persistence. Further, the small sample of African American respondents is not surprising when considering the make-up of Facebook memorial pages, which predominately represent young White males (Kern et al., 2013). The lack of cultural representation on Facebook memorial pages (Kern et al., 2013) may explain while researchers examining more comprehensive offline grief behaviors have found race to be a significant predictor while this study did not.

Similarly, type of death demonstrated no significant relationship with either grief severity or grief persistence. While findings on the influence of type of death have been inconsistent (Burke & Neimeyer, 2013), Holman et al., (2014) asserted that prolonged access to information about the death can increase symptom severity for the bereaved. While Holman (2014) focused on exposure to 24-hour news coverage, these findings are of interest, because it is possible that unlimited access to Facebook memorial pages, which often provide details about the death (Pennington, 2017), may play a role in the intensification of grief symptoms for the bereaved, regardless of the type of death.

Further research on the topic of reoccurring coverage and access may provide additional information on this variable.

Facebook Memorial Page Participation

Results of a Pearson correlation showed that Facebook memorial page participation has a statistically significant positive correlation with both grief severity and grief persistence. Additionally, although results of a multiple linear regression revealed that Facebook memorial page participation is not a statistically significant predictor of grief severity, a second multiple linear regression indicated that participation in a Facebook memorial page is a statistically significant predictor of grief persistence. Of interest to the dependent variable grief persistence, data analysis revealed that perceived emotional closeness and Facebook memorial page participation were the only statistically significant predictors of grief persistence in this analysis. Results of the multiple regression analysis revealed that none of the five remaining variables, age, gender, race, type of death, and bereavement length, were statistically significant predictors of grief persistence.

While these results are important, I must take caution when making inferences about these findings. As previously discussed, the sample for this study consisted primarily of White women between the ages of 28 and 48 years old. However, these findings are important to examine, as the current literature remains unclear about the benefit or harm associated with participating in online memorials (Pennington, 2017).

Theoretical Framework

When individuals die, their Facebook accounts continue to live on and have a voice in the social network (Koktan, 2017). Previous research by Carroll and Landry (2010) found that individuals reported joining Facebook memorial pages to connect with others, revisit old memories of the deceased, and find closure. However, findings from this study which highlight the predictability of Facebook memorial page participation on grief persistence challenges the notion that users are finding closure in the death. To best understand the implications of the current study, it is necessary to examine the findings through the theoretical lens through which I conceived this study.

As discussed in detail in Chapter 2, the continuing bonds theory emphasizes that relationships between the deceased and the bereaved do not simply end after one dies (Klass et al., 1996). Rather, individuals alter the parameters of the relationship and strive to maintain a connection with the deceased, reminiscent to when the deceased was alive (Klass et al., 1996). Researchers are not arguing about the phenomenon of continuing bonds in a virtual world but are conflicted on the adaptive or maladaptive nature of these relationships for the bereaved (Pennington, 2013; Boelen et al., 2006). Even Klass (2006) contended that the occurrence of continuing bonds does not implicitly affirm that ongoing relationships with the deceased are advantageous for the bereaved.

In congruence with the continuing bonds theory, Bailey et al., (2015) contended that grief is not a terminal process, but rather a continually evolving relationship between the bereaved and the deceased. Prior to the advent of virtual memorial pages, the

bereaved expressed continuing bonds through visits to the burial site of the deceased, sharing old photographs, and other ceremonious rituals to honor the dead and celebrate important anniversaries (Root & Exline, 2014). With the advancement of social networking, Facebook has expanded the application of continuing bonds behavior (Irwin, 2015). Individuals are now able to visit Facebook memorial pages and, in essence, allow the deceased to continue living through the lives of the bereaved (Willis & Ferrucci, 2017).

With the continuing bonds theory in mind, I sought to explore the relationship between Facebook memorial page participation on grief severity and grief persistence. Understandably, results of this study indicated that Facebook memorial page participation was not a predictive factor for grief severity. Individuals' past grief experiences occur immediately after the death, in which time a memorial page may not have existed. In this study, I limited bereavement length to 110 months, the time at which Facebook memorial pages initially launched on the social networking site. As such, although this study did not examine how long someone had been a member of the Facebook memorial page, I ensured that respondents had not experienced a death loss several years prior to the advent of Facebook memorial pages.

At any time following the death loss, Facebook users may choose to join memorial pages to mourn the deceased. Through the Facebook memorial page, the bereaved may begin to gather information, make connections, and share personal sentiments about the deceased (Pennington, 2017). In this study, I found a statistically significant positive correlation between respondents' frequency of participation on

Facebook memorial pages and grief persistence scores. These findings expand upon previous research which has demonstrated that online mourners do not visit virtual memorials to communicate with each other, but rather to speak directly to the deceased (Dobler, 2009; Irwin, 2015). Additionally, Brubaker and Hayes (2011) and Carrol and Landry (2010) concluded that social networking sites, including Facebook memorial pages, provide mourners with a distinctive way to develop and enhance bonds with the deceased. The direct engagement with the deceased provided by memorial pages, although one-sided in nature, allows the bereaved to make sense of the death loss and continue bonds with the deceased (Degroot, 2012).

Results from this study, which ascertain that there is a significant relationship between Facebook memorial page participation and grief persistence demonstrate that there may be a link between behavior directed at continuing bonds with the deceased and higher levels of present grief. Additional research would help expand knowledge of the experiences of online mourners and examine possible connections between specific Facebook memorial page activity or frequency of participation and grief persistence.

Limitations of the Study

The current study is not without limitations. First, and arguably most important, the current sample was relatively homogenous regarding gender and race. However, while the homogenous nature of the current study limits generalizability of the findings, it is also important to consider that previous research has demonstrated that the most common age demographic of all Facebook users are individuals between the ages of 25 – 34 years old (Zephoria, 2018). As such, it is more likely that these individuals will be

accessible and engage in Facebook activity (Zephoria, 2018). Previous researchers have reported similar homogeneity when surveying Facebook users who had experienced the death of a friend or family member. Rossetto et al., (2014) sampled 265 individuals age 18 and older using calls for participants, networking sampling, and snowball sampling on Facebook. The obtained sample consisted of 205 women (77%) and 58 men (22%). Further, almost all of the sample ($n = 225$) identified as White (Rossetto et al., 2014).

While I previously discussed the limitations and implications of homogeneity in regard to gender, the minimal representation of non-White respondents is another limitation of this study. Understanding racial differences in Facebook activity and grief, and the potential limitations resulting from a primarily White sample, are essential in ensuring accurate understanding of the implications of the current study.

The United States reports established racial differences in life expectancy with Black Americans experiencing significantly more deaths of family members than White Americans between childhood and adulthood (Umberson, Olson, Crosnoe, Liu, Pudrovska, & Donnelly, 2017). Estimating racial differences in experience with the death of a family member at various ages, Black Americans are significant more likely than their White counterparts to experience the death of a mother, father, or sibling between childhood and midlife (Umberson et al., 2017). Additionally, Black Americans are more likely to experience the death of a spouse or child between during adulthood (Umberson et al., 2017).

Additionally, while 67% of White adults in the United States are using Facebook, 70% of Black Americans, and 73% of Hispanic Americans report utilizing Facebook

regularly. The lack of representation of these races in this study is a limitation that limits the scope of the current findings. As discussed in detail in Chapter 2, culture plays a significant role in grief experiences, and it may be beneficial for future researchers to assess how culture and race may impact grief elements specific to the influence of Facebook memorial pages.

Another limitation of the current study may be the survey design and presentation. I used Survey Monkey to host the survey and the functionality of the program may have influenced response rates. After clicking the link to the survey, respondents saw the informed consent page. After reading the informed consent, respondents provided consent by selecting yes. Respondents then needed to click next to continue the survey. While response data indicated that 370 respondents began the survey, only 225 completed the survey. While I cannot be certain that this interface influenced the dropout rate of the survey, it is possible that having to make multiple clicks reduced the number of completed responses.

In addition to these limitations, one possible limitation of the current study is the use of Facebook as the only studied social networking site. Although Facebook has been the most common social networking site since April 2008, it is possible that Facebook may not always remain the most popular social network (Kosinski, Matz, Gosling, Popov, & Stillwell, 2015). Additionally, while Facebook currently remains the most commonly used social networking site in the United States, Facebook is only one of several online environments users may access during times of grief (Pennington, 2017). It is conceivable that an alternative social networking platform may overtake Facebook at

some time in the foreseeable future (Kosinski et al., 2015). Regardless, it is likely that the

world of social networking will not disappear. As such, while I cannot generalize the

findings of this study, which highlight the specifics of the influence of participating in

Facebook memorial page on grief, to all virtual means of grieving, I expect that many of

the concepts related to continuing bonds and the influence of engaging in online

memorials over time will remain applicable as Facebook evolves and new social

networking platforms transpire.

Recommendations

The topic of Facebook memorial page participation and its influence on grief

warrants additional research. A thorough analysis of the data revealed evidence of a

statistically significant relationship between Facebook memorial page participation and

grief persistence. However, as noted previously, this study was not without limitations.

Researchers may advance literature in the field of Facebook mourning by addressing the

limitations of this study.

Social networking sites are a virtual melting pot of diverse cultures (Hepp, 2010).

Unlike in offline environments, a variety of individuals representing various social

contexts (e.g. friends, work, family, school, acquaintances) are collapsed into one

category of friends on Facebook (Marwick & Ellison, 2012). This context collapse

impacts the mourning process, as the bereaved find themselves potentially in conflict

with the cultural grief practices of other mourners on the memorial page (Sabra, 2017).

As a result, mourners may question the legitimacy of their own feelings related to the

death, which may potentially impact their participation in the Facebook memorial page.

As Irwin (2015) identified, individuals are constantly renegotiating culture-specific mourning practices to fit the framework of social media. Future studies may benefit from expanding awareness of the role culture plays in Facebook memorial page behavior and the influence this may have on grief persistence.

In addition to cultural limitations, this study did not expand upon the independent variable of type of death. I chose to code type of death as a dichotomous variable, expected or unexpected. However, within these two categories are several potential circumstances related to the death. Kern et al., (2013) identified that just under half (42.36%) of all current Facebook memorial pages honor an individual that died as a result of a traumatic circumstance. Future researchers may wish to enhance understanding of the potential influence of type of death on grief persistence by expanding categories of type of death.

Further, researchers may enhance understanding of the relationship between Facebook memorial page perception and grief persistence by more thoroughly examining grief scores in relation to frequency of Facebook memorial page participation. Additionally, although the analysis did not reveal a statistically significant relationship between Facebook memorial page participation and grief severity, the variable warrants additional inquiry. While Facebook memorial page participation is not a predictor of grief severity, researchers may explore the influence of grief severity on one's decision to join or participate in Facebook memorial pages. Finally, researchers may enhance understanding of the influence of Facebook memorial page participation on grief through studies comparing the grief severity scores for Facebook memorial page users to their

grief persistence scores over time. A longitudinal design may be beneficial in enhancing understanding of the long-term implications of continuing bonds with the deceased through Facebook memorial pages.

Implications

Considering findings from the current study, I highlight several implications for positive social change within the counseling domain. While historical grief models contended that an individual must get over the death loss in order to regain healthy functioning post-loss (Getty et al., 2011), the continuing bonds theory (Klass et al., 1996) challenges this notion asserting that the bereaved do not simply move on following the death of friend or loved one. Rather, individuals engage in continuing bonds with the deceased, which can present in multiple contexts both online and offline. While individuals would previously visit the grave of the deceased and engage in other ritual behaviors to continue a relationship with the deceased, the internet has modernized the ways in which the bereaved maintain bonds with the deceased (Bouc et al., 2016). Resulting from their intense focus on social interactions, social networking sites provide an easily accessible space for individuals to engage in grief behaviors, including continuing bonds with the deceased (Gibson, 2015).

However, Neimeyer (2001) suggested that in order for the continued relationship to be productive, the bereaved must "make sense" of the death and the new relationship with the deceased. Failure to recognize changes in the relationship with the deceased could result in prolonged and unproductive grieving (Neimeyer, 2011). Previous research has focused on the use of Facebook and other social networking sites for mourning, but

researchers have made inconsistent inferences about the advantages or dangers associated with participating in Facebook memorial pages. This study revealed that there is a significant relationship between Facebook memorial page participation and grief persistence. As such, counselors, counseling students, and counselor educators may all benefit from the findings of this study as the findings may enhance understanding of the ways in which female White adults in the United States are grieving and the impact that using Facebook memorial pages may have on the grief process.

With this study, I sought to increase awareness of the influence of Facebook memorial page participation on grief severity and persistence. While Facebook memorial page participation is not a significant predictor of grief severity, there is a strong relationship between participation in Facebook memorial pages and grief persistence. This finding adds to the literature regarding continuing bonds and may help counselors and counselor educators better understand the potential influence of using Facebook following a death loss. This enhanced understanding may serve to enrich the education of counseling students and enhance counseling services for those in mourning. As Field (2006) emphasized, continuing bonds with the deceased are only adaptive if the bereaved recognizes that the relationship is inherently different from when the deceased was living. As such, counselors may wish to engage the bereaved in conversations about their use of Facebook and their online interactions with the deceased to better assess the adaptivity of continued bonds.

Clinical Implications

Finally, findings from this this study may be beneficial in assisting counselors and counselor educators in better understanding the impact of Facebook memorial page participation on clinical presentations of bereavement. Although grief typically resolves between 6 and 24 months following a death loss, grief is inherently an individualized process (Sveen et al., 2014). Even in traditional mourning practices, post-liminal rituals may take place for several years following the death (Reeves, 2011). It is inevitable, therefore, that virtual mourning may also extend beyond typical grief parameters.

Currently, the DSM-V asserts that clinicians may make a diagnosis of complicated bereavement if an individual's grief exceeds 12 months post-loss (DSM-V, 2013). Respondents in this study reported an average bereavement length of 3 years, 2 months. Getty et al. (2012) also found that individuals still activity participated in Facebook memorial pages three years post the death loss. Further, an individual's grief behaviors must also extend beyond what the DSM-V criteria identifies as culturally accepted mourning rituals (DSM-V, 2013).

Further indicating concerns with the current diagnostic criteria for complicated bereavement is research consistent with previously presented material which asserts that bereavement does not occur linearly or in a "normal" trajectory as first described by Kübler-Ross (Bonanno, Wortman, & Nesse, 2004). In fact, less than half of grieving individuals report grieving in a manner consistent with stage theory (Wortman & Boerner, 2011). In addition to changes in the belief and practice of the stages of grief, the influx of access to social media is also impacting the way in which individuals experience

relational losses as the Internet provides a place for individuals to grieve and create an online culture of mourning (Refslund Christensen & Gotved, 2015; Rossetto et al., 2014).

For counselors and counselor educators, it is important to enhance understanding as to how individuals are perceiving the role of social media in their own grief process (Rossetto et al., 2014). In response to user requests, Facebook has created multiple ways to remember or memorialize deceased users (Pennington, 2017). This development on its own highlights the differences in needs and perceptions of Facebook users as they grieve (Pennington, 2017). While researchers found that individuals experienced a sense of continued relational connection with the deceased and felt supported when engaging in Facebook memorials (Brubaker, Hayes, & Dourish, 2013; Rossetto et al., 2014), others found that some bereaved individuals challenge access to online memorials of the deceased and report their creation and maintenance as painful and harmful while grieving (Morehouse & Crandall, 2014; Pennington, 2013, 2014; Rossetto et al., 2015).

As discussed earlier, social media outlets create their own social contexts and participation in such pages may influence culturally appropriate behaviors for those choosing to mourn online. Throughout the last few decades the culture of online bereavement in the Western world has expanded rapidly (Refslund Christensen & Gotved, 2015). By nature, online platforms, including Facebook memorial pages, promote interaction and social sharing of feelings related to grief and mourning (Refslund Christensen & Gotved, 2015). These very processes align with the foundation of the continuing bonds theory which asserts that the goal of grief is no longer to let go of the relationship with the deceased but rather to keep hold of the relationship in a new and

evolving context (Klass et al., 1996; Refslund Christensen & Gotved, 2015). As such, the emerging memorial culture in online environments accentuates the now social task of grief, as individuals seek to reestablish a life without the deceased through the act of sharing emotional and cognitive reactions in a social environment (Refslund Christensen & Gotved, 2015).

With this in mind, counselors and counselor educators must be mindful of the cultural connections experienced by those engaging in online mourning behaviors. This study highlighted that there is a significant positive relationship between Facebook memorial page participation and grief persistence. Future research may help provide enhanced awareness of how to apply knowledge of continuing bonds and the influence of participating in online memorials to enhance accurate knowledge and application of diagnostic criteria of prolonged and complicated bereavement.

Conclusion

In this study, I used quantitative survey methodology to determine if there is a relationship between Facebook memorial page participation and two dependent variables, grief severity and grief duration, when controlling for additional predictor variables of age, race, gender, type of death, bereavement length, and perceived emotional closeness. To conduct this survey, I used convenience and snowball sampling on Facebook to reach adults living in the United States who had experienced a death loss between January 2009 and March 2018. After collecting data from 225 respondents, I conducted a multiple linear regression which revealed that there was no significant relationship between Facebook memorial page participation and grief severity. A second multiple linear

regression, however, revealed that there was a significant relationship between Facebook memorial page participation and grief persistence.

Motivation for this survey arose from a distinct gap in the literature related to the potential positive or negative repercussions of engaging in Facebook memorial pages following the death of a friend or loved one. While researchers previously investigated a variety of grief-related online behaviors (Bouc et al., 2016; Brubaker et al., 2013; Church, 2013; DeGroot, 2014; Kasket, 2012; Pennington, 2013, 2014; 2017), I could not find consistent quantitative findings on the influence of using Facebook memorial pages to continue bonds with the deceased. As social networking sites become increasingly integrated into our everyday lives, understanding the impact of grieving through Facebook memorial pages is essential to providing effective clinical care for the bereaved and ensuring accurate education and diagnosis of bereavement-related disorders.

Results from this study revealed a significant positive relationship between Facebook memorial page participation and perceived emotional closeness and grief persistence, while simultaneously revealing no significant relationships between grief persistence and the five other predictor variables. This information may be beneficial for counselor educators as they prepare counselors to work with bereaved populations who are undeniably using the Internet in their everyday lives to both celebrate accomplishments and express sorrow (Koktan, 2017).

While research related to Facebook continues to grow (Bouc, et al., 2016), there remains a need to enhance understanding of the role of continuing bonds in Facebook memorial pages and the influence that participation in Facebook memorial pages is

having on grief persistence. In this study, I explored several factors previously found to influence grief. This study revealed support for several factors previously demonstrated to influence grief and highlighted the influence of both perceived emotional closeness and Facebook memorial page participation on grief persistence. Ultimately, the awareness of the influence of continuing bonds and participating in Facebook memorial pages may better prepare counselors to attend to the evolving needs of the bereaved who and the continually changing norms of virtual mourning. With enhanced awareness of the relationship between Facebook memorial page participation and grief persistence, counselors may be better prepared to assess grief persistence scores overtime to ensure productive progression of continued bonds with the deceased though Facebook memorial pages.

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Appendix A: Permission to Use Survey Monkey

⌂ SurveyMonkey·

SurveyMonkey Inc.
www.surveymonkey.com

For questions, visit our Help Center
help.surveymonkey.com

Re: Permission to Conduct Research Using SurveyMonkey

To whom it may concern:

This letter is being produced in response to a request by a student at your institution who wishes to conduct a survey using SurveyMonkey in order to support their research. The student has indicated that they require a letter from SurveyMonkey granting them permission to do this. Please accept this letter as evidence of such permission. Students are permitted to conduct research via the SurveyMonkey platform provided that they abide by our Terms of Use, a copy of which is available on our website.

SurveyMonkey is a self-serve survey platform on which our users can, by themselves, create, deploy and analyze surveys through an online interface. We have users in many different industries who use surveys for many different purposes. One of our most common use cases is students and other types of researchers using our online tools to conduct academic research.

If you have any questions about this letter, please contact us through our Help Center at help.surveymonkey.com.

Sincerely,

SurveyMonkey Inc.
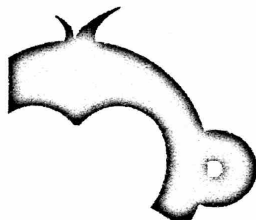
Appendix B: Invitation to Participate

Invitation to Participate

I am conducting a study about the role of Facebook memorial pages on grief. The title of the study is The Predictability of Facebook Memorial Page Participation on Grief. The purpose of this study is to obtain data about how participating in Facebook memorial pages influences grief symptom severity and duration for adults who have lost a friend or family member. This study will allow participants to share information about their relationship with someone who has died as well as their use of Facebook memorial pages to inform counselor educators about the way that Facebook memorial pages are impacting the grief process.

You are eligible to participate in this study if you identify as a registered Facebook user who is at least 18 years old, 'likes' at least one Facebook memorial page created to memorialize someone who has died since 2009, and are willing to participate in a one-time survey about grief and Facebook memorial page participation.

This dissertation is being conducted by doctoral candidate, Colleen Grote, MS, LMHC, RPT, NCC. The study has been approved by Walden University Institutional Review Board (IRB Number:)

Participating in my study is voluntary and you are free to withdraw at any time. All responses are confidential and no identifying information will be obtained. To learn more about the study, please contact the primary researcher, Colleen Grote at ███████████████ or email supervising faculty, Dr. Walter Frazier, a ████████████. To participate in the study, please click the link below:

Link

Appendix C: Obtaining the TRIG

RE: Obtaining the TRIG for doctoral research

Sid Zisook, M.D. ██████████████

Thu 10/26/2017 11:38 AM

To:Colleen Gilhooly ◄ ████████████████

3 attachments (5 MB)

TRIG.pdf; trig_pdf.pdf; Texas Revised Inventory of Grief.pdf;

Happy to have you use the TRIG for this interesting study.
SZ

From: Colleen Gilhooly [mailto█████████████████]
Sent: Thursday, October 26, 2017 9:26 AM
To:███████████████
Subject: Obtaining the TRIG for doctoral research

Dr. Zisook,

My name is Colleen Gilhooly Grote and I am currently a PhD Candidate at Walden University. I am studying the predictability of Facebook memorial page participation on grief symptom severity and duration among adults in the United States. I am writing to ask for your permission to utilize the TRIG as one of my measurement instruments and to obtain a copy of the measurement.

I appreciate your attention to my request.

Thank you!

Colleen Grote, MS, LMHC, NCC, RPT, ACS
PhD Candidate, Walden University

Appendix D: Obtaining the SEC

RE: Scale of Emotional Closeness

Servaty-Seib, Heather L ‹███████████›

Mon 1/8/2018 7:19 AM

To:Colleen Gilhooly ‹███████████›

Dear Colleen,

So good to hear from you.

I have cut and pasted to full measure for you below. Sometimes we do use a continuum from 0 to 100 as well—but we have found that it is redundant—so now we just use the six items. 2 and 5 are reverse scored.

All the best in your research.

Dr. S-S

The level of closeness we feel to others differs from person to person and over time. Please think about your relationship with the person who died while responding to the following statements. Using the scale below, write the number that corresponds to how much you agree with each statement in the blank provided.

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree

_____ 1. My life is meaningless or senseless without this person.
_____ 2. I did not need this person's love in my life.
_____ 3. I interacted with this person on a daily basis.
_____ 4. This person greatly influenced my hopes and beliefs.
_____ 5. Significant parts of my life were not affected by this person's death.
_____ 6. The loss of this individual is irreplaceable.

From: Colleen Gilhooly [mailto:c█████████████]
Sent: Friday, January 05, 2018 6:28 PM
To: Servaty-Seib, Heather L ‹███████████›
Subject: Scale of Emotional Closeness

Dr. Servaty-Seib and Dr. Pistole,

My name is Colleen Gilhooly Grote and I am currently a PhD Candidate at Walden University. I am studying the predictability of Facebook memorial page participation on grief symptom severity and persistence among adults in the United States. I am writing to ask for your permission to utilize the Scale of Emotional Closeness as one of my measurement instruments and to obtain a legal copy of the measurement.

I appreciate your attention to my request.

Thank you.

Colleen Grote, MS, LMHC, NCC, RPT, ACS
PhD Candidate, Walden University

Appendix E: Survey Questions

2. How old are you (in years)

[   ]

Other (please specify)

[   ]

3. What gender do you best identify with?

○ Male

○ Female

○ Transgender

○ Prefer not to disclose

○ Other (please specify)

[   ]

4. Which racial group do you most identify with?

○ White or Caucasian

○ Black or African American

○ Hispanic

○ Asian

○ Other (please specify)

[   ]

5. What country do you live in?

[   ]

6. Have you 'liked' at least one Facebook memorial page created to memorialize the death of a friend or family member?

○ yes

○ no

7. How often do you visit the memorial page?

Never	Rarely	Sometimes	Frequently	Very Frequently (almost every day)
○	○	○	○	○

8. How did the deceased die?

○ Expectedly

○ Unexpectedly

Texas Revised Inventory of Grief Part I: Past Behavior

Think back to the time this person died and answer all of these items about your feelings and actions at that time by indicating whether each item is Completely True, Mostly True, Both True and False, Mostly False, or Completely False as it applied to you after this person died. Check the best answer.

9. After this person died I found it hard to get along with certain people.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

10. I found it hard to work well after this person died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

11. After this person's death I lost interest in my family, friends, and outside activities.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

12. I felt a need to do things that the deceased had wanted to do.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

13. I was unusually irritable after this person died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

14. I couldn't keep up with my normal activities for the first 3 months after this person died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

15. I was angry that the person who died left me.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

16. I found it hard to sleep after this person died.

Completely True	Mostly True	Neutral	Mostly False	False
◯	◯	◯	◯	◯

Texas Revised Inventory of Grief Part II: Present Emotional Feelings

Now answer all of the following items by checking how you presently feel about this person's death. Do not look back at Part 1.

17. I still cry when I think of the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

18. I still get upset when I think about the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

19. I cannot accept this person's death.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

20. Sometimes I very much miss the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

21. Even now it's painful to recall memories of the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

22. I am preoccupied with thoughts (often think) about the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

23. I hide my tears when I think about the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

24. No one will ever take the place in my life of the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

25. I can't avoid thinking about the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

26. I feel it's unfair that this person died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

27. Things and people around me still remind me of the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

28. I am unable to accept the death of the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

29. At times I still feel the need to cry for the person who died.

Completely True	Mostly True	Neutral	Mostly False	False
○	○	○	○	○

Scale of Emotional Closeness

The level of closeness we feel to others differs from person to person and over time. Please think about your relationship with the person who died while responding to the following statements. Using the scale below, select the number that corresponds to how much you agree with each statement.

30. My life is meaningless or senseless without this person

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯

31. I did not need this person's love in my life

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯

32. I interacted with this person on a daily basis

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯

33. This person greatly influenced my hopes and beliefs

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯

34. Significant parts of life were not affected by this person's death

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯

35. The loss of this individual is irreplaceable

Strongly Disagree	Moderately Disagree	Neutral	Moderately Agree	Strongly Agree
◯	◯	◯	◯	◯