IOWA STATE UNIVERSITY
Digital Repository

2016

Death in the age of eternity: How Facebook users cope with personal loss

Eric Palmer Meyer
Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/etd

Part of the Mass Communication Commons

Death in the age of eternity: How Facebook users cope with personal loss

by

Eric Palmer Meyer

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Journalism and Mass Communication

Program of Study Committee:
Jan Lauren Boyles, Major Professor
Andrew Pritchard
Carolyn Cutrona

Iowa State University

Ames, Iowa

2016

DEDICATION

This thesis is dedicated to my parents, Janice Godtland and Michael Meyer. Without their patience, understanding, support, and of course love, this thesis would not have been possible.

I would also like to dedicate this to my sister, Dr. Sarah Meyer, and her husband, David Kratz, who has helped me immensely during my time at school.

I would also like to dedicate this to my dearest and oldest friend, Dr. David Osthus, who dispensed invaluable statistical and general advice in order to survive graduate school.

Lastly, I would like to dedicate this to my graduate advisor, Dr. Jan Lauren Boyles, whose constant help and guidance made this entire project possible.

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGMENTS

I would like to thank my committee chair, Dr. Jan Lauren Boyles, and my committee members, Dr. Andrew Pritchard and Dr. Carolyn Cutrona, for their guidance and support throughout the course of this research.

In addition, I would also like to thank the department faculty, especially Dr. Daniela Dimitrova, for all their help with my thesis. I want to also offer my gratitude to those who participated in my survey. Without their input this thesis would not have been possible.

ABSTRACT

This study explores the relatively new phenomenon of Facebook users creating memorial content in order to grieve. Using a survey with 230 undergraduate and graduate respondents, the study examines the factors that influence the creation of memorial content on Facebook. Users who post more and actively create content that is not related to mourning are more likely to create memorial content. For a majority of Facebook users, the site is a supportive and nurturing place. providing a social space for the grieving to interact with each other. Most users do not post memorial content, but those who do create memorial content found it helpful in the mourning process. Overall, the research indicates that while mourning on Facebook is viewed as a positive and helpful experience for individuals dealing with the loss of a friend, it does not take the place of being with loved ones when somebody close to them passes on.

Keywords: Facebook, uses and gratifications, social networking, mourning, social capital

CHAPTER 1

Introduction

In the digital age, our entire lives have slowly been moving and developing online. Data from the Pew Research Center shows that 87% of all American adults are online (2015a). Since 2005 (when only 7% of adults used social media), there has been a gigantic leap in usage. Today, 65% of all adults use at least one social media platform (Pew Research Center, 2015a). With this increase in usage come inevitable changes to society and culture. Turkle presents the idea that "We remake ourselves and our relationships with each other through our new intimacy with machines" (Turkle, 2012, 3). Turkle argues that for the first time we view ourselves (and our relationships) through the lens of a machine, which has caused changes in human interaction. Personalities are cultivated and created to maintain and meticulously uphold how we present ourselves. Spending time on social media equates to "essentially writing our autobiographies" (Ambrosino, 2016).

Social media is nearly ubiquitous in American society. In 2015, 72% of Americans are on Facebook (Pew Research Center, 2015a). Facebook users, for the most part, are highly active even when compared to users of other social media platforms, with 56% of Facebook users creating or curating media (Pew Research Center, 2014). Multi-platform use of social media – (including Twitter and Instagram, Snapchat or WhatsApp, for instance) – is on the rise by 16% over just one year ago (Pew Research Center, 2015b). Within this new media age, US citizens have also spent a good deal of time "living" online. According to Pew Research Center statistics, most Americans on Facebook are very active, with 70% visiting the site daily, and another 43% visiting multiple times a day (Pew Research Center, 2015a). There is almost no discernable

variance looking at usage rates when broken down by ethnicity, education or geographic location (Pew Research Center, 2015a).

Why is social media so popular? Current research seems to suggest that social maintenance, which can be defined as ways to keep relationships together, is the top reason why people continually access and use Facebook (Whiting & Williams, 2013). In one study of social media, 88% of those interviewed said that social interaction (engaging with friends, exchanging content and interacting with friends) was also a primary use of Facebook (Whiting & Williams, 2013). Interviewees also said that Facebook was a forum for users to interact with friends, allowing them to maintain relationships with people they do not regularly see in real life (Whiting & Williams, 2013).

Given the evidence that friendships are maintained on Facebook during life, what happens when the natural life has ended, but the user's presence on Facebook remains unchanged? In most cases after death, a Facebook user's presence stays in a concrete, codified state that cannot be easily removed. Even after death, some Facebook users continue to post photos, videos and other content on the deceased user's page. These acts of mourning online are a social phenomenon that will likely continue to grow. An estimate from 2012 suggests that there are more than 30 million dead Facebook users, with nearly 8,000 Facebook users dying per day (Ambrosino, 2016). If the rate remains constant, then it is likely that, at some point in the future, the number of dead users will outnumber the living (Ambrosino, 2016). As a result, grieving on social platforms like Facebook could go from an unusual phenomenon to something that happens more regularly.

This activity raises several key questions. Does Facebook user activity influence mourning content creation? Does perception about Facebook as a community impact mourning content creation? How helpful is this practice in the overall grieving process? Finding answers to these

questions proves difficult, as death is so intensely personal. By looking at these issues more deeply, it may be possible to understand broadly how Facebook has changed mourning practices in the digital age. If life has been changed by the implementation of social media, then surely death and the grieving associated with it has, too.

Researchers have published a few studies on death and Facebook (Pennington, 2013; Degroot, 2014; Church, 2013). This scholarship, however, has largely ignored whether social media has indeed affected the mourning process. This study explores what general Facebook activities influence mourning content creation, how perception of Facebook as a whole influences grieving online, and how helpful is mourning on Facebook to the grieving process. Through this work, I explore some of themes associated with death and Facebook, including how users feel about seeing someone memorialized on the site and how often the practice happens.

In the literature review, I explore Facebook and social networking theory, illustrating how people are connected to each other in both offline and online settings, while also highlighting what the potential benefits are associated with being a part of a social network. Next, I look at the importance and omnipresence of social media use in American society. I then transition into different theories of mourning and grieving, looking at both traditional and newer theories that deal with the death of a close one. This will be important to help make sense of what normative actions and coping mechanisms help those in the grieving process, and how Facebook plays into this picture. Then, the work provides an overview of uses and gratifications theory, which can explain why people are generally using social media, and what type of fulfillment is received from this digital engagement. Finally, in the literature review I look at previous research that has dealt specifically with death and Facebook.

The methods section of this thesis makes the argument that a survey is the best possible vehicle for gathering information about this phenomenon concisely. The findings section shows what factors contribute to potential memorial content creation and identifies how they feel about it. In the conclusion, I draw the findings together to show why users feel that posting memorial content is, for most, a helpful and healthy activity when dealing with the loss of a friend. I also add what limitations the study possesses, as well as other ideas for future research.

This study fills a gap in the communication field by better understanding the phenomenon of memorial content creation on Facebook. Current literature exists, but has not addressed what potential factors influence grieving content creation on Facebook. This study shows the overall importance of the community in the grieving process. It also shows how Facebook allows users to be proactive in the mourning process, creating new opportunities for them to mourn in a more nuanced and active way.

CHAPTER 2

LITERATURE REVIEW

Social Networks: Building Ties and Promoting Social Capital

Humans are social animals, and live within differing social confines. The theory of social

networking explains this need for social connectivity. A social network is a structure made up of

people or groups called *nodes*, which are tied together by one or more specific types of

connection, such as friendship, common interest or knowledge (Wasserman, 1994). Rainie and

Wellman describe social networking as "a set of relations among network members. Society is

made out of a tangle of networked individuals who operate in specialized, fragmented, sparsely

interconnected and permeable networks" (Rainie & Wellman, 2012, 21). Essentially, people are

connected to each other through commonalities with others.

One of the main components of social networking theory focuses on *ties*. These can be

defined as weak, strong or absent. Strong ties are those within close friendship groups that have

overlapping connections (Granovetter, 2005). Weak ties are considered relationships with

acquaintances and people who are rarely interacted with (Granovetter, 2005). Absent ties are

those with little to no significance (Granovetter, 2005). The ties in a social network can help

explain how information is processed or transmitted to different social groups and also explain

why people interact with each other. In a pre-digital study of social connectedness, Stanley

Milgram found that the probability of any two random people knowing each other was by five or

six short chains of acquaintances (Kleinberg, 2000; Milgram, 1967).

There are different ways in which the ties of social networks can be connected. Some

networks are connected through loose or weak ties, but can also be formed by *centrality*. When

the network flows through important vertices (or people) that are considered the most influential

or powerful, centrality is achieved. (Bonacich, 1987). Importance can be defined in different ways, such as involvement or cohesiveness of the network (Bonacich, 1987). All of this shows that while Facebook has a binary definition of friendship (you either are a friend or you're not), the actual structure of a social network is significantly more complicated and nuanced.

Being a member of a social network comes with perks or benefits. The idea of tangible benefits gained from social networks is known as social capital. According to Putnam, social capital encompasses "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, 67). This idea can be described as any worth (real or imagined) that could be derived from social networks. These benefits can be tangible, such as the potential benefit of living a longer life (Berkman & Syme, 1979). There are also intangible benefits, such as the sense of belonging (Putnam, 1995), the idea of being satiated socially (Putnman, 1995) and even the learning of positive behaviors (Baumeister & Leary, 1995). There are other intangibles such as cooperation (people getting along), coordination (networks working together for a common goal), and even individual benefit (perceived value received from being a member of a social network) (Putnam, 1995). Putnam also argues that social capital is important in order to foster civic engagement and encourage trust between people (1995). When this has been established, social capital allows for a "cultural template for future collaboration" (Putnam, 1995, 67) allowing others a blueprint for members of a social network to work together.

Social capital derived from offline networks has now been transported to online platforms that allow for visible proof of how networks are aligned and formed. The digital environment is potentially changing the way people are interacting within social networks. According to Rainie and Wellman, "People today are less bound to their national allegiance, village and neighborhood

moorings" (2012, 21). In places where the Internet is widely available, people are starting to move outside of the bounds of their groups and join multiple different social groups at once. This has weakened group boundaries and changed how information is received. This, in turn, has driven the change toward networked individualism (Rainie & Wellman, 2012). Networked individualism can be defined as people becoming more connected to others as individuals, rather than embedded as groups (Rainie & Wellman, 2012). Along the lines of networked individualism is the idea of bridging capital. This idea states that social capital can bring people together who are similar, which in turn, can create social trust and strengthen community connections (Norris, 2004). In essence, building capital in the digital age means that the individual is no longer a singular entity in an isolated location. Rather, the user has connections across many different networks to serve many different needs.

Personal networks have immutably changed, in that people no longer identify themselves as members of a group, but rather as individuals associated with several different social groups (Rainie & Wellman, 2012). This connectivity and ability to communicate over broad swaths of time and space alters how and why people are connected to each other in digital space. Personal contact seems to be the essence of maintaining social ties and building social capital. Social networking platforms are incredibly popular and have potentially changed how people are connecting to each other.

Facebook was launched officially on February 4, 2004 by students Mark Zuckerberg and Eduardo Saverin (Cassidy, 2008). The initial design of Facebook was for Harvard University students to connect with each other, but it has since grown to be one of the largest websites in the world (Cassidy, 2008). Today, the site hosts more than 1.59 billion users, meaning that nearly one quarter of the entire world is connected to each other (Buck, 2013). Even with all the changes to

the platform over 12 years, the site's purpose remains largely the same as it was when it was just for Harvard students: connecting people to each other. Facebook is one, gigantic social network. Like Milgram's original experiment in the 1960s, Facebook has transported real world networks online. While everyone on Facebook is loosely connected by a median connection of 4.7 friends (Ugander, Karrer, Backstrom, & Marlow, 2011), friends who are considered closer in real life seem to have much stronger connections.

Facebook allows people to connect to each other, and in this way, it has become pervasive on a societal and cultural level. One of the intended values of Facebook was to connect people together. Few ever thought it would also become a place to mourn the loss of a friend. Facebook is wholly aware of this phenomenon, and has even added the ability for users to bequeath their profile to a loved one or delete the profile altogether (Fowler, 2015). This "legacy contact" will be allowed to update or maintain the profile of a deceased member, if the user wishes. Unintentionally, Facebook has created a platform for those grieving to come together and mourn as a community in the digital age. Facebook may have changed how some grieve, but it is hard to say to what degree. Mourning is not a new emotion, however, and the models and theory of grief will help clarify what normative behaviors happen when a loved one passes on.

Pre-Digital Theories of Mourning

In some of the oldest models of mourning introduced in the early 1900s, it was believed that grieving had one essential purpose: getting over the loss and moving forward (Lindemann, 1944). According to older models proposed by Sigmund Freud and Eric Lindemann, grieving had two primary purposes (Lindemann, 1944; Freud & Strachey, 1962). First, the grieving process was constrained by time (Horacek, 1991). Mourners had a limited amount of time to grieve – a period that should last about a year (Horacek, 1991). Second, Freud and Lindemann proposed that

mourners would achieve a state called *decathexis*, which is the complete withdrawal of one's feelings from a person, object or idea (Horacek, 1991).

Since then, decathexis has mostly been rejected (Horacek, 1991). Horacek (1991) believed that forgetting those who have passed on is not optimal for the grieving process. He then attempted to outline a new model, in which forgetting the death of a loved one is not wanted. Horacek's model has three different phases: 1) shock or disbelief, 2) "grief tasks," or dealing with the gamut of emotions that come with loss, and 3) re-evaluating one's life after the death, but still continuing in the mourning process (Horacek, 1991, 468). This final stage is crucial because it denies that decathexis is possible or even wanted. This model has updated the idea of maintaining some kind of connection with the deceased (Horacek, 1991; Walter, 1996). Walter (1996) incorporates this discussion into his model, in which he says that the purpose of grief is not to move on, but to find a way to hold on to the deceased. Both models support the idea that forgetting and moving on is not ideal, as most grieving individuals want to be able to remember their lost loved one as they once were.

Other grieving models have been introduced that largely reject decathexis, but still incorporate the use of time. One the most the most prominent grief models is the Kübler-Ross Model, in which the mourner goes through five distinct stages of grief (Groveman & Brown, 1985; Kübler-Ross & Kessler, 2014 [reprint]). The five stages are: denial, anger, bargaining, depression and acceptance (Kübler-Ross & Kessler, 2014 [reprint]). One study found that the five stages were fully achieved around the 24-month mark, with the ultimate goal of acceptance (Maciejewski, Zhang, Block, & Prigerson, 2007). This model assumes that the grief trajectory is a normal path. The main idea of the Kübler-Ross model is considered a coping mechanism, because it provides a way for those grieving to follow a normal flow and timeline (Corr, 1993).

While the work of Kübler-Ross was influential, there are fundamental critiques that Kübler-Ross's work never answered. First, the original study was based on a single population, which was centered in England in the 1960s (Corr, 1993). Second, there is no evidence to suggest that this is the only way that people grieve, that it is limited to only five stages or that it happens in the exact order that Kübler-Ross prescribed (Corr, 1993). Finally there is little evidence to suggest that the five stages are obligatory (Corr, 1993). Death and dying are very personal, and grieving affects an individual and social level. In the end, the Kübler-Ross model allows for a base theoretical framework, but the obvious limitations make it less useful to understand why and how grieving happens – particularly in the digital age.

Worden (2008) has similarly advanced that there are four main tasks necessary to complete the process of mourning. The four tasks are: (1) accepting the loss and what it means; (2) dealing with the death head on, and not repressing it; (3) finding meaning in a world that is now absent of the one they love and (4) loosening the ties to the deceased in order to strengthen ties with others who are alive (Worden, 2008). The four grief tasks are essentially described as a way for those in mourning to find how to re-adjust their world now that someone whom they cared for is no longer there. Attig (1991) argues that there should be three additional grief tasks, all of which deal with re-appropriating the feelings for that lost one, but all the while understanding that forgetting the deceased altogether is not functional or realistic. Attig writes that "grieving requires that the bereaved find ways of successfully transforming their love for someone who is living and present into a continuing love for that same someone now dead and absent" (Attig, 1991, 390). This belief that emotions from the relationship can be maintained after death helps solidify the idea that remembrance of those deceased may help the user process the

death. It also allows the mourner to cope with the idea that the deceased may be gone, but it is not necessary to forget them.

Grief tasks, as viewed by all theorists of mourning, are seen as important for many reasons. Attig argues that it allows the mourner to regain a sense of equilibrium and a renewed sense of motivation in everyday life (1991). The tasks themselves give the griever a way to come through the process and give them a better-rounded perspective on life (1991). While death is painful and transformational, the grief tasks, at the very least, can yield unintended positive effects for the mourner. Grieving is an active process, not a passive one. It is full of choices that allow those in mourning to cope with the new reality that someone they knew and/or loved is now dead. Grief may be described sometimes as paralytic, but viewing it as an active process allows us a way forward in the mourning and coping process. Death can be so disruptive because it can be hard to simply conceptualize that someone is gone. The mourner has to remember and create an idea of who the person really was. It is important within the grieving process that the deceased as a person is affirmed by those who knew them. In summary, current literature on death and mourning suggests that simply forgetting the deceased is simply not an ideal way to handle loss (Walter, 1996; Horacek, 1991).

This study integrates these models of mourning into how grieving operates in the digital space. This research begins to understand why users are engaging in these behaviors of creating Facebook content related to loss, and what potential benefits are being sought or received from this interaction. In order to explore user behaviors, this study also integrates a theoretical approach from communication studies that presupposes that people use media (in this case, Facebook) to fulfill some kind of gratification or need (in this case, mourning). Integrating this

theory into the thesis can help shed light on why users are posting about the deceased on Facebook.

Uses and Gratifications Theory

Uses and gratifications (U&G) theory answers the question of why audience members use the media they choose and for what purpose. Selecting what media to use and why to use it is a deliberate choice to satisfy specific needs (Ifinedo, 2016). In short, "people select and use communication vehicles to satisfy their felt needs or desires" (Nabi & Oliver, 2009, 149).

The theory of uses and gratifications was developed in the 1940s by Lazarsfeld, who wanted to understand what held an audience's attention and what types of media satisfies both social and psychological needs (Lazarsfeld & Stanton, 1941; Cantril, 1942). The theory suggests the media is serving the various needs of the society, including cohesion (the ability for a society to stay together), cultural continuity (what beliefs or ideas stay the same as the world changes) and control (conformity by social pressure) (McQuail, 2010). But it also assumes that people use media for other purposes, such as relaxation, information and identity formation (McQuail, 2010). U&G also states that people are aware of their media choices, and that action and selections of certain media are a rational choice (McQuail, 2010).

The theory also examines what perceived benefits are provided by the medium (McQuail, 2010). What drives the audience to use the medium is central, and the factors that determine the impulse can be traced to three things: utility (how is the media useful to the audience), intentionality (why did the audience deliberately choose this medium), and selectivity (why was this medium chosen over any other option) (Nabi & Oliver, 2009). All of these factors are coupled with the idea that basic needs intersect with personal characteristics and the user's environment (Ruggiero, 2000).

In the context of the current study, U&G can be applied to understand what motivates someone to use Facebook for grieving. The original U&G theory accounted for an active audience, and the new social media platforms thrive upon active user engagement. Applying U&G to Facebook, Sundar and Limperos (2013) suggested the level of user interactivity has increased demands for new levels of engagement that were not available in traditional media, such as newspapers and television. Social media offers a plethora of interactivity for audiences – options that legacy media (newspapers and television) has never been able to provide before (Sundar and Limperos, 2013).

Few studies have applied the U&G framework to Facebook. The small scholarship that exists suggests that users are drawn to Facebook as it seemingly fulfills the need of most to stay connected with friends (Whiting & Williams, 2013). Research has illustrated that maintaining bonds with friends is the main reason why people continue to use social media sites, especially Facebook (Whiting & Williams, 2013; Raacke & Bonds-Raacke, 2008). In one U&G study of Myspace and Facebook, the authors suggest that an overwhelming majority of users said their most common reason for using the social media sites was to stay connected to old friends (96%) or to remain close with current friends (91.1%) (Raacke & Bonds-Raacke, 2008). Another study found that one of the main reasons people are continuing to use Facebook is to stay connected with others, perhaps looking for support and approval from these relationships (Urista, Dong & Day, 2009). This research shows that interacting and preserving relationships is a primary purpose of Facebook (Whiting & Williams, 2013; Raacke & Bonds-Raacke, 2008; Urista, Dong & Day, 2009).

Mourning on Facebook

Research on communication with the deceased on Facebook has been limited. Church (2013) wrote that profiles of the dead online remain in stasis, allowing those who want to stay connected with the deceased the ability to "communicate" with the dead. Degroot (2014) describes the phenomenon of "emotional rubbernecking" on Facebook, in which messages were written on memorial pages by users who had little or no connection to the deceased (209). Degroot found that the rubberneckers were participating in the grief. This communal sharing of grief may be positive for those that knew the deceased well, helping the emotional rubberneckers who want to participate in the shared feeling of grief. At the very least, emotional rubbernecking provides a nuanced look beyond the realm of personal grief, and offers a unique perspective into the importance of shared, communal grief.

Few studies have empirically studied this phenomenon, however. Pennington (2013) interviewed 43 college students, and found four prevailing themes among users and how they deal with the dead. First, Pennington suggests that most users don't "de-friend" the dead, which meant that all of the students in the research said they never un-friended their deceased friends (2013, 625). One of the interviewees noted that, "I'd have to actively make the choice to remove them from my friend list. That just seems wrong" (2013, 625). The second theme, defined by Pennington was the silent majority, which suggests that the users did not actively engage with the deceased friend (2013). The third theme was the vocal minority, which were those few who actively wrote on the deceased's wall (2013). Lastly, the last theme was presence through use after death, which was a rare activity when the deceased profile was still actively used by a parent, spouse or friend (2013).

The small amount of literature on the topic suggests that being able to remember and validate who the deceased was helps re-appropriate their memory into a secure place (Degroot, 2014). Facebook has made the grieving process more public, but in a way that may be more comforting and accessible because it allows for collective social re-appropriation of a friend's memory. Facebook now allows those dealing with the same loss to find a space where they are able to voice their feelings and memories of the deceased. Also, the interactivity of the site allows for users to make changes and personalize most aspects of their experience, such as profile pictures, what types information that want to read, and who they want to stay connected to. (Sundar & Limperos, 2013). Here, mourners can leave one last message for the dead.

Mourning online is a social phenomenon that will continue to grow, particularly on social networks like Facebook. This research explores how and to what extent communicating about death on Facebook establishes social capital in the digital space for users. So far, scholarship has been silent on answering what the perceived benefits are of this engagement. By fusing together social network theory, grieving models and the uses and gratifications among social media users, we can start to better understand the behaviors of those who mourn on Facebook. This thesis investigates what factors go into writing or creating a memorial post. Since this phenomenon is relatively new, this work explores how people feel about posting about the deceased, as well as the frequency of this activity. More specifically, this thesis centers on the following set of research questions:

RQ1: To what extent does general Facebook user activity influence mourning content creation?

RQ2: To what extent do positive or negative feelings toward Facebook influence mourning content creation?

RQ3: To what degree is mourning on Facebook helpful to the overall grieving process?

CHAPTER 3

METHODS

This study examines the online behaviors of Facebook users who write about the deceased, and identifies specific needs being fulfilled in memorial content creation. This study furthers understandings of mourning in the digital age by identifying potential reasons and factors people have for posting about the deceased on Facebook. This research expands the scope of knowledge in the communication field because of the relative infancy of social media, and especially, the newness of mourning behavior online.

This thesis used a survey as the primary research method, in order to fully understand the relationship between Facebook use and communication about the deceased. Because Facebook's user data is proprietary, it is incredibly difficult for a researcher to gather information about complex ideas like social networking and mourning directly from the site (Stallman, 2012). As a result, a survey of Facebook users was deemed most appropriate because of its ability to gather information about a single topic from a wide population with ease of analysis (Wright, 2005). A survey is also an ideal method for data collection because it provides data at an aggregate and anonymous level – key concepts to consider when dealing with an emotional and sensitive issue such as death on Facebook (Rossi, Wright, & Anderson, 2013). The anonymity factor may also help the findings, as it allows respondents to be completely honest with no repercussions for their responses (Ilieva, Baron & Healey, 2002). A survey is also appropriate because it allows for multivariate data analysis on human behavior (Rossi, 2013). Using a survey to gather data also adds to the literature, because prior studies of mourning and Facebook have not yet used this method. The previous studies completed by Pennington incorporated qualitative analysis by interviewing 43 students (2013). The other studies on death and Facebook conducted by Degroot

(2014) and Church (2013) both used content analysis of Facebook posts within the context of mourning. All of these factors contribute to choosing a survey as the best option for data collection in this research.

A survey, though considered most appropriate for this study, does possess several limitations. One limitation is self-selection bias, meaning there may be some respondents who are more willing than others to complete the survey (Thompson, 2003). This self-selection bias can influence results, and may make it harder to determine causality in a study (Thompson, 2003). Considering self-selection bias will be an important factor when dealing with a topic as personal as death. Also, those who had a loved one die recently may be more reluctant to take the survey. As surveys rely on self-reported data, the real-life actions of respondents may not align with their answers, which can also influence the results (Thompson, 2003). Additionally, surveys are limited by their response rate. A lower response rate will have a direct effect on the power and accuracy of analysis (Bean & Rozkowski, 1995). Other limitations include the inability of the researcher to follow up with the respondents (Evans & Mathur, 2005). Surveys are, by their nature, very impersonal, and thus limit the ability for the research to probe deeper. Nevertheless, a survey approach is favored because the advantages outweigh the disadvantages for this study.

There are different ways to survey a population sample. For my research, I deemed that an online survey was most appropriate. A telephone survey would not have afforded the respondents anonymity (Evans & Mathur, 2005). In addition, new data indicates that it is increasingly difficult to complete phone surveys, with the average number of calls to complete a single survey almost doubling since 1979 (Curtin, Presser & Singer, 2005). Also, cell phones have made it more difficult to ascertain the correct geographical location of respondents or even ascertain the numbers needed to get a large enough sample size (Silver, 2014). Mail surveys also possess

limitations. One of the biggest factors involves time, as it would take much longer to send out the surveys and much longer to receive them after completion. Mail surveys would also be more challenging for analysis, as each would have to be re-coded electronically (Porter, 2004). More preparation is necessary in mail surveys, and with that comes greater cost (Porter, 2004). Comparatively, online surveys generally have low to no costs for transmission (Porter, 2004). Mail surveys have some advantages, in that they allow those who do not have Internet access to take the survey (Porter, 2004). Mail surveys, however, would not have made sense for this project, as the phenomenon being studied dealt specifically with online behaviors.

An online survey allowed for greater sample size and ease of approaching respondents to participate in the survey (Wright, 2006). Other positives of online surveys include flexibility, as users can take the instrument whenever they want or are able to complete it (Wright, 2006). The last (and perhaps best) argument for online surveys is that they can be tailored to the demographic base and altered quickly with little to no cost being added (Evans & Mathur, 2005). For these reasons, an online survey was the methodological tool chosen for analysis.

Population and Sample

The population for the survey was Iowa State University students who were 18 years or older. This population was selected because it mirrors the demographics of Facebook as a whole. While there are few demographic differences (location, income, urban vs. rural), Facebook users tend to be younger than overall Internet users (Pew Research Center, 2015a). Because the user base is younger, a sample of college students for this study is appropriate. Narrowing the population will have an effect on the generalizability of the study, however. Some of the major constraints on being able to use a much larger and representative population included: time, resources and cost. While other forms of survey distribution were considered (including

Amazon's Mechanical Turk), these vehicles were too expensive for implementation. Despite these limitations, the study's sample population of ISU students allowed for the collection of a large enough data set to analyze a phenomenon few have studied.

This study used human subjects, and therefore, was reviewed by Iowa State's Institutional Review Board. This study received exempt status, and did not need full board review. This approval made it possible to conduct a survey with anyone over the age of 18 who attended Iowa State. Before taking the survey, respondents were informed that their responses would be completely anonymous and voluntary. They were also told that the IRB had approved the survey. Those who answered the survey were informed about the purpose of the study before they took it. They were also told that there were no foreseeable benefits or risks for partaking in the survey. (The approval form from the IRB can be found in Appendix B).

In developing the sample, I started with the university's overall enrollment. The data reported by the university indicates that there are currently 36,001 students enrolled at ISU (Iowa State Registrar's Office, 2015). From the sampling frame of all students, 5,000 students from both the undergraduate and graduate levels were randomly selected. The registrar's office developed a list of 5,000 students, which was shared with Information Technology Services (ITS). ITS created an email mailing list, and sent the instrument to all student accounts in the sample. The researcher did not have any access to the email list, ensuring complete anonymity for the project. Participants were then sent a link to Qualtrics, where they could access the survey.

The original set of questions was sent out on March 1, 2016. Three follow up emails were sent to the same list on March 4, March 8 and March 22 in order to increase the response rate. In total, 261 responses were received from the online survey – a response rate of 5.20%. Typical survey response rates for online instruments are slightly higher, with an average response rate of

9% for online surveys (Pew Research Center, 2012). A low response rate may affect the overall outcome, but the sample size of 261 allowed for enough data to make robust findings and statistical analyses.

Pretest of Survey

In order to determine the effectiveness of the survey, a pretest was conducted in February 2016. This pre-test is important as it affords the researcher the opportunity to resolve any potential problems that may affect the overall data. Some of the problems that require a pretest examination include the length of the study and the information to be collected (Hunt, Sparkman, Wilcox, 1982). After receiving IRB approval, the pretest was purposely sent to 31 people who had Facebook accounts. The pretest sample also closely resembled both the ethnicity and the age of the overall sample that was selected for the study. This allowed for insights into potential limitations of the original survey before it was sent to the 5,000 students in the sampling frame. After the pretest, the survey was modified in order to base the questions more on the communication elements of the study and less on the psychological aspects of the study.

The final version of the survey (available in Appendix A) had more information regarding general Facebook usage, as well as feelings and perceptions about seeing mourning happen on Facebook. Other questions were added about how the user feels about certain aspects of Facebook and the potential reasons as to why users create memorial content. These questions were more in line with the theories and literature review, and allowed for a more complete analysis of the data. In the end, none of the pretest respondents took the final survey, and none of their responses were used in the final analysis.

Procedure and Questionnaire Design

The survey was designed to prompt respondents to think first about their common usage of social networking platforms and Facebook (Pew Research 2014; 2015b), then how they generally feel about Facebook (Pew Research 2015a), and finally how they feel about engaging in creating mourning messages (Pennington, 2013; Degroot, 2014; Church 2013). The survey was broken into four parts: (1) general Facebook usage and feelings about Facebook; (2) perceptions and feelings about users writing about the deceased and other mourning activities; (3) demographics and (4) a broad, open-ended question, where respondents could provide more feedback to the researcher. The survey had 34 questions, and it took the average user seven minutes to complete. There were two filter questions added to the survey to better target respondents. In the first section, a filter question was added to ensure the user had Facebook. If the respondent answered "no," they were directed to the end of the survey, and their response was not included in the data. In the second part of the survey, another filter question was used to determine if the respondent had, at the very least, witnessed memorial content on Facebook. If they said "no," they were sent to the demographics section of the survey, as their data about general usage and feelings of Facebook could still be valuable.

In order to determine how the sample felt about certain activities using Facebook, the survey employed multiple Likert scales, which are considered an appropriate tool to measure general attitudes about phenomena occurring in a culture (Jamieson, 2004). The scale is usually ordinal, and often ranges from 1 (strongly disagree) to 5 (strongly agree) (Jamieson, 2004). Likert scales are suitable because they allow for a wider range of selection of attitudes and help widen the scope of answers – often a feeling about a social phenomenon that is not a binary agree or disagree, but rather within a spectrum of agreement (Gliem, 2003).

The Likert scales were used to determine the degree to which users agreed with statements. Other scales were used to determine users' Facebook activity. The Likert scale allowed for distinction of common Facebook activities and their general frequency. Other Likert scales allowed for the survey respondents to answer the extent to which they agree that creating mourning content is helpful, and to what degree they find some common mourning activities helpful in the grieving process. All of these scales allowed for a nuanced and in-depth analysis in the findings. The researcher wanted to explore the factors that play into memorial content creation. Feelings and perceptions are hard to gauge, so Likert scales were used to further stratify the variables. This also made simpler for study participants, as it may be hard for users to expound on complicated feelings dealing with death and grieving.

The design of the questionnaire made it possible to examine multiple parts of the three theories used (uses and gratifications, mourning and social networking). The research about the three theories indicated that social and cultural cohesion was a major factor in the grieving process. As a result, questions specifically asked about user perceptions of Facebook as a whole, as well as reasons why some created mourning content. In short, the survey allowed for deeper exploration of the theories than were seen in previous research about death on Facebook.

Data Analysis

In order to explore the findings, two statistical programs were used: R and SPSS. These programs were deemed necessary for use in order to sift through the large amount of data collected from the survey. Both are powerful enough to run hypothesis-testing statistics. To analyze the data, descriptive statistics were initially used to determine the frequency of various Facebook activities. The Likert scales were treated as ordinal variables ranging from negative feelings (strongly disagree, not helpful) to positive feelings (strongly agree, very helpful). The

scales were then measured by either frequency counts or cross tabulations. Next, t-tests were used to examine differences in means. These tests of central tendency allowed for more granular examination of the data, assessing the amount of variance that exists between two similar variables (McDonald, 2014).

Once initial analysis uncovered possible associations between variables, additional analyses were conducted to examine the extent to which sets of variables predicted key outcomes, such as creation of memorial content. Multiple regression allows the researcher to simultaneously consider the effects of multiple predictors on the outcome variable, and to isolate the unique contribution of each predictor, controlling for the effects of all other variables in the equation (McDonald, 2014). The regressions showed significance, effect and the likelihood of an event happening based on each variable. Logistic regressions were useful in discovering some of the key elements that factor into content creation and other nuanced feelings about Facebook.

The survey also allowed for open-ended comments, in case any respondent wanted to elaborate on key concepts. A very small amount of survey users left comments; in fact, only 43 comments were received overall. These comments were not formally coded, as there were a very small number, and a much smaller number that elaborated on the phenomenon of mourning online. The comments that went more in depth were placed into similar topics. The comments were added to the survey for greater in-depth experience and knowledge about why users create or feel about grieving online.

CHAPTER 4

RESULTS

Demographics and Facebook/Social Media Use

Table 1. *Demographic Breakdown*

Variable		Frequency	Valid Percentage
Age	18-22	121	51.48
	23-29	72	60.63
	30+	29	12.34
	Did not respond	13	5.53
Gender	Male	85	36.3
	Female	149	63.70
Education	Bachelor's Degree	138	59.00
	Master's Degree	41	17.50
	Doctoral Degree	45	19.20
	Other	8	4.30
Ethnicity	White	75	31.91
	Latino/Latina	7	2.90
	Indian	7	2.90
	Asian	11	4.68
	African American	3	1.27
	Prefer not to say	3	1.27
	Other	3	1.27
	Did not respond	126	53.61

Notes. N = 235

In total, the survey had 261 responses, with a response rate of 5.22% (261 out of 5,000). From this sample, 26 responses were removed because they answered less than half of the survey questions. This analysis, therefore, includes the 235 respondents who completed the survey instrument. As indicated in Table 1, 63% of respondents were females, and 37% indicated they were males. Given the sampling frame included college students at ISU, the average age of the respondent was 23.71, with a standard deviation of 5.43. There was also little difference in race, as a majority who answered said they were Caucasian (68.80%). (It should be noted that more than half of the study's respondents (53.60%) did not indicate their ethnicity).

The study's respondents were highly active on other social platforms. Facebook users also had profiles on Snapchat (93%), Instagram (60.7%) and Twitter (43%). Only 5% of respondents indicated that Facebook was the only social networking site they used. Facebook users are highly active in interacting with content on the site. Cross tabulations and frequency counts were used to determine what activities were most popular among the site's users. The data showed that more than 41.1% like their friend's posts at least once a day, with another 61.1% indicating that they read the newsfeed at least once a day. While users can be considered active on the platform, most infrequently create their own content, however. Only 15.9% post weekly or daily, and another 30.6% indicate they post less than once a week. Most users do not use the reaction buttons with regularity, as only 39.9% polled indicated they use the reaction buttons at least once a week. These reaction buttons let the user do more than just "like," but rather give a wide array of emotional options such as "haha," "sad," "angry," "wow" and "love."

Table 2. *Frequencies of Regular Facebook Activities*

Occurrence of activity	Facebook Activities					
	Read the Newsfeed	Like Friends' Posts	Post original content on your own profile	Message privately with friends	Write or comment on other friends' posts/ profile	Use reaction buttons
Rarely	6%	8.9%	41.4%	26.2%	21.5%	50.6%
Less than once a week	4.7%	11.5%	30.6%	27.9%	30%	9.5%
Once a week	6.4%	5.5%	12.1%	15%	17.6%	8.7%
A couple of times a week	21.8%	31.9%	11.6%	19.3%	24.9%	16.5%
Daily	61.1%	40.4%	4.3%	11.6%	6%	14.7%

Notes. N = 235

Correlations were then computed to examine the associations between the number of friends a user had and Facebook activity, as measured in reading the newsfeed, liking friends' posts, posting original content, writing/commenting on friends' profiles and using reaction buttons. As shown in Table 3, there were significant correlations between the number of Facebook friends and Facebook activity. The strongest positive correlations were between the number of Facebook friends and liking friends' posts ($r=0.334$, $p < .01$). Correlations between the number of Facebook friends and all other content creation variables were positive, except for the use of Facebook's new reaction buttons (which were unveiled the week that the survey instrument launched).

Table 3. *Pearson Product-Moment Correlations Between the Number of Friends a Facebook*

User Has and Facebook Activity

Measure	1	2	3	4	5	6	7
Number of Friends on Facebook (1)	—						
Read the Newsfeed (2)	.229**						
Like Friends' Posts (3)	.317**	.576**					
Post Original Content (4)	.230**	.229**	.471**				
Message privately with friends (5)	.091	.125	.240**	.322**			
Write or comment on friends' profiles (6)	.136	.264**	.561**	.522**	.417**		
Use reaction buttons (7)	.012	.250**	.424**	.419**	.236**	.474**	—

*Notes. **=p< .01.* N=234

User Activity and Memorial Creation (RQ1)

The first research question (RQ1) addressed how general Facebook user activity could

potentially influence mourning content creation, and if specific activities have a greater impact on

the likelihood of creating memorial content. The prevalence of memorial content was apparent, as

82.90% of Facebook users surveyed had seen a memorialization post on the platform. Within the

dataset, cases were then selected to isolate the users that had seen these messages (n=194). Of

users who had seen memorial posts, nearly all (91.20%) respondents had encountered these posts

via their newsfeed. The next most common place to see a memorial message was an individual

profile page (47.90%), a private group (21.10%) and, lastly, a public group (20.60%). The data here suggests that if a user sees a memorial post they are nearly twice as likely to see it on their newsfeed as any other place on the site.

Facebook allows for a lot of different types of media content to be created. Of memorial posts, the data showed that the most common type of content created was a photo (96.40%). The next most prevalent type of content created were wall posts (80.40%), a tagged status update (78.90%), comments on a photo (62.40%) and the least common content created was a video (28.40%). This indicates that while photos are the most prevalent, users create other content for memorialization.

Looking further into relationships between general content creation behaviors and the creation of memorial content on Facebook, a correlation was run. Correlations were computed to examine the associations between more general content creation behaviors and the creation of memorial content of Facebook. Considering only users who had seen memorial content (N=194), variables correlated with the creation of memorial content included general Facebook activities (reading the newsfeed, liking friends posts and posting content on your own profile), which were compared against other variables dealing specifically with memorial content creation (posting a photo, commenting on a photo and creating a wall post). As shown in Table 4, there were significant correlations between creating a wall post and reading the newsfeed at ($r=0.157$, $p <$ .05), liking friend post's ($r=0.281$, $p < .01$) and posting content on one's own profile ($r=0.456$, $p <$ .01). The variables of reading the newsfeed and liking friend's posts did not correlate significantly. The data in Table 4 suggests that there is a strong positive and significant association between creating content on a user's own profile and creating memorial content.

Table 4. *Pearson Product-Moment Correlation between Facebook Activity and. Creation of Memorial Postings*

Measure	1	2	3	4	5	6	7	8
†Read the Newsfeed (1)	—							
†Like Friends' Posts (2)	.576**							
†Post Content on own profile (3)	.229**	.410**						
††Tagged status update (4)	-.042	.066	.201**					
††Photo (5)	.025	.206**	.337	.482**				
††Video (6)	-.066	.079	.195**	.375**	.326**			
††Added comments to a photo (7)	-.028	.089	.158	.378	.409**	.223**		
††Wall Post (8)	.157*	.281**	.456**	.401	.393	.135	.293**	—

Notes. ** = p <.01. N=194
† = General Facebook Activity
†† = Memorial Content Creation Activity

To examine the effect of Facebook user activity on Facebook memorial creation, a binary logistic regression was used. The dependent variable, which measures the creation of memorial content, was recoded as a discrete variable (0=no, 1=yes). The independent variables (which included: how often a user reads the newsfeed, likes friends' posts, posts original content, messages privately, and writes or comments on other friends' posts) were measured using Likert scales as continuous variables. Since the demographics are mostly homogeneous, no demographic

data was used as a control. The analysis found two of the variables were significant predictors of memorial content creation. Those variables were reading the newsfeed (ß = -0.313, p < .05) and posting original content (ß =0.491, p< .01). Reading the newsfeed had a significant and negative effect on the likelihood of memorial content creation, while posting original content had a significant positive effect on the likelihood of memorial content creation. This shows that reading the newsfeed makes the user less likely to create memorial content. The regressions show a strong indication that posting on Facebook with regularity increases the likelihood of someone also posting original memorial posts. The other variables in the regression, liking friends' posts (ß = 0.264), messaging privately (ß = -0.018) and commenting on other friends' posts (ß = 0.138) did not reach significance.

Table 5. *Logistic Regression Predicting Memorial Content Creation from General Facebook Activity.*

Independent Variables	ß	S.E.	Exp(B)
Read the newsfeed	-.313*	.197	.731
Like Friends' Posts	.264	.202	1.302
Post original content	.491**	.165	1.634
Message privately	-.018	.133	1.018
Write or comment on other friends posts	.138	.172	1.147

X^2/df = 27.371/5***

-2 log-likelihood = 227.669
*= p < .05 **= p <. 01

Facebook's Nurturing Environment (RQ2)

The second research question (RQ2) addressed how positive or negative feelings toward Facebook could influence the likelihood of creating memorial content. The data indicated that most users felt that Facebook was a positive environment for interacting with other users,

especially in the context of mourning. Eight in 10 (80.6%) respondents somewhat agreed, agreed or strongly agreed that Facebook was "a supportive place to connect with others." Other questions gauged how users support their friends on Facebook (responding to bad or good news from friends, for instance). The variable agreeing they support friends sharing good news was higher (78.70%) than the frequency of the variable asking if respondents agree they support friends when they share bad news (53.1%). Together, the data indicates that users find Facebook to be a generally supportive place.

A logistic regression was conducted on the three supportive feelings variables: feeling that Facebook is a supportive place to connect with others, responding to good news and responding to bad news. These variables were used to determine if supportive feelings toward Facebook influenced whether or not users create memorial content. The dependent variable, which measures the creation of memorial content, was recoded as a discrete variable (0=no, 1=yes). The regression found that only one variable was significant, and that was sharing bad news ($ß = 0.287$, $p <. 05$). Sharing bad news had a positive effect on the likelihood of someone creating memorial content. The other two variables of supportive feelings ($ß = 0.077$) and sharing good news ($ß = 0.060$) failed to reach the significance threshold. The data shows that users are more likely to create memorial content if a user shares bad news. This indicates that users are creating memorial content as a way to help others whom they perceive are going through tough times.

Table 6. *Logistic Regression Predicting Memorial Content Creation from Supportive Feelings Perceived on Facebook.*

Independent Variables	ß	S.E.	Exp(B)
Facebook is a supportive place	.077	.171	1.080
When a friend shares good news I try to respond	.060	.131	1.062
When a friend shares bad news I try to respond	.287*	.126	1.332

X^2/df = 6.876/3

-2 log-likelihood = 246.221

*= $p < .05$

In examining the survey's open-ended content, 29 respondents answered a general question: "Is there anything else that you would like to add that you would like the researcher to know?" The responses were placed into categories that matched the study's three research questions. One respondent acknowledged in the time of grieving that he felt Facebook was a good place to deal with the difficulties of someone passing on because of the robust, supportive feelings he received online. "The community was so strong and so impactful that it really changed the way I felt," he wrote. "I spent less time asking why but instead focusing on all the good and the impact the person had on my life." Another respondent indicated similar feelings, "Facebook seems to be more about lifting spirits and sharing happiness." The combination of quantitative and qualitative data supports the claim that Facebook's overall environment acts as a supportive place for those in mourning.

Needs Fulfilled in Memorial Content Creation (RQ3)

The third research question (RQ3) determined if memorial content is perceived as helpful to the user. First, it was important to determine how users felt about seeing memorial content. One

of the survey questions asked users to indicate how they felt about seeing memorial content on Facebook. The question asked them to select as many words as they wanted from the following list: strange, unhealthy, normal, respectful, reassuring, healthy, negative and positive. A frequency was then tabulated to determine what variables were chosen the most. The word selected most often was respectful (64.94%), followed by normal (54.12%) and positive (47.90%).

Of users who had posted memorials on Facebook, users were asked how the content creation helped in the mourning process. Users were asked if Facebook content creation helped to mourn their loss, create a sense of community, express emotions or provide support for friends and family. The frequencies, which were measured in Likert scales, showed that users felt creating memorial content was useful in their grief. The variables showed that expressing emotions was the most common reason for posting content (86.3%), followed by creating a sense of community (83.5%), mourning the loss (76.7%) and providing support for friends and family (68.4%). The data all indicates that users who create memorial content on Facebook believe that it is a useful way to personally grieve and to support their social network through a difficult time.

For users who have created memorial content, the data suggests that Facebook use complements, and does not substitute, other mourning activities. The data shows that offline mourning activities were generally considered to be more helpful than the online activities. The offline activities that users found helpful or very helpful were: attending a funeral (81.7%), sending a card (41.2%), spending time with others who are mourning (83.2%), receiving support from experts (49.4%) and sending flowers (39.2%). This compares to the online mourning activities, where generally the percentages were considerably lower. The two online variables were: reading content others have posted on Facebook (38.1%) and posting content to Facebook

(22.5%). The most helpful activities in this data by almost twofold were spending time with others and attending a funeral. This shows that while some Facebook content creators see posting material on Facebook as helpful, it does not replace physically being around others in a time of mourning.

To examine the likelihood of posting memorial content based on the helpfulness of grieving behavior, a binary logistic regression was used. The dependent variable, the creation of memorial content, was recoded as a discrete variable (0=no, 1 =yes). The independent variables (helpfulness of reading content others have posted on Facebook and helpfulness of posting content on Facebook) were measured as Likert scales. The first regression was used to determine if the perceived helpfulness of online mourning was a key factor in the likelihood of creating memorial content. The analysis found that of the two variables, the perceived helpfulness of only posting content on Facebook (ß = 1.023, $p < .001$) was significant. This variable had a strong and significant effect on the likelihood of a user creating memorial content. The other variable, reading content others have posted (ß = -0.004) did not reach significance. This test shows that if a Facebook user feels that posting memorial material is helpful in the grieving process, Facebook users are much more likely to do it.

Table 7. *Logistic Regression Predicting Memorial Content Creation from the Perceived Helpfulness of Online Mourning Activities*

Independent Variables	ß	S.E.	Exp(B)
Reading content others have posted on Facebook	-.004	.226	.996
Posting content on Facebook	1.023***	.225	2.781

$X^2/df = 39.453/2$***

-2 log-likelihood = 213.644
***= $p < .001$

To examine the effect of offline mourning behaviors on the likelihood of creating memorial content, a binary logistic regression was used. The dependent variable, the creation of memorial content, was recoded as a discrete variable (0=no, 1 =yes). The independent variables (helpfulness of attending a funeral, sending a card, spending time with others who are mourning, receiving support from experts and sending flowers) were measured as Likert scales. The analysis found that none of the variables had a significant effect on the likelihood of creating memorial content. The data did indicate, however, that the only variable that didn't have a positive impact on the likelihood of creating memorial content was spending time with others ß = -0.253. This regression suggests that if a user does not find content creation helpful in the mourning process, then they will likely not partake it in it.

Table 8. *Logistic Regression Predicting Memorial Content Creation from the Perceived Helpfulness of Offline Mourning Behavior*

Independent Variables	ß	S.E.	Exp(B)
Attending a funeral	.092	.207	1.096
Sending a card	.146	.193	1.157
Spending time with others who are mourning	-.253	.204	.777
Receiving support from experts	.135	.168	1.144
Sending flowers	.194	.206	1.214

X^2/df = 4.922/5

-2 log-likelihood = 243.310

Some of the comments received in the open-ended section also support the idea that posting a memorial to Facebook has benefits to aid in the progression of dealing the death. One respondent indicated it helped with the passing of his mother. "My mother passed away in

November 2014 and I find myself posting photo memories of her to my Facebook page and I truly feel like that was helpful." Other open-ended responses supported the overall helpfulness of seeing memorial posts on Facebook. One respondent even indicated that Facebook was a good proxy if geography was a major obstacle in the mourning. "People posting on the deceased's wall is a way to mourn and it's healthy, especially for those people that loved the deceased who are too far away to attend a funeral." The open-ended statements received complement the data that some users feel Facebook gives them an additional place to come together in the mourning process.

The relationships formed on Facebook persist long after a user's death. Two of the questions in the survey asked if users would ever block or un-friend a Facebook friend if they had died. Of the survey respondents, nearly nine in 10 (89%) would never block the deceased friend, and more than three-fourths (78%) would never un-friend a user. This indicates that users are unwilling to permanently detach themselves from Facebook friends, even after death.

CHAPTER 5

IMPLICATIONS, FINDINGS AND CONCLUSIONS

Discussion

Focusing on the relationship users have to Facebook as a platform, this research explored the phenomenon of Facebook users posting and creating mourning content on the social network. The research helped uncover possible factors that influence content creation, and also identified what kind of environment Facebook is creating for interactive user engagement around death and mourning. Lastly, the study examined just how helpful Facebook has become in the mourning process overall.

Looking at general Facebook use, the data showed that users on Facebook are highly active in consuming content, but do not create that much new content. Rather, users like to engage with friends by either liking posts or just reading the newsfeed. Facebook users are highly active on other social media platforms as well. The number of Facebook friends that a user has positively correlated with Facebook activity; in that the more friends a user has on the site, the much more likely that user is to engage on Facebook.

General Facebook user activity can influence the likelihood of mourning content creation. Users who are more active in content creation are much more likely to create memorial content online. A major influence on the posting of memorial content surrounds how active the user was in posting new content to their profile (wall posts or status updates). More specifically, the activity of creating new media (and not just reading or liking) acts as a major predictor of memorial content creation. User perception of Facebook is an indicator of the likelihood of memorial content creation. Generally speaking, most users believe Facebook is a positive and

supportive place to engage with friends. If a user feels that Facebook is an overall supportive place, he or she will be much more willing to share his or her feelings of grief with others. In fact, the data showed that if a user shared bad news on the platform, Facebook friends were much more likely to create memorial content. Mourning on Facebook is viewed as helpful for those who partake in it. While mourning on Facebook was helpful, it was still not the most important grief behavior when dealing with the death of a friend. Instead, the data suggests that being around others face-to-face was the most helpful activity in dealing with grief. Facebook is still not the most important mourning behavior in the grieving process, but instead is complementary when dealing with the death of a friend. Users who feel that creating memorial content is helpful are much more likely to create memorial content. Of these users who memorial content, most felt that producing the memorials on Facebook helped them emotionally. All of the data gathered suggests one very important fact: Facebook provides, at the very least, a positive environment for mourners to connect with one another.

The data found in this research supports and upholds the theories used in the literature review. Social networking theory centers upon how people are connected to each other. Through the passing of a loved one, the community of bereaved individuals comes together to support each other in a difficult time. Mourning on Facebook may operate to help build social capital, which can be gained when users create mourning posts in order to support friends and show a connection to the deceased. On Facebook, groups can come together and mourn for a person who was a member of their social network (or node). This behavior, in turn, can help create new connections with other mourning friends to generate social cohesion. This connects to networked individualism, which suggests that people are now a part of many different social networks. Grieving users on Facebook may want to maintain their connections in differing groups in order

to ensure that no social capital is lost while they are mourning. Users are coping with their grief while trying to maintain memories of the deceased on Facebook. Respondents agreed that they would not want to unblock or un-friend a deceased friend from their Facebook feed. Both of these ideas align with Horacek's (1991) belief of continued connection with the deceased, while still moving on with one's life. Facebook gives the grieving user agency in their own grief, creating a way to tangibly hold on to their feelings. Here, Worden's (2008) theory of active grieving is also supported, as Facebook allows users to create content that helps them throughout the mourning process. The uses and gratifications model presupposes that people use media consciously to fulfill differing needs, such as societal cohesion. In this study, most respondents agreed that creating a memorial post helps to maintain social cohesion by creating a sense of community. Facebook is fulfilling a need for those in mourning by giving the user one more chance to write or post about the deceased. It gives the living a singular, digital place that their loved one will always exist. Together, all three theories allow for a deeper understanding of this digital phenomenon of mourning on Facebook. Social networking theory helps explain the societal implications of the death, and how community connectivity interplays with content creation behaviors. The mourning theories provide context into the type of normative responses that happen as grieving has now been transported online. Finally, the framework of uses and gratifications helps us understand what types of needs are specifically being fulfilled when creating this content.

This study was significant, in that it found key factors that influence memorial content creation. Other studies have focused on themes about the content and similar behaviors in the aggregate. This research, instead, asked *why* users create memorial content. While this study answered many questions, gaps still exist. This study was unable to account for nuanced

demographic and cultural differences that may exist in the grieving process. Grieving is an intensely personal and very complicated emotion, a survey cannot fully encompass all activities associated with the complex phenomenon of grieving.

An unexplored space of digital grieving centers on the role and responsibility that Facebook has related to mourning content created on its platform. Facebook has access to all their users' information, and by using an algorithm with factors such as: strength of ties, common friends and geolocation, Facebook could be much more involved in the mourning process for its users. If a user dies, Facebook has the potential ability to figure out who that person's closest friends are and offer counseling services, help the user find ways to support the grieving family, or even give funeral or other physical locations to send "real-world" condolences for the deceased. As a result, there are many impending ethical questions about privacy that connect with how Facebook deals with someone's death, such as the "right to be forgotten" (Rosen, 2012). This idea suggests that individuals should have a right to erase portions or all of their online presence (Rosen, 2012). A major question has yet to be answered: What privacy rights do the dead have? This phenomenon of mourning on Facebook adds a new wrinkle to the debate. It may be against the wishes of a deceased user that their profile remains active or even viewed after death. These issues, among others, can fuel new and more in-depth future research.

Future research could also extend this study in several ways. Future studies should expand the sampling frame to a broader population to determine if there are demographic differences in Facebook usage or mourning activities on the social network. Additional scholarship should also try using more in-depth methodological approaches, such as interviewing. This qualitative method would allow for a more nuanced look, factoring in cultural and societal perspectives, while giving more specific reasons why users create mourning messages. The other recommendation would be

to also scrape or collect message data for content analysis of the messages on the deceased's profiles. This collected data could be coded to understand the common themes among these messages. Using software to graphically represent a user's social network on Facebook, future studies could also see what happens a node (or member of a social group) dies, and evaluate the strength of ties to this user, based on posted content. To address these more complicated issues, the research needs to expand beyond the survey to allow for a much deeper understanding of mourning behavior online.

Limitations

While this study expands the scope of knowledge in mass communication, limitations exist. The generalizability of the data is imperfect due to all responses coming from a University-based student sampling frame. A broader sampling frame of the general population would allow for research into differences between subgroups of people, using demographics like age, gender, income to see if Facebook is used differently. This study may also have an issue with self-selection bias because of the topic itself. It is not known whether or not those who are going through a recent death would be more or less likely to respond to survey questions about such a sensitive topic. Because the data is self-reported, there is also no way to verify if respondents acted in the same way that they reported in the survey.

Other limitations deal with Facebook and its use of data and algorithms. Facebook uses more than 100,000 factors when determining what each user sees on their newsfeed (Oremus, 2016). Essentially, the algorithm customizes what each individual user sees, so no two users will have the same experience. Facebook's data is proprietary, so knowing what data is available and what every user sees is impossible. Every user is different, and we simply do not know from person to person how different the experience is and what those differences mean. Along with

being proprietary, Facebook users can choose various privacy settings to control who sees their content. For the most part, profile pages are private and inaccessible. This inaccessibility limits the ability fully understand how mourning happens on the platform, particularly if factors such as the strength of ties or the closeness of the relationship influences content creation behaviors. Despite these limitations, however, this study has shown that Facebook is a positive place for mourners to gather after a loved one's death.

Conclusions

Facebook, it appears, has not changed how users mourn, but rather provided an alternate and complementary place to grieve. In the context of grief, Facebook acts as a nurturing and supportive place for mourners to engage with each other in healthy ways. Facebook is helpful to the overall grieving process, but not the most important vehicle for dealing with loss. Users felt that physically being around others who were mourning was still paramount in dealing with their emotions. While it cannot replace all grief tasks associated with death, Facebook acts as simply another way for users to cope with loss. Facebook has not disrupted the grieving or mourning process, but has instead enhanced it, inadvertently creating another tool in navigating the grieving process. Seeing shared memories or a tribute helps the users connect, remember and maintain the attributes of the person who has died. Forgetting is never optimal. Instead, it is more important to find a place for that person to be kept in memory. In the context of mourning, Facebook helps users construct a shared place for their friends and family to be remembered.

REFERENCES

Ambrosino, B. (2016, March 14). Facebook is a growing and unstoppable digital graveyard. Retrieved from http://www.bbc.com/future/story/20160313-the-unstoppable-rise-of-the-facebook-dead.

Attig, T. (1991). The importance of conceiving of grief as an active process. *Death Studies*, *15(4),* 385-393.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, *117(3),* 497.

Bean, A. G., & Roszkowski, M. J. (1995). The long and short of it. *Marketing Research*, *7(1),* 20–26.

Berkman, L. F., & Syme, S. L. (1979). Social networks, host resistance, and mortality: a nine-year follow-up study of Alameda County residents. American Journal of Epidemiology, *109(2)*, 186-204.

Bonacich, P. (1987). Power and centrality: A family of measures. *American Journal of Sociology*, *1(1),* 1170-1182.

Buck, S (2013, February 13). Facebook after death. Retrieved from http://mashable.com/2013/02/13/facebook-after-death/.

Cantril, H. (1942). Professor quiz: A gratifications study. In P. F. Lazarsfeld & F. Stanton (Eds.), *Radio Research, 1941*, 34–45.

Cassidy, J (2006, May 15). Me Media. *The New Yorker*. Retrieved from http://www.newyorker.com/magazine/2006/05/15/me-media.

Church, Scott H. (2013). Digital gravescapes: digital memorializing on Facebook. *The Information Society*, *29,* 184-189.

Corr, C. A. (1993). Coping with dying: lessons that we should and should not learn from the work of Elisabeth Kübler-Ross. *Death Studies*, *17*(1), 69-83.

DeGroot, Jocelyn M. (2014). For whom the bell tolls: emotional rubbernecking in Facebook memorial groups, *Death Studies*, *38(2)*, 79-84,

Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, *15(2),* 195-219.

Fowler, G A (2015). Facebook heir? Time to choose who manages your account when you die; *Wall Street Journal,* Retrieved from http://www.wsj.com/articles/facebook-heir-time-to-choose-who-manages-your-account-when-you-die-1423738802.

Freud, S., & Strachey, J. (1962). *The ego and the id* (No. 142). New York, NY: WW Norton & Company.

Gliem, R. R., & Gliem, J. A. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *2003 Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.*

Granovetter, M. (2005). The impact of social structure on economic outcomes. *The Journal of Economic Perspectives*, *19(1),* 33-50.

Horacek, B.J. (1991). Toward a more viable model of grieving and consequences for older persons. *Death Studies*, *15(5)*, 459-472.

Hunt, S. D., Sparkman Jr, R. D., & Wilcox, J. B. (1982). The pretest in survey research: issues and preliminary findings. *Journal of Marketing Research*, *19,* 269-273.

Ifinedo, P. (2016). Applying uses and gratifications theory and social influence processes to understand students' pervasive adoption of social networking sites: perspectives from the Americas. *International Journal of Information Management*, *36(2)*, 192-206.

Ilieva, J., Baron, S., & Healey, N. M. (2002). Online surveys in marketing research: pros and cons. *International Journal of Market Research*, *44(3)*, 361-376.

Jamieson, S. (2004). Likert scales: how to (ab)use them. *Medical Education*, *38 (12),* 1217-1218.

Kleinberg, J. (2000, May). The small-world phenomenon: an algorithmic perspective. *In Proceedings of the Thirty-Second Annual ACM Symposium on Theory of Computing,* 163-170.

Kübler-Ross, E., & Kessler, D. (2014). *On Grief and Grieving: Finding the Meaning of Grief Through the Five Stages of Loss*. New York, NY: Simon and Schuster.

Lazarsfeld, P. F., & Stanton, F. (1944). *Radio Research*, 1941. New York, NY: Duell, Sloan & Pearce.

Lindemann, E. (1944). Symptomatology and management of acute grief. *American Journal of Psychiatry*, *101*, 141-148.

Maciejewski, P. K., Zhang, B., Block, S. D., & Prigerson, H. G. (2007). An empirical examination of the stage theory of grief. *Journal of American Medical Association*, *297(7),* 716-723.

McDonald, J. H. (2014). *Handbook of Biological Statistics*. Retrieved from http://www.biostathandbook.com/linearregression.html.

McQuail, D. (2010). *McQuail's Mass Communication theory (6.th ed.)*. London: Sage Publications.

Milgram, S. (1967). The small world problem. *Psychology Today*, *2(1)*, 60-67.

Nabi, L & Oliver, M. (2009). The SAGE Handbook of *Media Processes and Effects*, New York, NY: Sage.

Norris, P. (2004). *The Bridging and Bonding Role of Online Communities.* Thousand Oaks, CA: Sage Publications.

Oremus, W. (n.d.). Who really controls what you see in your Facebook feed—and why they keep changing it. Retrieved from http://www.slate.com/articles/technology/cover_story/2016/01/how_facebook_s_news_feed_algorithm_works.html

Pennington, N (2013). You don't de-friend the dead: an analysis of grief communication by college students through Facebook profiles. *Death Studies*, *37(7)*, 617-635.

Pew Research Center (2012). Assessing the representativeness of public opinion surveys. Retrieved from http://www.people-press.org/2012/05/15/assessing-the-representativeness-of-public-opinion-surveys/.

Pew Research Center (2014). Internet use over time. Retrieved from http://www.pewinternet.org/data-trend/internet-use/internet-use-over-time/.

Pew Research Center (2015a). Facebook demographics. Retrieved from http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/2015-08-19_social-media-update_07/.

Pew Research Center (B) (2015b). Social media update. Retrieved from http://www.pewinternet.org/2015/01/09/social-media-update-2014/.

Porter, S. R. (2004). Pros and cons of paper and electronic surveys. *New Directions for Institutional Research*, *2004(121)*, 91-97.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, *6(1)*, 65-78.

Raacke, John and Bonds-Raacke, Jennifer (2008). MySpace and Facebook: applying the uses and gratifications theory to exploring friend-networking sites; *CyberPsychology & Behavior, 11(2),* 169-174.

Rainie, H., & Wellman, B. (2012). *Networked: The New Social Operating System*. Cambridge, MA: MIT Press.

Registrar's Office of Iowa State University (2015). Retrieved from: http://www.registrar.iastate.edu/enrollment.

Rosen, J. (2012). The right to be forgotten. *Stanford Law Review Online*, (64), 88.

Rossi, P. H., Wright, J. D., & Anderson, A. B. (Eds.). (2013). *Handbook of Survey Research*. Cambridge, MA: Academic Press.

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, *3(1),* 3-37.

Silver, Nate (2014, August 25). Is the polling industry in stasis or in crisis? *FiveThirtyEight.com*. Retrieved from http://fivethirtyeight.com/features/is-the-polling-industry-in-stasis-or-in-crisis/.

Sundar, Shyam S & Limperos, Anthony M (2013). Uses and grats 2.0: new gratifications for new media. *Journal of Broadcasting & Electronic Media, 57(4)*, 504-525.

Stallman, R (2012, February 7). Facebook is a surveillance engine, not friend. *The Economic Times*. Retrieved from http://www.lexisnexis.com.proxy.lib.iastate.edu/hottopics/lnacademic/?.

Thompson, L. F., Surface, E. A., Martin, D. L., & Sanders, M. G. (2003). From paper to pixels: moving personnel surveys to the web. *Personnel Psychology*, *56(1),* 197-227.

Turkle, S. (2012). *Alone Together: Why We Expect More From Technology and Less From Each Other*. New York, NY: Basic Books.

Ugander, J., Karrer, B., Backstrom, L., & Marlow, C. (2011). The anatomy of the Facebook social graph. Retrieved from http:// arxiv.org/abs/1111.4503.

Urista, M. A., Qingen, D & Day, K. D. (2009). Explaining why young adults use MySpace and Facebook through uses and gratifications theory. *Human Communication*, *12(2),* 215-229.

Walter, T (1996). A new model of grief: bereavement and biography. *Mortality: Promoting the Interdisciplinary Study of Death and Dying*, *1(1)*, 7-25.

Wasserman, S., & Faust, K. (1994). *Social network analysis: methods and applications* (8). Cambridge, MA: Cambridge University Press.

Whiting, A., & Williams, D. (2013). Why people use social media: a uses and gratifications approach. *Qualitative Market Research: An International Journal*, *16(4)*, 362-369.

Worden, J. W. (2008). *Grief Counseling and Grief Therapy: A Handbook for the Mental Health Practitioner*. New York, NY: Springer Publishing Company.

Wright, K. B. (2005). Researching internet based populations: advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer Mediated Communication*, *10(3)*.

APPENDIX A. FULL SURVEY

RESEARCH PROCEDURE

This research is being conducted to investigate how Facebook users engage with mourning. As this survey centers on Facebook and mourning, if you do not feel comfortable answering questions about this topic, please do not take this survey. The primary investigator is a graduate student in Iowa State University's Greenlee School of Journalism and Communication. This research has been approved by Iowa State University's Institutional Review Board. If you agree to participate, you will be asked to respond to a series of questions that will take approximately 10 minutes. This research is intended for publication. Material would potentially be cited in academic conference presentations, in journal articles, in popular media articles and in a trade book.

RISKS

There are no foreseeable risks for participating in this research.

BENEFITS

There are no material benefits for participation. The researcher hopes that the research will have important insights for the theory, practice and education of contemporary communication.

CONFIDENTIALITY

All survey material is anonymous, and will never be linked to your identity. The researcher will only see aggregate responses, which will be de-identified.

PARTICIPATION

Please remember that your participation is voluntary, and you can skip any questions you do not want to answer. You may also stop participating in the survey at any time.

CONTACT

If you have questions or comments regarding your rights as a participant in the research, you may contact the primary investigator, Eric Meyer at 605-595-2110 or the Institutional Review Board at Iowa State University, 515-294-1516.

Q2 CONSENT

I agree to participate in this study.

❍ Yes (1)

❍ No (2)

If No Is Selected, Then Skip To End of Survey

Q3 Do you have a Facebook account?

❍ Yes (1)

❍ No (2)

If No Is Selected, Then Skip To End of Survey

Q4 The first part of this survey will deal with general Facebook usage and activities.

Q5 About how many Facebook friends do you have?
- ○ 1-50 (1)
- ○ 51-200 (2)
- ○ 201-400 (3)
- ○ 401-800 (4)
- ○ More than 800 (5)

Q6 About how long have you been an active Facebook user?
- ○ Less than six months (1)
- ○ Six months to 11 months (2)
- ○ One year (3)
- ○ 2-3 years (4)
- ○ 4-5 years (5)
- ○ 6-7 years (6)
- ○ 8-9 years (7)
- ○ 10 or more years (8)

Q7 About how many of your Facebook friends do you consider to be ACTUAL friends?
- ○ 1-50 (1)
- ○ 51-200 (2)
- ○ 201-400 (3)
- ○ 401-800 (4)
- ○ More than 800 (5)

Q8 Who are you Facebook friends with? (Check all that apply)
- ❑ Your parents (1)
- ❑ Other family members (2)
- ❑ Work colleagues (3)
- ❑ Friends from high school (4)
- ❑ Current friends that I see in real life (5)
- ❑ Current friends that I do not see in real life (6)
- ❑ Neighbors (7)
- ❑ Celebrities (8)
- ❑ People I have never met in real life (9)

Q9 Thinking about your engagement on Facebook, please indicate if you agree or disagree with the following statements:

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Somewhat agree (4)	Agree (5)	Strongly Agree (6)
When you see a friend sharing good news on Facebook, you try to respond (1)	○	○	○	○	○	○
My friends often post items that are too personal on Facebook (2)	○	○	○	○	○	○
Sometimes I miss important stories in my Facebook newsfeed (3)	○	○	○	○	○	○
I feel that Facebook is a supportive place to connect with others (4)	○	○	○	○	○	○
Sometimes my newsfeed shows me stories that I don't want to know about (5)	○	○	○	○	○	○

| When you see a friend sharing bad news on Facebook you try to respond (6) | ○ | ○ | ○ | ○ | ○ | ○ |
| Facebook generally shows updates in my newsfeed that I care about (7) | ○ | ○ | ○ | ○ | ○ | ○ |

Q10 On an average day, how would you describe your general use of Facebook?

○ I leave Facebook open in my browser most of the day (1)
○ I log into Facebook hourly (2)
○ I log into Facebook a couple times a day (3)
○ I log into Facebook every couple of days (4)
○ I rarely log into Facebook (5)

Q11 How often do you do some of the following activities on Facebook:

	Rarely (1)	Less than once a week (2)	Once a week (3)	A couple times a week (4)	Daily (5)
Read the Newsfeed (1)	○	○	○	○	○
Like Friends' posts (2)	○	○	○	○	○
Post original content on your own profile (3)	○	○	○	○	○
Message privately with your friends (4)	○	○	○	○	○
Write or comment on other friends' posts/profile (5)	○	○	○	○	○
Use the Facebook reaction buttons (wow, haha, love, sad and angry) (6)	○	○	○	○	○

Q12 What other social networks do you regularly use to keep in touch with friends? (check all that apply)
- ❑ Twitter (1)
- ❑ Instagram (2)
- ❑ Snapchat (3)
- ❑ WhatsApp/ GroupMe/ group texts (7)
- ❑ Other (5) _____
- ❑ None (6)

Q13 The next part of this survey will deal with Facebook and mourning. Remember, your participation is voluntary, and you may stop the survey at any time.

Q14 Facebook users often create content to memorialize friends who have died. Have you encountered these posts?
- ○ Yes (1)
- ○ No (2)

Q15 Where did you encounter these posts? (check all that apply)
- ❑ My newsfeed (1)
- ❑ An individual profile page (2)
- ❑ A private group (3)
- ❑ A public group (4)

Q16 What types of memorial posts have you seen on Facebook? (check all that apply)
- ❑ Tagged status update (1)
- ❑ Photo (2)
- ❑ Video (3)
- ❑ Added comments to a photo (4)
- ❑ Wall Post (5)

Q17 How would you describe the messages posted to the deceased wall? (check all that apply)
- ❑ Condolences/Tributes (1)
- ❑ Shock or disbelief at the user's death (2)
- ❑ A shared memory (3)
- ❑ A subsequent birthday, holiday or anniversary (4)
- ❑ Other (6) _____

Q18 How do you feel about others writing or posting about the deceased? (check all that apply)
- ❑ It is a good way to celebrate a friend's life (1)
- ❑ It feels disingenuous (2)
- ❑ It feels kind of strange (3)
- ❑ I have no feelings about it (4)
- ❑ Other (5) _____

Q19 What words would you use to describe others writing or posting about the deceased? (check all that apply)
- ❑ Strange (1)
- ❑ Unhealthy (2)
- ❑ Normal (3)
- ❑ Respectful (4)
- ❑ Reassuring (5)
- ❑ Healthy (6)
- ❑ Negative (7)
- ❑ Positive (8)

Q20 What types of memorial posts have you created on Facebook? (check all that apply)
- ❑ Tagged status update (1)
- ❑ Photo (2)
- ❑ Video (3)
- ❑ Added comments to a photo (4)
- ❑ Wall Post (5)
- ❑ I have not personally created this type of content (6)

If I have not personally creat... Is Selected, Then Skip To Would you ever block a Facebook frien...

Q21 How would you describe the content of these messages?
- ❑ Condolences/tributes (1)
- ❑ Shock or disbelief at the user's death (2)
- ❑ A shared memory (3)
- ❑ A subsequent birthday, holiday or anniversary (4)
- ❑ All of the above (7)
- ❑ Other (5) _____

Q22 Creating memorial content on Facebook helped me:

	Strongly disagree (1)	Somewhat disagree (2)	Disagree (3)	Somewhat Agree (4)	Agree (5)	Strongly agree (6)	Don't know (7)
Mourn the loss (1)	❍	❍	❍	❍	❍	❍	❍
Create a sense of community (2)	❍	❍	❍	❍	❍	❍	❍
Express emotions (3)	❍	❍	❍	❍	❍	❍	❍
Provide support for friends and family (4)	❍	❍	❍	❍	❍	❍	❍

Q23 Would you ever block a Facebook friend who has died?

❍ Yes (1)

❍ No (2)

If No Is Selected, Then Skip To Would you ever un-friend a Facebook f...

Q24 Why would you block this Facebook user?

❍ I wouldn't want to think about this friend anymore (1)

❍ I wouldn't want to see others interacting with this friend on Facebook (2)

❍ I didn't know them that well (3)

❍ Other (4) _____

Q25 Would you ever un-friend a Facebook friend who has died?

❍ Yes (1)

❍ No (2)

If No Is Selected, Then Skip To Which of the following helps you mourn?

Q26 Why would you un-friend this Facebook user?

❍ I wouldn't want to think about this friend anymore (1)

❍ I wouldn't want to see others interacting with this friend on Facebook (2)

❍ I didn't know them that well (3)

❍ Other (4) _____

Q27 Which of the following helps you mourn?

	Very unhelpful (1)	Unhelpful (2)	Neither helpful or unhelpful (3)	Helpful (4)	Very helpful (5)
Attending a funeral, wake or memorial service (1)	○	○	○	○	○
Reading content others have posted on Facebook (2)	○	○	○	○	○
Sending a card (3)	○	○	○	○	○
Spending time with others who are mourning (4)	○	○	○	○	○
Posting content to Facebook (5)	○	○	○	○	○
Receiving support from experts (6)	○	○	○	○	○
Sending flowers (7)	○	○	○	○	○

Q28 How would you like your Facebook profile handled 100 years from now?
○ I want my account shut down/deleted (1)
○ I want a friend or family member to take over my account (2)
○ I want my profile turned into a memorial (3)
○ I don't care what happens (4)
○ Other (5) _____

Q29 Have you had a Facebook friend die in the last two years?
○ Yes (1)
○ No (2)

Q30 The final section of the survey deals with general demographics.

Q31 What is your age?

Q32 What is your gender?
- ○ Male (1)
- ○ Female (2)

Q33 What is your level of education?
- ○ Some high school completed (1)
- ○ High school graduate (2)
- ○ Currently enrolled in a bachelor's program (3)
- ○ Bachelor's degree received (4)
- ○ Masters or currently enrolled in masters program (5)
- ○ Doctoral/professional degree, or currently enrolled in program (6)
- ○ Other (7)

Q34 What is your ethnicity?
- ○ White (1)
- ○ Latino/ Latina (2)
- ○ African (3)
- ○ Indian (4)
- ○ South Pacific (5)
- ○ Asian (6)
- ○ Middle Eastern (7)
- ○ Native American (8)
- ○ Prefer not to say (9)
- ○ Other (10) _____

Q35 Is there anything else that you would like to add that you would like the researcher to know?

APPENDIX B. INSTITUTIONAL REVIEW BOARD APPROVAL (IRB)

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

Date: 11/5/2015

To: Eric Meyer   **CC:** Dr. Jan Lauren Boyles
2319 Knapp St #1   113 Hamilton Hall
Ames, IA 50014

From: Office for Responsible Research

Title: Death in Age of Eternity: How Facebook Users Cope wuth Personal Loss

IRB ID: 15-616

Study Review Date: 11/4/2015

The project referenced above has been declared exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) because it meets the following federal requirements for exemption:

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures with adults or observation of public behavior where
    - Information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subjects; or
    - Any disclosure of the human subjects' responses outside the research could not reasonably place the subject at risk of criminal or civil liability or be damaging to their financial standing, employability, or reputation.

The determination of exemption means that:

- **You do not need to submit an application for annual continuing review.**

- **You must carry out the research as described in the IRB application.** Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any modifications to the research procedures (e.g., method of data collection, nature or scope of information to be collected, changes in confidentiality measures, etc.), modifications that result in the inclusion of participants from vulnerable populations, and/or any change that may increase the risk or discomfort to participants. Changes to key personnel must also be approved. The purpose of review is to determine if the project still meets the federal criteria for exemption.

    Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

    Detailed information about requirements for submission of modifications can be found on the Exempt Study Modification Form. A Personnel Change Form may be submitted when the only modification involves changes in study staff. If it is determined that exemption is no longer warranted, then an Application for Approval of Research Involving Humans Form will need to be submitted and approved before proceeding with data collection.

Please note that you must submit all research involving human participants for review. **Only the IRB or designees may make the determination of exemption,** even if you conduct a study in the future that is exactly like this study.

Please be aware that **approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **An IRB determination of exemption in no way implies or guarantees that permission from these other entities will be granted.**

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.