

Perceptions of Intentional vs. Non-Intentional Death



A Major Qualifying Project Report
Submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
In partial fulfillment of the requirements for the Degree of Bachelor of Science

By Karen Ho
Psychological Science & Professional Writing

Date:
April 28, 2022

Report Submitted to Project Advisors:
Dr. Angela Rodriguez, PSY Dr. Ryan Madan, PW
Dr. Stacy Shaw, PSY Dr. Shana Lessing, PW

This report represents the work of a WPI undergraduate student submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, see <http://www.wpi.edu/Academics/Projects>.

TABLE OF CONTENTS

ABSTRACT	4
ACKNOWLEDGEMENTS	5
INTRODUCTION	6
BACKGROUND	8
Terror Management Theory	8
Mortality Saliency & Death Anxiety	9
Physiological Stress Response to Death Anxiety	10
Heart Rate Change	11
Suicide: Suffering, Silence, & Stigma	11
Suicide Prevalence	12
Persistence of Suicide Stigma	13
Effects of Suicide Stigma	16
Attitudes Towards Suicide	18
Indirect Language & Use of Euphemisms	19
The Language of Suicide & Stigma	23
Motivations For This Project	23
METHOD	26
Participants	26
Design	26
Materials	27
Death Announcement Emails: Death Type and Language Type Manipulations	27
Immediate Anxiety Dependent Variable	29
Perceptions & Reactions Dependent Variable	30
Death Anxiety Dependent Variable	30
Mental Health Attitudes Dependent Variable	31
Perceived Stress Dependent Variable	31
Heart Rate Change Dependent Variable	32
Procedure	32
RESULTS	36
Perceptions & Judgements of the Deceased	36
Perception of the Deceased	36
Blame Attributed to the Deceased	37
Belief That Cause of Death Should Not be Disclosed	39
Mental Health Attitudes	41
Mental Illness Stigma Scale (MISS)	42

PERCEPTIONS OF DEATH AND SUICIDE

	3
Perceptions of Stigmatization by Others for Seeking Psychological Help (PSOSH)	42
Anxiety & Stress	42
Immediate Anxiety	43
Death Anxiety	44
Perceived Stress	46
Heart Rate	47
HR - All Conditions	47
HR - Death Condition	49
HR - Language Condition	52
DISCUSSION	56
The Positive Effects of Euphemisms	56
Increasing Understanding of Suicide	58
Limitations & Future Directions	61
CONCLUSION	62
REFERENCES	64
APPENDICES	71
A: Generic Work Emails	71
B: Death Announcement Emails	76
C: Immediate Anxiety Measurement Scale	80
D: Perceptions/Reactions Questionnaire	81
E: Batson's Empathy Scale	83
F: Corrected Collett-Lester Fear of Death Scale, Version 3.0	84
G: Mental Illness Stigma Scale	86
H: Perceptions of Stigmatization by Others for Seeking Psychological Help Scale	88
I: Perceived Stress Scale	89
J: ANOVA Results for MISS	90
K: ANOVA Results for PSOSH	93
L: ANOVA Results for PSS	94

ABSTRACT

This study aimed to examine emotional and physiological reactions to death and suicide, and to investigate whether the type of language (direct language vs. indirect/euphemistic language) used to convey news of such events influences those reactions. Dependent measures included participants' death anxiety, mental health attitudes, perceptions of the deceased, subjective stress and anxiety, and objective heart rate change. Results indicate that the deceased was viewed more negatively when their death was conveyed using direct language and that direct language leads to greater immediate anxiety and death anxiety. This suggests that the use of euphemisms may indeed shield the recipient from emotional distress. Findings also suggest that the public may recognize the complexity of suicide, as participants did not explicitly display stigmatizing attitudes to the degree expected. It seems that we are progressing towards a space where we can have open discussions about suicide.

Keywords: death, suicide, stress, anxiety, stigma, language

ACKNOWLEDGEMENTS

I would like to thank all my advisors, Dr. Angela Rodriguez, Dr. Ryan Madan, Dr. Stacy Shaw, and Dr. Shana Lessing, for their incredible support, guidance, and patience. Thank you for having faith in my project and in me. I also want to acknowledge Dr. Jeanine Skorinko and Dr. Ben Nephew for their expertise and feedback. Thank you all for your time, energy, enthusiasm, and care. Without your mentorship, I certainly would not have been able to complete this project.

I would also like to thank my cousin, Raymond, for helping me edit my study materials and tolerating my multiple requests for the seemingly smallest of changes. You were right. You are faster with photo editing than I am. And finally, thank you to Alex, my fictional character, for allowing me to write them out of existence... multiple times. Be safe, take care, and rest well.

INTRODUCTION

This study aimed to examine emotional and physiological reactions to death and suicide, and to investigate whether the type of language used to convey news of such events influences those reactions.

From past work, we know that thinking about death and mortality is stressful (Routledge & Juhl, 2010), and often increases feelings of death anxiety, the anxiety caused by the fear of one's own death or the process of dying. This increase in emotional arousal is often accompanied by physiological arousal akin to a stress response (Klackl & Jonas, 2019). These effects may explain why people often want to avoid talking about death and dying. The rejection of open discussion can contribute to stigma, resulting in a reciprocal effect that compounds upon itself as those who feel stigmatized often feel even more compelled to distance themselves from the discussion of such topics (Carpiniello & Pinna, 2017). In contrast to death in general, it is unclear how learning or thinking specifically about suicide affects individuals emotionally or physiologically and how these responses could compare to when one learns about a death. Therefore, this project aimed to investigate the emotional and physiological reactions to learning about a suicide, as well as perceptions of the incident and the person involved.

Similar to the general desire to avoid direct discussion of death, discussion of suicide is often avoided as well. Unfortunately, this unwillingness to openly discuss suicide only contributes to the prevalence and perpetuation of the stigma surrounding mental health topics. Past work suggests that utilizing indirect language may be a part of that distancing effort, and that employing euphemisms may be a strategy to shield individuals from the discomforts of such events and their associated emotions (Liszka, 1990; McGlone et al., 2006). The use of such coded language gives individuals the ability to frame and interpret information more as they

would like and protects them from reality (Lucas & Fyke, 2014). For example, the phrasing “commit suicide” frames suicide as a crime or a sin (acts that are “committed”), and can contribute to harmful perceptions of suicide (Beaton et al., 2013). To reduce this stigma, mental health professionals now advise the use of “died by suicide” or “suicide death” when discussing such deaths (Centre for Suicide Prevention, 2022). Yet, it remains unclear if the use of direct or indirect language actually influences the emotional arousal experienced when receiving unfortunate news. Therefore, this work examined any potential influence that the type of language used to communicate the incident may have (more specifically, direct vs indirect/euphemistic language).

To investigate the effects that the type of death and the type of language may have on one’s response to news of a death, participants viewed an email announcing an individual’s death. Then, they completed questionnaires to assess their death anxiety, mental health attitudes, perceptions of the deceased, and the subjective stress/anxiety that participants experienced. To examine their physiological response to learning about death, their heart rate was also recorded at multiple points during the study. Findings provide a physiological understanding of reactions to suicide and speak to the prevalence and perpetuation of the stigma surrounding mental health and its public discussion.

Hypotheses:

- Learning about a suicide will elicit a greater stress response than thinking about death (increased heart rate, greater feelings of anxiety and stress).
- Indirect language will buffer the magnitude of the stress response to death but have no effect on the response to suicide.

BACKGROUND

Terror Management Theory

Life is hard. Our time on Earth is fleeting and it can be difficult to find meaning in lives that we know will end. Yet, somehow, we push through those existential crises and pursue careers, relationships, dreams, and more. We want to live, even though we know that, in the end, we must die. Terror management theory proposes that the conflict between one's innate desire for self-preservation and their conscious awareness that death is inevitable can result in significant fear (Solomon, 2011). This terror is managed by the individual's cultural worldview (their conception of reality) and their belief that they are meeting the standards of that worldview (their self-esteem). In other words, people are comforted by their understanding of the world around them and the belief that they are a worthy member of that world. Feeling that they are a valuable contributor to a meaningful universe provides a possibility for symbolic immortality (Solomon, 2011), or the idea that a part of them will "live on" even after they die. Because these psychological constructions protect the individual from the terror that results from death awareness, people are motivated to develop faith in their cultural worldviews and to meet the standards associated with them (Solomon, 2011). Terror management theory allows us to understand one pathway through which the thought of death may cause someone to feel uncomfortable and unwilling to participate in discussions involving death.

Terror management theory developed from work by Ernest Becker, a cultural anthropologist who argued that humans are innately inclined to maintain their self-esteem by meeting cultural standards (Becker, 1971). Thus, the psychological need for self-esteem is uniquely human because only humans are capable of symbolic, temporal, and self-reflective thought (Becker, 1962; Greenberg et al., 1986). While these mental capabilities can be

advantageous to survival, they also lend themselves to some uniquely human problems. Because we are capable of these types of thought, we are also capable of pondering the meaning of our existences, leaving us to face the reality that our existences are limited. The universe is uncontrollable and our inevitable deaths could occur at any moment simply due to a chance occurrence (Greenberg et al., 1986). Becker argued that these disconcerting thoughts would cause great anxiety (1973; 1975). Therefore, we use our worldviews to organize the chaotic elements of our world in an attempt to make events seem more predictable. Through our worldviews, we are also able to ascribe meaning to our lives and foster a grounding sense of permanence. Facing the end of that permanence that we worked so hard to build can then cause great cognitive dissonance and anxiety. In this way, our fear of death motivates us to strive for meaning in life so that we can avoid those negative feelings and find a safe haven in the chaos of fear (Routledge & Juhl, 2010).

Mortality Salience & Death Anxiety

Our awareness of death is linked to our anxiety surrounding it. For example, Routledge and Juhl (2010) found that feelings of death anxiety can increase when one's mortality becomes salient or when one must face their mortality. Furthermore, Greenberg et al. found that increased self-esteem reduces anxiety in response to vivid images of death (1992). These findings are reasonable, considering that self-esteem serves to maintain a sense of personal value and acts as a defense against threats to personal security (Greenberg et al., 1986, p. 199). Therefore, when one's self-esteem is low, the individual lacks a defense against the attacking death anxiety.

Mortality salience can also influence one's behavioral intentions. For example, past research has found that after viewing a road trauma film (and thus being reminded of the

possibility of death), more participants reported the intention to practice safe driving (Taubman Ben-Ari et al., 2000). Similarly, mortality salience can prompt individuals to donate significantly more money to charity if their sense of virtue is a strong source of their self-esteem (Ferraro et al., 2005). These findings suggest that the idea of death can only hurt us if it threatens our faith in meaningful existence. Our self-esteem influences how we experience and react to the worldview that we built for ourselves. Self-esteem is the lens through which we assess our value to the world, and in turn, the value of living to ourselves. These findings demonstrate that when mortality salience threatens one's self-esteem or their place in the world, the individual will pursue avenues to protect their self-esteem, and thus themselves.

Physiological Stress Response to Death Anxiety

Mortality salience and death anxiety lead to changes in physiological arousal that are indistinguishable from those elicited by dental pain salience, the aversive control used by Klackl and Jonas (2019). The physiological response induced when one thinks about death is similar to the response to thinking about experiencing physical pain (death and dental pain tend to both be uncomfortable feelings that people want to avoid). In these cases, heart rate, respiratory rate, and skin conductance galvanic skin responses (GSR) tended to increase, while high-frequency heart rate variability (HRV; the variation in time between heartbeats) decreased.

While death anxiety can elicit changes in the systemic regulation of the heart, skin, brain, lungs, and muscles, my project focused on the effects of anxiety on heart rate.

Heart Rate Change

In general, when individuals experience anxiety, their heart rate increases, and in some cases, they may experience heart palpitations, or feelings that their heart is pounding or skipping beats, (Cleveland Clinic). Unavoidable threats that are less predictable, such as death, lead to more anticipatory anxiety and a more intense anxiety reaction (Epstein & Roupenian, 1970). During acute stress, research has found that objectively measured and subjectively reported heart rate changes were significantly correlated (Trotman et al., 2019). Subjective heart rate change was associated with cognitive and somatic anxiety during stress. However, subjective reports did not correlate with objective measurements. Yet, those with greater changes in measured heart rate reported greater levels of cognitive and somatic anxiety. This suggests that while we may not be able to accurately describe the physiological effects that we are experiencing, both our subjective and objective responses speak to the anxiety experienced.

Suicide: Suffering, Silence, & Stigma

Our connection to the world around us is what connects us to the feeling of being alive. While this includes our relationships with other people, humans are unique animals not because we are social beings, but because we are cultural beings (Greenberg et al., 1986). We may live in societies, but our shared symbolic representation of the universe is ultimately determined by cultural influence. Unfortunately, this also leaves us vulnerable to social stigma and its devastating effects.

Suicide Prevalence

Although often addressed as a condition, suicide itself is not an illness. Suicide most often occurs when life stressors and health issues combine and cause feelings of despair (ASFP, 2022a). Suicide is the type of death that results from suicidal ideation (thoughts about engaging in suicide-related behavior), which is a possible symptom of mental illnesses such as depressive disorders, posttraumatic stress disorder, anxiety disorders, and eating disorders (O'Carroll et al., 1996; WebMD, 2022). When unaddressed, these mental health conditions increase the risk for suicide (ASFP, 2022a). The most common condition linked to suicide is depression, an illness that often goes undiagnosed and/or untreated.

Suicide is a prevalent type of death because its risk factors are often not addressed. In 2020, The Harris Poll found that 60% of adults self-reported having thought they had a mental health condition, with anxiety (37%) and depression (35%) being the most commonly reported. These mental health experiences exist at concerning rates within the United States and the healthcare system is not designed to support those that need help. While 78% of those surveyed think that mental and physical health are equally important, 51% of people believe that the U.S. healthcare system treats physical health as more important than mental health (p. 6).

Globally, over 1 in every 100 deaths is the result of suicide, with over 700,000 people dying by suicide in 2019 (UGMH, 2022). For every person who dies, 20 more have attempted suicide (WHO, 2022). While global suicide rates decreased by 36% between 2000 and 2019, suicide rates in the United States increased by 17% during that same period (WHO, 2021). Between 2010 and 2019, the suicide rate in the U.S. rose from 12.08 suicides per 100,000 individuals in 2010 to 13.93 per 100,000 individuals (AFSP, 2022b). In 2019, suicide was the

10th leading cause of death in the United States, claiming the lives of over 47,500 people that year. Suicide was the second leading cause among people ages 10-34, only falling behind unintentional injury (WISQARS, 2022). In fact, there were 2.5 times more suicides than there were homicides in the United States that year (47,511 vs 19,141). Suicide is so prevalent that approximately 1 in 4 U.S. adults (24%) has personally considered or attempted suicide. An additional 55% of adults know someone who has had suicidal thoughts or behaviors, (The Harris Poll, 2020).

Persistence of Suicide Stigma

The term “stigma” refers to a mark of disgrace associated with a shameful quality of a circumstance or person (Pompili et al., 2003). Having a mental illness has long been linked with shame and social shunning, such as the association between mental illness and violent outbursts portrayed in the media. This same mentality fosters the idea that mental illness is not a “true” illness the way that physical diseases are (Pompili et al., 2003, p. 173). While people often know how to respond to physical disorders, a result of their fear of mental illness usually includes not knowing how to handle mental health topics.

While the concept of suicide is nothing new. In fact, the concept of taking one’s own life can be traced back to the earliest documented history of mankind (Cvinar, 2005). However, how people view this type of death has changed over time and across cultures. For example, in early Greco-Roman and Far Eastern cultures, suicide was seen as a politically appropriate or even honorable act carried out for the best interest of society (Toynbee, 1968). However, around the early Middle Ages, attitudes towards suicide seemed to shift in Europe. Records from that time describe the corpses of those who had committed suicide as regularly being mutilated to “prevent

the unleashing of wandering spirits” into the community (Cvinar, 2005, p. 14). The desecration of these bodies was often so extreme that survivors of the suicide victim were left with insufficient remains for a normal burial. This meant that the survivors were deprived of both their loved one’s remains and of the ceremonial farewell that could have provided closure (Dunne et al. 1987).

In many Western cultures, lack of closure was not the only difficulty that survivors of suicide faced. In England, the deceased’s property was often confiscated by the local government official (Minois, 1998). Families were also commonly socially shunned and denied community support. In the later Middle Ages, formal laws began to systematize these repressive actions (Cvinar, 2005). These legal pursuits seem to have been early attempts at suicide prevention. However, in the end, suicide seemed to punish not just the dead but the living as well (Dunne et al., 1987).

It was not until the 18th century that legal, religious, and social institutions began to reduce the punishing of survivors. However, this attitude often simply meant hiding suicide as the cause of death and using more socially acceptable nomenclature, such as saying that the individual had died from insanity or an accident (Cvinar, 2005, p. 15). In the 19th century, Western social structures finally began to relieve survivors of the suffering they faced due to suicide stigma. For example, legal bodies gradually stopped confiscating survivors’ property (Cvinar, 2005). It also became less frequent for communities to isolate survivors from society.

Finally, in the 20th century, suicide began to be seen as the result of a complicated combination of physical, psychological, and social issues. With this new understanding, survivors were finally allowed to grieve. At last, the public recognized that survivors of suicide faced a unique experience of loss and bereavement (Dunne et al., 1987). However, the social

stigma has yet to fade. Even now, many insurance policies include a suicide clause or provision that excludes paying benefits if the policyholder dies by suicide within the first few years of that policy beginning (Carpiniello & Pinna, 2017). So while confiscating the survivors' property is no longer allowed, there are still financial consequences endured by the survivors.

While mental illness has gradually become less stigmatized over the years, suicide stigma remains (Sudak et al., 2008). For example, although suicide and attempted suicide were decriminalized in the United Kingdom in 1961 (Levine & Pyke, 1999), the Royal College of Psychiatrists describes practicing in a culture of ambivalence where stigma is still present (Tadros & Jolley, 2001). Tadros and Jolley claim that the stigma surrounding suicide remains high enough to discourage people from seeking help. Some fear that if they were to openly discuss their experiences with suicidal thoughts, they would be labeled as weak, insane, or lacking faith. These fears act as barriers that hinder the detection of early signs of suicide (Tadros & Jolley, 2001). In contrast to the criminalization of suicide that began in the Middle Ages, Tadros and Jolley argue that strategies to prevent suicide should include eliminating the blame and stigmatization faced by the individual and their survivors.

While some countries have made strides to prevent suicide, these efforts are not seen everywhere. In fact, only 38 countries are known to have a national suicide prevention strategy (WHO, 2021). Furthermore, attempting suicide is still considered a criminal offense in 20 countries (UGMH, 2022). This crime is punishable by hefty fines and years in prison. In some countries, even children can be prosecuted for attempted suicide. For example, in Nigeria, children as young as seven can be arrested, tried, and prosecuted for attempting suicide (United for Global Mental Health, 2021). In her career, Dr. Vijayakumar, a psychiatrist in Chennai, India, and founder of Sneha, a suicide prevention organization, has seen the impact of laws that

criminalize suicide. She believes that such legislation contributes to the stigma and discrimination against mental health, (The Guardian, 2021).

Not only suicidal individuals, but even their families continue to experience stigma. In fact, a significant difference between suicide bereavement and normal bereavement is the stigma experienced by survivors (Cvinar, 2005; Hanschmidt et al., 2016). Research has shown that to this day, the families of those who die by suicide experience social stigma in the form of shame, blame, and avoidance (Hanschmidt et al., 2016). These families experience such stigmatizing acts significantly more frequently than the families of those who die by natural death. Suicide stigma has even been linked to surviving family members socially withdrawing and concealing their loved one's cause of death. Experienced stigma is also associated with reduced psychological and somatic functioning, as well as difficulties with grieving (Hanschmidt et al., 2016).

Effects of Suicide Stigma

Perceived stigma can be extremely distressing. Approximately 90% of people with mental health problems say that they have experienced stigma and discrimination, and say that it negatively affected their lives (Mental Health Foundation, 2021). Experiencing stigma can reduce self-esteem and even deter people from seeking treatment (Carpiniello & Pinna, 2017). That stigma can also lead to a lack of awareness and education about mental health and suicide. People become less capable of recognizing mental illness, not just in others, but within themselves. This means that they will not know when others need support or when they themselves should seek help. Also, even if they are able to recognize a decline in mental health, they will not know what to do, how to reach out, or how to support a loved one. This not only

makes the stigmatized individual vulnerable to a greater risk of suicide but can even make suicide seem like the best or only solution to escape the psychological pain they are experiencing (Pompili et al., 2003). Past research has also found that internalizing that stigma (absorbing those negative messages and applying them to oneself) can decrease one's self-esteem, self-efficacy, and their belief in the possibility of recovery (Drapalski et al., 2013), leading to more severe psychiatric symptoms.

Past work has also found that stigma towards people with mental health conditions may contribute to differences in national suicide rates. Schomerus et al.'s (2010) examination of suicide rates in 25 European countries found that the social acceptance of someone with a significant mental health problem was negatively correlated with national suicide rates. This relationship meant that the less accepting and more stigmatizing of mental health problems a country was, the higher its suicide rate tended to be.

As previously discussed, individuals who have attempted suicide often experience stigmatization, shunning, and "social distancing" (of the pre-pandemic kind). This social exclusion can be extremely painful, reducing one's quality of life (Skarstein et al., 2020), and can even be processed by the brain as similar to physical pain (Eisenberger et al., 2003).

Other work has found that there is a reciprocal relationship between suicidality and experienced stigma (Carpiniello & Pinna, 2017). Those with personal experience of depression or suicide often undergo strong self-stigma (Carpiniello & Pinna, 2017). Those who have attempted suicide often describe being ashamed of their behavior and tend to want to hide the fact that they attempted. Similar behaviors are commonly observed among the family members of those who have died by suicide or made a suicide attempt. This internalization of that stigma and the resulting distancing of oneself from discussion of mental health topics can be a

significant risk factor for suicide, as it can be quite distressing and prevents one from seeking help (Carpiniello & Pinna, 2017). This work demonstrates how stigma and suicidality can feed into each other. Suicidality leads to perceived and internalized stigma, which is a risk factor for suicide, thus propelling the cycle forward.

We cannot address the distress that social stigma causes unless we break the loop and publicly discuss mental health and suicide. The normalization of such discussions could act as a great source of relief for those suffering from suicidal ideation and suicide stigma.

Attitudes Towards Suicide

Although often seen as a bleak topic, suicide is usually not viewed as inevitable. In fact, most adults believe there are signs before the act and that there are ways to help individuals experiencing suicidal ideation. Surveys have found that 93% of U.S. adults feel that suicide is preventable at least sometimes and 78% would be interested in learning how to help someone who may be suicidal (The Harris Poll, 2020, p. 8). Yet, only a third of people feel that they can identify when someone is suicidal. Many adults are not even comfortable talking about mental health topics in public (42%), and even more (51%) are uncomfortable openly discussing suicide in particular, (p. 9). Commonly cited barriers that prevent them from doing so are not knowing the right words or not having enough knowledge to discuss suicide with others. When faced with someone they know who is experiencing mental health issues, people fear making them feel worse, or that talking about it would increase the likelihood of the individual acting, and others feel that they would not know what to do or say (p. 10).

Even though feelings of awkwardness are abundant, change is coming. Adults are more open to talking about mental health since COVID-19 rose to the world stage. In fact,

three-quarters of surveyed adults say that they are now more aware of the importance of taking care of their mental health and 2 in 3 adults say that the pandemic has made them more empathetic (The Harris Poll, 2020, p. 10).

While many barriers may hinder one from seeking help, fewer people now identify “embarrassment” as one of those barriers. Only 55% of those surveyed in 2020 responded that embarrassment inhibited their efforts to seek help, down from the 63% observed in 2018, (The Harris Poll, 2020, p. 8). However, public stigma has developed over centuries and we have a long road ahead of us before these matters can truly exist in the public light.

Indirect Language & Use of Euphemisms

The language people use to discuss sensitive matters affects our perceptions of both the person speaking and the topic of discussion. For example, speakers are often perceived as more polite and mature if they use conventional euphemisms (McGlone et al., 2007). This type of indirect language can also serve to convey respect and kindness, as if one is showing greater care and regard by not directly addressing the matter.

Euphemisms are regarded as a strategy for symbolically displacing topics that have the potential to cause great emotional reactions (Liszka, 1990). This displacement is achieved by avoiding direct, literal reference to the occurrence (e.g., “she died”) and instead utilizing descriptions of the unfortunate event’s consequences (e.g., “she’s no longer with us”), related events (e.g., “she took her last breath”), or metaphors (e.g., “she knocked on Heaven’s door”), (McGlone et al., 2007, p. 276). We often even employ attempts at consolation with versions of “they are resting in peace.” These substitutions of semantic equivalents are intended to reduce the potential emotional impact the topic may have (McGlone et al., 2007).

Speakers usually use euphemisms when they are afraid of breaking societal norms or hurting another person's feelings (Hysi, 2011). Euphemisms are used to conceal uncomfortable topics even in situations where the literal description is not necessarily offensive. The use of such euphemistic language can also be seen as an attempt to fulfill a social contract involving the avoidance of taboos. Many euphemisms developed as a result of superstitions based on the idea that words, as symbols, have the power to summon evil things (Hysi, 2011). For example, the belief that discussing death could bring about someone's actual death, or that saying the name of the deceased could disturb the dead soul (which is why many follow up with "may they rest in peace"). Since people associate words and symbols with the objects that they symbolize, the discussion itself could trigger the same emotions that an actual death would. For this reason, one may avoid discussing someone's death because they do not want to bring the family any emotional pain. Therefore, euphemisms can be used as a shield to protect against offensive language that could potentially hurt one's feelings because of superstitious beliefs.

Euphemisms allow us to appear more considerate and polite. The use of euphemisms is a manifestation of the gendered expectations of manners and civility. For example, in many traditional settings, women are expected to speak with greater elegance than men. This includes avoiding swearing or other vulgar language (Hysi, 2011). In fact, women in the 19th century could not even directly refer to chicken breasts or legs. Instead, the terms white meat or dark meat were used. In order to satisfy gendered norms and maintain a delicate image, women created euphemisms. This development of "women's language" strengthened linguistic taboos and established social regulations and guidelines for discussing sensitive matters (p. 380). Those who properly employed such veiled language were seen as more educated and cultured (Hysi,

2011). Managing these social perceptions was particularly important to those of higher social class, as they needed to uphold the idealized model of a refined woman.

By its very design, euphemisms allow us to not talk about things directly. However, because of this feature, euphemisms also allow people to manage the framing of certain situations. By being indirect, we can give the person we are speaking with the opportunity to accidentally or purposefully interpret the situation differently (Lucas & Fyke, 2014). This offers them protection from the consequences of the discussion. For example, using the phrasing “Max is resting in peace” to notify someone that Max has died. Such framing could allow the recipient to elude the pain of death by focusing on the idea of peace, shielding themselves from potential emotional distress over Max’s death. Therefore, euphemisms can allow people to make decisions based on their interpretations rather than the reality of the words they received. If the individual focuses on the painful fact that Max has died, they would likely react and behave differently than if they focus on the more positive framing of Max being at peace.

While the use of coded language may be a well-intentioned act employed to protect against emotional pain, it can also impair ethical decision-making and be used to manipulate the interpretation of certain events (Lucas & Fyke, 2014). Work by Lucas and Fyke (2014) found that, in 2001, personnel at Penn State were able to use euphemisms to cover up sexual assault committed by one of their football coaches. Employees used coded language to report the assault up the administrative chain (e.g., instead of directly saying sexual assault, the incident was reported as the coach being “*with a young boy in the shower and that it was way over the lines*”). Penn State’s leadership then responded with euphemisms, all the while hiding behind harmless and false interpretations of those earlier euphemisms as their basis for decision-making while they planned their course of action (or lack thereof; e.g., they simply told the coach “*not to bring*

children into the shower again”). Therefore, organization leadership was able to deny that they received a report of sexual assault since no one had directly used those words, and the coach was able to continue abusing children because he was literally never told to stop sexually assaulting them. This case is a painful example of how harmful euphemistic language can be, since it allows both the speaker and listener to manipulate the framing and salience of acts, and encourages the mindless processing of information. Euphemisms shield against psychological and material consequences because they allow people to not actively consider moral or ethical principles (Lucas & Fyke, 2014).

The veiled nature of euphemisms can not only manipulate interpretations of reality but also prevents accurate discussion of sensitive topics. Not only does this lead to stigma (Carpiniello & Pinna, 2017) but it also means that individuals may never learn the proper terms to use. For example, in many cultures, sex is a taboo topic. However, if children never receive proper sex education, they will not learn the correct terms that could also be needed in healthcare contexts. Because they do not have the vocabulary or understanding to address those topics, they simply will not, and this could be detrimental to them and their health.

In this sense, it is understandable why not knowing the right words or not having enough knowledge to discuss suicide with others is often cited as the reason why adults avoid publically discussing suicide (The Harris Poll, 2020). Even though most adults (roughly 70%) feel that a majority of people exhibit warning signs before suicide, few (only about 30%) believe that they can identify those signs, let alone that they know how to appropriately discuss suicide (The Harris Poll, 2020, p. 8). Some do not even feel comfortable speaking with a clinician or loved one about suicide when they are the ones struggling. Lacking education in mental health topics and the proper terms for symptoms certainly would not help in this regard.

The Language of Suicide & Stigma

Indirect or euphemistic language can be used to avoid stigmatized topics. Because of desires for social acceptance, we avoid “taboo” topics. We do not want to be the ones that make things awkward. However, what made that topic taboo? Is it about morality? Religion? Law? All of these influences are likely at play here.

From past research, we know that certain terms for suicide are associated with feelings of dehumanization and judgment (Padmanathan et al., 2019). Changing the way that we talk about sensitive matters allows us to reframe the darkness that we so desperately want to avoid. We must confront the pain and give the power back to those that we have lost. *Small changes in the way we talk about things can have larger impacts on how we perceive things.* We need to honor their agency, validate their emotions, and value their life. They did not “commit a crime,” they died by suicide. Their suicide was not “successful,” they completed suicide. They were not a “victim of suicide,” they were not crying out for help. They were in pain and they needed it to end. The way we talk about these situations matters. It is human nature to seek relief from suffering. We need to respect their decision. However, we cannot even begin to understand the weight of their choice if we refuse to talk about suicide.

Motivations For This Project

This project is titled “Perceptions of Intentional vs. Non-Intentional Death.” This is an investigation into the differences in how people perceive suicides compared to accidental deaths. While these terms were selected in an attempt to respectfully address death, I acknowledge that by not directly saying “suicide,” I used indirect language. While this may seem hypocritical

considering that the purpose of this project is to understand the impact that open discussions could have on sensitive topics, this phrasing draws attention to the agency that we credit to the deceased. When someone dies in an accident, it is not their fault since the circumstances that led to the end of their life were unintentional. In contrast, suicide is intentional death. They intentionally caused the end of their own life. However, even though they intended to die, death is usually not the individual's true desire. Suicide is an attempt to end the incredible pain that has plagued them for far too long. So while they intentionally pursued suicide, was their death really their fault? They did not want to die, but they needed the pain to end. No matter the cause, their loved ones now face possibly the worst pain of their lives and, unfortunately, society often fails to support them in these times.

Considering that death anxiety can cause significant emotional and physiological stress, it seems reasonable that this anxiety could be partly responsible for why we dislike talking about death. Yet, we avoid discussing suicide even more. If a similar or more intense stress response occurs when learning about a suicide, it could contribute to why we particularly dislike talking about suicide. Research in this area could provide physiological explanations for stigmatizing responses to hearing about a suicide. Findings could also speak to the prevalence and perpetuation of the stigma surrounding mental health and its public discussion.

It is not only whether or not we talk about sensitive topics, but also how we talk about them that affects the stigma around their discussion. That stigma can also contribute to narratives that develop after suicide. Therefore, this study also examined the effects of the language that we use to talk about death and suicide. What people say about the deceased and how they treat those left behind can either provide support or perpetuate the stigma that hinders others from seeking help. What gets blamed affects how people grieve. Seeking relief from pain is human nature. It is

a normal thing to do. Yet somehow, when that pain is emotional instead of physical, society falls into a biased view. Was the deceased's vulnerability a character flaw or a result of external trauma? Are they fatigued because of their depression or are they just lazy and making excuses? Were they just a sensitive person that openly expressed their feelings or were they mentally weak and wanted attention? To better understand the effects of different framings, this project explored how differently we perceive suicide compared to accidental death. When loved ones have to face these different views on their loss, not even euphemisms can save them from the pain. Or can euphemisms truly provide some emotional protection? It is important that we understand how language we use to communicate about death and suicide can affect people's reactions to the deceased, their death, and the narratives the survivors may then have to face.

This blaming of the ill occurs far more frequently with mental illnesses than with physical conditions. Perhaps that is a manifestation of how uninformed the public is. Sprained ankle? Grab some ice. Headache? Take an Advil. Emotional distress? ... People tend not to skip a beat responding to those first two situations. The wounded know where to go for help and the party they ask for assistance often knows exactly what to do to help. Yet, when emotional support is needed, fewer people feel comfortable asking for help, and just as few feel prepared and equipped to respond. Discussions about healthcare should not end with physical health, nor should they end with suicide. We should still talk about pain when it is psychological. We should still talk about the ones that we have lost.

A body that wants to live is only as strong as a mind that wants to die. We should not blame the one suffering for wanting the pain to end just because their illness is "invisible," especially since they are rarely ever truly invisible.

METHOD

Participants

A total of 228 adult participants were recruited through Amazon's Mechanical Turk (MTurk) to participate in this study. All participants gave informed consent prior to beginning the study. The data of 68 participants were excluded (48 did not fully complete the experiment and 20 failed multiple attention/manipulation checks by giving incoherent open response answers that suggested these were bots). Therefore, the results are based on 160 participants (98 males, 60 females, and 2 who preferred not to disclose). Participants ranged in age from 24 to 72 with a mean age of 40. Of these participants, 82 of them (52 males, 29 females, and 1 other; ages 24 to 72, mean age: 38) were able to provide heart rate readings. At the conclusion of the study, all participants were fully debriefed and received the payment indicated on the MTurk post.

Design

This research utilized a 2 (Death Type: Intentional Death vs. Non-Intentional Death) x 2 (Language Type: Direct Language vs. Indirect Language), fully randomized between-participants design. Participants were asked to view some email messages that they were told were sent and received in a workplace. The last one of these emails was a message communicating to the staff that their colleague, Alex, had died. To keep the timing of the heart rate measurements consistently spaced from the death announcement email, the viewing order of the emails and the questionnaires were consistent across participants.

Participants were randomly assigned to view a death announcement email, that described Alex's cause of death as either a suicide/intentional death (e.g., intentionally crashing a car) or an accident/non-intentional death (e.g., car accident). The death announcement email either

employed direct language (e.g., died, death, mourn) or indirect language (e.g., passed away, loss, process) to convey the news of Alex's death.

The dependent variables were the participants' death anxiety, mental health attitudes, perceptions and responses to Alex/Alex's friends and family, subjective stress and anxiety, and objective heart rate change. Heart rate change was assessed by having the participants self-report their heart rate at multiple points throughout the study. Participants completed questionnaires to measure each of the other dependent variables.

Materials

Death Announcement Emails: Death Type and Language Type Manipulations

Participants were asked to view a total of six email messages that they were told were sent and received by members of "Loop Enterprises," which unbeknownst to them is a fictitious company. The first five emails were generic workplace emails discussing meeting times or ongoing projects. These work emails are included in Appendix A. The sixth and last email was a death announcement email. Sent from the head of the Human Resources department to all of the company staff, it conveyed that a member of the company, Alex, had died.

To manipulate the type of death that participants believed Alex had experienced, half of the participants viewed an email that described Alex's cause of death as an accidental death (non-intentional death; car accident), while the other half viewed an email that described it as a suicide (intentional death; intentional car crash).

To manipulate the type of language used in the death announcement, half of the participants viewed an email that included direct language (e.g., died, death, mourn), while the

other half viewed an email that used indirect language (e.g., passed away, loss, process) when conveying the news of Alex's death.

Therefore, there were four distinct death announcement emails, with a quarter of participants viewing each condition: Non-Intentional + Direct, Non-Intentional + Indirect, Intentional + Direct, and Intentional + Indirect. These emails are included in Appendix B.

The death announcement emails were pre-tested with 9 university students. The students rated the announcements on a Likert-type scale of 1-7 for directness and clarity with higher scores indicating higher rankings of these characteristics. An ANOVA examination of pre-test ratings indicated that in the death condition, there was a statistically significant difference in the perceived directness of the language used in the emails. The language of the direct announcements ($M = 5.70$, $SD = 1.16$) were perceived as indeed being more direct than the language of the indirect announcements ($M = 4.00$, $SD = 2.07$), $p = .03$. There was no statistically significant difference in the perceived directness of the announcements between the suicide conditions, with the language of the direct announcement ($M = 4.63$, $SD = 1.69$) being perceived similarly to the indirect announcement ($M = 5.43$, $SD = 1.40$), $p = .34$. However, in the suicide condition, there was a statistically significant difference between how clearly the announcements were perceived as conveying Alex's manner of death. The indirect language announcement ($M = 5.57$, $SD = 1.72$) was actually perceived as more clearly conveying Alex's manner of death compared to the direct language announcement ($M = 4.88$, $SD = 1.36$), $p = .004$. While unexpected, these results were interpreted as being due to how commonly euphemisms are employed to indirectly discuss suicide. Therefore, over time, this language may become even more clear than the less commonly used direct statements of suicide.

In contrast to pre-test results, an ANOVA manipulation check on participant responses found that direct language announcement ($M = 5.64$, $SD = 1.44$) was perceived as more clearly conveying Alex's manner of death compared to the indirect language announcement ($M = 5.04$, $SD = 1.49$), $p = .01$. However, language type did not appear to affect the degree to which participants perceived the message as direct, $p = .13$.

While these results appear to conflict, they speak to the complexity of language and how people interpret messages differently. Both sets of tests still suggest that participants are noticing the qualities of the type of language used.

Immediate Anxiety Dependent Variable

The immediate anxiety experienced by participants was measured using the Immediate Anxiety Measurement Scale (IAMS), (Thomas et al., 2002). The IAMS is used to assess the intensity and directional interpretation of cognitive and somatic anxiety, as well as self-confidence intensity. Participants respond to 3 items by rating how much they are experiencing each of the three constructs (cognitive anxiety, somatic anxiety, and confidence) on a Likert-type scale ranging from 1 (Not at All) to 7 (Extremely). Higher scores indicate greater feelings of that construct. Participants are also asked to rate the intensity of each symptom experienced on a scale ranging from +3 (very facilitative/positive) to -3 (very debilitating/negative). More positive scores indicate the construct was interpreted as more facilitative. The IAMS is included in Appendix C.

Perceptions & Reactions Dependent Variable

To evaluate the participant's attitudes towards Alex, Alex's family and friends, and the circumstances of Alex's death, participants completed a questionnaire. Designed for this study, these questions assess the stigma around suicide and, more specifically, the stereotypical attitudes towards those who die by suicide. Participants indicated on a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree), how much they agreed with statements like "the way Alex died was shameful," "Alex was an attention-seeking person," and "Alex's friends/family are to blame for Alex's death." Higher scores (more agreement with these statements) indicate more prejudiced attitudes towards suicide and those who die by suicide. These questions are included in Appendix D.

Participants also completed Batson et al.'s Empathy Scale (1997) twice. Once to determine how much empathy they felt for Alex, and once more in regards to Alex's family/friends. Participants responded to 6 items on a scale of 1 (Not at All) to 7 (Very Much). Higher scores indicated more empathy felt for that party. This scale is included in Appendix E.

Death Anxiety Dependent Variable

The death anxiety that participants experienced after viewing the death announcement email was measured using the Corrected Collett-Lester Fear of Death (CL-FOD) Scale, Version 3.0, (Lester & Abdel-Khalek, 2003). Included in Appendix F, the CL-FOD is designed to measure death anxiety broken down into 4 categories of death-related fears: death of self, dying of self, death of others, and dying of others. Each subscale contains 7 items (28 total items). Participants respond on a Likert-type scale ranging from 1 (Not at All) to 5 (Very Much So).

Each subscale is scored separately, with higher scores indicating greater anxiety relative to that category of death anxiety.

Mental Health Attitudes Dependent Variable

The participants' attitudes towards mental health topics were measured using two scales. First, participants completed Day et al.'s Mental Illness Stigma Scale (2007). Consisting of 28 total items, this scale assesses the general public's attitudes toward people with mental illness. These attitudes are divided into 7 main attitude dimensions: interpersonal anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery. Participants respond on a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Each of the 7 attitude subscales is scored separately, with higher scores indicating the presence of more prejudicial attitudes. The Mental Illness Stigma Scale is included in Appendix G.

Next, participants completed the Perceptions of Stigmatization by Others for Seeking Psychological Help (PSOSH) Scale, (Vogel et al., 2009). While the Mental Illness Stigma Scale measured one's attitudes towards others, the 5-item PSOSH scale was designed to measure perceptions of stigmatization by others for seeking psychological help. Participants respond to 5 items on a Likert-type scale ranging from 0 (Not at All) to 4 (A Great Deal). Higher scores indicate greater perceived stigma. The PSOSH scale is included in Appendix H.

Perceived Stress Dependent Variable

Participants also completed Cohen et al.'s Perceived Stress Scale (PSS), a classic stress assessment instrument used to help practitioners understand how different situations affect one's feelings and perceived stress (1983). Participants respond to 10 items on a Likert-type ranging

from 1 (Never) to 5 (Very Often). However, instead of its traditional phrasing asking about perceptions in the last month, these questions were altered to ask about the participant's feelings during the study. Individual scores on the PSS can range from 0 to 40, with higher scores indicating greater perceived stress. Scores from 0-13 are considered low stress. Scores from 14-26 are considered moderate stress. Scores from 27-40 are considered high stress. The PSS is included in Appendix I.

Heart Rate Change Dependent Variable

To objectively gauge the physiological stress response that may have occurred during the experiment, participants were asked to self-report their heart rate 4 times: at the beginning of the study after giving consent, after reading the emails, while completing the surveys, and finally at the end of the study. Participants were asked to self-report their current heart rate using their personal fitness tracker or smartwatch (when available). An increase in heart rate after reading the death announcement email would indicate that the participant experienced some form of stress/anxiety.

Procedure

First, all participants viewed an informed consent form providing information about the study and what they will be doing. While participants needed to be fully informed before agreeing to participate, we did not want to prime them to react to the emails and questionnaires with death or suicide in mind. Furthermore, past research (Bruce et al., 2021) has found that viewing a trigger warning can increase physiological reactivity (such as increased heart rate, respiratory rate, and skin conductance) compared to when either a general warning (e.g.,

“PG-13”) or no warning is given. Therefore, participants were only generically told that the study “may include questions about topics that often make people anxious such as mental math, surgery, death, opinions of others, public speaking, etc.”

After viewing these materials and giving informed consent, participants were told that they would be viewing some email communications sent and received by members of “Loop Enterprises” and answering some questions about those emails. If participants had a fitness tracker or smartwatch (such as a Fitbit, Garmin, Apple Watch, etc.), then after giving consent to participate, they were asked to make sure they were wearing the device prior to beginning the survey. Participants were still allowed to remain in the study even if they did not have a device that could measure their heart rate. Participants were prompted to self-report their heart rates a total of four times over the course of the study: before reading the emails, after reading the emails, after completing the perceptions and death anxiety questionnaires, and once more at the end of the study.

The first five emails that participants viewed were standard workplace emails discussing meeting times or ongoing projects. Having the participants read through these materials allowed for a physiological baseline to be established. The sixth and last email was a death announcement email. Sent from the head of the Human Resources department to all of the company staff, it conveyed that a member of the company, Alex, had died.

To investigate whether the type of death one learns about affects their reactions, participants were randomly assigned to one of two death conditions: Intentional Death (Suicide) or Non-Intentional Death (Accidental Death). The death announcement email that participants viewed described Alex’s cause of death as either an accident (e.g., a car accident) or as a suicide (e.g., a purposeful car crash).

To assess whether the type of language used to inform others of Alex's death affects how participants perceive Alex and their death, participants were also randomly assigned to one of two language conditions: Direct Language vs. Indirect Language. Based on these conditions, the death announcement email utilized either direct language (e.g., died, death, mourn) or indirect language (e.g., passed away, loss, process) when conveying the news of Alex's death.

After viewing those emails, participants completed a few attention checks. This included writing about the information discussed in the communications that they viewed and providing their initial reactions to that information and the people involved. Additional attention and manipulation checks included asking the participant about the name of the person whose death was announced in the email, their cause of death, and how clearly they felt that information was conveyed. Participants were also asked how easy to understand and direct they felt the language of the emails was.

After that writing task, participants completed the Immediate Anxiety Measurement Scale (IAMS) to gauge their feelings of anxiety (Thomas et al., 2002). Participants then completed a series of questionnaires. First, participants answered questions assessing their perceptions of Alex, Alex's friends/family, and Alex's death. These questions were designed to evaluate the participant's attitudes towards Alex and the way Alex died (e.g., How much do you agree or disagree with the following? Alex is to blame for their death... Alex was responsible for their death). Batson et al.'s empathy scale was also completed at this point (1997). Next, participants completed the Collett-Lester Fear of Death Scale - Corrected Version 3.0, (Lester & Abdel-Khalek, 2003) to measure their feelings of death anxiety. Then, participants' attitudes towards mental health topics were measured using Day et al.'s Mental Illness Stigma Scale (2007) and Vogel et al.'s (2009) Perceptions of Stigmatization by Others for Seeking

Psychological Help (PSOSH) Scale. Finally, perceived anxiety/stress was measured using Cohen et al.'s (1983) Perceived Stress Scale (PSS).

Then, participants provided demographic information. They were also asked if they had experienced any recent deaths or suicides of people they know. Finally, participants engaged in a distractor/cheering-up task to reduce any lasting negative emotions. This included viewing an image of two dogs and suggesting names for these new pets.

Participants were thanked and fully debriefed at the end of the study. This included disclosing the true nature of the study. Participants were also informed that none of the people or matters discussed in the emails that they viewed were real. All participants received the payment posted in the MTurk portal for their participation.

RESULTS

Perceptions & Judgements of the Deceased

Perception of the Deceased

I began by analyzing how the deceased was perceived based on the way they died and the language of the death announcement email. An ANOVA examining the language and death conditions was not statistically significant (corrected model: $F(3, 156) = 1.94, p = .13, \eta^2p = .04$). However, it did observe a main effect in that the type of language used to convey news of their death affects participants' perceptions of the deceased (Table 1).

As seen in Figure 1, the deceased was viewed significantly more positively when indirect language was used to convey news of their death ($M = 4.55, SD = 1.89$) than when direct language was used ($M = 3.91, SD = 1.78$), $F(1, 156) = 4.88, p = .03, \eta^2p = .03$.

Unexpectedly, the death condition did not affect participants' perceptions of the deceased, nor were there interactions observed between language and death conditions, $p = .43$.

Table 1

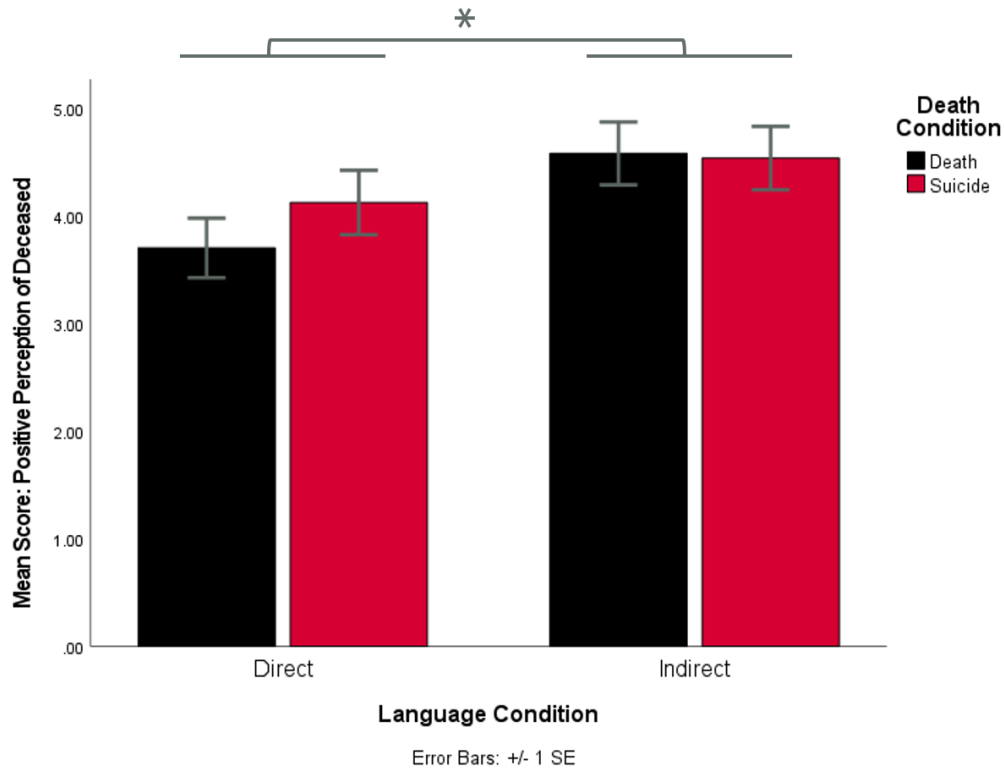
Results of ANOVA for positive perception of the deceased.

Source	SS	df	MS	F	p	η^2_p
Corrected Model	19.17	3	6.57	1.94	.13	.04
Language Condition	16.58	1	16.58	4.88*	.03	.03
Death Condition	1.42	1	1.42	.42	.52	.00
Language Condition x Death Condition	2.16	1	2.16	.64	.43	.00
Error	529.40	156	3.39			
Corrected Total	549.11	159				

Note. ANOVA source table for the positive perception of the deceased measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction. * $p \leq .05$.

Figure 1

Mean score for positive perception of the deceased based on language and death conditions



Note. Bar graph depicting the mean scores for the positive perception of the deceased measure (mean value of positive perceptions: good, kind, caring; and negative perceptions (reverse-scored): burden, bad, selfish, attention-seeking) based on language and death conditions. Higher scores indicate a more positive perception of the deceased. $*p \leq .05$.

Blame Attributed to the Deceased

Knowing that the language used to describe the death created statistically significant differences in the perception of the deceased, an ANOVA was conducted to investigate if the language condition also influenced how much the deceased was blamed for their own death. Significant main effects were observed in that language type and death type both affected how

much the participant blamed the deceased for their own death (corrected model: $F(3, 156) = 14.74, p < .001, \eta^2 p = .22$), as seen in Table 2.

The deceased was blamed significantly *more* for their death when direct language was used to convey news of their death ($M = 3.39, SD = 1.71$) compared to when indirect language was used ($M = 2.84, SD = 1.60$), $F(1, 156) = 5.19, p = .02, \eta^2 p = .04$, as seen in Figure 2.

Surprisingly, the deceased was also blamed significantly *more* for their death when they died in an accident ($M = 3.81, SD = 1.63$) compared to when they died by suicide ($M = 2.42, SD = 1.41$), $F(1, 156) = 36.23, p < .001, \eta^2 p = .19$. This result was the opposite of what I had hypothesized.

No interactions were observed between language and death conditions, $p = .06$.

Table 2

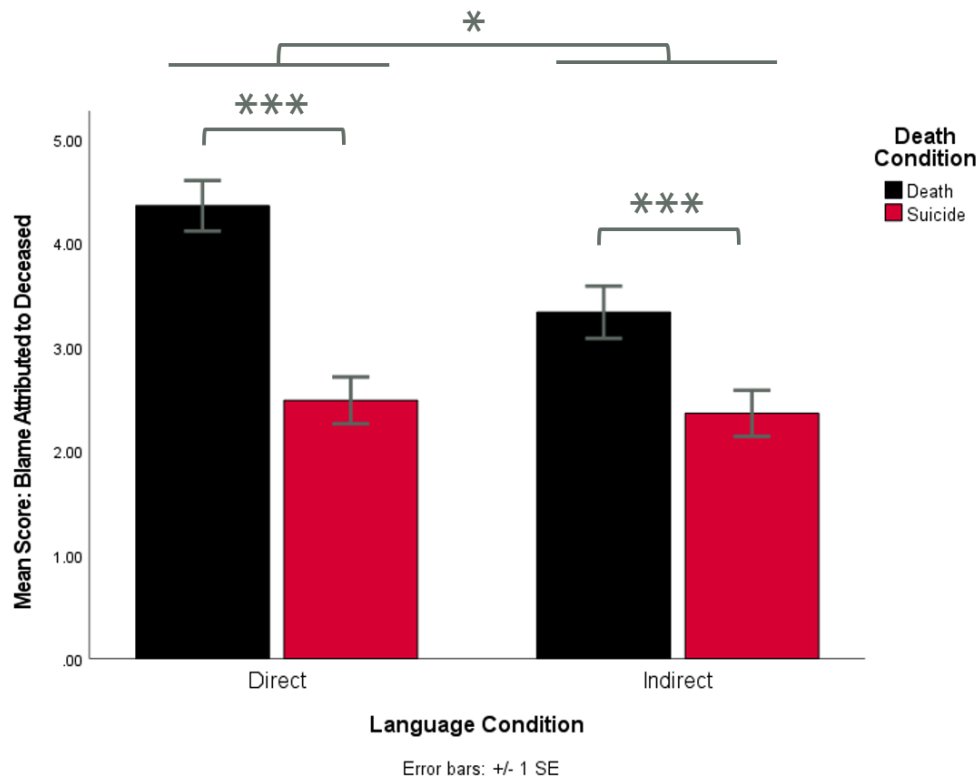
Results of ANOVA for blame attributed to the deceased.

Source	SS	df	MS	F	p	$\eta^2 p$
Corrected Model	98.20	3	32.73	14.74***	<.001	.22
Language Condition	13.13	1	13.13	5.19*	.02	.04
Death Condition	80.47	1	80.47	36.23***	<.001	.19
Language Condition x Death Condition	8.04	1	8.04	3.62	.06	.02
Error	346.44	156	2.22			
Corrected Total	444.64	159				

Note. ANOVA source table for the blame attributed to the deceased based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction. * $p \leq .05$ and *** $p < .001$.

Figure 2

Mean score for blame attributed to the deceased based on language and death conditions



Note. Bar graph depicting the mean scores for the blame attributed to the deceased measure (blame, responsibility, control, deserve) based on language and death conditions. Higher scores indicate greater blame attributed to the deceased for their own death. * $p \leq .05$ and *** $p < .001$.

Belief That Cause of Death Should Not be Disclosed

Considering the stigma that often smothers discussions of suicide, I wanted to see if the death and language conditions affected how participants felt about the cause of death being disclosed. An ANOVA exploring the effects of the language and death types on participants'

belief that the cause of death should not have been shared was not statistically significant (corrected model: $F(3, 156) = 2.37, p = .07, \eta^2p = .04$). However, a main effect was observed in that the death condition affected how much participants agreed or disagreed that the cause of death should have been shared (Table 3).

Participants felt that the cause of death should not have been shared significantly more when the death was an accident ($M = 3.65, SD = 2.03$) compared to when it was a suicide ($M = 3.02, SD = 1.80$), $F(1, 156) = 4.48, p = .04, \eta^2p = .03$ (Figure 3).

No interactions were observed between language and death conditions, $p = .14$.

Table 3

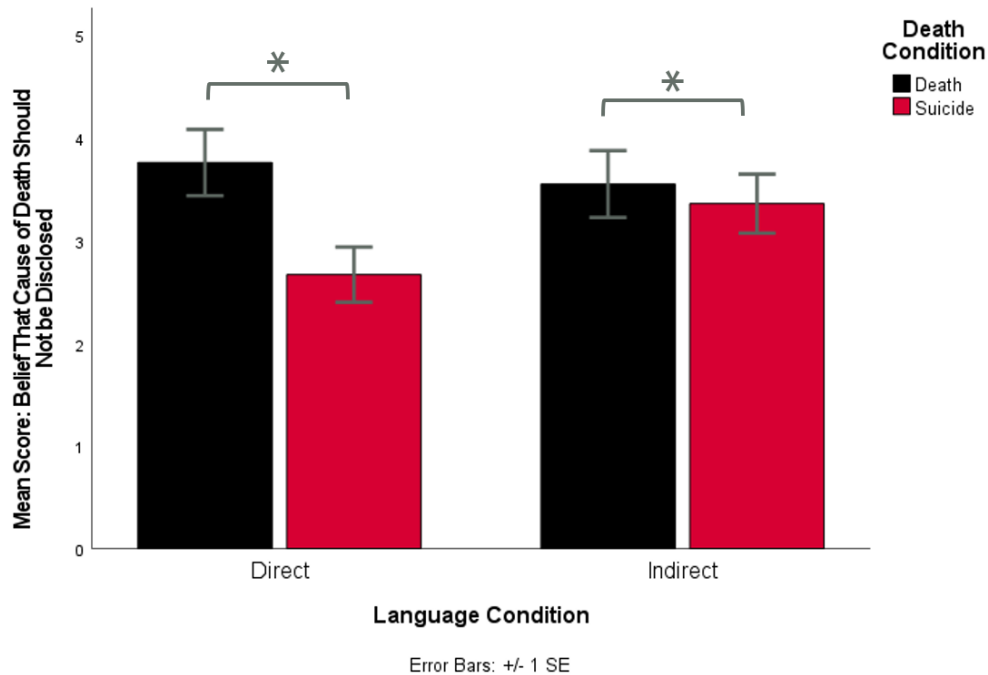
Results of ANOVA for the belief that the cause of death should not be disclosed.

Source	SS	df	MS	F	p	η^2_p
Corrected Model	25.92	3	8.64	2.37	.07	.04
Language Condition	2.31	1	2.31	.63	.43	.00
Death Condition	16.35	1	16.35	4.48*	.04	.03
Language Condition x Death Condition	8.07	1	8.07	2.21	.14	.01
Error	569.53	156	3.65			
Corrected Total	595.44	159				

Note. ANOVA source table for the belief that cause of death should not be disclosed measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction. * $p \leq .05$.

Figure 3

Mean score for whether or not the cause of death should have been shared based on language and death conditions



Note. Bar graph depicting the mean scores for the belief that cause of death should not be disclosed based on language and death conditions. Higher scores indicate a greater belief that the cause of death should *not* have been shared. $*p \leq .05$.

Mental Health Attitudes

To determine if learning about a death or suicide would affect the participants' attitudes towards mental health topics, I also measured their feelings about others having mental illnesses as well as how they expected to be treated if they sought psychological support.

Mental Illness Stigma Scale (MISS)

Participants also completed Day et al.'s (2007) Mental Illness Stigma Scale (MISS), which assesses attitudes toward people with mental illness along 7 main attitude dimensions: interpersonal anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery. There were no main effects or interactions between language or death conditions. The ANOVA source tables for these analyses can be found in Appendix J.

There was no statistically significant effect based on the language or death conditions on self-reported interpersonal anxiety ($p = .08$ for language and $p = .05$ for death conditions), relationship disruption ($p = .99$ and $p = .22$), poor hygiene ($p = .10$ and $p = .09$), visibility ($p = .08$ and $p = .15$), treatability ($p = .72$ and $p = .19$), professional efficacy ($p = .61$ and $p = .69$), or recovery ($p = .06$ and $p = .44$).

No significant interactions were observed between language and death either, all $ps > .17$.

Perceptions of Stigmatization by Others for Seeking Psychological Help (PSOSH)

The PSOSH scale was designed to measure perceptions of stigmatization by others for seeking psychological help (Vogel et al., 2009). There were no main effects or interactions between language or death conditions on the PSOSH measure, $ps > .25$. The ANOVA source tables for these analyses can be found in Appendix K.

Anxiety & Stress

To determine how the stress response to learning about a suicide differs from the reaction to learning about a death, subjective measures of immediate anxiety, death anxiety, and perceived stress were utilized alongside an objective measure of heart rate change.

Immediate Anxiety

An ANOVA probing the influence of language on feelings of immediate anxiety was only marginally significant, (corrected model: $F(3, 156) = 2.41, p = .07, \eta^2 p = .04$). However, the analysis observed a main effect in that the language condition affected the amount of anxiety that participants experienced (Table 4).

As seen in Figure 4, participants who viewed the death announcement that used direct language felt significantly *more anxious* ($M = 3.76, SD = 1.29$) than those that viewed the announcement with indirect language ($M = 3.31, SD = .90$), $F(1, 156) = 6.78, p = .01, \eta^2 p = .04$.

No interactions were observed between language type and death type, $p = .55$.

Table 4

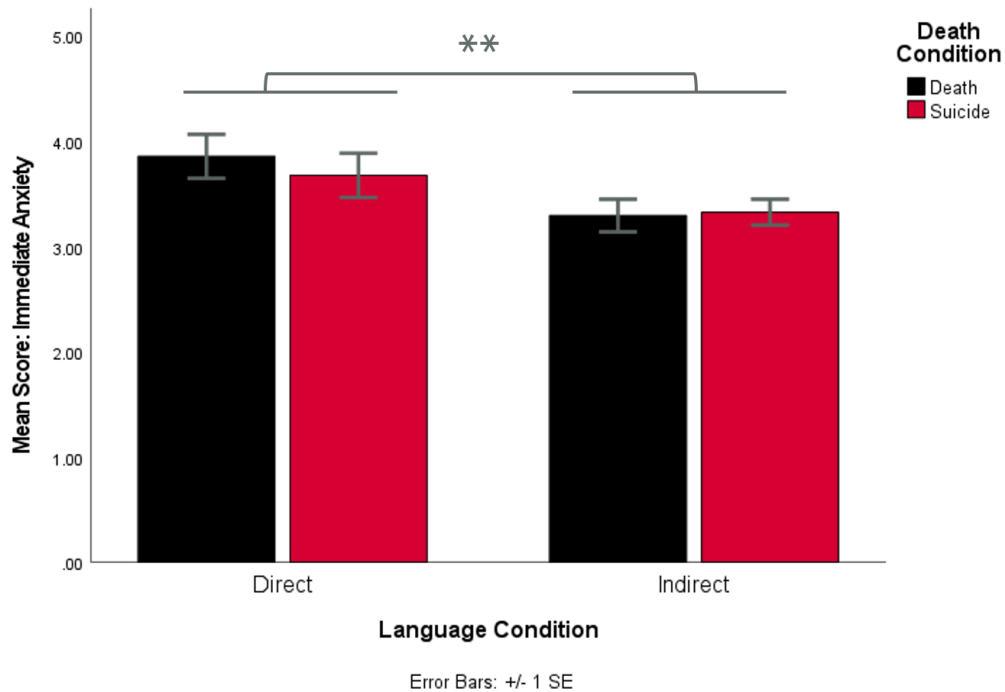
Results of ANOVA of immediate anxiety.

Source	SS	df	MS	F	p	$\eta^2 p$
Corrected Model	8.85	3	2.95	2.41	.07	.04
Language Condition	8.29	1	8.29	6.78**	.01	.04
Death Condition	.22	1	.22	.18	.67	.00
Language Condition x Death Condition	.45	1	.45	.37	.55	.00
Error	190.83	156	1.22			
Corrected Total	199.68	159				

Note. ANOVA source table for the immediate anxiety measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction. ** $p \leq .01$.

Figure 4

Mean score for immediate anxiety based on language and death conditions



Note. Bar graph depicting the mean scores for the immediate anxiety measure (cognitive anxiety, somatic anxiety, and confidence (reverse-scored)) based on language and death conditions. Higher scores indicate greater feelings of anxiety. $**p \leq .01$.

Death Anxiety

An ANOVA examining the effect of the death and language conditions was not statistically significant (corrected model: $F(3, 156) = 1.71, p = .17, \eta^2 p = .03$). However, similar to the trend observed with immediate anxiety, a main effect was seen in that the language condition affected the amount of death anxiety that the participants experienced (Table 5).

Participants who viewed the death announcement that used direct language experienced statistically significantly more death anxiety ($M = 3.41$, $SD = .78$) than those who viewed the announcement that used indirect language ($M = 3.13$, $SD = .90$), $F(1, 156) = 4.19$, $p = .04$, $\eta^2_p = .03$, (as depicted in Figure 5).

Table 5

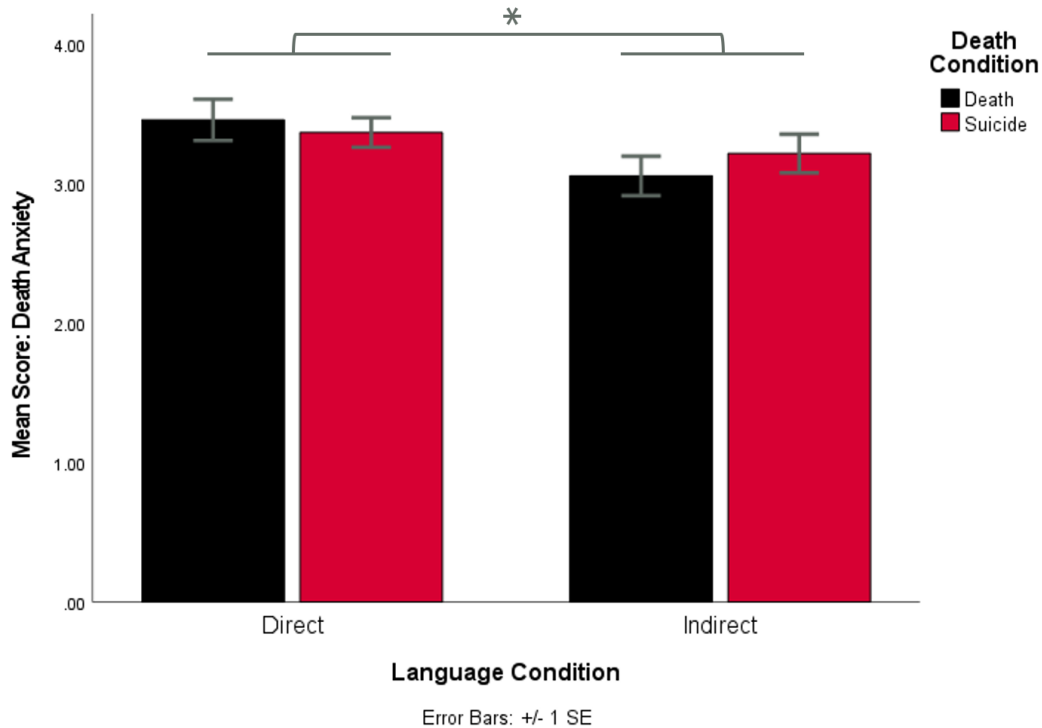
Results of ANOVA death anxiety.

Source	SS	df	MS	F	p	η^2_p
Corrected Model	3.71	3	1.24	1.71	.17	.03
Language Condition	3.03	1	3.03	4.19*	.04	.03
Death Condition	.05	1	.05	.07	.80	.00
Language Condition x Death Condition	.63	1	.63	.87	.35	.01
Error	112.81	156	.72			
Corrected Total	116.52	159				

Note. ANOVA source table for the death anxiety measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction. $*p \leq .05$.

Figure 5

Mean score for death anxiety based on language and death conditions



Note. Bar graph depicting the mean scores for the death anxiety measure (own death, own dying, others' death, others dying) based on language and death conditions. Higher scores indicate greater feelings of death anxiety. $*p \leq .05$.

Perceived Stress

Unlike the immediate and death anxiety measures, there were no main effects or interactions between language or death conditions on perceived stress, $ps > .17$. The ANOVA source tables for these analyses can be found in Appendix L.

Heart Rate

All Conditions

Of the 160 participants that completed the study, 82 of them (52 males, 29 females, and 1 other; ages 24-72, mean age: 38) reported their heart rates during the study. A repeated-measures ANOVA with a Greenhouse-Geisser correction observed that participants' mean heart rate differed significantly over the course of the study, $F(1.80, 140.59) = 4.24, p = .02, \eta^2 p = .05$, (seen below in Table 6).

Table 6

Results of repeated-measures ANOVA with a Greenhouse-Geisser correction for mean heart rate over the course of the study.

Source		SS	df	MS	F	p	η^2_p
Heart Rate	Sphericity Assumed	201.17	2	100.59	4.24*	.02	.05
	Greenhouse-Geisser	201.17	1.80	111.61	4.24*	.02	.05
Error (Heart Rate)	Sphericity Assumed	3705.01	156	23.75			
	Greenhouse-Geisser	3705.01	140.59	26.35			

Note. ANOVA source table of the within-subjects effects for the heart rate repeated measure with all conditions combined.

Post-Hoc Fishers' LSD tests identified statistically significant pairwise comparisons. As seen in Tables 7 and 8, participants experienced an increase in heart rate after reading the death announcement email ($M = 77.62, SD = 12.48$) to ($M = 79.66, SD = 13.48$), $p = .01$. Heart rate then decreased by the end of the study ($M = 78.06, SD = 12.19$), $p = .05$.

These changes in mean heart rate can be seen in Figure 6.

Table 7*Descriptive statistics for heart rate*

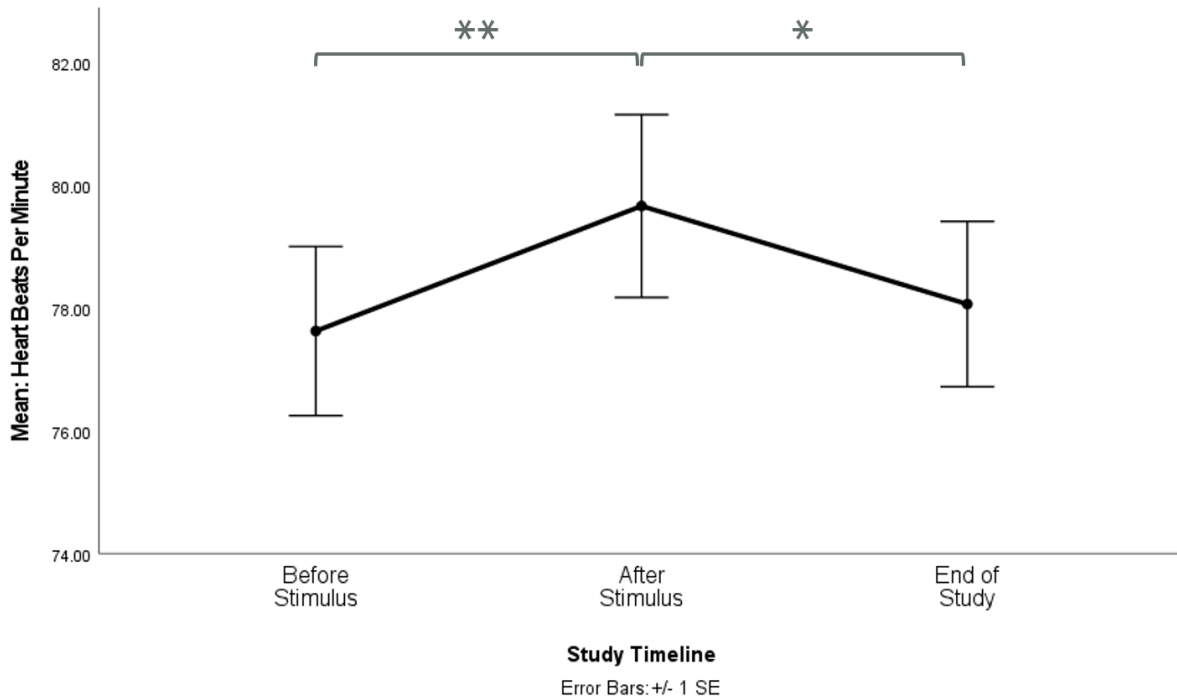
Source	N	HR 1		HR 2		HR 3	
		M	SD	M	SD	M	SD
Heart Rate	82	77.62	12.48	79.66	13.48	78.06	12.19

Note. ANOVA source table of descriptive statistics for the heart rate measure with all participants combined.

Table 8*Pairwise comparisons of mean heart rates at the three timepoints*

Source	<i>I (HR)</i>	<i>J (HR)</i>	<i>Mean Diff. (I-J)</i>	<i>SD</i>	<i>p</i>
Heart Rate	1	2	-2.16**	.86	.01
		3	-.62	.64	.34
	2	3	1.54*	.77	.05

Note. ANOVA source table of the pairwise comparisons for the heart rate repeated measure with all conditions combined.

Figure 6*Participants' mean heart rate over time*

Note. Line graph depicting the mean heart rate of all participants over the course of the study. $*p \leq .05$ and $**p \leq .01$.

Death Condition

While the heart rate data showed a general trend without considering the different conditions, I wanted to investigate the effect of the death condition on heart rate change. A repeated-measures ANOVA with a Greenhouse-Geisser correction observed that participants' mean heart rate did not significantly differ over the course of the study based on the death condition, $F(1.80, 140.59) = .92, p = .39, \eta^2 p = .01$, (Table 9).

Table 9

Results of repeated-measures ANOVA with a Greenhouse-Geisser correction for mean heart rate over based on death condition

Source		SS	df	MS	F	p	η^2_p
Heart Rate	Sphericity Assumed	43.86	2	21.93	.92	.39	.01
	Greenhouse-Geisser	43.86	1.80	24.33	.92	.39	.01
Error (Heart Rate)	Sphericity Assumed	3705.01	156	23.75			
	Greenhouse-Geisser	3705.01	140.59	26.35			

Note. ANOVA source table of the within-subjects effects for the heart rate repeated measure based on death condition.

However, Post-Hoc Fisher's LSD tests identified statistically significant pairwise comparisons. As seen in Tables 10 and 11, when participants viewed the accidental death scenario, they experienced an increase in heart rate between the first time point (before reading the death announcement email; $M = 77.46$, $SD = 11.98$) and the second time point (after reading the email; $M = 80.15$, $SD = 14.44$), $p = .02$ as depicted in Figure 7.

No significant pair-wise comparisons were observed when participants viewed the suicide scenario, $ps > .11$.

Table 10

Descriptive statistics for heart rate based on death condition

Source	N	HR 1		HR 2		HR 3	
		M	SD	M	SD	M	SD
Death Condition							
Non-Intentional (Death)	41	77.46	11.98	80.15	14.44	78.71	12.72
Intentional (Suicide)	41	77.78	13.11	79.17	12.62	77.41	11.76

Note. ANOVA source table for the heart rate repeated measure based on the death (death vs. suicide) condition.

Table 11

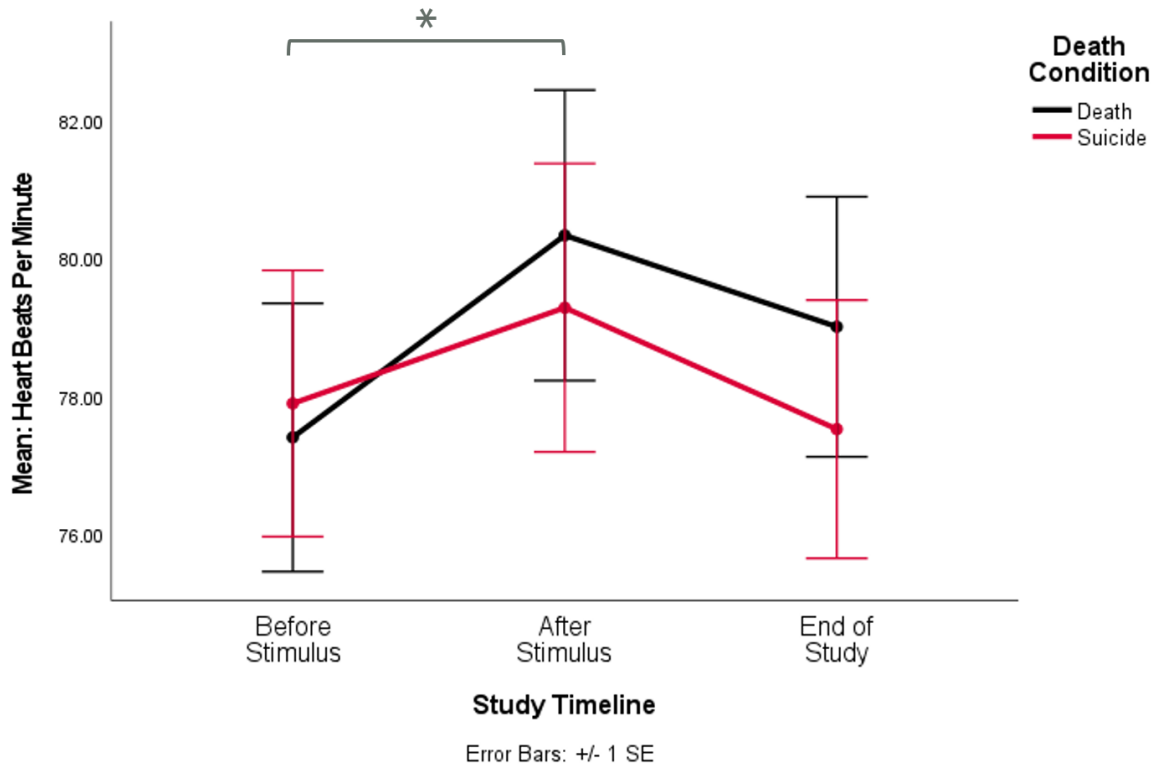
Pairwise comparisons of mean heart rates at the three timepoints

Source	I (HR)	J (HR)	Mean Diff. (I-J)	SD	p
Death Condition					
Non-Intentional (Death)	1	2	-2.93*	1.23	.02
		3	-1.60	.91	.08
	2	3	1.35	1.10	.23
Intentional (Suicide)	1	2	-1.39	1.22	.26
		3	.37	.90	.68
	2	3	1.76	1.09	.11

Note. ANOVA source table of the pairwise comparisons for the heart rate repeated measure based on the death (death vs. suicide) condition. * $p \leq .05$.

Figure 7

Mean heart rate over time based on the death condition



Note. Line graph depicting the mean heart rates over the course of the study based on the death (death vs. suicide) condition. $*p \leq .05$.

Language Condition

Finally, when examining the influence of language, a repeated-measures ANOVA observed no main effect in that the language condition did not affect the overall trend of the participants' heart rate over the course of the study, $F(1.80, 140.59) = 2.30, p = .10, \eta^2 p = .03$, (as noted in Table 12).

Table 12

Results of repeated measures ANOVA with a Greenhouse-Geisser correction for mean heart rate over based on language condition

Source		SS	<i>df</i>	MS	<i>F</i>	<i>p</i>	η^2_p
Heart Rate	Sphericity Assumed	109.30	2	54.65	2.30	.10	.03
	Greenhouse-Geisser	109.30	1.80	60.64	2.30	.11	.03
Error (Heart Rate)	Sphericity Assumed	3705.01	156	23.75			
	Greenhouse-Geisser	3705.01	140.59	26.35			

Note. ANOVA source table of the within-subjects effects for the heart rate repeated measure based on language condition.

However, Post-Hoc Fisher's LSD tests identified statistically significant pairwise comparisons. When participants viewed the direct language announcement, they experienced a decrease in heart rate between the second time point (after reading the email; $M = 80.95$, $SD = 15.06$) and the last time point at the end of the study ($M = 78.84$, $SD = 13.44$), $p = .05$.

Furthermore, when participants viewed the death announcement that used indirect language, they experienced an increase in heart rate after reading the death announcement email (before: $M = 75.15$, $SD = 10.68$; after: $M = 78.23$, $SD = 11.53$), $p = .01$, as shown in Tables 13 and 14. A significant increase in heart rate was also found between the first time point (before reading the announcement) and the last time point at the end of the study ($M = 77.25$, $SD = 10.67$), $p = .02$.

These changes in heart rate based on the language condition can be seen in Figure 8.

Table 13

Results of repeated-measures ANOVA with a Greenhouse-Geisser correction for mean heart rate over the course of the study.

Source	N	HR 1		HR 2		HR 3	
		M	SD	M	SD	M	SD
Language Condition							
Direct	43	79.86	13.65	80.95	15.06	78.84	13.44
Indirect	39	75.15	10.68	78.23	11.53	77.25	10.67

Note. ANOVA source table for the heart rate repeated measure based on the language (indirect vs. direct) condition.

Table 14

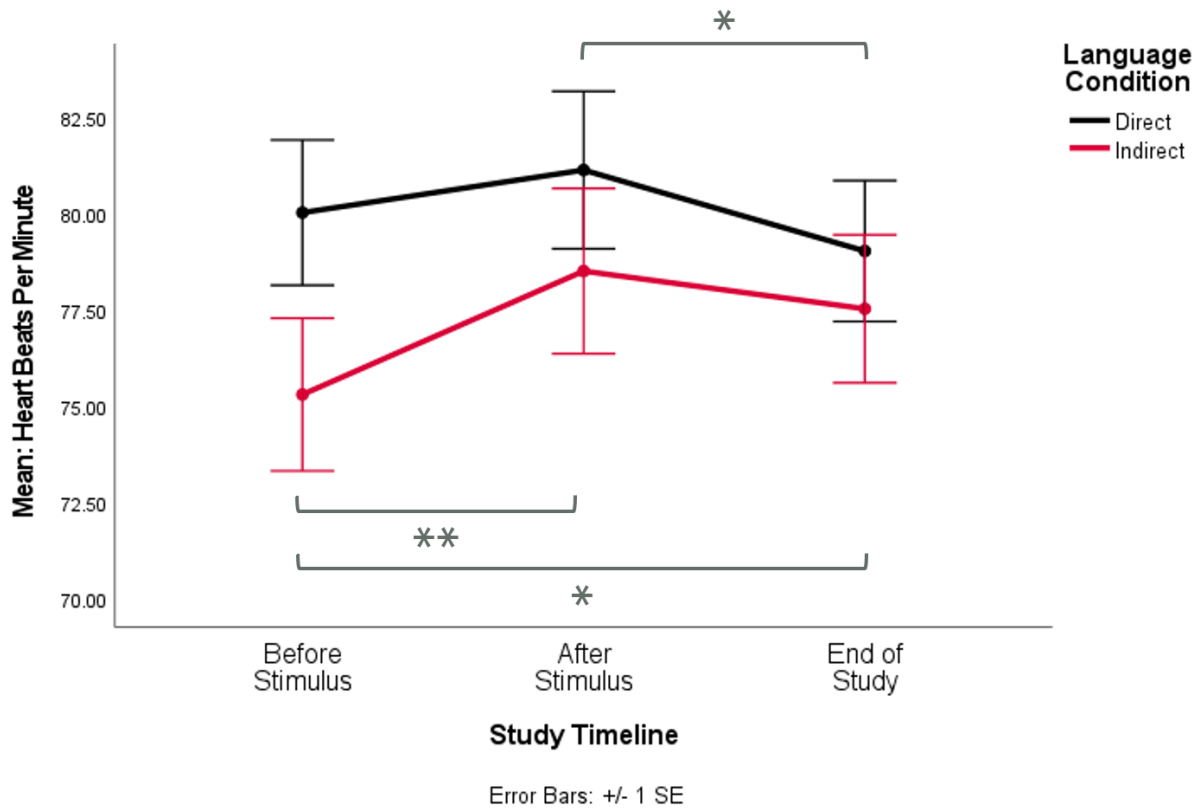
Pairwise comparisons of mean heart rates at the three timepoints

Source	I (HR)	J (HR)	Mean Diff. (I-J)	SD	p
Language Condition					
Direct	1	2	-1.11	1.19	.36
		3	1.00	.88	.26
	2	3	2.11*	1.07	.05
Indirect	1	2	-3.21**	1.25	.01
		3	-2.23*	.93	.02
	2	3	.98	1.12	.38

Note. ANOVA source table of the pairwise comparisons for the heart rate repeated measure based on the language (indirect vs. direct) condition.

Figure 8

Mean heart rate over time based on the language condition



Note. Line graph depicting the mean heart rates over the course of the study based on the language (indirect vs. direct) condition. * $p \leq .05$ and ** $p \leq .01$.

DISCUSSION

As a reminder, this study was designed to investigate the emotional and physiological reactions to learning about a suicide, as well as perceptions of the incident and the person involved. I also wanted to examine any potential influence that the type of language used to communicate the incident may have (more specifically, direct vs indirect/euphemistic language). My dependent measures included the participants' feelings of immediate or general anxiety, as well as their feelings of anxiety particularly relating to death and dying. I also wanted to know more about participants' mental health attitudes and their perception of the deceased and the circumstances of their death to see if these feelings related to how they reacted to learning about that death, particularly in the suicide condition. Then, to get more insight into their physiological reactions, I had participants complete a questionnaire to gauge the amount of stress they experienced during the study. Finally, I collected their heart rates at various points during the experiment for an objective measure of their physiological response.

With past research indicating that learning about death can cause emotional and physiological stress, this work aimed to investigate if learning about a suicide would elicit a similar or perhaps more intense stress response, and perhaps that stress contributes to why we really do not like talking about suicide, even more than we do not like talking about death. I was also interested in seeing if how we talk about different types of death might speak to the prevalence and perpetuation of the stigma surrounding mental health and its public discussion.

The Positive Effects of Euphemisms

The results indicate that direct language leads to greater immediate anxiety and death anxiety. Since participants reported lower feelings of anxiety (and no difference in feelings of

stress) when they viewed the indirect language, it seems that the use of euphemisms may indeed shield the recipient from emotional distress.

The language difference also appeared to lead to more significant changes in heart rate than the death condition, suggesting that the language used to convey the news of a death affects the physiological stress response to that news. However, the increase in heart rate associated with the indirect language condition suggests that this type of language is actually more stress-inducing when compared to direct language, contrary to the self-reported feelings of anxiety and stress previously mentioned. This discrepancy could be due to self-monitoring causing the participants to not want to admit that discussion of death makes them feel anxious and stressed, or this effect could simply be happening on a subconscious level that the participants are not fully processing into awareness. Further research could provide clarity on why these findings seem to conflict.

Findings also indicate that the deceased was viewed more negatively when their death was conveyed using direct language. They were also blamed more for their own death. Therefore, using indirect language may be helpful when attempting to depict the deceased in a more positive light. A possible explanation for this is that feelings of death anxiety cause people to not want to discuss death to begin with, so they may be reacting negatively simply because the situation involved the loss of life. However, euphemistic language allows speakers to skirt around the severity of the topic. In contrast, direct language may be perceived as more “in your face,” forcing those conversing to confront the topic head-on. People may essentially “push back” in order to re-establish that distance, and in doing so they may over-correct and blame the victim more and perceive the deceased more negatively.

There is also the possibility that because direct language is often viewed as cold (in the heartless sense, not the temperature sense), it could seem like the author of the message is using direct language because of their feelings about the topic (such as how they personally feel about the deceased or how they feel that other people should feel about the way that they died). Therefore, the reader could be noticing this subtle signaling as they interpret the situation through the speaker and the language that they used. This could then affect how the reader reacts to the message and to those involved in the communication.

Increasing Understanding of Suicide

People tended to perceive the deceased more positively when they viewed the suicide death scenario compared to the accidental scenario, suggesting that even though there were no statistically significant differences in empathy, people may still have kinder attitudes towards those who die by suicide. The thought of a car accident may seem more relatable as it is a possibility that all drivers face whenever they get behind the wheel. This feeling of closeness to the scenario and to deceased could have made harsher judgment more accessible as people attempt to reject the thought that such an accident could happen to them. This pushing back against feelings of connection to the deceased could be seen as a form of victim-blaming and can be explained using the just-world theory (Van der Bruggen & Grubb, 2014). The just-world phenomenon is the tendency for people to believe that the world is inherently just ("APA Dictionary of Psychology," 2022). In such a world, people get what they deserve, even when they are victims of injustice. Because we want to believe the world is fair, when bad things happen, we look for ways to rationalize and reduce cognitive dissonance. Instead of attributing misfortune to bad luck, people tend to look for someone or something to blame, allowing them to

restore their feelings of control, order, and justice. This can then result in blaming the victim for what happened, regardless of if they had any control over the incident (Fox et al., 2010).

There were no statistically significant differences in the immediate anxiety, death anxiety, or perceived stress measures based on death condition. Therefore, my hypothesis that learning about a suicide would elicit a greater stress response than learning about death was not supported. However, the similar trends in heart rate change over the course of the study suggest that learning about a suicide does indeed evoke a similar physiological stress response to learning about an accidental death. With no true control condition (one that did not involve learning about any kind of death) it is difficult to tell if these differences are truly due to the different death conditions or if the general idea of a loss of life causes an overarching effect. Further research would be needed to continue exploring this gap in our understanding of how learning about a suicide can affect us.

While the accidental death condition did prompt the expected increase in heart rate associated with death anxiety, no such response was observed in the suicide condition. My hypothesis that learning about a suicide would cause a greater physiological stress response is therefore not supported. However, these results once again seem to suggest that participants may experience a physiological reaction without consciously being aware of an emotional response. This trend echoes the findings for the language condition as participants' heart rates increased in the death condition but they did not report a corresponding increase in feelings of anxiety or stress. Further research could provide clarity on why these findings do not seem to align.

Findings also suggest that the public may recognize the complexity of suicide more than expected. Participants did not explicitly display stigmatizing attitudes to the degree predicted. While these results could be due to self-monitoring and over-correcting, such a scenario would

still demonstrate participants' awareness of societal views of suicide. This is in line with recent work that has found that the 81% of the U.S. public feels that mental health awareness and suicide prevention should be national priorities (The Harris Poll, 2020, p. 12).

The finding that participants were more likely to feel that the cause of death should have been disclosed in the suicide scenario suggests that people are more willing to acknowledge suicide than I expected. Instead, this result indicates progress towards transparent discussions about suicide. It is significant that people do not feel the need to hide a cause of death when discussing suicide. While they may not actively share or initiate the discussions, it does not seem like they will actively prevent these conversations from occurring. While this may seem like a small step in the fight for mental health awareness, being receptive is a meaningful improvement over being stigmatizing, and opens the door to an educated future.

Collectively, the lack of stigmatizing attitudes and the willingness to disclose a suicide suggests that suicide is not as stigmatized as it once was. This result stands in stark contrast to other studies that indicate that suicide remains highly stigmatized, both socially and, in some parts of the world, legally (UGMH, 2021). These more cognizant views are possibly due to recent advocacy campaigns promoting mental health education and awareness. In the past few years in particular, experiences due to COVID-19 seem to have made people more empathetic, more open to talking about mental health, and more aware of the importance of taking care of their mental health (The Harris Poll, 2020, p. 11). It seems that we are moving into a space where we can have open, honest, and respectful discussions about suicide.

Limitations & Future Directions

To further investigate the finding that the stigma surrounding suicide may be reducing and to address the limitations of self-reported data regarding a sensitive topic, future research could utilize an Implicit Association Task to measure implicit attitudes towards death and suicide. These results could then be compared to the explicit attitudes assessed in this study, potentially giving insight into any self-monitoring that may be occurring.

Employing a continuous means of measuring heart rate could also depict more precise trends and may help us understand why the self-reported feelings of anxiety and stress did not follow the same trends as the heart rate data when looking at how language influences people's stress response to learning about a death compared to a suicide.

Other work could investigate the types of media that people have encountered and how those experiences may influence their views. This direction is interesting from a sociological perspective. Content creators frequently censor words or find alternative terms to discuss sensitive topics in order to elude algorithms that would otherwise remove their content from the platform. This could be seen as the creation of modern euphemisms that allow us to have those discussions with others (at least in public). We want to talk about it and we are finding ways to do so while maintaining efforts to seem polite and to abide by social contracts involving the avoidance of sensitive or taboo topics. It is also becoming increasingly common to preface videos with trigger warnings. These patterns suggest that people are actively attempting to be considerate in their discussions of difficult topics. However, since people still recognize that certain terms should be censored, this may not quite be a destigmatizing act.

Finally, as this study only utilized one death scenario (the car accident or intentional crash), additional research could also expand on people's perceptions of death by exploring

different death scenarios, particularly those commonly associated with acts of suicide (i.e., by firearm, self-harm, or overdose). Another direction for future work could be examining if the gender of the deceased affects one's perspective of that individual and/or their death since Alex's gender was not specified in the materials that the participants viewed. People may have been biased even towards an accident because they could have thought that the accident occurred due to negligence or poor driving practices, (especially if they thought Alex was a female and they stereotypically believe women to be bad drivers). Researching other scenarios that might not prime the same kinds of implicit assumptions could better inform our understanding of how accidental deaths are perceived.

CONCLUSION

Overall, this work helps us understand the differences in how accidental death and suicide are viewed, as well as how the language we use to communicate about those deaths affects people's perceptions of that loss.

Future work can offer greater insight into the influence of direct and indirect language. Other death scenarios should also be examined for a more holistic understanding of the public's perceptions of death and how they compare to views of suicide. Further research could also explore the use of other physiological stress measures such as skin conductance and respiratory rate. Additional work in this area could help explain why participants' self-reported feelings of anxiety and stress did not seem to align with the trends observed in their heart rate data.

The findings from this study indicate that society is making promising progress towards more open discussions of suicide. Research in these areas can inform mental health advocacy and advance suicide awareness and education. It can help us foster more understanding and

supportive environments that allow us to recognize the unique type of pain that many endure everyday. While small changes in the wordings of these discussions may seem insignificant in grand scheme of things, they can make a world of difference to those facing this darkness.

Work in these areas is especially relevant in today's society as public discussions of suicide and mental health have drawn increasing media attention due to public figures dying by suicide. Mental health and suicide awareness have also increased through the use of social media platforms such as Instagram and TikTok. Through these sites, users have established communities where it is safe to have honest conversations about suicide and mental health. In recent years, COVID-19 has also drawn substantial attention to the importance of maintaining mental wellness. Hopefully, this passion project of mine becomes only one of the many studies that help us better understand the complexities of suicide discussions.

REFERENCES

- APA Dictionary of Psychology. (2022). Retrieved 25 April 2022, from <https://dictionary.apa.org/just-world-hypothesis>
- ASFP. (2022a). Risk factors, protective factors, and warning signs. Retrieved 26 April 2022, from <https://afsp.org/risk-factors-protective-factors-and-warning-signs>
- AFSP. (2022b). Suicide statistics. Retrieved 26 April 2022, from <https://afsp.org/suicide-statistics>
- Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L.L., ... & Highberger, L. (1997). Empathy and attitudes: Can feeling for a member of a stigmatized group improve feelings toward the group?. *Journal of Personality and Social Psychology*, 72(1), 105. <https://doi.org/10.1037/0022-3514.72.1.105>
- Beaton, S., Forster, P., & Maple, M. (2013). Suicide and language: Why we shouldn't use the 'C' word. *In Psych.*
- Becker, Ernest. 1971. *The birth and death of meaning: An interdisciplinary perspective on the problem of man*. 2d ed. New York: Free Press.
- Becker, Ernest. 1973. *The denial of death*. New York: Free Press.
- Becker, Ernest. 1975. *Escape from evil*. New York: Free Press.
- Carpiniello, B., & Pinna, F. (2017). The reciprocal relationship between suicidality and stigma. *Frontiers in Psychiatry*, 8, 35.
- Centre for Suicide Prevention. (2022). Suicide and Language. Retrieved 27 April 2022, from <https://www.suicideinfo.ca/resource/suicideandlanguage/#:~:text=They%20recommend%20the%20replacement%20of,suicide%E2%80%9D%20and%20%E2%80%9Csuicide.%E2%80%9D>

- Chatard, A., & Selimbegović, L. (2011). When self-destructive thoughts flash through the mind: Failure to meet standards affects the accessibility of suicide-related thoughts. *Journal of Personality and Social Psychology, 100*(4), 587–605. <https://doi.org/10.1037/a0022461>
- Cleveland Clinic. (n.d.). *Heart Palpitations & Anxiety: Causes, Symptoms & Treatment*. Retrieved December 15, 2021, from <https://my.clevelandclinic.org/health/diseases/21677-heart-palpitations-and-anxiety>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 385-396*.
- Cvinar, J. G. (2005). Do suicide survivors suffer social stigma: a review of the literature. *Perspectives in psychiatric care, 41*(1), 14-21.
- Davis, M. H. (1980). A multidimensional approach to individual difference in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*, 113– 126.
- Day, E. N., Edgren, K., & Eshleman, A. (2007). *Measuring Stigma Toward Mental Illness: Development and Application of the Mental Illness Stigma Scale 1*.
- Drapalski, A. L., Lucksted, A., Perrin, P. B., Aakre, J. M., Brown, C. H., DeForge, B. R., & Boyd, J. E. (2013). A model of internalized stigma and its effects on people with mental illness. *Psychiatric Services, 64*(3), 264–269.
- Dunne, E.J., Dunne-Maxim, K., & McIntosh, J.L. (Eds.). (1987). *Suicide and its aftermath: Understanding and counseling the survivors*. Ontario: Penguin.

- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, *302*(5643), 290–292.
https://doi.org/10.1126/SCIENCE.1089134/SUPPL_FILE/EISENBERGER_SOM.PDF
- Epstein, S., & Roupelian, A. (1970). Heart rate and skin conductance during experimentally induced anxiety: The effect of uncertainty about receiving a noxious stimulus. *Journal of Personality and Social Psychology*, *16*(1), 20–28. <https://doi.org/10.1037/H0029786>
- Ferraro, R., Shiv, B., & Bettman, J. R. (2005). Let us eat and drink, for tomorrow we shall die: Effects of mortality salience and self-esteem on self-regulation in consumer choice. *Journal of Consumer Research*, *32*(1), 65-75.
- Fox, C. L., Elder, T., Gater, J., & Johnson, E. (2010). The association between adolescents' beliefs in a just world and their attitudes to victims of bullying. *British journal of educational psychology*, *80*(2), 183-198.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In *Public self and Private Self* (pp. 189-212). Springer, New York, NY.
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., ... & Pinel, E. (1992). Why do people need self-esteem? Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of Personality and Social Psychology*, *63*(6), 913.
- Hysi, E. (2011). Aspects of Taboos and Euphemisms in Women's Language. *Mediterranean Journal of Social Sciences*, *2*(3), 379.
<https://www.richtmann.org/journal/index.php/mjss/article/view/10857>

- Klackl, J., & Jonas, E. (2019). Effects of mortality salience on physiological arousal. *Frontiers in Psychology, 10*, 1893.
- Lester, D., & Abdel-Khalek, A. (2003). The Collett-Lester fear of death scale: A correction. *Death Studies, 27*(1), 81-85.
- Levine, S. M., & Ryke, J. (1999). *Levine on coroners' courts*. Sweet & Maxwell.
- Liszka, J. J. (1990). Euphemism as transvaluation. *Language and Style, 23*(4), 409-424.
- Lucas, K., & Fyke, J. P. (2013). Euphemisms and Ethics: A Language-Centered Analysis of Penn State's Sexual Abuse Scandal. *Journal of Business Ethics 2013 122:4, 122*(4), 551–569.
<https://doi.org/10.1007/S10551-013-1777-0>
- Mcglone, M. S., Beck, G., & Pfister, A. (2006). Contamination and Camouflage in Euphemisms. *Communication Monographs, 73*(3), 261–282.
<https://doi.org/10.1080/03637750600794296>
- Mental Health Foundation. (2021). Stigma and discrimination. Retrieved 26 April 2022, from <https://www.mentalhealth.org.uk/a-to-z/s/stigma-and-discrimination>
- Minois, G. (1998). Suicide in the middle Ages. *Nuances. A history of suicide*, 1-9.
- O'Carroll, P., Berman, A., Maris, R., Moscicki, E., Tanney, B., & Silverman, M. (1996). Beyond the Tower of Babel: A Nomenclature for Suicidology. *Suicide And Life-Threatening Behavior, 26*(3), 237-252. doi: 10.1111/j.1943-278x.1996.tb00609.x
- Padmanathan, P., Biddle, L., Hall, K., Scowcroft, E., Nielsen, E., & Knipe, D. (2019). Language use and suicide: An online cross-sectional survey. *PloS one, 14*(6), e0217473.
- Pompili, M., Mancinelli, I., & Tatarelli, R. (2003). Stigma as a cause of suicide. *The British Journal of Psychiatry, 183*(2), 173-174.

- Routledge, C., & Juhl, J. (2010). When death thoughts lead to death fears: Mortality salience increases death anxiety for individuals who lack meaning in life. *Cognition and Emotion*, *24*(5), 848-854.
- Schomerus, G., Evans-Lacko, S., Rüsç, N., Mojtabai, R., Angermeyer, M. C., & Thornicroft, G. (2015). Collective levels of stigma and national suicide rates in 25 European countries. *Epidemiology and psychiatric sciences*, *24*(2), 166–171.
<https://doi.org/10.1017/S2045796014000109>
- Skarstein, S., Helseth, S., & Kvarme, L. G. (2020). It hurts inside: a qualitative study investigating social exclusion and bullying among adolescents reporting frequent pain and high use of non-prescription analgesics. *BMC Psychology*, *8*(1), 1–9.
<https://doi.org/10.1186/S40359-020-00478-2/PEER-REVIEW>
- Solomon, S. (2011). Terror Management Theory. *Psychology*.
<https://doi.org/10.1093/OBO/9780199828340-0058>
- Sudak, H., Maxim, K., & Carpenter, M. (2008). Suicide and stigma: a review of the literature and personal reflections. *Academic Psychiatry*, *32*(2), 136-142.
- Tadros, G., & Jolley, D. (2001). The stigma of suicide. *The British Journal of Psychiatry*, *179*(2), 178–178. <https://doi.org/10.1192/BJP.179.2.178>
- Taubman Ben-Ari, O., Florian, V., & Mikulincer, M. (2000). Does a threat appeal moderate reckless driving? A terror management theory perspective. *Accident Analysis & Prevention*, *32*(1), 1–10. [https://doi.org/10.1016/S0001-4575\(99\)00042-1](https://doi.org/10.1016/S0001-4575(99)00042-1)
- The Guardian. (2021). Suicide still treated as a crime in at least 20 countries, report finds.
Retrieved 26 April 2022, from

<https://www.theguardian.com/global-development/2021/sep/09/suicide-still-treated-as-a-in-at-least-20-countries-report-finds>

The Harris Poll. (2020). *Public Perception of Mental Health and Suicide Prevention Survey Results*.

<https://www.datocms-assets.com/12810/1603916624-suicideandmentalhealthpublicperceptionsurveyfinalreportaugust2020.pdf>

Thomas, O., Hanton, S., & Jones, G. (2002). An alternative approach to short-form self-report assessment of competitive anxiety: a research note. *International Journal of Sport Psychology*, 33(3), 325-336.

Toynbee, A. (1969). *Man's concern with death*. New York: McGraw-Hill. (Original work published 1968).

Trotman, G. P., Veldhuijzen van Zanten, J. J., Davies, J., Möller, C., Ginty, A. T., & Williams, S. E. (2019). Associations between heart rate, perceived heart rate, and anxiety during acute psychological stress. *Anxiety, Stress, & Coping*, 32(6), 711-727.

UGMH. (2022). *Suicide Decriminalisation | United for Global Mental Health*. Retrieved 26 April 2022, from <https://unitedgmh.org/suicide-decriminalisation>

Van der Bruggen, M., & Grubb, A. (2014). A review of the literature relating to rape victim blaming: An analysis of the impact of observer and victim characteristics on attribution of blame in rape cases. *Aggression and violent behavior*, 19(5), 523-531.

Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology*, 56(2), 301.

WebMD. (2022). Recognize the Warning Signs of Suicide. Retrieved 26 April 2022, from <https://www.webmd.com/mental-health/recognizing-suicidal-behavior>

WHO. (2021). One in 100 deaths is by suicide. Retrieved 26 April 2022, from <https://www.who.int/news/item/17-06-2021-one-in-100-deaths-is-by-suicide>

WHO. (2022). Suicide. Retrieved 26 April 2022, from <https://www.who.int/news-room/fact-sheets/detail/suicide>

WISQARS. (2022). Injury Data Visualization Tools | WISQARS | CDC. Retrieved 26 April 2022, from <https://wisqars.cdc.gov/data/lcd/home>

APPENDICES

A: Generic Work Emails

The first 5 emails that participants viewed were generic work emails.

Figure A.1

Generic Work Email #1

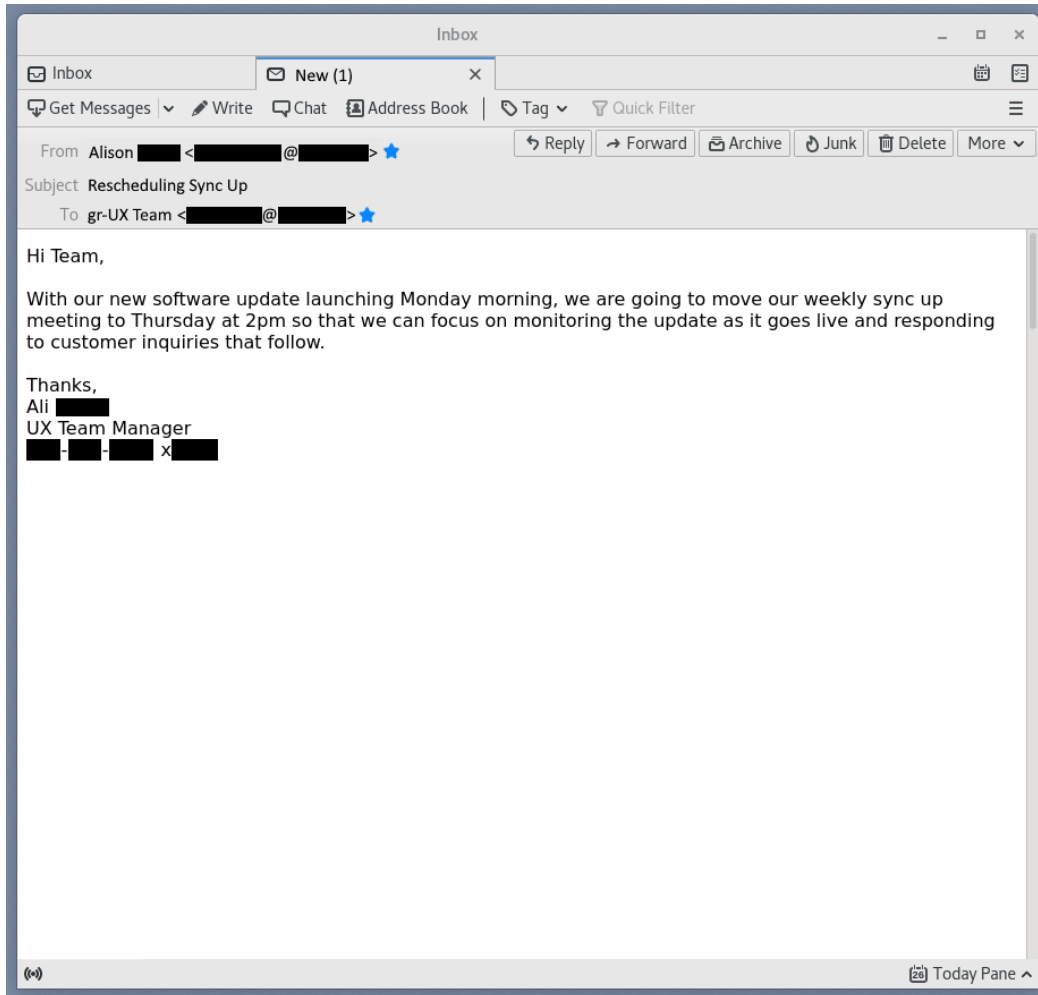


Figure A.2
Generic Work Email #2

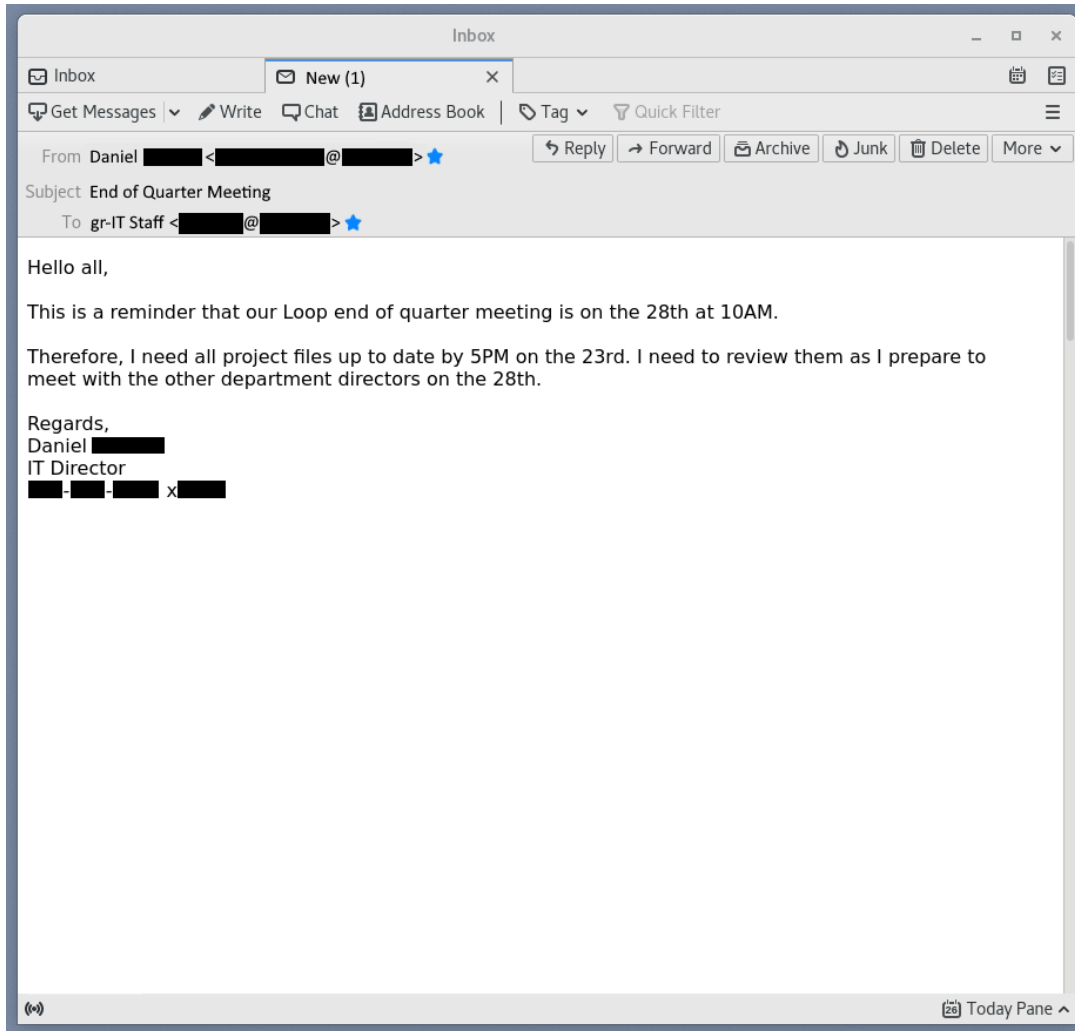


Figure A.3
Generic Work Email #3

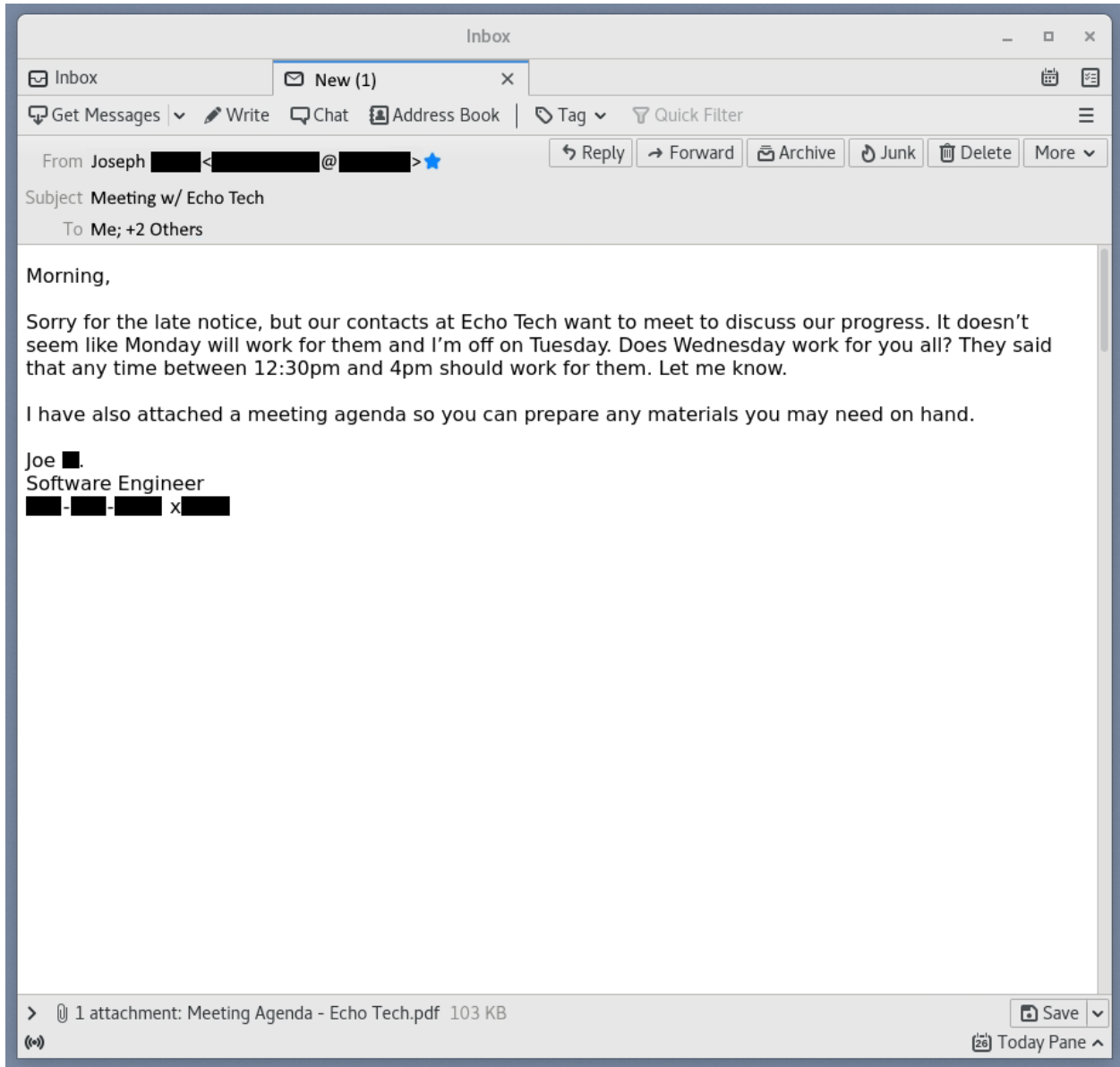


Figure A.4
Generic Work Email #4

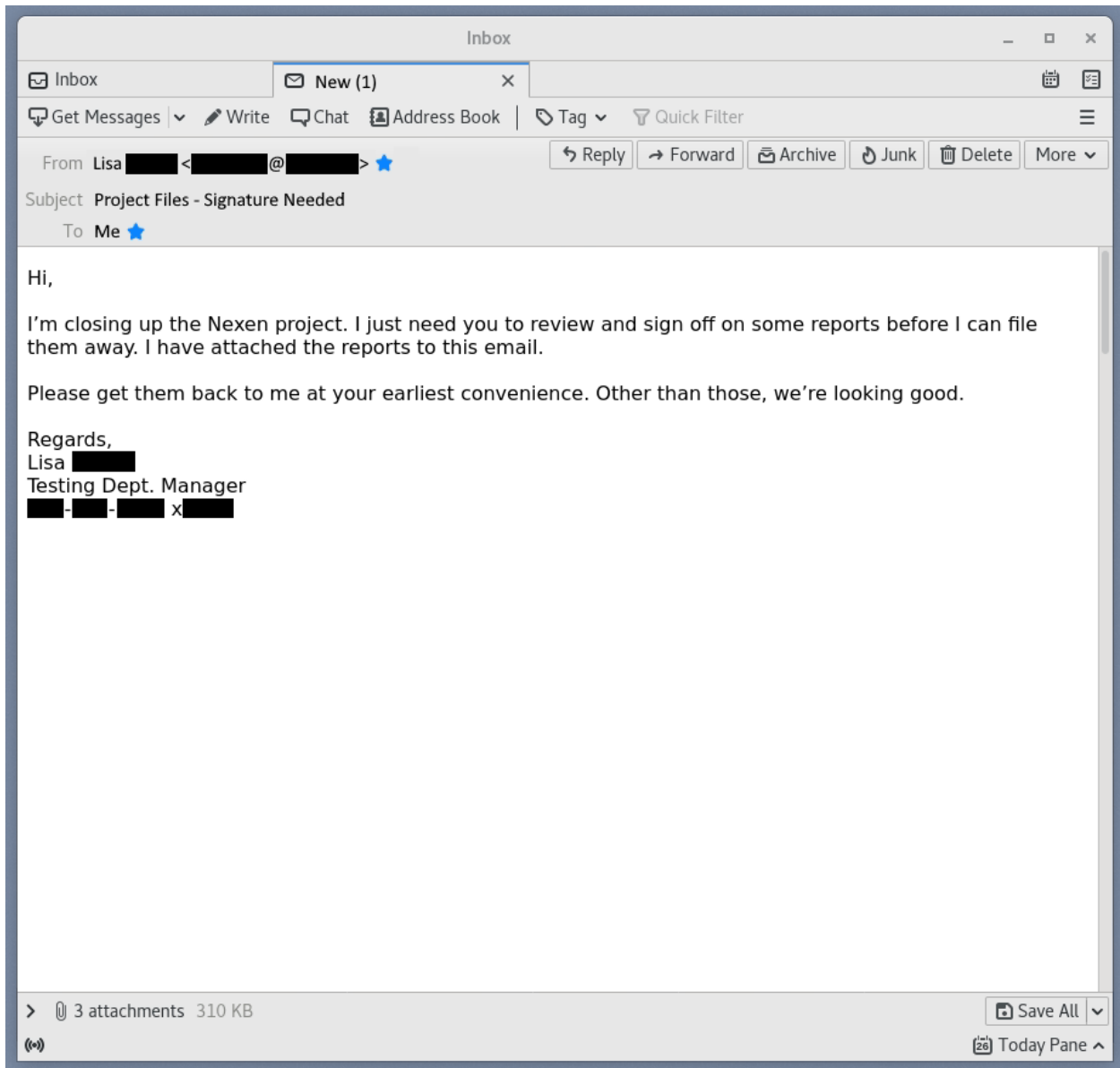
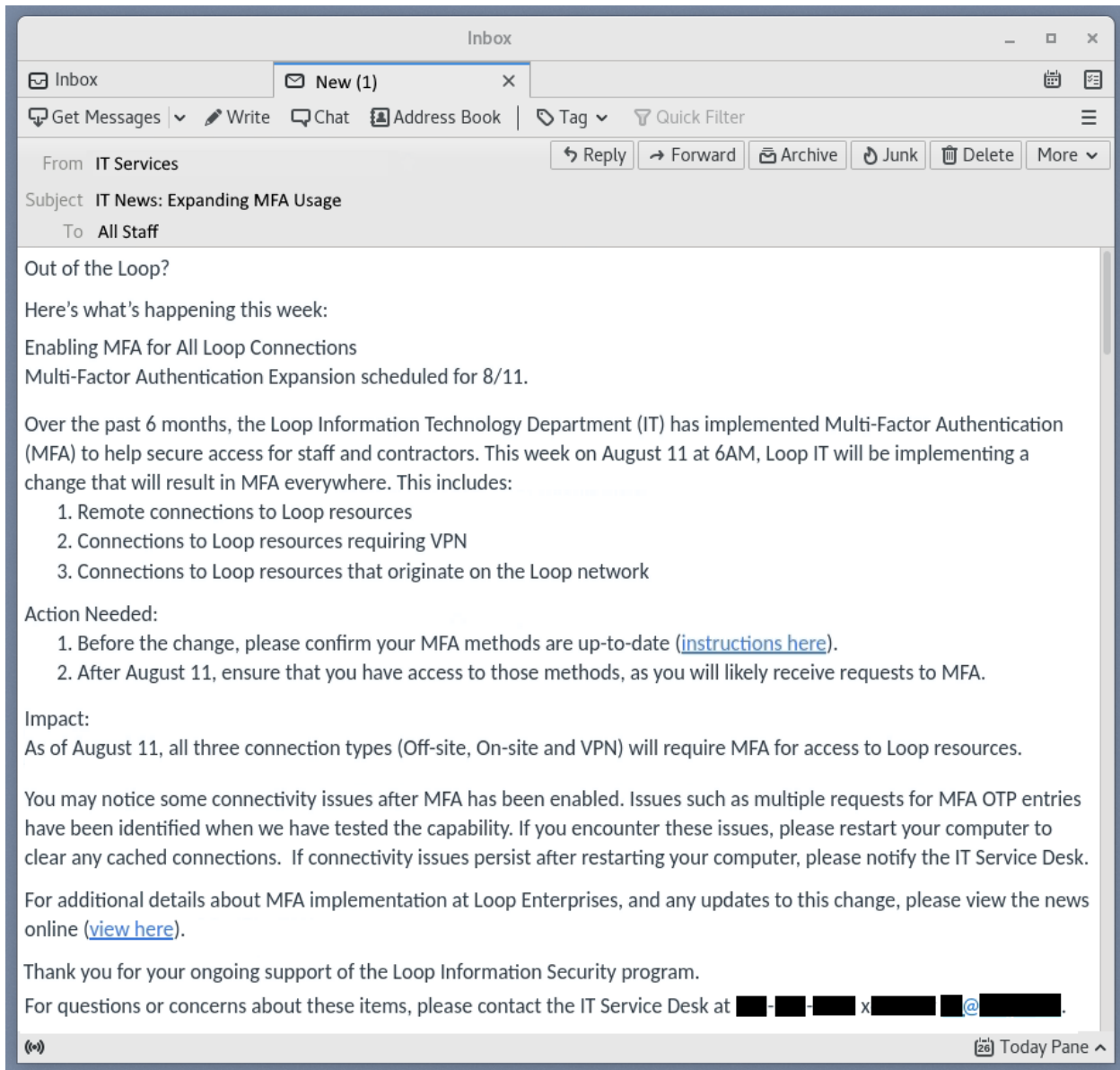


Figure A.5
Generic Work Email #5



B: Death Announcement Emails

Figure B.1

Direct + Intentional Death Announcement Email

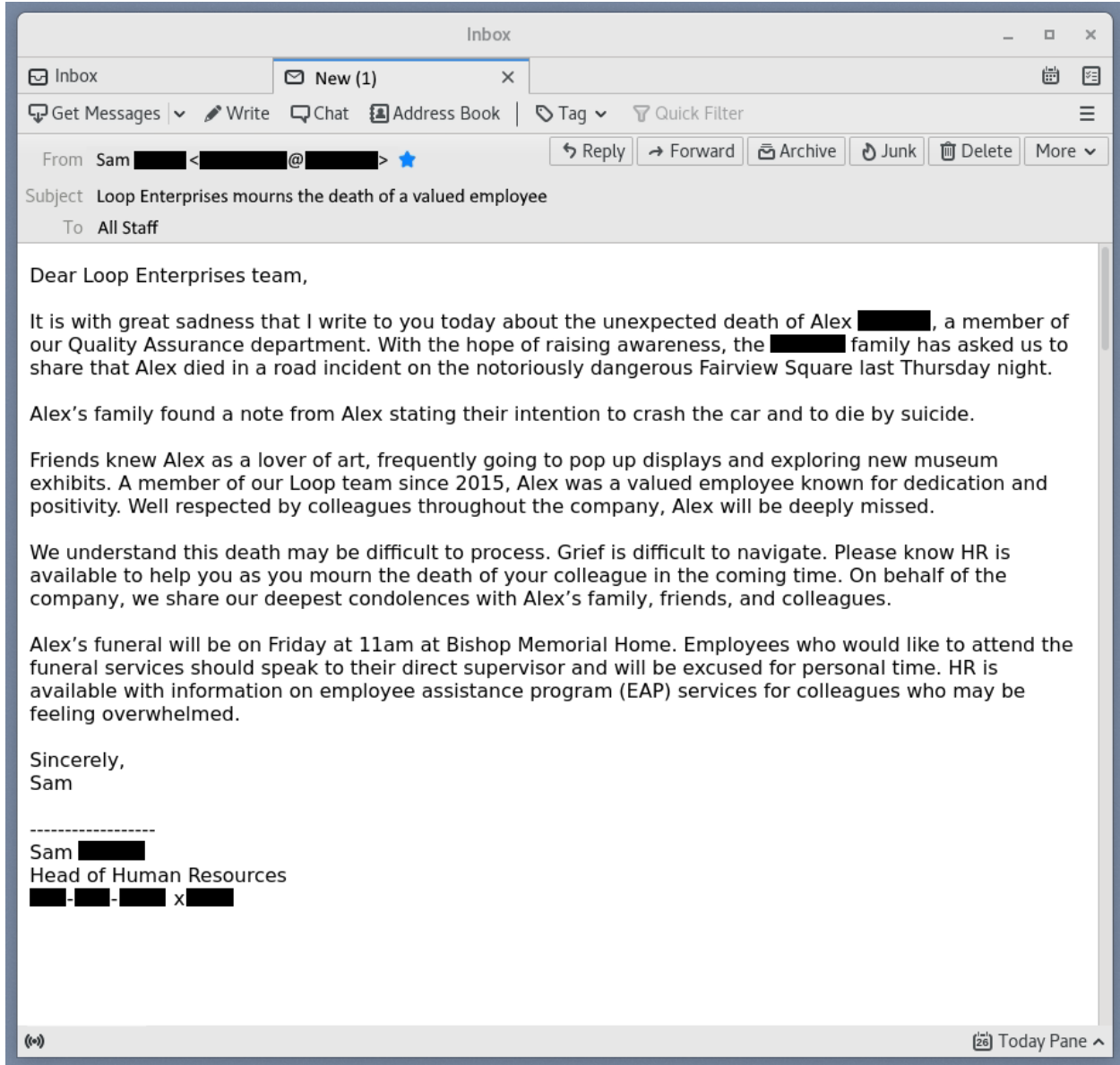


Figure B.2

Indirect + Intentional Death Announcement Email

Inbox

New (1)

Get Messages | Write | Chat | Address Book | Tag | Quick Filter

From Sam [redacted] <[redacted]@[redacted]> ★

Reply | Forward | Archive | Junk | Delete | More

Subject Loop Enterprises mourns the passing of a valued employee

To All Staff

Dear Loop Enterprises team,

It is with great sadness that I write to you today about the unexpected passing of Alex [redacted], a member of our Quality Assurance department. With the hope of raising awareness, the [redacted] family has asked us to share that Alex passed away in a road incident on the notoriously dangerous Fairview Square last Thursday night.

Alex's family found a note from Alex suggesting that the crash was not an accident.

Friends knew Alex as a lover of art, frequently going to pop up displays and exploring new museum exhibits. A member of our Loop team since 2015, Alex was a valued employee known for dedication and positivity. Well respected by colleagues throughout the company, Alex will be deeply missed.

We understand this loss may be difficult to process. Grief can be a difficult experience to navigate. Please know HR is available to help you process this loss in the coming time. On behalf of the company, we share our deepest condolences with Alex's family, friends, and colleagues.

Alex's funeral will be on Friday at 11am at Bishop Memorial Home. Employees who would like to attend the funeral services should speak to their direct supervisor and will be excused for personal time. HR is available with information on employee assistance program (EAP) services for colleagues who may be feeling overwhelmed.

Sincerely,
Sam

Sam [redacted]
Head of Human Resources
[redacted]-[redacted]-[redacted] x [redacted]

Today Pane ^

Figure B.3

Direct + Non-intentional Death Announcement Email

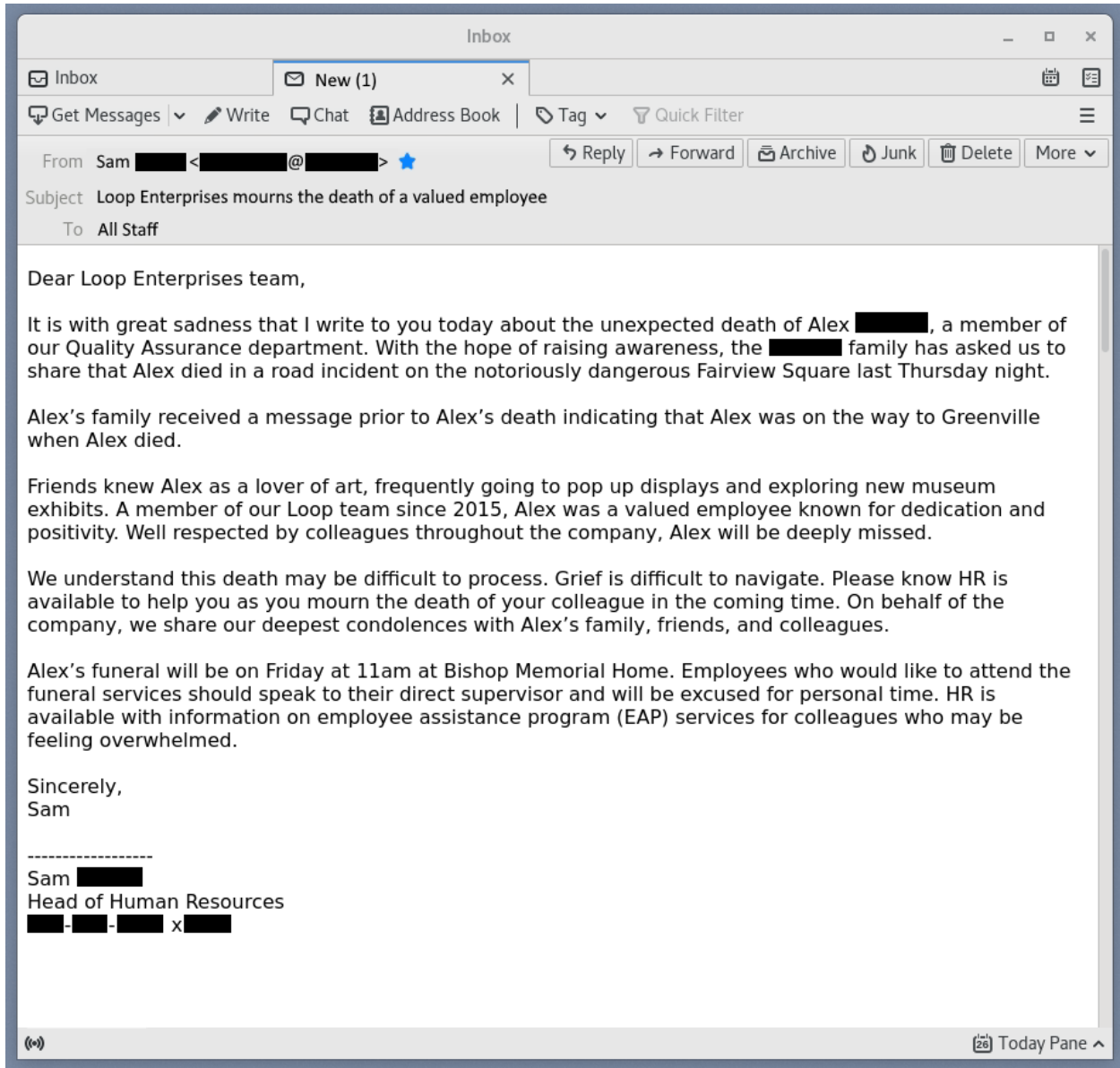
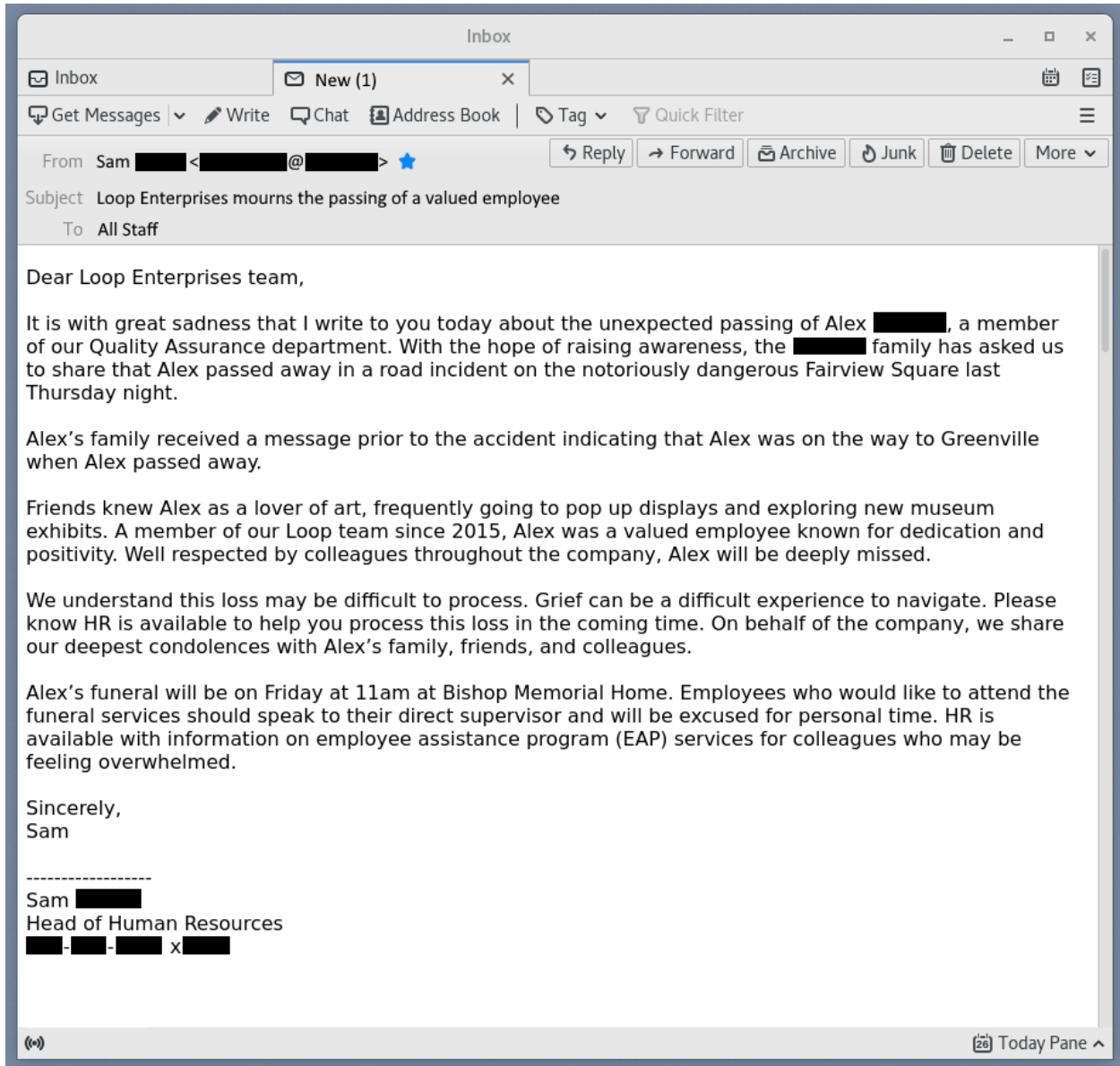


Figure B.4
Indirect + Non-Intentional Death Announcement Email



C: Immediate Anxiety Measurement Scale

- The Immediate Anxiety Measurement Scale (IAMS), (Thomas et al., 2002), is used to assess the intensity and directional interpretation of cognitive and somatic anxiety, as well as self-confidence intensity.
- “Please indicate how much you are experiencing each of the following:”
 - Participants respond to 3 items by rating how much they are experiencing each of the three constructs on a Likert-type scale ranging from 1 (Not at All) to 7 (Extremely). Participants are also asked to rate the intensity of each symptom experienced on a scale ranging from +3 (very facilitative/positive) to -3 (very debilitating/negative).
 1. I am cognitively anxious
 - a. (Cognitive anxiety = the mental component of anxiety, includes negative thoughts, concerns, and worries)
 2. I am somatically anxious
 - a. (Somatic anxiety = the bodily symptoms and sensations of anxiety, including physical nervousness, butterflies in the stomach, tense muscles, and increases in heart rate, perspiration, and respiration)
 3. I am confident
 - a. (Self-confident = a feeling of trust in one's abilities, qualities, and judgment, particularly regarding achieving goals and performing well under pressure)

D: Perceptions/Reactions Questionnaire

- Participants respond on a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).
- **Relating to Alex & Alex's friends/family**
 - a. As a person...
 - i. Alex was a burden to others
 - ii. Alex was a good person
 - iii. Alex was a caring person
 - iv. Alex was a kind person
 - v. Alex was a bad person
 - vi. Alex was a selfish person
 - vii. Alex was an attention-seeking person
 - b. Thinking about Alex, how much do you agree or disagree with the following?
 - i. Alex is to blame for their death
 - ii. Alex's death was their own fault
 - iii. Alex was responsible for their death
 - iv. Alex had control over the circumstances of their death
 - v. Alex deserved to die
 - c. Thinking about Alex's friends/family...
 - i. Alex's family/friends are to blame for their death
 - ii. Alex's death was their Alex's family/friends' fault
 - iii. Alex's family/friends were responsible for their death
 - iv. Alex's family/friends had control over the circumstances of their Alex's
 - v. Alex's family/friends deserved for Alex to die
- **Relating to the incident**
 - a. Thinking about the way Alex died, how much do you agree or disagree with the following?
 - i. The way Alex died was preventable
 - ii. The way Alex died was avoidable
 - iii. The way Alex died was shameful
 - iv. The way Alex died was embarrassing
 - v. The way Alex died was disgraceful
 - vi. The way Alex died was wrong
 - vii. The way Alex died was immoral
 - viii. The way Alex died was sinful
 - b. To what extent do you agree or disagree with the following statement:
 - i. Alex's family and the company should not have shared Alex's cause of death.
 - c. Now imagine you knew Alex personally. How much do you agree or disagree with the following statements?

- i. I have the ability to have helped Alex in that situation
- ii. I would have tried to help Alex in that situation

- **Behavioral Responses**

- a. If you had received that email about Alex and then later met Alex's friends/family, how do you think you might behave with them? This may be a hard scenario to imagine, but any response you give is helpful. (Open response)
- b. If you were a coworker/an employee at Alex's company, what type of support would you be willing to offer to Alex's friends/family? (Check all that apply)
 - i. Financial Support (ex. money)
 - ii. Informational Support (ex. Providing information about a support group)
 - iii. Emotional Support (ex. spending time with them)
 - iv. Other Tangible Support (ex. Bringing them food)
 - v. None of the above
- c. Imagine you saw a GoFundMe page for Alex's family. How much would you give? Please provide a dollar amount that you would donate. If you would not donate, please enter "0" in the box below. (Open response)

E: Batson's Empathy Scale

- Participants responded to 6 items on a scale of 1 (Not at All) to 7 (Very Much). Higher scores indicated more empathy felt for that party, (Batson et al., 1997).
 1. How much empathy did you feel for [Alex, Alex's family/friends]?
 2. How much sympathy did you feel for [Alex, Alex's family/friends]?
 3. How much compassion did you feel for [Alex, Alex's family/friends]?
 4. How soft-hearted did you feel towards [Alex, Alex's family/friends]?
 5. How much warmth did you feel towards [Alex, Alex's family/friends]?
 6. How much tenderness did you feel towards [Alex, Alex's family/friends]?
 7. How moved were you by [Alex, Alex's family/friends]?

F: Corrected Collett-Lester Fear of Death Scale, Version 3.0

- This scale is designed to measure death anxiety, categorized by 4 death-related fears: death of self, dying of self, death of others, and dying of others, (Lester & Abdel-Khalek, 2003). Participants respond to 28 items (7 items per each of the 4 different fear subscales) on a Likert-type scale ranging from 1 (Not at All) to 5 (Very Much So). Higher scores indicate greater anxiety. Each 7-item subscale is scored separately.
 - a. “How disturbed or made anxious are you by the following aspects of death and dying? Read each item and answer it quickly. Don’t spend too much time thinking about your response. We want your first impression of how you think right now.”
 - Your Own Death
 1. The total isolation of death
 2. The shortness of life
 3. Missing out on so much after you die
 4. Dying young
 5. How it will feel to be dead
 6. Never thinking or experiencing anything again
 7. The disintegration of your body after you die
 - Your Own Dying
 1. The physical degeneration involved
 2. The pain involved in dying
 3. The intellectual degeneration of old age
 4. That your abilities will be limited as you lay dying
 5. The uncertainty as to how bravely you will face the process of dying
 6. Your lack of control over the process of dying
 7. The possibility of dying in a hospital away from friends and family
 - The Death of Others
 1. Losing someone close to you
 2. Having to see the person’s dead body
 3. Never being able to communicate with the person again
 4. Regret over not being nicer to the person when he or she was alive
 5. Growing old alone without the person
 6. Feeling guilty that you are relieved that the person is dead
 7. Feeling lonely without the person
 - ii. The Dying of Others
 1. Having to be with someone who is dying
 2. Having the person want to talk about death with you
 3. Watching the person suffer from pain
 4. Seeing the physical degeneration of the person's body

5. Not knowing what to do about your grief at losing the person when you are with him or her
6. Watching the deterioration of the person's mental abilities
7. Being reminded that you are going to go through the experience also one day

G: Mental Illness Stigma Scale

- The Mental Illness Stigma Scale (MISS), (Day et al., 2007), assesses the general public's attitudes toward people with mental illness, broken down into 7 main attitude dimensions: interpersonal anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery. Participants respond to 28 items on a Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Each of the 7 attitude dimension subscales is scored separately.
 - a. “Please complete the following questionnaire in accordance with your own opinions on those who have mental illnesses. You are asked to rate the extent to which you agree or disagree with each statement.”
 1. There are effective medications for [mental illnesses] that allow people to return to normal and productive lives. (Treatability)
 2. I don't think that it is possible to have a normal relationship with someone with [a mental illness]. (Relationship Disruption)
 3. I would find it difficult to trust someone with [a mental illness]. (Relationship Disruption)
 4. People with [mental illnesses] tend to neglect their appearance. (Hygiene)
 5. It would be difficult to have a close meaningful relationship with someone with [a mental illness]. (Relationship Disruption)
 6. I feel anxious and uncomfortable when I'm around someone with [a mental illness]. (Anxiety)
 7. It is easy for me to recognize the symptoms of [mental illnesses]. (Visibility)
 8. There are no effective treatments for [mental illnesses]. (Treatability; reverse-scored)
 9. I probably wouldn't know that someone has [a mental illness] unless I was told. (Visibility; reverse-scored)
 10. A close relationship with someone with [a mental illness] would be like living on an emotional roller coaster. (Relationship Disruption)
 11. There is little that can be done to control the symptoms of [mental illness]. (Treatability; reverse-scored)
 12. I think that a personal relationship with someone with [a mental illness] would be too demanding. (Relationship Disruption)
 13. Once someone develops [a mental illness], he or she will never be able to fully recover from it. (Recovery; reverse-scored)
 14. People with [mental illnesses] ignore their hygiene, such as bathing and using deodorant. (Hygiene)
 15. [Mental illnesses] prevent people from having normal relationships with others. (Relationship Disruption)

16. I tend to feel anxious and nervous when I am around someone with [a mental illness]. (Anxiety)
17. When talking with someone with [a mental illness], I worry that I might say something that will upset him or her. (Anxiety)
18. I can tell that someone has [a mental illness] by the way he or she acts. (Visibility)
19. People with [mental illnesses] do not groom themselves properly. (Hygiene)
20. People with [mental illnesses] will remain ill for the rest of their lives. (Recovery; reverse-scored)
21. I don't think that I can really relax and be myself when I'm around someone with [a mental illness]. (Anxiety)
22. When I am around someone with [a mental illness] I worry that he or she might harm me physically. (Anxiety)
23. Psychiatrists and psychologists have the knowledge and skills needed to effectively treat [mental illnesses]. (Professional Efficacy)
24. I would feel unsure about what to say or do if I were around someone with [a mental illness]. (Anxiety)
25. I feel nervous and uneasy when I'm near someone with [a mental illness]. (Anxiety)
26. I can tell that someone has [a mental illness] by the way he or she talks. (Visibility)
27. People with [mental illnesses] need to take better care of their grooming (bathe, clean teeth, use deodorant). (Hygiene)
28. Mental health professionals, such as psychiatrists and psychologists, can provide effective treatments for [mental illnesses]. (Professional Efficacy)

H: Perceptions of Stigmatization by Others for Seeking Psychological Help Scale

- The Perceptions of Stigmatization by Others for Seeking Psychological Help (PSOSH) Scale was designed to measure perceptions of stigmatization by others for seeking psychological help, (Vogel et al., 2009). Participants respond to 5 items on a Likert-type scale ranging from 0 (Not at All) to 4 (A Great Deal). Higher scores indicate greater perceived stigma.
 - a. “Imagine you had a problem that needed to be treated by a mental health professional. If you sought mental health services, to what degree do you believe that the people you interact with would _____.”
 1. Think of you in a less favorable way
 2. Think bad things of you
 3. React negatively to you
 4. See you as seriously disturbed
 5. Think you posed a risk to others

I: Perceived Stress Scale

- The Perceived Stress Scale (PSS), (Cohen et al., 1983) is a classic stress assessment instrument used to help practitioners understand how different situations affect one's feelings and perceived stress. Participants respond to 10 items on a Likert-type ranging from 1 (Never) to 5 (Very Often) Individual scores on the PSS can range from 0 to 40, with higher scores indicating greater perceived stress.
 - Scores from 0-13 are considered low stress.
 - Scores from 14-26 are considered moderate stress.
 - Scores from 27-40 are considered high stress.
- “Indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question.”
 1. In the last month, how often have you been upset because of something that happened unexpectedly?
 2. In the last month, how often have you felt that you were unable to control the important things in your life?
 3. In the last month, how often have you felt nervous and stressed?
 4. In the last month, how often have you felt confident about your ability to handle your personal problems? (reverse-coded)
 5. In the last month, how often have you felt that things were going your way? (reverse-coded)
 6. In the last month, how often have you found that you could not cope with all the things that you had to do?
 7. In the last month, how often have you been able to control irritations in your life? (reverse-coded)
 8. In the last month, how often have you felt that you were on top of things? (reverse-coded)
 9. In the last month, how often have you been angered because of things that happened that were outside of your control?
 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

J: ANOVA Results for MISS**Table J.15***Results of ANOVA for MISS: Interpersonal Anxiety subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	16.68	3	5.561	2.32	.08	.04
Language Condition	7.38	1	7.38	3.08	.08	.02
Death Condition	9.04	1	9.04	3.77	.05	.02
Language Condition x Death Condition	.01	1	.01	.003	.96	.000
Error	373.63	156	2.395			
Corrected Total	390.32	159				

Table J.2*Results of ANOVA for MISS: Relationship Disruption subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	3.38	3	1.13	.54	.66	.01
Language Condition	.001	1	.001	.000	.99	.000
Death Condition	3.12	1	3.12	1.50	.22	.01
Language Condition x Death Condition	.17	1	.17	.08	.78	.001
Error	325.33	156	2.09			
Corrected Total	328.71	159				

Table J.3*Results of ANOVA for MISS: Poor Hygiene subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	17.48	3	5.83	2.59	.06	.05
Language Condition	6.37	1	6.37	2.83	.10	.02
Death Condition	6.64	1	6.64	2.95	.09	.02
Language Condition x Death Condition	3.89	1	3.89	1.72	.19	.01
Error	351.66	156	2.25			
Corrected Total	369.14	159				

Table J.4*Results of ANOVA for MISS: Visibility subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	11.91	3	3.97	2.39	.07	.04
Language Condition	5.17	1	5.17	3.12	.08	.02
Death Condition	3.45	1	3.45	2.08	.15	.01
Language Condition x Death Condition	2.94	1	2.94	1.77	.19	.01
Error	258.97	156	1.66			
Corrected Total	270.88	159				

Table J.5*Results of ANOVA for MISS: Treatability subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	1.87	3	.62	1.32	.27	.03
Language Condition	.06	1	.06	.13	.72	.001
Death Condition	.84	1	.84	1.77	.19	.01
Language Condition x Death Condition	.88	1	.88	1.87	.17	.01
Error	73.66	156	.47			
Corrected Total	75.53	159				

Table J.6*Results of ANOVA for MISS: Professional Efficacy subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	1.74	3	.58	.35	.79	.01
Language Condition	.44	1	.44	.26	.61	.002
Death Condition	.28	1	.28	.17	.69	.001
Language Condition x Death Condition	1.11	1	1.11	.66	.42	.004
Error	261.81	156	1.68			
Corrected Total	263.55	159				

Table J.7*Results of ANOVA for MISS: Recovery subscale*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	12.34	3	4.11	1.54	.21	.03
Language Condition	9.89	1	9.89	3.71	.06	.02
Death Condition	1.59	1	1.59	.60	.44	.004
Language Condition x Death Condition	.71	1	.71	.27	.61	.002
Error	415.56	156	2.66			
Corrected Total	427.90	159				

Note. ANOVA source tables for the seven MISS measure subscales based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction.

K: ANOVA Results for PSOSH**Table K***Results of ANOVA of PSOSH.*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	2.89	3	.96	.73	.54	.01
Language Condition	1.78	1	1.78	1.35	.25	.01
Death Condition	1.01	1	1.01	.76	.38	.01
Language Condition x Death Condition	.08	1	.08	.06	.80	.000
Error	206.47	156	1.32			
Corrected Total	209.36	159				

Note. ANOVA source table for the PSOSH measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction.

L: ANOVA Results for PSS**Table L***Results of ANOVA of PSS*

Source	SS	df	MS	F	p	η^2_p
Corrected Model	.20	3	.07	.83	.48	.02
Language Condition	.16	1	.16	1.91	.17	.01
Death Condition	.02	1	.02	.23	.63	.001
Language Condition x Death Condition	.03	1	.03	.33	.57	.002
Error	12.68	156	.08			
Corrected Total	12.88	159				

Note. ANOVA source table for the perceived stress measure based on the language (direct vs. indirect) and death (death vs. suicide) conditions and their interaction.