EXISTENTIAL OPENNESS AND DISCONTINUOUS SELF-CHANGE: DIFFERING MAGNITUDES OF EXISTENTIAL THREAT

A Thesis

by

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ABSTRACT

Personal growth is a central topic of investigation in psychological research and therapeutic practice. Existing models of growth tend to emphasize forms of change that are gradual and linear in nature. This project examines a potential catalyst of discontinuous change, and in doing so draws upon experimental existential psychology and dynamical systems theory. I predicted that sufficiently challenging core existential defenses and assumptions would lead to a psychological state that is characterized by heightened openness to new perspectives. Participants were randomly assigned to a vivid contemplation of personal mortality condition or a control condition, before reading a first-person story about either the narrator's positive experiences in therapy or a control topic. I predicted that vivid contemplations of mortality would lead to greater openness to the narrator's perspective and ultimately more positive views of mental health treatment when reading the therapy narrative. Results provided no support for this hypothesis. Exploratory analyses demonstrated that death contemplation dampened the relationship between experience-taking and positive attitudes towards therapy for those who read the therapy narrative. I discuss possible reasons for lack of support for my hypothesis, as well as the theoretical and practical implications of the exploratory findings.

KEYWORDS: Mortality, Growth

CONTRIBUTORS AND FUNDING SOURCES

Contributors

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TABLE OF CONTENTS

LIST OF FIGURES

Page

LIST OF TABLES

INTRODUCTION

Questions regarding the existence and nature of enduring self-change are central to the scientific investigation of psychology. Although the success of the self-help industry in America suggests that people believe in, or at least strongly desire, quick-fixes and meaningful changes, psychological research is decidedly more pessimistic. Psychotherapy, an industry predicated on the assumption that people can change for the better, appears to largely operate under an expectation of slow, intentional change (Hayes et al., 2015; Laurenceau, Hayes & Feldman, 2007). Is the popular notion of quick-fixes and sudden transformations simply wishful thinking, or are there possible trajectories of growth that are currently underrepresented in psychological research? Based on existentially oriented frameworks in psychological science, namely that the resolution of existential concerns serves as the foundation of psychological functioning (e.g. Janoff-Bulman, 1992; Rosenblatt, Greenberg, Solomon, Pyszczynski & Lyon, 1989), I sought to explore the possibility that exposure to substantial existential threats can expedite transformational alterations of self. A series of disparate literatures provide evidence that causing a person to sufficiently question fundamental assumptions about reality can lead to a state where they are uniquely open to new worldviews and patterns of functioning, which may help facilitate abrupt and enduring change (e.g. Miller & C'deBaca, 2001; Griffiths et al., 2016). The purpose of the present research is to examine a potential catalyst of such change by leveraging research and theory on death-relevant cognitions (Greenberg et al., 1989).

Normative Investigations of Change

The topic of psychological change holds broad implications for a number of psychological subdisciplines, but it is of paramount importance to the research and practice of psychotherapy and therapeutic interventions. Though a large amount of therapeutic change

research is meant to explore the incredibly important question: “which therapeutic approaches facilitate individual change?”, comparatively little research focuses on the specific processes involved with the subjective experience of personal change (Barkham, Stiles & Shapiro, 1993). Kazdin (2007) notes: “It is remarkable that after decades of psychotherapy research, we cannot provide an evidence-based explanation for how or why even our most well studied interventions produce change” (p. 27). In some ways the current approach makes logical sense. The prevalence of psychopathology is alarmingly high (Kessler, Chiu, Demler & Walters, 2005) and the demand for mental health care cannot currently keep up with the ability of practitioners to provide it (Mowbray et al., 2010). As such, approaches that establish what works in a given population without delving much deeper are implicitly encouraged. However, without clear mechanistic insights into the psychological and neurobiological underpinnings of individual growth and transformation on a meta-level, it is incredibly difficult to extrapolate therapeutic change research beyond the specific circumstances in which it was conducted.

All of this is not to say that therapeutic change research is misguided, or even that it isn’t the most strategic approach to addressing the contemporary mental health crisis (Yarnell & Edens, 2018). However, the philosophical assumptions that are made in clinical realms about if, when and how people change carry incredible weight for practice and research, and deserve to be fully investigated. The unbalanced consideration of change that occurs gradually and linearly appears to reverberate across the field of psychological science. For example, Wrzus & Roberts (2017) recently proposed a model of personality change suggesting that adult development occurs as the result of repeated exposure to situational factors and the individual’s accompanying reactions and adaptations. In conjunction with the general consensus in personality psychology that central features of personality are relatively stable across the lifespan (e.g. Damian,

Spengler, Sutu & Roberts, 2019), this is consistent with the notion that personality change is slow and difficult to achieve. Further, cognitive abilities and tendencies have also been demonstrated to follow relatively stable and predictable trajectories across the lifespan (Craik & Bialystok, 2006). In regards to felt personal identity, people are often seen as carrying a "motivated bias" that protects them from challenges or changes to their identity (Sedikides & Alicke, 2012). Alicke, Sedikides & Zhang (2019) suggest that this motivated bias serves to filter external information in a way that helps people retain a positive self-view—a theory that implies that people protect themselves from disruptions to the homeostasis of their psychological identity. Together, these areas of research paint a picture of reluctance and labored progress in regards to self-change. However, they also are limited by their conceptualization of normative experiences, and may then fail to consider the impact of extreme circumstances or severe disruptions to the status quo.

Discontinuous Change

William James, who wrote at length about mystical experiences and general incidents of personal conversion, divided personal change into two broad categories: "volitional" change, which he characterized as a gradual process of growth that occurs as a result of intentional effort, and change stemming from "self-surrender", which he described as occurring abruptly and having the quality of happening to the individual regardless of their intentions or desires (James, 1902, pgs. 163-165). This second form of change does appear to be present in lay intuition (e.g. epiphanies, or references to an experience that "changed my life forever") and popular culture/media (e.g. Ebenezer Scrooge, villain redemption arcs), but it is under-explored in psychological research.

Abrupt psychological change has been conceptualized based on general principles of dynamical systems theory (e.g. Hayes et al., 2007). According to these perspectives, the mind can be considered a Complex Adaptive System (CAS) because it exhibits high levels of complexity, it can learn from and adapt to its environment, and it has a unified degree of organization from which higher order processes emerge (Eidelson, 1997). One feature of complex systems is that abrupt and discontinuous changes in functioning tend to be the rule, rather than the exception (Guastello, 1995). Systems naturally exhibit a "status quo bias" towards existing patterns of functioning, and when small environmental perturbations occur, the system will generally reinforce existing homeostatic processes (Kovalenko & Sornette, 2012). However, when external perturbations threaten the system beyond a certain threshold, it experiences a "bifurcation", or a rapid destabilization of normal patterns of functioning and the abrupt adoption of a qualitatively different form of homeostasis (Nowak & Lewenstein, 1995). In simpler systems, like the geological processes of a mountain, this may look like the build-up of rock displacement followed by the abrupt "phase transition" that would occur during an avalanche. In adaptive systems though, particularly a CAS, there are a variety of possible patterns of functioning that the system could potentially adopt. During the brief window of time after a bifurcation occurs, CAS's are uniquely sensitive to environmental conditions as they search for new, and potentially more adaptive, forms of homeostasis (Eidelson, 1997).

Psychological bifurcations and phase transitions may occur on a smaller scale quite often—changes in opinion after exposure to convincing disconfirming evidence, or even shifts from waking to sleeping states of consciousness, could be thought of as examples. The most impactful phase transitions in the psychological system, however, may source from the shifting of aspects of the conscious experience that existential psychologists consider the most

fundamental: core beliefs and basic assumptions about reality (Greenberg, Pyszczynski & Solomon, 1986; Janoff-Bulman, 1992). The ways that this sort of change may be exhibited in psychological functioning could perhaps be best illustrated with an example: If a person with a deterministic view of the universe saw a figure out of the corner of their eye that wasn't there when they turned to look, they would probably write it off as a perceptual anomaly. If they saw a ghost-like figure quite clearly for a brief period of time, it might be jarring, but they would most likely reassure themselves by explaining it away within their rational worldview. At a certain point, however, if they had a convincing enough encounter with a ghost, the person may have no choice but to admit that their perspective was somehow flawed, and be forced to consider new ways of viewing the world. Upon confronting the limitations of their belief, they would likely be uniquely open to new worldviews that could account for the experience. A newly adopted belief in this context would involve a fundamental shift in the way that the individual experiences and perceives reality, and corresponding changes would likely permeate widely to other aspects of their internal world. Though it may be underrepresented in psychological science, select literatures have explored discontinuous changes of self in a variety of contexts.

Trauma represents one well-researched example of people experiencing fundamental alterations of self and identity as a result of single experiences that challenge fundamental assumptions about reality. Numerous models explain how traumas exert such a profound impact on people, ranging from neurobiological accounts of amygdala hyper-reactivity and dysfunction in the hippocampus and pre-frontal cortex (de Quervain et al., 2003), to cognitive models involving attentional bias and deficits in memory formation (Brewin, 2007), to theories of emotional avoidance and dysregulation (Reynolds & Brewin, 1995). All of these explanations are likely valid ways of understanding trauma, but the existential level of analysis is most

relevant to my investigation. Janoff-Bulman (1992) suggests that traumatic events exert a negative impact, in part, by eroding basic assumptions that a person holds about the world that they live in—including that the world is generally a good and just place and that the self has meaning within it. Further research has empirically demonstrated the impact of traumatic events on existential assumptions by showing that traumatized individuals are significantly less effective at purging their minds of death-related thoughts when their core assumptions and beliefs have been undermined (Edmondson et al., 2011; Pyszczynski & Taylor, 2010). Traumatic experiences may exert largely negative impacts, but they are nonetheless a well-researched example of discontinuous change.

Of course, transformations of self following trauma need not always be negative. The experience of posttraumatic growth is a well-documented, albeit controversial, phenomenon (Tedeschi & Calhoun, 2004). According to theories of posttraumatic growth, people who have experienced a trauma sometimes develop a greater appreciation of life and a shift in priorities, more intimate relationships with others, a greater sense of personal strength, recognition of new possibilities or paths for one's life, and spiritual development. A recent meta-analysis examined 122 longitudinal studies and found a positive trend between both positive and negative life events and self-esteem, positive relationships and mastery (Mangelsdorf, Eid & Luhmann, 2019). This account of trauma fits well within the framework of systems theory and discontinuous change. When a person’s existential assumptions are sufficiently challenged they may enter a state where they are temporarily and uniquely sensitive to environmental conditions and open to altering foundational beliefs and perspectives. The often-negative outcomes associated with trauma may, then, be partially a product of the stressful and threatening environmental conditions in which they occur.

Abrupt alterations of self are inherently difficult to capture in an empirical setting, but researchers have taken a variety of approaches to exploring them. Baumeister (1994) published a theoretical account of major life changes that he called the "Crystallization of Discontent". His description of stressors and negative emotions slowly building as a result of situational factors, before reaching a certain threshold and abruptly motivating shifts in core values and ultimately behaviors, is reminiscent of the idea of a bifurcation threshold in a complex system. Following this, Miller & C'deBaca (2001) collected 55 anecdotal accounts of individuals who reported having life-changing epiphanies or transformations in discrete, anomalous experiences. Referred to by the authors as "Quantum Change", these examples of abrupt metamorphoses all had the commonality of exerting a "deep shift in core values, attitudes, or actions" (p. 58), and mostly all fit the criteria of a "mystical experience", defined by William James in 1902.

The recent resurgence in the research of psychedelic compounds has provided clear evidence of people altering fundamental assumptions as the result of discrete experiences. Experimenters have demonstrated that a single dose of psilocybin in a controlled setting can reliably induce a mystical experience, and that these experiences are often rated as one of the single most important experiences of the participant's life, leading to long-term increases in personal meaning and decreases in depression and anxiety (Griffiths, Richards, McCann & Jesse, 2006; Griffiths et al., 2016). Self-report questionnaires from psilocybin trials reveal consistent experiences of oceanic boundlessness and ego dissolution (relating to the expansion or complete loss of self-perception), internal and external unity, transcendence of space and time, transcendence of death, and a deeply felt sense that the knowledge and experiences were somehow "more real" than everyday life (Griffiths et al., 2011). Together, these areas of research provide further evidence that abrupt and enduring shifts in core beliefs and reality assumptions

can occur, and all cases seem to involve the confrontation or challenging of existing values and beliefs in some capacity.

Existential Psychology and Self-Change

Folk wisdom suggests that foundational components of self are somehow involved in major transitions (e.g. “existential crisis”, or “spiritual awakening”), but this notion is not well explored in existential psychology research. In fact, the majority of existing research in this area focuses on how people cling to and defend core beliefs, values and orientations. Empirical support for Terror Management Theory (TMT) ushered the field of social psychology toward novel investigations of the ways that existential concerns provide unconscious motivations for people’s attitudes, preferences and decisions (Rosenblatt et al., 1989). Broadly, experimental existential psychology tends to support the idea that, when existential assumptions are threatened, people respond by bolstering pre-existing sources of meaning and self-worth (Burke, Martens & Foucher, 2010; Heine, Proulx & Vohs, 2006). For example, reminders of personal mortality (a potent form of existential threat) tend to make people show a greater preference for ingroup and dislike of outgroup members (Castano, Yzerbyt, Paladino & Sacchi, 2002) and increased self-esteem striving (Landau & Greenberg, 2006). Bolstering extrinsically oriented (societally shared/accepted) sources of significance in this way is thought to help the individual deny death’s inevitability by embedding them within cultures and symbols that will last beyond their physical death (Greenberg et al., 1990).

The depiction of an existential “buffer” is reminiscent of the way that defenses are treated in clinical treatment settings. In psychoanalytic therapies, the breaking down of defenses is considered a necessary component of therapeutic change (McWilliams, 1999), but this idea of defenses having a limited capacity for stress is not commonly explored in other areas of

psychological science, especially in regards to positive change. What happens when an existential threat is too powerful for typical psychological defenses? Vess (2013) theorizes that, when sources of meaning break down, "the existential need to find new stable structure in the world may increase susceptibility to the loudest and most accessible macro-meaning frameworks available" (p. 281). This would certainly fit with the systems theory account of unique openness to environmental conditions and new patterns of functioning during the destabilization window (after a bifurcation), but it remains a mostly un-investigated topic.

Leveraging Death-Focused Thought to Initiate Openness to Self-Change

Of course, to the extent that extreme existential threats open people to new ways of being, it is important to explore processes that generate this type of change in ways that don't require actual traumatic experiences or the ingestion of illegal substances. I proposed that making people vividly confront their personal mortality would elicit a psychological state of openness to new perspectives and assumptions about reality. This idea builds upon Terror Management Theory, but critically asserts that previous investigations in this domain have focused on existential threats of a lesser magnitude.

Interestingly, one line of research has examined the impact of more vivid contemplations of individual mortality, and found that it produces markedly different outcomes than the simple reflections on mortality used in typical TMT studies. Cozzolino and colleagues (2004; 2006) published a line of research where participants read about a detailed scenario in which they are trapped in a burning building, and ultimately realize death is inevitable. In contrast to individuals who were simply asked to reflect on their own mortality more generally, participants in the death contemplation condition displayed growth-oriented outcomes that the authors described within a posttraumatic growth framework. These findings were replicated and extended by Lykins and

colleagues (2007) in a longitudinal design, who showed that, while individuals who completed standard mortality salience manipulations showed increasing trends towards extrinsic goals (e.g. status, power), those who contemplated more deeply and vividly on their mortality displayed *intrinsic* goal shifts (e.g. love, altruism, growth). This pattern is broadly consistent with the idea that, beyond a certain magnitude of threat, psychological systems display shifts in core values and processes rather bolstering typical defenses and sources of worth. Encouraging people to vividly contemplate their own mortality may threaten foundational assumptions enough to provoke a psychological phase transition.

Hypotheses

Psychological research tends to focus on normative types of change that occur incrementally over time. General principles in dynamical systems theory provide a framework for psychological systems changing in abrupt, discontinuous ways (Hayes et al., 2006), and literatures involving trauma (Pyszczynski & Taylor, 2016), mystical experiences (Miller & C'deBaca, 2001), and psychedelic experiences (Griffiths et al., 2016) provide compelling evidence that this sort of change can occur. Though the transformations described in these areas of research all involve shifts in core beliefs about reality to some extent, existential psychology strongly suggests that challenges to basic assumptions typically elicit defensiveness and the bolstering of pre-existing meaning frameworks (Burke et al., 2016; Heine et al., 2006). One line of research hints that deep contemplations of mortality provoke very different reactions than typical existential threats (Lykins et al., 2007), which is congruent with the way that complex systems are thought to respond to different magnitudes of threats to homeostatic functioning (Eidelson, 1997). Drawing all of this together, I predicted that vivid contemplations of individual

mortality would render one temporarily open to considering new perspectives and altering fundamental features of their worldview.

In order to test this idea, I conducted an experiment in which people vividly imagined a scenario where their physical death was imminent (modeled after the paradigm used by Cozzolino and colleagues) before reading a first-person narrative. If this manipulation did indeed facilitate an openness to new perspectives, then people should theoretically have inhabited the mind of the narrator more readily and integrated aspects of the narrator's worldview more effectively into their own. This was measured with a self-report experience-taking questionnaire (Kaufman & Libby, 2012). Given the potential importance of experimentally-induced discontinuous change to psychotherapy research, the story that participants read was written about the hypothetical narrator's experiences in therapy and the many benefits that it provided them. This allowed me to explore the theoretical hypothesis while also attempting to facilitate improved perceptions of therapeutic services. I predicted that intense death contemplation (vs. control) would lead to greater reports of experience-taking after reading a first-person narrative, and more positive perceptions of therapy when participants read about the narrator's beneficial experiences with a therapist (vs. a neutral control narrative).

THESIS STUDY

Method[1]

Participants

Participants (N = 511) were all undergraduate students at Texas A&M who were recruited through the online SONA portal as a partial fulfillment of their requirements for Psychology 101. Participants (N = 79) who endorsed items on the integrity check indicating that they weren't paying careful attention (e.g. "I just clicked through the questions without paying too much attention to them"; Aust, Diedenhofen, Ullrich & Musch, 2013) were excluded from the analyses. The final sample consisted of 430 participants (64.3% female, 34.9% male, 0.8% other or didn't report) aged 18-20. The sample was 72.9% White, 13.4% Hispanic/Latinx, 13.8% Asian, and 5.9% Multi-Racial.

Procedure

Participants saw the study listed through the online portal, and signed up on a voluntary basis. Once they opened the survey, the read an information sheet and advanced the page to indicate their willingness to participate. Participants first completed a visualization task designed to induce intense death reflection or reflection on a control topic. In the "Intense death reflection" group, participants listened to an audio recording that instructed them to imagine a specific scenario in which they are falling off of a building and ultimately realize that their death is inevitable. In the control group, participants listened to a recording asking them to imagine a scenario in which they are about to give a public speech in front of thousands of people, which was intended to provoke anxiety in a manner that is unrelated to mortality. Due to concerns with

[1] These methods reflect the committee-approved methodological changes that occurred in response to the COVID-19 pandemic and the necessity to move this study to an online format. The originally proposed methods section can be found in Appendix B.

attention in the online environment, participants were also presented with the text of the recordings and instructed to read along while listening. Assignment to these conditions was randomized.

After listening to these recordings, participants were randomly assigned to read one of two narratives. Half of the participants read a first-person narrative describing a personal experience of seeking therapy and the ways that this benefited and changed the narrator. The other half read a first-person control story in which the narrator describes his daily morning routines (Kaufman & Libby, 2012). Next, all participants completed the dependent variable questionnaires, which included an experience-taking measure and a measure of attitudes towards psychological treatment. After this, participants completed a variety of other related measures, followed by a demographics questionnaire. Finally, they read a debriefing page informing them of the true nature of the study.

Materials[2]

Intense Death Reflection. The primary manipulation involved two audio recordings. In the death reflection condition, participants listened to a recording instructing them to imagine that they were falling off of a building. The text for this recording was based on previous research by Cozzolino and colleagues (2004), but differed in the specific manner of death due to the concern that the act of imagining oneself burning in a fire may introduce an unintentional confound into the design (physical suffering). The recording ended with the realization that physical death is imminent ("…as you see the ground approaching quickly, you realize that this is the end"). In the control condition, participants were instructed to imagine a scenario in which

[2] All materials, in their entirety, are presented in Appendix C.

they are asked to give a public speech. Participants were instructed to read the text of the recordings on the screen while listening to the audio in both conditions.

Narratives. Participants were randomly assigned to read one of two narratives. The first story was from the perspective of a person engaged in therapy for the past year who touted the many ways that it has benefitted their life and broadened their perspective ("I never would have thought of myself as mentally unhealthy before, but after spending time in therapy I see that there were still so many ways that I could broaden my perspective, treat others compassionately, and lead a more meaningful life."). The second comparison narrative was developed and used by Kaufman & Libby (2012). It was written from the perspective of a person going through their standard daily routine.

Experience-Taking. The Experience-Taking Measure (Kaufman & Libby, 2012) was used to gauge immersion in the perspective of the story's narrator. Participants rated their agreement with a variety of statements on a 7-point scale (1 = *strongly disagree,* 7 = *strongly agree*), and statements involved adoption of the narrator's perspective ("I found myself taking on the experience and perspective of the narrator").

Attitudes Towards Therapy. The Mental Health Seeking Attitudes Scale (Hammer et al., 2018) was used to measure attitudes towards therapy. Participants responded to the question "If I had a mental health concern, seeking help from a mental health professional would be..." using 9 different adjective pairings (e.g. useless vs. useful; healing vs. hurting). Ratings ranged from -3 to 3, with 0 serving as a neutral midpoint[3].

[3] The survey also included additional measures included for exploratory purposes, in addition to these primary measures. No robust effects emerged involving these measures, and thus I do not discuss them. Scale descriptions for these secondary measures can be seen in Appendix B, and scale statistics can be seen in Appendix A.

Results

I first calculated correlations and scale statistics for each dependent variable (Table 1).

Table 1

Descriptive Statistics and Correlations Between Primary Outcome Variables

	M	*SD*	α	1
1. Experience Taking	6.47	1.61	.88	-
2. Mental Health Attitudes	5.82	1.10	.92	.209**

Note: * $p < .05$. ** $p < .01$.

Primary Analyses

To test my primary hypotheses, I conducted two separate 2 X 2 Between-Subjects Analyses of Variance (ANOVA), with Salience (Death Reflection vs. Public Speaking) and Narrative (Therapy vs. Control) entered as Between-Subjects factors. When treating Experience Taking as the dependent variable, there was a significant main effect of Salience, $F(1, 426) = 10.61$, $p = .001$, $\eta_p^2 = .024$. Collapsing across Narrative type, participants in the Death Reflection condition reported significantly *lower* levels of Experience Taking ($M = 6.22$, $SD = 1.63$) than participants in the Public Speaking condition ($M = 6.72$, $SD = 1.55$), which was the opposite of what was predicted. I observed no significant main effect of Narrative, $F(1, 426) = 0.86$, $p = .355$, $\eta_p^2 = .002$, and no significant interaction between Salience and Narrative, $F(1, 426) = 0.22$, $p = .638$, $\eta_p^2 = .001$.

When treating Mental Health Attitudes as the dependent variable, there was no significant main effect of Salience, $F(1, 426) < .001$, $p = .999$, $\eta_p^2 < .001$, no significant main

effect of Narrative, $F(1, 426) = 1.19$, $p = .277$, $\eta_p^2 = .003$, and no significant interaction between Salience and Narrative, $F(1, 426) = 2.99$, $p = .084$, $\eta_p^2 = .007$ (see Table 2).

Table 2

Mental Health Attitudes by Condition

Condition	Narrative	Mean	SD
Death	Therapy	5.97	0.94
	Control	5.67	1.33
Public Speaking	Therapy	5.79	1.06
	Control	5.86	1.03

Exploratory Analyses

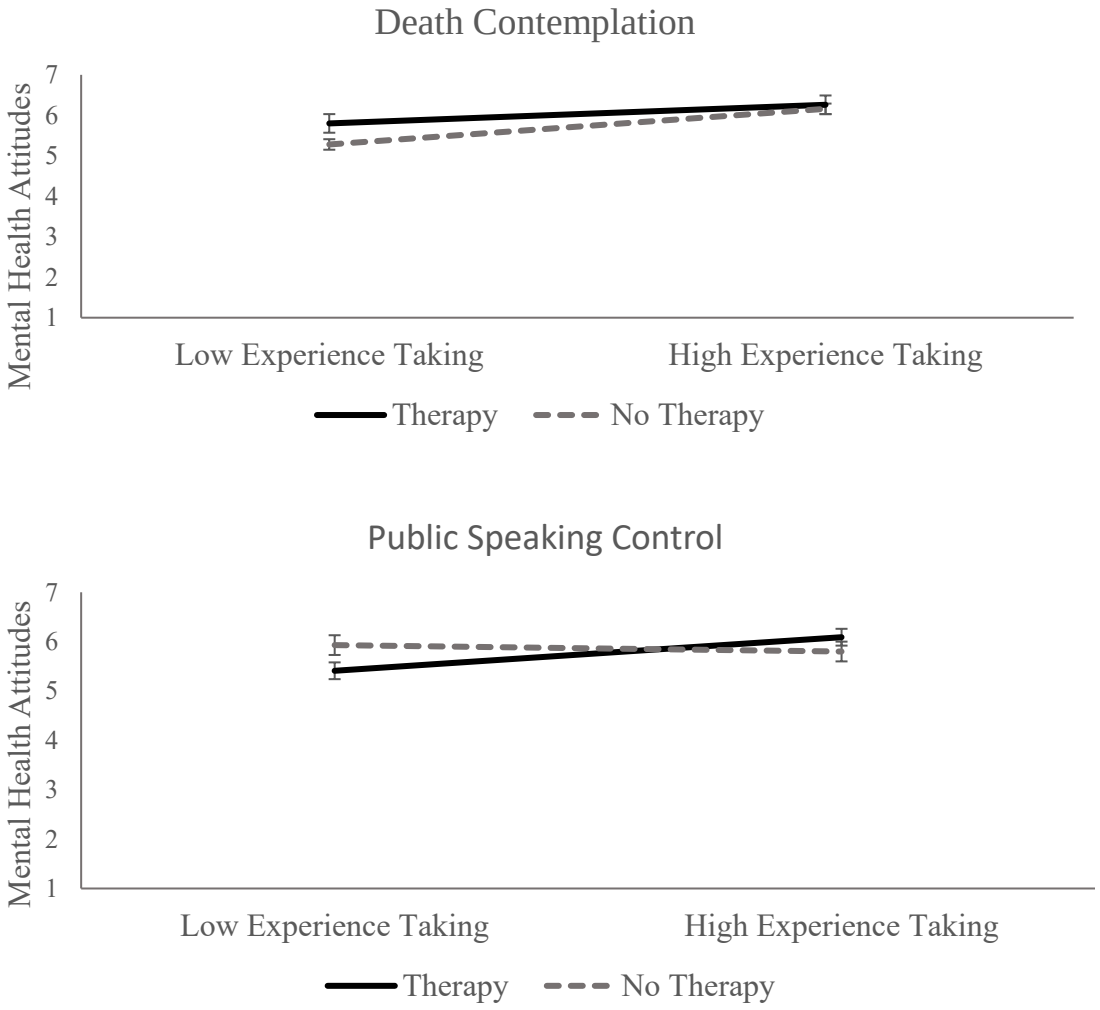
I also conducted exploratory analyses to test whether Experience Taking moderated the impact of Salience and Narrative on Mental Health Attitudes. All three predictor variables were entered into the first step of a hierarchical regression model with Mental Health Attitudes as the dependent variable. Salience and Narrative were dummy coded (0 = control condition, 1 = experimental condition), and Experience Taking was grand mean-centered. I observed a positive main effect of Experience Taking, $b = .15$, $SE = .03$ $t(426) = 4.54$, $p < .001$, 95% CI [.08, .21] but no main effects of Salience, $b = .07$, $SE = .11$, $t(426) = 0.71$, $p = .480$, 95% CI [-.13, .28], or Narrative, $b = .13$, $SE = .10$, $t(426) = 1.29$, $p = .199$, 95% CI [-.07, .34]. All two-way interactions were entered in the second step of the regression model. The Experience Taking by Narrative interaction was not significant, $b = .06$, $SE = .07$, $t(423) = 0.88$, $p = .381$, 95% CI [-.07, .19]. However, both the Experience Taking by Salience interaction, $b = .14$, $SE = .07$, $t(423) = 2.11$, $p = .036$, 95% CI [.01, .27] and the Salience by Narrative interaction, $b = .44$, $SE = .21$, $t(423) = 2.09$, $p = .038$, 95% CI [.03, .85], were significant. These effects were qualified by an Experience

Taking by Salience by Narrative interaction in the third step of the regression model, b = -.37, SE = .13, t(422) = -2.87, p = .004, 95% CI [-.63, -.12].

I unpacked the three-way interaction by utilizing the PROCESS macro for SPSS (Version 3.4, Model 3; Hayes, 2013). I entered Experience Taking as the primary predictor variable (X), Narrative as the first moderating variable (W), Salience as the second moderating variable (Z), and Mental Health Attitudes as the primary dependent variable (Y). For individuals in the Death Reflection condition, the simple interaction between Experience Taking and Narrative was not significant, b = -.13, SE = .09, F(1, 422) = 1.90, p = .169, 95% CI [-.31, .06]. However, within the Public Speaking condition, the interaction between Experience Taking and Narrative was significant, b = .25, SE = .09, F(1, 422) = 7.09, p = .008, 95% CI [.07, .42]. Specifically, within the public speaking condition, the relationship between Experience Taking and Mental Health Attitudes was significant and positive for those in the Therapy Narrative condition, b = .21, SE = .07, t(422) = 3.13, p = .002, 95% CI [.08, .34], but was not significant for those in the Control Narrative condition, b = -.04, SE = .06, t(422) = -0.60, p = .547, 95% CI [-.17, .09] (Figure 1).

Figure 1

Salience x Narrative Type x Experience Taking Interaction on Mental Health Attitudes



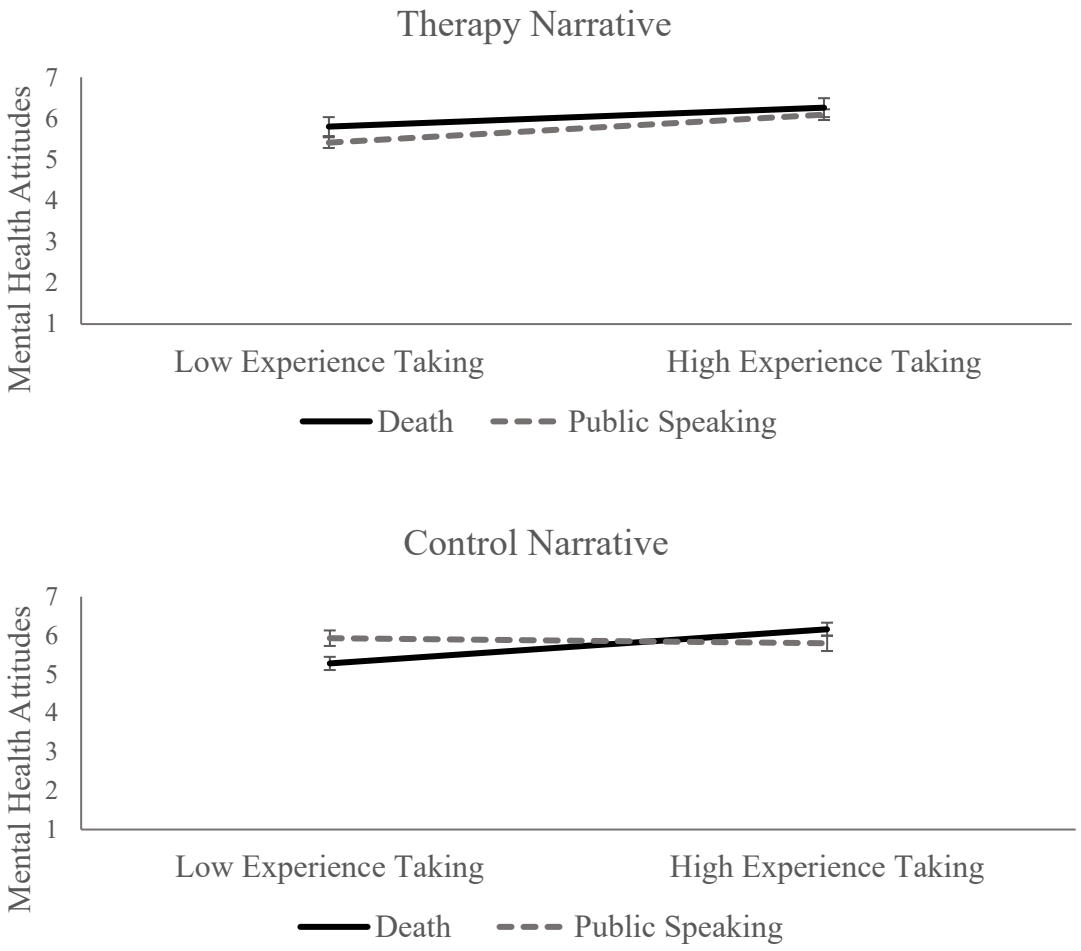
Note: Error bars represent standard error of the predicted means. Low (-1SD) and High (+1SD) Experience Taking are represented on the x-axis. Higher scores on the y-axis represent more positive mental health attitudes.

Looked at differently, for individuals in the Therapy Narrative condition, the simple interaction between Experience Taking and Salience was not significant, b = -.13, SE = .09, F(1, 422) = 0.49, p = .483, 95% CI [-.31, .06]. This interaction was significant, however, for individuals in the Control Narrative condition, b = -.13, SE = .09, F(1, 422) = 12.24, p < .001,

95% CI [-.31, .06]. Specifically, within the Control Narrative condition, the relationship between Experience Taking and Mental Health Attitudes was stronger in the in the Death Contemplation condition, b = .27, SE = .06, $t(422) = 4.55$, $p < .001$, 95 % CI [.15, .38], relative to the Public Speaking condition, b = .14, SE = .07, $t(422) = 2.01$, p = .045, 95% CI [.003, .28] (see Figure 2).

Figure 2

Narrative Type x Salience x Experience Taking Interaction on Mental Health Attitudes



Note: Error bars represent standard error of the predicted means. Low (-1SD) and High (+1SD) Experience Taking are represented on the x-axis. Higher scores on the y-axis represent more positive mental health attitudes.

Discussion

Drawing on theorizing from general systems theory and existential psychology, I predicted that vivid contemplations of mortality would lead to a temporary openness to new perspectives. By inducing participants to intensely contemplate their mortality (vs. imagining public speaking), I expected that they would show greater amounts of taking the experience of the narrator of a first-person story. The results from this experiment yielded no evidence to support this hypothesis. In fact, regardless of narrative type, contemplation of mortality led to *lower* reports of Experience Taking, which is contrary to my predictions. Further, I expected that those who contemplated death and were exposed to a first-person narrative about the benefits of therapy (vs. a narrative about daily routines), would show more positive attitudes towards mental health treatment. There was no support for this hypothesis either—participants in the death contemplation and therapy narrative conditions did not report higher attitudes towards psychological treatment.

Follow-up exploratory analyses investigated whether reports of experience taking would interact with the relationship between each of the two conditions to predict attitudes towards mental health. Results indicated that, for individuals who reflected on public speaking, taking the experience of a narrator describing positive experiences in therapy, but not a narrative describing daily routines, positively predicted attitudes towards mental health treatment. These results suggest that, in the absence of mortality manipulations, being absorbed into a first-person narrative about therapy bodes well for attitudes towards therapy. For individuals who contemplated mortality, experience taking predicted greater attitudes towards therapy regardless of which narrative participants read. This likely occurred for individuals who read the therapy narrative for the same reason that it occurred in the public speaking condition (i.e., the content of

the narrative), but it is difficult to speculate about why I may have observed this pattern for individuals who read the control narrative.

GENERAL DISCUSSION

What can be made of this lack of support for my general hypotheses? There are at least two broad, but likely interrelated, possibilities: either my theorizing was incorrect or the methodology employed was not able to accurately capture the hypothesized phenomena. Given the quantity and quality of support for various notions of psychological homeostasis, threat, and discontinuous change (e.g., Griffiths et al., 2016; Hayes et al., 2015; Miller & C'deBaca, 2001), it seems unlikely that this overall theoretical framework is resolutely false. However, it may be the case that these theorized processes are not adequately engaged by the types of psychological threats or defenses that are typically reported in the existential threat compensation literature. It is very possible, for example, that people do experience discontinuous psychological change, but that brief contemplations of mortality in an experimental setting are simply not a valid way of facilitating it.

My findings are consistent with this general notion, but there was evidence that death contemplation led to *less* experience taking, which might suggest intense death reflection dampens openness to experiences outside one's own perspective. This pattern may actually better align with Terror Management Theory than my predictions do (see Rosenblatt et al., 1989). TMT predicts that people respond to reminders of mortality with defensive attempts to bolster their self-esteem and the importance of the cultures/groups to which they belong (Routledge & Vess, 2018). Death reminders also foster high levels of avoidance of social threat (Finch, Iverach, Menzies & Jones, 2016), which could presumably translate to a lower overall tendency to consider the perspectives of other social actors. Given that the active employment empathy (Van Laer et al., 2014) and identification with the narrator (Zhou & Shapiro, 2021) are critical for narrative transportation/persuasion, it is perhaps reasonable to expect death reminders

not only failed to foster openness, but also led to perceptions of the therapy narrative as threatening. People who were exposed to death contemplation and the therapy narrative may therefore have been reluctant to engage with a narrative about mental health struggles and help-seeking. The fact that this pattern also existed for individuals who contemplated death and read the control narrative is more difficult to explain. It is possible that the same sort of egocentric anchoring lead individual to be less open to experiencing the daily routine of a typical working adult, which is presumably more foreign to college students, though this explanation is ultimately speculative.

Despite the lack of support for my primary hypotheses, there are still useful theoretical implications of the exploratory findings. I found that, for individuals in the public speaking control condition, experience taking positively predicted mental health attitudes after reading the therapy narrative but not after reading the daily routine comparison narrative. This finding is consistent with previous research demonstrating that narrative transportation positively predicts narrative persuasion (Van Laer, De Ruyter, Visconti, & Wetzels, 2014). Decades of research supports the notion that losing oneself in a story can provoke affective, cognitive and attitudinal shifts that lead to alignment with perspectives expressed in the story (Adaval, Isbell & Wyer, 2007; Green, 2008; Pennington & Hastie, 1988). Green and Brock (2002) suggest that this transportation is dependent on contextual factors including empathy for the storyteller and vivid visualizations of the story's details. I found a similar effect in that reports of higher experience taking in the context of a therapy narrative was associated with more positive attitudes towards mental health. Interestingly, however, in the death contemplation condition experience taking positively predicted mental health attitudes for both the control narrative and the therapy narrative. This pattern is certainly interesting, but it is difficult to speculate upon given that it is

outside the intended scope of this research and does not seem to align with any existing threat-compensation frameworks.

Beyond the theoretical implications of this research, it is important to note several practical implications as well. A broad goal of this project was to provide experimental evidence of a type of change that is quite different from the gradual, labored change commonly represented in research on personality and therapeutic progress. These ideas certainly could hold important implications for therapeutic practice, but unfortunately, they were not supported in this experiment. That being said, previous research involving discontinuous change in therapy (Hayes et al., 2007; Laurenceau, Hayes & Feldman, 2007), and in life experiences more broadly (Miller & C'deBaca, 2001), can still provide important lessons for practicing clinicians. It may be worthwhile for mental health practitioners to consider the notion of clients building towards moments of abrupt vulnerability and shifts in attitudes/beliefs, rather than wedding themselves typical models of linear change that are implicit in psychotherapy research and practice.

Even more concretely, however, the practical goal of this study was to attempt to increase participants attitudes towards seeking mental health treatment. While the we did not observe overall differences between participants in the four experimental groups (death contemplation vs. public speaking and therapy narrative vs. control narrative), the role of Experience Taking highlighted by the exploratory analyses might provide important insights. Reports of taking the experience of the narrator positively predicted attitudes towards therapy for those who read the therapy narrative and this relationship did not differ as a function of salience condition. In addition, in the absence of death-thought, experience taking predicted more positive attitudes towards therapy more strongly for people who read the narrative about therapy. This suggests that factors that increase experience taking may help to improve the potency of persuasive

narratives in favor of psychological treatment. Given the societal stigma associated with mental health treatment (Currier, McDermott & McCormick, 2017; Hirsch, Rabon, Reynolds, Barton & Chang, 2019), coupled with alarmingly high rates of mental illness in modern society (Pew Research Center, 2021), identifying factors that positively predict attitudes towards seeking psychological health is always worthwhile to investigate. Based on these findings, future research might focus on factors that increase narrative transportation, or decrease existential defensiveness (e.g., self-affirmations; Schmeichel & Martens, 2005), in order to foster receptivity to messaging surrounding mental health treatment.

Finally, it is important to note a few limitations of the current research. First, the entire experiment was carried out in an online environment using self-report questionnaires as the primary outcome variables. Though experimental methodology is a critical strategy for isolating the primary causal factors of real-world phenomena, the experience of participants in this experiment was ultimately drastically different from any of the instances of discontinuous change that my theorizing was based upon. A comprehensive investigation of this question would need to combine insights from basic science with more ecologically valid methodological approaches. Second, the phenomenon being targeted by this research—responses to powerful existential threat—is one that likely carries a very large degree of interindividual variability. A significant proportion of research designs informed by TMT are predicated upon the idea that individual difference variables moderate responses to mortality salience (e.g., political orientation, religious fundamentalism, depression; see Burke, Martens & Faucher, 2010). If there indeed is a threshold of threat at which responses qualitatively change, that threshold would likely vary quite a bit between people (and perhaps within people over time). It is entirely possible that a lurking moderator could have hidden actual effects that would otherwise have

supported my hypothesis. Though none of the potential moderators that we measured meaningfully interacted with the primary study variables, future research might focus on other factors that might play a role.

Theoretical and empirical conceptions of psychological growth and change are limited by the common view that it occurs slowly and linearly. Guided by basic principles from dynamical systems theory and disparate accounts of abrupt psychological change, I theorized that defensives response to existential threat were only one portion of a bimodal response distribution. Ultimately, this experiment did not support the hypothesis that intense contemplations of mortality can facilitate openness to new perspectives, it is still worth investigation whether existential threat may be useful for more than just eliciting defensiveness. Furthermore, exploratory analyses yielded findings that can potentially add to the theoretical literatures surrounding narrative transportation and mortality awareness, as well as inform more practical approaches to improving mental health attitudes. Open orientations to differing perspectives seems especially relevant in modern cultural climates of polarization, isolation and discontent. All avenues for potentially encouraging and facilitating it are likely worthwhile to explore.

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APPENDIX A

Table 3

		M	*SD*	α	1	2	3	4	5	6	7	8	9	10	11
1.	Experience Taking	6.47	1.61	.88	-										
2.	Mental Health Attitudes	5.82	1.10	.92	.21**	-									
3.	Self-Stigma	2.65	0.73	.87	-.13**	-.49**	-								
4.	Self-Esteem	2.91	0.58	.91	-.09	.18**	-.21**	-							
5.	MIL Judgments	5.82	1.25	.94	.02	.23**	-.10*	.69**	-						
6.	MIL Comprehension	4.90	1.18	.79	-.06	.09	-.10*	.66**	.53**	-					
7.	MIL Purpose	5.54	1.31	.87	.01	.08	-.09	.55**	.61**	.56**	-				
8.	MIL Mattering	4.96	1.53	.90	.03	.26**	-.07	.54**	.70**	.47**	.47**	-			
9.	Self-Alienation	4.78	1.50	.87	-.10*	.12*	-.18**	.70**	.54**	.64**	.48**	.39**	-		
10.	Authentic Living	5.71	0.91	.86	.17**	.19**	-.20**	.37**	.40**	.31**	.32**	.34**	.35**	-	
11.	External Influence	3.99	1.41	.76	-.07	.02	-.19**	.40**	.21**	.28**	.23**	.14**	.38**	.34**	-

Correlations Between All Study Variables

Note: * $p < .05$. ** $p < .01$

APPENDIX B

Original Methods and Proposed Analyses

Participants

Participants will be all be undergraduate students at Texas A&M who are recruited through the online SONA portal as a partial fulfillment of their requirements for Psychology 101. Participants will take the Mental Health Seeking Attitudes Scale (Hammer, Parent & Spiker, 2018) as a part of a preliminary screening survey administered early in the academic term. We will recruit participants who score at or below the midpoint of the scale to ensure that our sample consists of people who do not already hold unambiguously positive attitudes towards treatment (Hammer et al., 2018). The proposed experiment is a 2 (intense death reflection vs. control) by 2 (therapy narrative vs. extroversion narrative) between-subjects factorial experimental design. We intend to collect a sample size of at least 100 participants per condition (N = 400), which exceeds the sample size needed to detect an effect of r = .21. That is the effect size recommended by best practices in social psychology when an established effect size is absent in the literature (Funder et al., 2014). Participants who endorse items on the integrity check indicating that they weren't paying careful attention (e.g. "I just clicked through the questions without paying too much attention to them") will be excluded from the final analysis.

Procedure

After being introduced to the experiment and signing consent forms, participants will enter a private room where the remainder of the experiment will take place on a computer. After completing a demographics questionnaire, they will complete a visualization task designed to induce intense death reflection or reflection on a control topic. In the "Intense death reflection" group, participants will listen to an audio recording that instructs them to close their eyes and

imagine a specific scenario in which they are falling off of a building and ultimately realize that their death is inevitable. In the control group, participants will listen to recordings asking them to close their eyes and imagine a scenario where they are about to give a public speech in front of thousands of people, which is intended to provoke anxiety in a manner that is unrelated to mortality. Assignment to these conditions will be random.

After listening to these recordings, participants will be randomly assigned to read one of two narratives. Half of the participants will read a first-person narrative describing a personal experience of seeking therapy and the ways that this has benefited and changed the narrator. The other half will read a first-person story in which the narrator describes his daily morning routines (Kaufman & Libby, 2012), which will serve as a control. Next, all participants will complete the dependent variable questionnaires, which include an experience-taking measure and a measure of attitudes towards psychological treatment. After this, participants will be told to expect a follow-up survey in 3 days and will be free to leave.

The follow-up survey will be sent out by email 3 days after the initial experiment takes place. Participants will open the online survey through their email, and respond to the same set of dependent variable measures and exploratory questionnaires that they received 3 days earlier (without the manipulation). After completing these questions, participants will read a debriefing page and their participation will be complete.

Materials

Intense Death Reflection. The primary manipulation will involve two possible audio recordings. In the death reflection condition, participants will listen to a recording instructing them to close their eyes and imagine that they are falling off of a building. The text for this recording will be based on previous research by Cozzolino and colleagues (2004), but will differ

in the specific manner of death due to the concern that fear of physical suffering in a fire may introduce an unintentional confound into the design (physical suffering). The recording will end with the realization that physical death is imminent ("…as you see the ground approaching quickly, you realize that this is the end"). In the control condition participants will be instructed to imagine a scenario in which they are asked to give a public speech.

Narratives. There will be two narratives that participants will be randomly assigned to read. The first story is from the perspective of a person who has been engaging in therapy for the past year, and is touting the many ways that it has benefitted their life and broadened their perspective ("I never would have thought of myself as mentally unhealthy before, but after spending time in therapy I see that there were still so many ways that I could broaden my perspective, treat others compassionately, and lead a more meaningful life."). The second narrative was developed and used by Kaufman & Libby (2012), and is written from the perspective of a person who is behaving in an extroverted way. This will serve as the control narrative.

Experience-Taking. The Experience-Taking Measure (Kaufman & Libby, 2012) will be used to gauge immersion in the perspective of the story's narrator. Participants will be asked to rate their agreement with a variety of statements on a 7-point scale (1 = *strongly disagree,* 7 = *strongly agree*), and statements will involve adoption of the narrator's perspective ("I found myself taking on the experience and perspective of the narrator").

Attitudes Towards Therapy. The Mental Health Seeking Attitudes Scale (Hammer et al., 2018) will be used to measure attitudes towards therapy. Participants will respond to the question "If I had a mental health concern, seeking help from a mental health professional would be..."

using 9 different adjective pairings (e.g. useless vs. useful; healing vs. hurting). Ratings will range from -3 to 3, with 0 serving as a neutral midpoint.

Self-Stigma Towards Therapy. The Self-Stigma of Seeking Help Scale (Vogel et al., 2013) will be used to measure to measure the self-stigma associated with seeking therapy. Participants will rate their agreement with statements such as "My self-esteem would increase if I talked to a therapist" along a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*).

Self-Esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) will be administered at time 1 and time 2. The RSE measures evaluative feelings about the self with items such as "I take a positive attitude toward myself," and "I certainly feel useless at times" (reverse scored). Responses are made on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale.

Meaning in Life. The Multi-dimensional Existential Meaning Scale (George & Park, 2017) will be administered at time 1 and time 2. This scale includes 3 subscales of meaning (comprehension, purpose and mattering), and instructs participants to rate their agreement with a variety of statements (e.g. "My entire existence is full of meaning") along a 7-point scale (1 = *strongly disagree,* to 7 = *strongly agree*).

Authenticity. The Authenticity Personality Scale (Wood, Linley, Maltby, Baliousis, & Joseph, 2008) will be administered at both time points. The Authentic Personality Scale is comprised of three subscales intended to gauge different facets of authenticity: self-alienation (i.e., awareness of one's physiological states, emotions, and cognitions), authentic living (i.e., congruence between one's behavior and one's physiological states, emotions, and cognitions), and accepting external influence (i.e., the extent to which one believes they must conform to others' expectations). All three subscales are rated on a on a 7-point scale (1 = *strongly disagree,* 7 = *strongly agree*).

Proposed Analyses

The IBM SPSS Statistics 26 package will be used to perform the data analysis. There are two dependent variables, experience-taking and attitudes towards therapy, and different analyses will be used for each. The impact of condition and narrative type on experience-taking will be tested using a 2 by 2 ANOVA, with condition and narrative type entered as between subjects factors and experience-taking entered as the dependent variable (measured at time 1 only). I predict a main effect of condition, such that participants in the death reflection condition will report significantly higher levels of experience-taking, regardless of narrative type. The impact of condition and narrative type on attitudes towards therapy will be tested via a Mixed Analysis of Variance (ANOVA) analyses with condition and narrative type entered as a between-subjects factors and the time 1 and time 2 treatment seeking attitudes entered as a within-subjects repeated factors. I predict a 2 by 2 interaction between condition and narrative type, such that individuals in the death reflection condition who also read the therapy narrative will report significantly more positive attitudes towards therapy at time 1 and time 2.

APPENDIX C

Demographic Questions

Please answer the following questions to give us a better sense of who you are.

What is your age? _____

What is your gender?

Is English your native language? Yes No

What is your race?

Are of any of the statements below true of you (check all that apply). Please note that you will receive credit regardless of how you respond to this question. This just helps us assess the data we are receiving.

- ☐ I didn't read the instructions carefully.
- ☐ I just clicked through the questions without paying too much attention to them.
- ☐ None of the above statements are true of me.

Self Esteem

Personal Assessment Questionnaire

This questionnaire is designed to give a better picture of you as an individual. Enter the number in the space provided that most accurately describes how you feel about yourself in general. Please answer as truthfully as possible, taking into account what is generally true about the way you would describe yourself.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

_____ I feel that I am a person of worth, at least on an equal basis with others.

_____ I feel that I have a number of good qualities.

_____ All in all, I am inclined to feel that I am a failure.

_____ I am able to do things as well as most other people.

_____ I feel I do not have much to be proud of.

_____ I take a positive attitude toward myself.

_____ On the whole, I am satisfied with myself.

_____ I wish I could have more respect for myself.

_____ I certainly feel useless at times.

_____ At times I think I am no good at all.

Authentic Personality Questionnaire

Respond to the following statements by indicating the extent to which each item describes you

The scale ranges from 1 (does not describe me at all) to 7 (describes me very well)

1. I think it is better to be yourself, than to be popular.
   1 2 3 4 5 6 7

2. I don't know how I really feel inside.
   1 2 3 4 5 6 7

3. I am strongly influenced by the opinions of others.
   1 2 3 4 5 6 7

4. I usually do what other people tell me to do.
   1 2 3 4 5 6 7

5. I always feel I need to do what others expect me to do.
   1 2 3 4 5 6 7

6. Other people influence me greatly.
   1 2 3 4 5 6 7

7. I feel as if I don't know myself very well.
   1 2 3 4 5 6 7

8. I always stand by what I believe in.
   1 2 3 4 5 6 7

9. I am true to myself in most situations.
   1 2 3 4 5 6 7

10. I feel out of touch with the 'real me.'
    1 2 3 4 5 6 7

11. I live in accordance with my values and beliefs.
    1 2 3 4 5 6 7

12. I feel alienated from myself.
    1 2 3 4 5 6 7

Multidimensional Existential Meaning Scale

Using the scale, please indicate your current feelings by selecting how much you agree or disagree with the following statements:

1 = Strongly Disagree
2 = Disagree
3 = Somewhat Disagree
4 = Neither Agree or Disagree
5 = Somewhat Agree
6 = Agree
7 = Strongly Agree

1. My life as a whole has meaning.
2. My entire existence is full of meaning.
3. My life is meaningless.
4. My existence is empty of meaning.
5. I can make sense of the things that happen in my life.
6. Looking at my life as a whole, things seem clear to me.
7. I can't make sense of events in my life.
8. My life feels like a sequence of unconnected events.
9. I have a good sense of what I am trying to accomplish in life.
10. I have certain life goals that compel me to keep going.
11. I don't know what I am trying to accomplish in life.
12. I don't have compelling life goals that keep me going.
13. Whether my life ever existed matters even in the grand scheme of the universe.
14. Even considering how big the universe is, I can say that my life matters.
15. My existence is not significant in the grand scheme of things.
16. Given the vastness of the universe, my life does not matter.

Experience-Taking Measure

Rate the extent to which you agree with the following statements about how you felt while reading the story using the scale below.

1 (*strongly disagree*) and 9 (*strongly agree*).

1. I felt like I could put myself in the shoes of the character in the story.

2. I found myself thinking what the character in the story was thinking.

3. I found myself feeling what the character in the story was feeling.

4. I could empathize with the situation of the character in the story.

5. I understood the events of the story as though I were the character in the story.

6. I was not able to get inside the character's head.

7. At key moments in the story, I felt I knew what the character was going through.

Mental Help Seeking Attitudes Scale (MHSAS)

INSTRUCTIONS: For the purposes of this survey, “mental health professionals” include psychologists, psychiatrists, clinical social workers, and counselors. Likewise, “mental health concerns” include issues ranging from personal difficulties (e.g., loss of a loved one) to mental illness (e.g., anxiety, depression).

Please mark the circle that best represents your opinion. For example, if you feel that your seeking help would be extremely useless, you would mark the circle closest to "useless." If you are undecided, you would mark the "0" circle. If you feel that your seeking help would be slightly useful, you would mark the "1" circle that is closer to "useful."

If I had a mental health concern, seeking help from a mental health professional would be...

	3	2	1	0	1	2	3	
Useless	○	○	○	○	○	○	○	Useful
Important	○	○	○	○	○	○	○	Unimportant
Unhealthy	○	○	○	○	○	○	○	Healthy
Ineffective	○	○	○	○	○	○	○	Effective
Good	○	○	○	○	○	○	○	Bad
Healing	○	○	○	○	○	○	○	Hurting
Disempowering	○	○	○	○	○	○	○	Empowering
Satisfying	○	○	○	○	○	○	○	Unsatisfying
Desirable	○	○	○	○	○	○	○	Undesirable

Self-Stigma of Seeking Help Scale

INSTRUCTIONS: People at times find that they face problems that seeking help would mean. Please use the 5-point scale to rate the degree they consider seeking help for. This can bring up reactions about what to which each item describes how you might react in this situation.

1 = Strongly Disagree

2 = Disagree

3 = Agree & Disagree Equally

4 = Agree

5 = Strongly Agree

1. I would feel inadequate if I went to a therapist for psychological help.

2. My self-confidence would NOT be threatened if I sought professional help.

3. Seeking psychological help would make me feel less intelligent.

4. My self-esteem would increase if I talked to a therapist.

5. My view of myself would not change just because I made the choice to see a therapist.

6. It would make me feel inferior to ask a therapist for help.

7. I would feel okay about myself if I made the choice to seek professional help.

8. If I went to a therapist, I would be less satisfied with myself.

9. My self-confidence would remain the same if I sought professional help for a problem I could not solve.

10. I would feel worse about myself if I could not solve my own problems.

Intense Death Reflection Script

Imagine that you are peering over the edge of an extremely tall building. Looking down, you see people as small as ants on the sidewalk far below, and you get a queasy feeling in your stomach. As you pull back from the edge, a gust of wind swells behind you, knocking you off balance. You reach desperately for something to grab, but your hands come up empty as you feel your weight tip over the side of the building. Suddenly, you are falling with nothing to catch you. As the windows rush past, you realize that there is nothing to be done. You are going to die. With your limbs whipping around uncontrollably, you catch a glimpse of the hard pavement approaching far too quickly. You think about how your body will break when it hits. Knowing that there is no escape now from death, you allow this fact to fill you up until you are overcome with terror. You do not want to die, but you surely will. In the split second before you hit the pavement, you have no choice but to face the fact that you are about to experience your own death. This is the end.

Public Speaking (Control) Script

Imagine that you are about to give a speech on stage in front of thousands of people. Peering past the curtain, you see that every seat in the stadium is full, and you get a queasy feeling in your stomach. As you pull the curtain back in front of you, a cheer sweeps through the crowd, signaling their readiness for your speech. You desperately think of what you might say, but you come up empty as you feel your feet begin to march you towards the stage entrance. Suddenly, you are on the stage, in full view of the crowd. As the crowd cheers again, you realize that there is nothing to be done. You have nothing prepared to say. With your limbs wobbling around uncontrollably, you catch a glimpse of the podium approaching far too quickly. You think about how your legs will go weak as you stand up there. Knowing that there is no escape now from giving this speech, you allow this fact to fill you up until you are overcome with anxiety. You do not want to speak, but you there is no choice. In the split second before you reach the podium, you have no choice but to face the fact that you are about to experience your worst nightmare. This is it.

Therapy Narrative

These last few years of my life have been a real rollercoaster, but I think that I finally understand who I am and what I want out of life. Two years ago, I didn't have a job and I was going through a break-up, and things just felt really confusing and overwhelming. I remember just going through the motions in my life, feeling like I didn't know why I was doing anything or what the point was. One day my friend suggested that I see a therapist. I've always considered myself a fairly healthy person, but there was something about the idea of therapy that made me feel uneasy. I had no problem with other people going, but I couldn't see why it would be a good use of my time to just go talk about my feelings with a stranger. But I was having a tough time, so I thought that I might as well give it a shot.

The first day that I walked in to see my therapist I was nervous and had no idea what to expect. I remember sitting in the waiting room and seeing calming pictures and quotes on the walls, and wondering whether I was really cut out for this sort of thing. But then a woman called my name, and I followed her into her office. At first, she just asked questions and I talked about my life. I wasn't really sure what the point was, but I did enjoy the feeling in the room and everything she said felt very kind and made me feel safe. It took a few sessions, but I began to feel more comfortable opening up to her and letting her see my view on the world. She taught me how to handle some of the thoughts and emotions that had been bogging me down, and she really seemed to be invested in me and care about my well-being. I'm not even sure what about it helped, but over time I began to gain confidence and feel more in charge of my life. Each week, it felt like she was just helping me get better at understanding myself, and eventually I began to make changes on my own in my life.

Looking back on all of that now, I feel so grateful that I made the decision to see a therapist. It was so much more than just talking about my feelings. I learned so much about myself, how I relate to others, and the things that I want in life. I felt like I could have stopped seeing her after I felt better again, but I decided to keep going anyway because I liked it so much. I really think that anyone can benefit from therapy, because it's always good to understand yourself better and live a fuller life. I make sure to tell all of my friends now that therapy isn't scary at all, and that it can help them as much as it helped me.

Control Narrative

When I wake up in the morning, I have a pretty strict routine that gets my day started. First, I go out into the kitchen and turn on the coffee maker. Something about the noise the machine makes when it turns out always puts a smile on my face. Then, I go jump in the shower, brush my teeth and comb my hair. I used to shower at night, but I always hated the feeling of waking up and feeling dirty. After I'm done in the bathroom, I go into my room to pick out what I'm wearing for the day. I usually need to check the weather first, but I stick to a pretty standard schedule when it comes to my clothing otherwise.

After I'm dressed, I go back into the kitchen to pour myself a fresh cup of coffee. I splash some milk in it, then pop some toast in the toaster. Usually at this point I turn on the radio and start listening to my favorite morning show while I finish getting ready. Once the toast is done, I take it out and put jam on it, and pour myself a fresh bowl of cereal. I love eating my breakfast while reading, so I usually bring whatever book I'm reading to the table with my breakfast. By the time I'm done eating, my dog has usually brought me his leash, which means he wants a walk. I quickly clean up my dishes, then take him on a nice long walk around the park near our house. I love the early morning air, especially in the springtime, when nobody else is awake yet and we can have the whole park to ourselves. Sometimes I bring a ball and throw it for my dog to fetch a few times before we head home. By the time we get home, I'm usually getting close to the time that I need to leave for work. I'll make sure that my dog has enough food and water for the day, double check that everything is clean in the kitchen, and then get my work bag together. Usually this just involves unplugging my laptop and putting it in my bag, but sometimes I have papers and things that were left out if I did work from home the night before.

I'm not sure why I enjoy these routines so much, but they really start my day on a good note. I started doing things like this was I was pretty young, and have always just kind of stuck with it. Sometimes I'll experiment with a new routine, and those are fine too, but I always find myself coming back to this predictable order of events. I find that it really gives me a chance to enjoy my mornings and spend some quality time with my dog. I hope that I'm always able to have a routine like this.