WHAT DOES IT ALL MEAN? THE EFFECT OF MOOD AND UNCERTAINTY ON MEANING IN LIFE AND LIFE SATISFACTION

by

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(Under the Direction of Leonard L. Martin)

ABSTRACT

Recent work suggests that while a sense of meaning in life often provides benefits for well-being, it is not the inherent need it has been made out to be (Steger, Oishi, & Kesebir, 2011). The current study sought to build on this research and explore how uncertainty and mood affect meaning in life and life satisfaction. In an experiment based on Wilson, Centerbar, Kermer, and Gilbert (2005), participants watched short versions of a happy or sad movie, and were made to feel certain or uncertain about the fate of the characters. It was hypothesized that participants who felt uncertain would generally report greater meaning in life than those who felt certain. Movie condition was expected to interact with uncertainty so that that those who saw a happy movie in the uncertain condition would report the greatest life satisfaction. These hypotheses were not supported and possible shortcomings are discussed.

INDEX WORDS: meaning, purpose, life satisfaction, uncertainty, mood

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CHAPTER 1

INTRODUCTION

As we pursue the scientific study of meaning in life, it is hard to ignore the influence of earlier philosophical thinkers who considered similar issues. In the ancient world, Aristotle (350 BCE/1998) prescribed purposeful action in accordance with virtue, or eudaimonia, as the way we should live and the ultimate path to happiness. Later, existentialists like Nietzsche (1882/1974) and Camus (1955) emphasized the subjective nature of life and how it appears absurd and even meaningless. They theorized that each person must will, create, or find his or her own purpose to stave off these burdens. But Frankl's (1963) seminal work, *Man's Search for Meaning,* moved the concept beyond the realm of ethics and mankind's place in the universe, proposing a clear psychological explanation of how a human need for meaning affects our thoughts, behaviors, and outcomes in the most dire of circumstances. It is now accepted that we cannot hope to define objectively mankind's place in the universe, but scientists have made strong attempts to clarify a more subjective sense of purpose and significance and how it relates to our psychology.

Meaning in life has been defined in a number of ways within the psychological literature. In existential psychology, it has been called the "emergence of personal narrative identity characterized by connectedness, purpose and growth" (McGregor & Little, 1998; Kray, George, Liljenquist, Galinsky & Tetlock, 2010). Others have considered the term more broadly as the experience of things making sense or the subjective rationality of one's thoughts (Hicks, Cicero, Trent, Burton & King, 2010). Proulx and Inzlicht (2012) cogently explain this broader view of meaning as containing the answers to two basic questions; the *what,* and the *why,* where the *what*

relates to our epistemic understanding of experiences, and the *why* refers to our explanations of these events, and our own lives in context.

Despite the variability in definition, one clear factor that affects how meaning in life operates is mood. People tend to use their current moods as information when making a wide range of evaluative judgments, as long as the source of their mood is not made salient (Schwarz & Clore, 1996). For example, people judge their lives to be worse when it is raining than when it is sunny outside, though this effect disappears if they are reminded of the weather (Schwarz & Clore, 1983). King, Hicks, Krull, and Del Gaiso (2006) found that positive affect (PA) is an exceptionally strong predictor of meaning in life, and priming participants with PA was sufficient to cause increased judgments of meaning relative to a control condition. This relationship was found to be moderated by an intuitive processing style, or the propensity to render quick and effortless judgments in accordance with hunches and "gut feelings" (Hicks et al., 2010). For individuals exhibiting an intuitive processing style, priming PA facilitated greater feelings of understanding toward abstract paintings. Surprisingly, it improved accuracy in coherence judgments on loosely related linguistic triads, where an objectively correct answer exists (e,g. the words base, snow, and dance can all be related back to "ball").

Although positive affect has been called the "natural habitat" of meaning (King et al., 2006), this is not to say that we can only experience a sense of purpose in life when things are going well. King and Hicks (2009) found that participants expect to find meaning in both positive and negative major life events like getting married or the death of a loved one, as opposed to trivial events like stepping on a piece of gum or seeing a good movie. Later, content analyses of essay responses revealed that for positive events, meaning is likely to be detected in a seemingly effortless way, as if we are being reminded that our basic assumptions about life are

correct. For negative events, a sense of meaning appears to be constructed, such that people thoughtfully consider the important lessons they may have learned from these experiences (King & Hicks, 2009).

Research has also reliably shown that people who report having meaning in life report having greater well-being compared to those that report not having meaning in life (Wong & Fry, 1998). In addition, those who report having less meaning in life tend to experience more depression, anxiety, (Debats, van der Lubbe, & Wezeman, 1993) and a need for therapy (Battista & Almond, 1973). Meaning in life has been said to be both essential for coping with trauma (Frankl, 1963) and to predict lower rates posttraumatic stress among survivors of the September 11th terrorist attacks (Updegraff, Cohen, Silver, & Holman, 2008). Likewise, finding meaning in life events reduces existential burdens (Soloman, Greenberg, & Pyszczynski, 1991). These results have led some to conclude that meaning is a basic need and requirement for any lasting happiness (King & Napa, 1998).

But more recent work has cast doubts on the conclusion that meaning is both necessary for happiness and that it is an inherent human motivation. Consider Steger, Frazier, Oishi and Kaler's (2006) Meaning in Life Questionnaire (MLQ), which defines meaning as "the sense made of, and significance felt regarding, the nature of one's being and existence" and distinguishes between two dimensions of meaning in life; the presence of meaning and the search for meaning. Whereas the presence of meaning refers to the subjective sense that one's life is meaningful (e.g. I understand my life's meaning), the search for meaning focuses on an individual's motivation to find this meaning (e.g. I am always looking to find my life's purpose). This distinction is useful, because the ways we may acquire meaning can be thought of in two non-mutually exclusive ways. On one hand, we may seek out meaning in new experiences to

augment and enhance our understanding of the world and our place in it. On the other hand, it is possible that we attempt this search when our current meaning structures have been shattered by traumatic experiences. A more balanced view is that we may engage in both of these forms of meaning-making depending on the situation.

It is also notable that this distinction in the MLQ was replicated by confirmatory factor analysis using an independent sample. By contrast, the factor structure of other measures of meaning in life like the Purpose in Life Test (PIL, Crumbaugh & Maholick, 1964) and the Life Regard Index (LRI; Battista & Almond, 1973) have been noted to vary from study to study (Steger et al., 2006). These earlier measures of meaning in life have also been criticized for confounds on an item level with other constructs of interest like neuroticism and negative affect (Dyck, 1987, Frazier, Oishi, & Steger, 2003).

The MLQ demonstrates that not everyone reports searching for meaning, despite claims that it is a universal need and a prerequisite for happiness. In fact, people who report searching for meaning in life tend to experience less meaning, and are generally less satisfied with life than those who are not searching for meaning (Steger et al. 2006; Steger, Kashdan, Sullivan, & Lorentz, 2008). Upon further exploration, Steger, Kawabata, Shimai, & Otake (2008) found that this relationship is moderated by the level at which someone is searching for meaning in life. Thus, the presence of meaning in life will only affect our judgments of life satisfaction if we are searching for meaning in the first place. This moderating relationship is true not just for our own judgments of life satisfaction, but for our judgments of others' life satisfaction as well (Steger, Oishi, & Kesebir, 2011).

Taken together, these findings suggest that meaning in life may not be the grand ideal and marker of "the good life" it has been made out to be. Rather, the search for meaning in life may

operate as a schema (Markus & Wurf, 1987). Just as schemata are mental frameworks of preconceived ideas that guide our thinking, the level at which someone searches for meaning seems to direct our attention to those subjective things an individual considers to fill his or her life with purpose. This meaning-relevant information is then used when making judgments about life satisfaction (Steger et al., 2011).

This interpretation is consistent with Oishi, Diener, Suh, and Lucas' (1999) value-as-a-moderator hypothesis, as well as other moderator models of subjective well-being (SWB) (Brunstein, Schultheiss, & Grässman, 1998; Sagiv & Schwartz, 2000**)**. Specifically, the value-as-a-moderator hypothesis examines intraindividual changes in SWB. It states that although people's mean levels of SWB are often consistent over time and across situations (Diener & Larsen, 1984; Diener, Sandvik, Pavot,& Fujita, 1992), moment to moment judgments of SWB are moderated by each person's own salient values. For example, people who consider themselves to be sensation seekers might evaluate their daily well-being by attending to hedonic markers such as physical pain and pleasure (Oishi, Schimmack, & Diener, 2001). Similarly, only people who subscribe to the belief that life *should* be full of meaning search for meaning when considering happiness. By contrast, those who do not endorse this value as strongly are less likely to report searching for meaning.

This schematic view of the search for meaning in life also seems to relate to Heine, Proulx, and Vohs' (2006) meaning maintenance model, which uses a broader interpretation of meaning. In this view, meaning in life is about sense-making and answers two questions about our experiences; what is being experienced and why is it so? The meaning maintenance model asserts that as we navigate the world, we develop implicit associations not unlike schemata, which answer these questions and guide our thinking. When these associations or meaning

frameworks are violated, it produces a common syndrome of aversive arousal (Proulx, Inzlicht, & Harmon-Jones, 2012). As a result of these meaning violations, we engage in various compensatory behaviors to reduce arousal and restore our sense of understanding. Perhaps these efforts could be seen as analogous to searching for meaning as defined by Steger et al. (2006).

If judgments of meaning are about sense-making, then our level of certainty about what we have experienced should play a strong role in the process. Although no research has directly examined uncertainty with regard to meaning in life to my knowledge, one study by Kray et al. (2006) seems to touch on the concept. Participants were instructed to think about important life events while listing either the countless alternative ways these events could have unfolded or factual details about the events. Although counterfactual thinking about the past cannot alter the consequences of earlier events, it might make us feel uncertain about how our current self could differ drastically under slightly altered circumstances. Participants who engaged in counterfactual thinking were more likely to assign meaning to life events and endorse beliefs in fate than those who merely considered factual details about events. Considering these counterfactuals even provided participants with more meaning than directly reflecting on the event itself.

Work on affective forecasting also suggests that uncertainty could play a role in meaning in life as it relates to judgments of life satisfaction. Feelings of uncertainty typically increase the intensity and duration of our emotions. For example, Wilson, Centerbar, Kermer, and Gilbert (2005) asked participants to watch clips of a happy movie and were made to feel certain or uncertain about the movie's outcome. Participants who felt uncertain were happier than participants who were not, both initially after the movie and five minutes later. According to one model of emotional adaptation, this effect can be explained using the acronym AREA. Once we

Attend and **R**eact to an emotional stimulus, if we are able to **E**xplain it and make sense of it, we can **A**dapt, and our moods will return to baseline (Wilson & Gilbert, 2003; Wilson, Gilbert & Centerbar, 2003). This explanation fits remarkably well with the observation that finding meaning in traumatic events enhances coping (Frankl, 1963).

These connections raise interesting questions about how meaning and uncertainty relate to positive versus negative moods. Recall that meaning in life is closely linked to positive affect (King et al., 2006) as though it is automatically detected in the face of happy experiences (King & Hicks, 2009). At the same time, evidence suggests that we are able to construct meaning for major negative life events with more effortful consideration. If participants are made to feel uncertain about significant events, will they report greater meaning or life satisfaction as did those who engaged in counterfactual thinking (Kray et al., 2010), or were otherwise uncertain about their moods (Wilson et al. 2003)? Will these outcomes be differentially affected if the event is positive or negative?

Whatever the case, the outcome can tell us something about how meaning in life could function as a schema that guides our thinking about life satisfaction. For example, maybe meaning in life is a concept that we do not readily associate with negative emotions, at least while we are going through them. Thus when we are in the thick of these emotionally raw moments, negative affect could be taken as information that we are unhappy and our lives lack meaning. Or perhaps uncertainty in the face of negative emotions promotes searching for meaning.

The current study seeks to answer these questions by expanding on work of Steger et al. (2011), and employing much of the experimental design of a study conducted by Wilson et al., (2005). In this experiment participants were shown shortened versions of either a happy movie or

sad movie, and were made to feel either certain or uncertain about the outcomes of the characters. Then, after a filler task, I collected participants' ratings of mood, meaning in life, and life satisfaction. In line with the work of Wilson et al. (2005), I expected participants experiencing uncertainty to feel their moods more strongly than those who are not. Consistent with Kray et al. (2010) I expected participants feeling uncertain to report greater meaning in life than those who are certain. In line with the work of King et al. (2006), I generally expected participants in positive moods to report greater meaning in life and life satisfaction with life than those experiencing negative moods. Furthermore, it seems plausible that positive moods would interact with uncertainty to increase meaning and satisfaction with life judgments as indicated by Hicks et al. (2006) and Kray et al. (2010). Increases in meaning in life judgments for those in positive moods may be driven by the experience of meaning as defined by the MLQ rather than the search for meaning (Steger et al. 2006). Given that participants searching for meaning tend to be less satisfied with life (Steger et al., 2008), it is likely that negative moods will increase the search for meaning.

CHAPTER 2

METHODS

Participants

Participants were 64 students recruited from a participant pool made up of those taking undergraduate psychology courses. These students received partial course credit for their participation at the experiment's conclusion. This sample consisted of 13 men and 51 women.

Materials

Movies and outcomes. All participants saw versions of *Rudy* (Fried, Woods, & Anspaugh, 1993), or *Terms of Endearment* (Brooks, 1983), both of which were shortened to about 30 minutes. *Rudy* tells the uplifting story of Daniel "Rudy" Ruettiger, a poor student from a working class family who dreams of playing football at Notre Dame. Despite the fact that he is not very athletic and is often belittled by his family, he manages to attend Notre Dame and makes the team through hard work. After spending years as a bench warmer, Rudy secures a starting spot for his final game, where he makes a spectacular tackle as the crowd chants his name. *Terms of Endearment* is a tragic story about the strained relationship of free-spirited Emma Greenway and her overbearing mother Aurora. Over the course of the movie, both women are seeking romantic love. While Emma experiences the breakdown of her marriage, Aurora slowly begins to open up and becomes romantically involved with a neighbor. Just as Aurora and Emma begin to mend their relationship and find happiness, Emma is diagnosed with terminal cancer. In a heart-wrenching scene, Emma must explain to her young children that she will die as she says goodbye

to her family and grieving mother. The possible outcomes of the main characters that participants read after watching *Rudy* or *Terms of Endearment* can be found in Appendix A.

Meaning in Life. Participants completed the Meaning in Life Questionnaire (MLQ; Steger et al., 2006). This scale contains two subscales of five items each, measuring the search for and presence of meaning in life (see Appendix B). It uses a seven-point scale ranging from 1 (absolutely untrue) to 7 (absolutely true). This two factor structure of meaning has been replicated by CFA with three independent samples, and a multitrait-multimethod matrix has established its convergent and discriminant validity (Steger et al., 2006).

Life Satisfaction. Participants completed the short version of the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). This widely used and well-validated measure contains five items measuring life satisfaction, rated on a scale from 1 (absolutely untrue) to 5 (absolutely true). Sample items include statements such as "In most ways my life is close to the ideal" (see Appendix C).

Procedure

The experimenter first greeted participants and explained that the experiment explored the way in which people evaluate dramatized real-life stories. Participants were then asked to have a seat at a computer, where they watched a shortened version of either a happy movie, *Rudy* (Anspaugh, 1993), or a sad movie, *Terms of Endearment* (Brooks, 1983). The experimenter emphasized that the movie was based on a true story, whose characters are actual figures, though in reality, this was only the case for *Rudy*. Following the movie, the experimenter handed participants a sheet of paper describing two possible outcomes for the main character in the movie they watched. For *Rudy*, these outcomes explained that after graduating college, Rudy

either became a motivational speaker or a private person devoted to his family. For *Terms of Endearment*, the outcomes explained that the main character had either committed suicide or died as a result of alcoholism. The experimenter first told all participants that although it is unknown which of the two outcomes actually occurred, the one that did not happen likely happened to another important character in the story. As participants paused to read these possible outcomes, the experimenter sat at a computer on the far side of the room, whose screen was out of participants' view. As if searching the web, she then called out to those in the certain condition that according to the Internet, the first outcome had been verified as true. Participants in the uncertain condition did not receive this information and read the two outcomes uninterrupted.

Afterwards, participants completed a number of questionnaires on a computer using Medialab. In the first of these, taken from Wilson et al. (2005), participants rated their moods, as described by seven adjectives (*happy, pleased, cheerful, bored, irritated, frustrated, and agitated*). They also answered four manipulation check questions assessing their liking of the movie, interest in the movie, liking of the main character, and curiosity about the story or people in the movie. Next participants were asked to generate as many words as they could for a number of categories over the course of 5 minutes. These categories included words that start with the letter "S," words that could describe a forest, professions, foods, and colors. For these first two categories, the words participants generated could be positive or negative. For example, a forest might be described as "scary" or "serene." Such words with positive and negative valences were counted and used as a mood manipulation check, whereas the remaining three categories simply served as a filler task. Following this, participants reported to what extent they had thought about the movie and its possible outcomes during the previous task. Afterwards participants rated their

moods once again, followed by measures of meaning in life, and life satisfaction. Finally, participants were debriefed and thanked for their participation.

CHAPTER 3

RESULTS

Mood

As in Wilson et al. (2005), the scores of positive mood items (*happy*, *pleased cheerful*) and negative mood items (*bored*, *irritated*, *frustrated*, *agitated*) were summed to give single measures of positive moods and negative moods, respectively. These measures of positive moods and negative moods were calculated both at Time 1 and Time 2. Each of these four composite scores (positive moods at Time 1 and Time 2 and negative moods at Time 1 and Time 2) showed Cronbach's Alpha values above .80. Item intercorrelations for the mood item *bored* were particularly low (.354 and .424 respectively). For this reason, it was dropped from further analyses. As expected, participants viewing *Rudy* reported greater positive moods at Time 1, $F(1, 62) = 113.05$, $p < .001$ and Time 2, $F(1, 62) = 25.96$, $p < .001$. Those viewing *Terms of Endearment* reported greater negative moods at Time 1, $F(1, 62) = 36.47$, $p < .001$, but not Time 2, $F(1, 62) = 1.07$, $p = .306$. Contrary to my hypothesis, there was no significant interaction between uncertainty condition and the movie watched to predict mood. That is, participants who watched *Rudy* reported equally positive moods in both certain and uncertain conditions at Time 1, $F(1, 60) = 1.12$, $p = .295$ and Time 2, $F(1, 60) = 1.16$, $p = .286$. Likewise, those who watched *Terms of Endearment* reported equally negative moods in both certain and uncertain conditions at Time 1, $F(1, 60) = .11$, $p = .741$ and Time 2, $F(1, 60) = 1.11$, $p = .296$. This was still found to be the case when I assessed feelings on a single dimension in which negative mood scores were subtracted from positive mood scores.

Manipulation check items assessing participants' liking and interest in the movie and its characters given just after reading movie outcomes revealed that participants generally liked the movie *Rudy* more than *Terms of Endearment*, $F(1,62) = 10.51$, $p = .002$, as well as its main character, $F(1, 62) = 27.68$, $p < .001$. Additionally, there was no significant effect of movie watched on the number of positive adjectives generated that start with the letter "S", $F(1, 62) = 3.02$, $p = .087$, or that could be used to describe a forest $F(1, 62) = .274$, $p = .603$. However, participants who watched *Terms of Endearment* did generate more negative adjectives starting with "S", $F(1, 62) = 14.86$, $p < .001$ and that could be used to describe a forest, $F(1, 62) = 4.82$, $p = .032$ than participants who watched *Rudy*. Whether or not participants were in the uncertain condition had no significant effect on the number of positive or negative words starting with "S", $F(1, 62) = .977$, $p = .327$ and $F(1, 62) = 3.06$, $p = .085$ respectively. Uncertainty condition also had no effect or positive and negative words generated that could describe a forest, $F(1, 62) = .84$, $p = .363$ and $F(1, 62) = 1.48$, $p = .228$ respectively. Furthermore, uncertainty condition did not interact with the movie watched to produce any significant effects for generating positive and negative words in these categories.

Meaning in Life

Because participants who engaged in counterfactual thinking were more likely to assign meaning to life events (Kray et al., 2010), I predicted that participants feeling uncertain about the outcomes they read would report greater meaning in life than those who were certain. Furthermore, I predicted that participants who watched a happy movie would report greater meaning in life than those who watched a sad movie, as meaning in life has been closely tied to positive affect (Hicks et al., 2010). Because searching for meaning has been linked to less

satisfaction with life (Steger et al., 2008), I expected participants watching a sad movie to report more searching for meaning. Inconsistent with these hypotheses, a series of ANOVAs revealed that the uncertainty condition had no significant effect on reported presence of meaning, $F(1, 62) = .32$, $p = .572$, search for meaning, $F(1, 62) = .491$, $p = .486$, or meaning in life as a whole $F(1, 62) = .82$, $p = .368$. Likewise, the movie watched had no significant effect on reported presence of meaning, $F(1, 62) = .43$, $p = .512$, search for meaning, $F(1, 62) = .35$, $p = .554$, or meaning in life as a whole, $F(1, 62) = .82$, $p = .369$. Furthermore, the movie watched and uncertainty condition produced no significant interaction effect in each of these measures.

Satisfaction with Life

Because mood has been long known to influence our evaluative judgments (Schwarz & Clore, 1996), I predicted that participants who watched a happy movie would report greater satisfaction with life than those watching a sad movie. Consistent with Wilson et al. (2005), I hypothesized that uncertainty would increase the intensity of participants' moods and would be reflected in judgments of life satisfaction. As predicted, an analysis of variance indicated a significant main effect of movie condition on reported life satisfaction, $F(1, 63)$ 7.38, $p = .009$. That is, participants who watched a happy movie reported greater life satisfaction than those who had seen a sad movie. However, the uncertainty condition demonstrated no significant interaction effect on life satisfaction, for those who watched a happy movie or sad movie, $F(1, 60) = 1.63$, $p = .206$.

CHAPTER 4

DISCUSSION

My hypotheses were largely unsupported. Although participants watching a happy movie reported greater positive moods than those watching a sad movie, uncertainty played no role in this relationship. That is, uncertainty did not affect the intensity or duration of participants' moods. This was found to be the case even after exploring a different ways of evaluating mood at Times 1 and 2. Although participants who watched the positive movie reported greater life satisfaction than those who watched the negative movie, uncertainty condition also played no part in this effect. Furthermore, both the movie watched and uncertainty condition demonstrated no effect on reported searching for meaning, presence of meaning, and total meaning in life.

The outcomes of this experiment are inconsistent with previous research. Contrary to Wilson et al. (2005), participants who were uncertain about movie outcomes did not experience negative and positive moods more strongly than those who were certain. Although I employed an experimental design similar to one of the experiments used in Wilson et al. (2005), some differences may have contributed to the non-significant result. When selecting mood items Wilson et al. (2005) used principal components factor analysis to yield a two-factor solution for positive and negative mood items. These mood items did not generalize well to my own sample. Perhaps it would have been prudent to evaluate the psychometric properties of these items more closely before going through with this experiment. Furthermore, the mood manipulation check in which participants generated adjectives to describe a forest and words starting with the letter "S" may not have been very effective due to its presentation in Medialab. It was not uncommon for

participants to list only one or two words each for these categories, and I suspect that presenting these items on paper, might encourage participants to generate more words.

It is also difficult to assess whether or not the uncertain condition truly made participants feel uncertain. A shortcoming in this manipulation could be behind both the inability to replicate Wilson et al. (2005) and Kray et al. (2011) with regard to mood and uncertainty respectively. One possibility is that participants were not quite so invested in the movie watched to be affected by the uncertain outcomes for its characters. After all, it has been about 20 years since *Rudy* was released and about 30 years since *Terms of Endearment* was released. But given that movie condition did produce significant differences in life satisfaction, and that many participants watching *Terms of Endearment* were observed to be visibly upset, this may not be plausible. Another possibility is that the uncertainty manipulation was not as strong as it could have been. For example, maybe the presentation of written outcomes after each movie was not sufficiently compelling to really let these outcomes really sink in. In this case, a more effective uncertainty manipulation should be explored going forward.

It is particularly puzzling why there were no differences between happy and sad movie conditions for reported meaning in life, including its subscales of searching for meaning and presence of meaning. This directly contradicts previous research showing positive affect predicts a stronger sense of meaning in life (King et al., 2006). And because those watching a happy movie did report greater life satisfaction, it is hard to chalk this finding up to an ineffective mood manipulation. Outside of the small possibilities of systematic bias every experiment must endure, one clear explanation that comes to mind most easily. Maybe participants were reasonably aware of how their moods were affected by the movies they watched. While participants may have used their moods to guide judgments of life satisfaction, perhaps these moods were too easily

recognized as situational when judging meaning in life. Because the meaning in life measure was completed just before the satisfaction with life measure lends some credence to this idea. If this were the case, it could be seen as indicative of Steger et al.'s (2011) suggestion that the search for meaning in life functions like a schema. In the future, it may be helpful to counterbalance the order in which these dependent measures are collected.

Needless to say, there is much work to be done when it comes to understanding meaning in life. The current study may not have discovered any pieces of the puzzle, but it can show us where we might look. More carefully controlled experiments with robust measures of uncertainty and affect are of great value. It also seems worth mentioning that we should resist the temptation to assume meaning in life as the platonic ideal it is often made out to be within our culture. Whatever we are able to uncover about meaning in life, one thing is certain; it is intimately tied to how we see the world and our place in it.

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APPENDIX A

Movie Outcomes

Community Speaker. After college Rudy moved to New York City and married the director of a community development agency. He began speaking to community groups and schools to encourage others to work toward their dreams, which soon developed into a lucrative career as an inspirational speaker. Today, he and his wife enjoy attending Notre Dame football games. Additionally, an official at Notre Dame recently conceded off the record that Rudy was an anonymous donor who had been instrumental in maintaining the school's athletic program.

Family Man. After college, Rudy returned to Illinois and worked hard at a real estate company, of which he eventually became the vice president. He married a woman after a two-year courtship and has three sons. He helped to coach his sons' football teams, and like their father, all three eventually earned academic scholarships to college. He is close with his family and enjoys hosting many holiday parties, but prefers not to be in the public eye with regard to his past achievements.

Suicide. After Emma died, Aurora took her grandchildren back to Houston. Feeling depressed, she became socially isolated and extremely reclusive. Her depression became so extreme she often lacked the energy to even get out of bed. Realizing she could not fulfill her duties as a primary caregiver, she made a difficult decision to send her grandchildren away to live with their father in Nebraska. Within a year she was hospitalized after a suicide attempt in which she overdosed using prescription medication. When she was released, she again made another suicide attempt, this time taking her own life.

Alcoholism. With Emma's death, Aurora raised her grandchildren back in Houston. Devastated by the loss of her daughter, she took to drinking and soon became an alcoholic. Over the next ten years, she was in and out of the hospital as her drinking seriously impaired her ability to take care of herself. Child services eventually removed the children from her custody, and she died soon after as a result of severe malnutrition.

APPENDIX B

Meaning in Life Questionnaire (MLQ)

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and there are no right or wrong answers. Please answer according to the scale below:

1 - Absolutely Untrue
2 - Mostly Untrue
3 - Somewhat Untrue
4 - Can't Say True or False
5 - Somewhat True
6 - Mostly True
7 - Absolutely True

1. _____ I understand my life's meaning.
2. _____ I am always looking for something that makes my life feel meaningful.
3. _____ I am always looking to find my life's purpose.
4. _____ My life has a clear sense of purpose.
5. _____ I have a good sense of what makes my life meaningful.
6. _____ I have discovered a satisfying life purpose.
7. _____ I am always searching for something that makes my life feel significant.
8. _____ I am seeking a purpose or mission for my life.
9. _____ My life has no clear purpose.
10. _____ I am searching for meaning in my life.

MLQ scoring:
Presence = 1, 4, 5, 6, & 9-reverse-coded
Search = 2, 3, 7, 8, & 10

APPENDIX C

Satisfaction with Life Scale (SWLS)

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 - Strongly agree
6 - Agree
5 - Slightly agree
4 - Neither agree nor disagree
3 - Slightly disagree
2 - Disagree
1 - Strongly disagree

____ In most ways my life is close to my ideal.
____ The conditions of my life are excellent.
____ I am satisfied with my life.
____ So far I have gotten the important things I want in life.
____ If I could live my life over, I would change almost nothing.

31 - 35 Extremely satisfied
26 - 30 Satisfied
21 - 25 Slightly satisfied
20 Neutral
15 - 19 Slightly dissatisfied
10 - 14 Dissatisfied
5 - 9 Extremely dissatisfied