PLAYING THE OBJECTIFICATION GAME: HOW WOMEN'S SELF-ESTEEM IMPACTS THE EXISTENTIAL CONSEQUENCES OF OBJECTIFICATION

A Dissertation
Submitted to the Graduate Faculty
of the
North Dakota State University
of Agriculture and Applied Science

By

Christina Rose Roylance

In Partial Fulfillment of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

Major Department:
Psychology

March 2017

Fargo, North Dakota

North Dakota State University
Graduate School

Title

Playing the objectification game: How women's self-esteem impacts the existential consequences of objectification

By

Christina Rose Roylance

The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

DOCTOR OF PHILOSOPHY

SUPERVISORY COMMITTEE:

Clay Routledge
Chair

Benjamin Balas

Michael Robinson

Elizabeth Birmingham

Approved:

03/27/2017
Date

Mark Nawrot
Department Chair

ABSTRACT

Living in a culture of objectification harms women's well-being in a number of ways. Despite this well-studied phenomenon, no research has yet investigated whether objectification impacts women's existential well-being, or meaning in life, which is a critical component of psychological and physical health. Using a terror management theoretical perspective, I propose that objectification is a worldview women are encouraged to participate in in order to achieve meaning. More specifically, I propose that objectification's effect on meaning will be dependent on women's perceived success at living up to the standards of objectification (i.e. her self-esteem about her appearance), or how much she values the objectification worldview (i.e. how much important she places on her appearance). Results support that body esteem and appearance contingency of self-worth both play a role in moderating various outcomes after women have contemplated an experience of being objectified. Additional results support that an unrelated contingency of self-worth related to religion and spirituality may also moderate the impact of objectification. The importance of these results in the landscape of objectification intervention research is discussed.

ACKNOWLEDGMENTS

First, I would like to thank my advisor and mentor, Dr. Clay Routledge. I am proud of all the accomplishments of the past five years, and it was only possible because of your guidance and mentorship. Thank you to my committee, Dr. Benjamin Balas, Dr. Michael Robinson, and Dr. Elizabeth Birmingham for your thoughtful contributions on this, and previous projects. Thank you to my fellow graduate students and friends. I have learned so much from all of you. Finally, thank you to all the research assistants who contributed to this project.

DEDICATION

This manuscript is dedicated to my parents. In every sense, I could not have done it without you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Women's health and well-being are actively at risk by living in a culture where they are frequently objectified (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). To be objectified is to be assessed not as a full-fledged, agentic individual, but as a body that exists to further the pleasure of others (Fredrickson & Roberts, 1997). Specifically, women are sexually objectified—this means that their bodies are considered a commodity that serves to be suitably sexually attractive and sexually available to others (Szymanski, Moffitt, & Carr, 2011). To live in an objectification culture manifests in certain kinds of experiences that are far more commonly experienced by women—being intensely visually inspected (Hall, 1984) and cat-called in the street (Bartky, 1990); appearance-based discrimination (e.g. Snow & Harris, 1985); and domestic and sexual violence (Rudman & Mescher, 2012; Wright & Tokunaga, 2016; Zurbriggen, & Roberts, 2013).

Women in our society are on the receiving end of such experiences starting from a young age (American Psychological Association, 2007). These experiences shape women's sense of their own value and worth, in that they are acculturated to believe that a woman's whole value resides in her ability to live up to the standards of objectification culture. To live in such a culture, women adapt and learn to internalize the position of a theoretical outside observer. That is to say, in order to achieve and maintain value and status in our culture, women learn that they must be constantly self-vigilant to their bodies and appearance in order to appear suitably attractive and beautiful—a process known as "self-objectification" (Fredrickson & Roberts, 1997; Calogero, Tantleff-Dunn, & Thompson 2011).

Fredrickson and Roberts (1997) conceived a psychological framework of objectification as an attempt to understand why women suffer certain negative well-being outcomes at a higher

rate than men. They proposed that a life of objectification (both from experiences of being objectified by others, as well as internalized self-objectification) triggers a cascade of psychological consequences that ultimately results in heightened risk for certain mental health outcomes. Namely, women suffer from disproportionate rates of eating disorders, depression and sexual dysfunction. Fredrickson and Roberts suggested that objectification culture and self-objectification are partially responsible for the increased risk among women for these disorders. Subsequent research has largely supported that proposition by both experimentally manipulating objectification, as well as measuring trait-like self-objectification, and finding them to be associated with indicators of all three aforementioned mental health outcomes (Moradi & Huang, 2008; Szymanski, Moffitt, & Carr, 2011).

Generally, objectification theory and the subsequent psychological field of research it inspired has provided abundant evidence that women suffer from living in objectification culture (Moradi & Huang 2008; Szymanski, Moffitt, & Carr, 2011). However, one important metric of well-being has not yet been investigated in the context of objectification—existential well-being. Existential well-being reflects the extent to which people believe that life is full of meaning, purpose and significance (Frankl, 1997; Maslow, 1968). To feel that life is meaningful manifests in a number of ways, depending on what an individual feels is important and represents personal value and significance. This can mean that one believes human life matters in a grand sense, and that human life is inherently valuable (Baumeister, 1991). It can be derived from feeling that one has pursued a unique and individual identity through goal pursuits and self-actualization (Deci & Ryan, 2000; Kenyon, 2000; Seligman, 2002). Meaning can even be more simple and mundane, derived through a sense that daily life has purpose, routine and certainty (e.g. Antonovsky, 1993;

Baumeister & Vohs, 2002). At its core, finding what makes life meaningful is a deeply personal existential pursuit.

Achieving existential well-being, or meaning in life, is not merely a philosophical or lofty pursuit. A vast body of research has demonstrated that finding a sense of meaning in life is not an unnecessary extravagance for intellectuals, but rather a fundamental motive that all humans seek to fulfill (Maslow, 1968). Health psychologists have successfully established that meaning in life is a major metric of psychological and physical health. For example, lacking meaning in life is associated with negative mental health outcomes such as depression (Debats, van der Lubbe, & Wezeman, 1993; Mascaro & Rosen, 2005), suicidality, and substance abuse (Harlow, Newcomb, & Bentler, 1986; Ungar, Ungar, & Kim, 2011; Kinnier, Metha, Keim, & Okey, 1994). Conversely, having meaning in life predicts longer life (Boyle, Barnes, Buchman, & Bennett 2009; Krause, 2007), and greater happiness and life satisfaction (Park, Park & Peterson, 2010). Additionally, despite the high cost of lacking meaning, successful therapies have been developed that focus on actively increasing meaning as a way to improve health prognoses. For example, such therapies have had success at improving outcomes for individuals with depression (Santos et al., 2013) and substance abuse issues (Singer, Singer, & Berry, 2013). Overall, the picture that emerges is that meaning in life is a critical human motive, and without it people suffer health and well-being consequences.

Despite meaning in life being a significant indicator of well-being and health, and objectification having a known impact on women's well-being, research has yet to integrate these lines of work. If objectification is broadly damaging to women's well-being and psychological health, it may follow that it is damaging within the specific realm of existential health and well-being. To be reduced to an object is a dehumanizing experience (Haslam, 2006;

Paladino, & Puvia, 2011), which may in turn negatively impact women's meaning in life. Additionally, many of the psychological factors or outcomes within the objectification framework (e.g. depression) are associated with meaning deficits (Mascaro & Rosen, 2005); theoretically, any of the negative psychological outcomes within the objectification framework could create a link between objectification and lessened meaning in life.

Although it may seem intuitive that objectification's damage to well-being would spill over into damage to existential well-being, theoretical insight from the realm of terror management theory (TMT; Greenberg, Pyszczynski, & Solomon, 1986) may justify a different prediction. According to TMT, humans have the potential for significant anxiety about their deaths, which they seek to alleviate by investing in what are called "worldviews" (Solomon, Greenberg, & Pyszczynski, 2004). Essentially, a worldview is a system of meaning that people turn to in order to feel that their lives matters, and which gives them avenues through which to contribute something meaningful to the world (e.g. a religion; Vail et al., 2010). Participation in a worldview is thought to help people "solve" the problem of death so to speak. That is to say that a worldview may offer either a literal solution to death (e.g. an afterlife; Vail et al., 2010) or a more symbolic one (e.g. a legacy one leaves among loved ones after death; Florian & Mikulincer, 1998; Lifton, 1983; Routledge & Arndt, 2008). Much TMT research has empirically supported its theoretical claims by utilizing what is known as a mortality salience (MS; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989) induction. Basically, since death is the motivation behind our adherence to worldviews, prompting someone with a death reminder should increase strict and abiding adherence to whatever worldview one holds. A substantial body of research utilizing the MS induction has supported this proposition (see Burke, Martens, & Faucher, 2010).

Using the TMT framework, one can conceptualize objectification as the predominant worldview that women are socialized to adhere to. Although objectification does actively damage women's well-being, it is still the system through which women are taught they can achieve a sense of value and self-worth in society (i.e. if a woman is suitably attractive, she reaps societal rewards; Berscheid, Dion, Walster, & Walster, 1971; Etcoff, 1999). According to TMT, self-esteem and self-worth are the gauges by which individuals can assess whether or not they are adequately living up to the standards of their worldview (Greenberg, 2008). Objectification culture does have an overall negative impact on women's self-worth, but since it is a framework by which women are socialized to seek their value in society, perhaps objectification's impact on meaning hinges on a woman's perceived success at living up to its worldview (i.e. her self-esteem in the realm of her appearance).

The notion that objectification belongs in the TMT framework is not merely speculative—research indicates that there is a terror management function to the objectification of women (see Goldenberg, 2013). Essentially, our corporeal nature threatens our immortality strivings, and humans therefore seek to be disassociated from reminders of our bodily nature, especially when death is made salient (Goldenberg et al, 2006; Goldenberg, Heflick, & Cooper, 2008). Women's bodies are particularly problematic, since their role in reproduction provides additional reminders of our attachment to our bodily nature (e.g. Goldenberg & Roberts, 2004; Ortner, 1974; Tuana 1993). According to TMT, objectification may be motivated by a desire to strip women's bodies of their more threatening aspects, and turn them into unthreatening objects of beauty (Goldenberg & Roberts, 2004; Goldenberg, 2013). Research in this vein has demonstrated that reminders of death increase aversion to women's natural bodies (Cox, Goldenberg Arndt, & Pyszczynski, 2007; Goldenberg, Goplen, Cox, & Arndt, 2007), as well as

people's tendency to objectify women (Grabe, Routledge, Cook, Andersen, & Arndt, 2005). Additionally, bolstering the theory that objectification is a worldview, for women who highly value their physical attractiveness, a death reminder increases self-objectification (Grabe, Routledge, Cook, Andersen, & Arndt, 2005). This result indicates that objectification is a worldview or meaning system that women may actively turn to when confronted with the reality of death.

Assuming objectification is a worldview, I propose that objectification may not be directly damaging to women's existential well-being all of the time. I would instead hypothesize that the relationship between objectification and existential outcomes is moderated by the individual difference of women's self-esteem, specifically in the context of her physical appearance. If objectification is a worldview, even if it tends to have damaging downstream consequences, a woman who perceives that she is successfully living up to the standards of objectification culture may experience a boost to existential well-being upon being objectified. The standards for physical beauty within our culture may be unattainable for many women (Goldenberg & Roberts, 2004; Wolf, 1991), but perhaps for women who are successfully deriving self-esteem from appearance, objectification may counterintuitively be a source of meaning in life. Therefore I conducted a series of studies that will specifically look into whether individual differences may impact women's perception of and reaction to objectifying experiences, specifically in regards to meaning-oriented outcomes.

Hypothesis

I propose that there will be an interaction between women's appearance-relevant self-esteem and objectification on meaning outcomes. For women high in self-esteem relevant to physical appearance, an objectification prime may increase indicators of existential well-being.

For women low in such self-esteem, the opposite is predicted. That is, an objectification prime will decrease indicators of existential well-being. A supplementary hypothesis is that this relationship may alternatively be moderated by the extent to which an individual woman reports physical appearance as being an important source of self-worth.

PRELIMINARY STUDY

Methods

The primary purpose of the preliminary study was to develop an objectification manipulation. Specifically, since I propose that self-esteem will impact how women perceive their objectifying experiences, I developed a manipulation intended to prime women with their own individual experiences with objectification, assess how they perceive such experiences, and investigate whether self-relevant attitudes are associated with how women interpret and perceive experiences of objectification.

Participants and Design

80 female participants were solicited through Amazon's Mechanical Turk (MTurk; Miller, Crowe, Weiss, Maples-Keller, & Lynam, 2017). The MTurk platform allows "requesters" to solicit "workers" to engage in various tasks for compensation. Various reviews and studies have indicated MTurk to be a reliable and valid source of data for psychological research (Buhrmester, Kwang, & Gosling, 2011; Mason & Suri, 2012; Paolacci & Chandler, 2014). Participants were informed that the study concerned attitudes and memories. All participants reported being from the United States, and speaking English fluently. Participation was voluntary, and participants were able to withdraw from the study at any time. Six participants were excluded from analyses for writing about an objectifying memory in another condition (2 participants), writing an insufficient amount (i.e. 1 sentence or less; 2 participants), thinking of an irrelevant memory (1 participant) and being unable to think of a memory (1 participant), leaving 74 participants in the analyses (M_{age} = 40.47, SD_{age} = 12.41). Among these, according to self-reported responses of these participants, 58 were non-Hispanic white (78.8%), 6 were

African American (8.1%), 4 were Asian American (5.4%), 2 were Latino/Hispanic (2.7%), 1 was West Indian (1.4%), and 3 responded they were "other" (4.1%).

Materials and Procedure

Contingencies of Self-worth. Although it might be reasonable to assume that women are generally socialized to accept objectification as their worldview, it is also possible that there is an individual difference in how much importance women place on their appearance as a source of self-worth. This may in turn impact the relationship between self-esteem and objectification on well-being outcomes. To assess participants' relative importance of various sources of self-worth, I first administered the 35-item Contingencies of self-worth scale (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). This measure assesses how much self-worth individuals derive from a variety of sources, including from physical attractiveness. Sample items include "When I think I look attractive, I feel good about myself." Participants rated their agreement using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. After reverse-scoring appropriate items, an average was taken, with each source computed separately, and higher scores will indicate greater value placed on self-worth derived from a source (Appearance contingency: $\alpha = .86$, $M = 4.99$, $SD = 1.15$). The other sources of self-worth included in this measure are family support ($\alpha = .86$, $M = 5.15$, $SD = 1.20$), competition ($\alpha = .86$, $M = 4.60$, $SD = 1.11$), God's love ($\alpha = .97$, $M = 3.88$, $SD = 2.21$), academic competence ($\alpha = .83$, $M = 5.21$, $SD = 0.94$), virtue ($\alpha = .82$, $M = 5.69$, $SD = .97$), and approval from others ($\alpha = .85$, $M = 4.02$, $SD = 1.32$). Although the primary variable of interest is the physical attractiveness contingency, the other sources were included for purposes of comparison.

Body-esteem. I administered a trait measure of body esteem adapted from the Body Image States scale (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002). Items included

"I feel satisfied with my physical appearance." Participants rated their agreement using a 1 (*strongly disagree*) to 9 (*strongly agree*) scale, with higher scores indicating greater body image esteem ($\alpha = .95$, $M = 4.24$, $SD = 1.89$).

Memory Prompt. Participants were then randomly assigned to an objectification memory prompt (N = 24), or the control neutral memory prompt (N = 27). I additionally included a third experimental condition in which participants were asked to reflect on a time when they were judged based on their intelligence or personality (N = 23). This condition was contrived to act as an inverse, or opposite-of-objectification prime, as opposed to the truly neutral memory control condition. I will refer to this as the "competence" condition.

Participants received the prompt instructions, and were then asked to spend 5 minutes writing their response. For those in the objectification memory condition, the prompt read "Please think of a time when you were judged based on your body or appearance. Specifically, think of a time when your appearance or attractiveness was judged, and your intelligence or personality was ignored. Then, for 5 minutes, write about this experience. Try and recall what happened, as well as your reactions and how you felt following this experience." For those in the neutral memory condition, they received a structurally similar prompt that reads "Please think of a time when you had an average day. Specifically, think of a time when your day went as planned, and what happened. Then, for 5 minutes, write about this day. Try and recall what happened, as well as your reactions and how you felt following this day." For those in the competence condition, the prompt read "Please think of a time when you were judged based on your personality, intelligence, or other such qualities. Specifically, think of a time when your competence or personality was judged, and your body or appearance was ignored. Then, for 5

minutes, write about this experience. Try and recall what happened, as well as your reactions and how you felt following this experience."

Manipulation Check Questions. To ensure the effectiveness of the manipulation, I included items meant to assess participants' reaction to the prompts. Specifically, I sought to ensure that individuals who received the objectification memory prompt felt significantly more objectified than those who received the neutral or competence prompts. Items included statements such as "To what extent did writing about your memory make you feel judged based on your appearance?" Participants rated their agreement using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. A total manipulation check score was computed by averaging the three items together ($\alpha = .86$, $M = 3.33$, $SD = 2.04$).

Analysis and results

The aim of this preliminary study was to develop the experimental manipulation to be used in a subsequent experimental study. Thus, I predicted that participants in the objectification memory condition would score higher on the objectification manipulation check measure than participants in the control condition. Results of a one-way analysis of variance (ANOVA) indicated that there was a significant difference between conditions in how objectified women felt ($F(2, 71) = 83.74$, $p < .001$). Follow-up least significant difference (LSD) tests indicated that participants reported feeling more objectified in the objectification condition compared to the competence condition ($p < .001$) as well as compared to the neutral memory condition ($p < .001$; see Table 1 for means and standard deviations). There was no significant difference between the neutral and competence memory condition ($p = .34$).

Table 1

Means and standards deviations for the manipulation check items in the pilot study by condition

	Mean	SD
Objectification memory	5.78	1.21
Neutral memory	2.32	1.27
Opposite-objectification memory	2.01	0.91

Given that the manipulation involves participant narrative writings, and I was specifically interested in how women perceive these different kinds of memories, I then had the narratives coded for certain content. Two trained research assistant coders, blind to condition, were given all the narratives in addition to a series of questions they answered related to each narrative. I then created scores to indicate how positive and how negative the objectification and neutral memories were. Additionally, I had coders rate the narratives on a variety of emotion-based dimensions, to assess what kinds of emotional reactions the narratives demonstrated, which were averaged to create positive emotion and negative emotion dimensions (see Appendix H for full coding dimensions; Inter-rater reliability for positivity dimension: $\alpha = .91$; for positive emotion: $\alpha = .88$; for negativity: $\alpha = .96$; and for negative emotion: $\alpha = .86$).

I analyzed narrative codings using a multivariate analysis of variance (MANOVA), with follow-up LSD tests. There were significant differences by condition on positivity ($F(2, 74) = 25.79$, $p < .001$), negativity ($F(2, 74) = 44.59$, $p < .001$), positive emotion ($F(2, 74) = 14.07$, $p < .001$) and negative emotion ($F(2, 74) = 32.00$, $p < .001$).

Follow-up tests indicated that for those in the objectification condition, narratives were significantly less positive than both the competence and neutral memories (both p's $< .001$). There was no significant difference in positivity between neutral and competence memories ($p = .23$). For positive emotions, the objectification memory narratives contained significantly less positive emotions than both the competence and neutral memory narratives (both p's $< .001$).

There was no significant difference between neutral and competence memories on positive emotions ($p = .31$).

For negativity, the objectification memory narratives were significantly more negative than both the competence and neutral memory narratives (both p's $< .001$). Additionally, the competence memory was significantly more negative than the neutral memory ($p < .01$). For negative emotions, the objectification memory narratives contained significantly more negative emotions than both the competence and neutral memory narratives (both p's $< .001$). Finally, the competence memory contained significantly more negative emotions than the neutral memory ($p = .01$; see Table 2 for all means and standard deviations).

Table 2

Means and standards deviations for the positive and negative dimensions within the narratives in the pilot study by condition

		Mean	SD
Positivity			
	Objectification	1.42	0.65
	Competence	2.87	1.32
	Neutral	3.19	1.20
Negativity			
	Objectification	3.44	0.84
	Competence	1.94	1.24
	Neutral	1.17	0.37
Positive Emotions			
	Objectification	1.13	0.35
	Competence	2.07	0.94
	Neutral	1.88	0.55
Negative Emotions			
	Objectification	2.30	0.77
	Competence	1.51	0.60
	Neutral	1.05	0.15

As expected, overall these results indicate that the objectification memories were the least pleasant among all three memory types. Additionally, these results show that although the competence memories were better than the objectification memories, compared to neutral

memories there was more negativity, while they contained about equal amounts of positivity. This may indicate that although many women describing memories in which they were judged by something other than their bodies or appearance had some negative reactions, there may be more positivity in women's responses when writing about these experiences. This could mean that despite some ambivalence within these competence memories, there may be some value for women in reflecting on them.

To demonstrate examples of what kinds of narratives women were producing when presented with the prompts, below are examples of narratives by condition. The following is an example of a woman writing about an objectifying memory:

> "When I was younger, I felt that everyone only wanted to date me for my looks. I was very shy, so they didn't even get to know me very well. They were just interested in my looks. It felt kind of odd and made me not like them and feel that they were creeps and predatory. That behavior from those kinds of people made me super uncomfortable and made me feel bad about myself."

The following is an example of a woman writing about a competence memory:

> "I recently applied for a job as a social worker/case manager. I have high academic performance measures and recently received my Master's degree with a 3.98 GPA. My interview and ultimate hiring for the position was based off of my intelligence as well as my personality as it takes a certain personality to be a social worker, especially at the agency where I work (HIV/AIDS agency). I do not feel like my looks were taken into account at all when being considered for the position. While I know that I am a fairly attractive person, I have gained a substantial amount of weight following a dark period of my life and I feel unattractive all the time even though others tell me that is not the case. Being hired for this job made me feel worthy and capable despite how I feel about my looks."

The following is an example of a neutral memory narrative:

> "I woke up at 6:30. Prepare breakfast for my family. Woke them up. Help kids get ready for school. We are [*sic*] and I drove my daughter to school. On way home I stopped at the store and bought some groceries. Then I cooked dinner. Clean the house. At 3 pm drove to pick up kid for school. We ate dinner. Help my child do the homework. We played games etc. Showers. Read book to my kid. Watched some TV and fell asleep. I felt good about this day. Everything went as I planned. Every day with my family is a blessing."

Additionally, I ran a correlational analysis to assess whether positive and negative language in objectification memories is associated with the body esteem measure and the physical attractiveness self-worth measure. Results revealed no significant correlations between any of the coding dimensions and body esteem, nor with appearance as a self-worth contingency.

Finally, I conducted a series of hierarchical regressions to assess whether body esteem or appearance as a self-worth contingency interacted with the manipulation to impact positive and negative dimensions in the narrative. Since the competence condition was not a true control condition, instead of collapsing that condition in with the neutral memory, I elected to conduct a series of regressions, where I compared objectification memories to neutral, then competence memories to neutral, and finally objectification memories directly against competence memories.

Objectification versus neutral memories

Those in the competence memory condition were excluded from the following analyses. Condition was dummy coded with objectification memory as 0 and neutral memory as 1. Body esteem was centered. For all analyses, both terms were entered in the first step of the regression, with the interaction in the second. For narrative positivity, there was a significant main effect of condition in that positivity was lower in the objectification condition ($B = 1.78$, $SE = .19$, $t = 9.19$, $p < .001$). There was no main effect of body esteem ($p = .51$), and the interaction was non-significant ($p = .18$).

For positive emotions, again there was similarly a main effect of condition whereby there were fewer positive emotions in the objectification condition ($B = .76$, $SE = .13$, $t = 5.71$, $p < .001$). Again there was no main effect of body esteem ($p = .68$), and the interaction was non-significant ($p = .49$).

For negativity, there was a main effect for condition (B = -2.31, SE = .70, t = -13.60, p < .001) indicating that negativity was higher in the objectification condition. Additionally there was a main effect of body esteem (B = -.11 SE = .05, t = -2.48, p = .02), indicating that higher esteem was associated with lower negativity. There was also a marginal interaction (B = .18 SE = .09, t = 2.01, p = .05). I then conducted follow-up simple slope tests. Within the objectification memory condition, body esteem was significantly and negatively associated with negativity (B = 0.20, SE = .06, t = -3.21, p < .01). There was no significant relationship within the neutral memory condition (p = .65; see Figure 1). Follow-up predicted means tests indicated that negativity was significantly higher in the objectification condition both at low (B = -2.64, SE = .22, t = -11.25, p < .001) and high body esteem (B = -1.98, SE = .23, t = -8.49, p < .001). What the interaction seems to indicate though, is that the objectification condition results in less negativity when one has high body esteem.

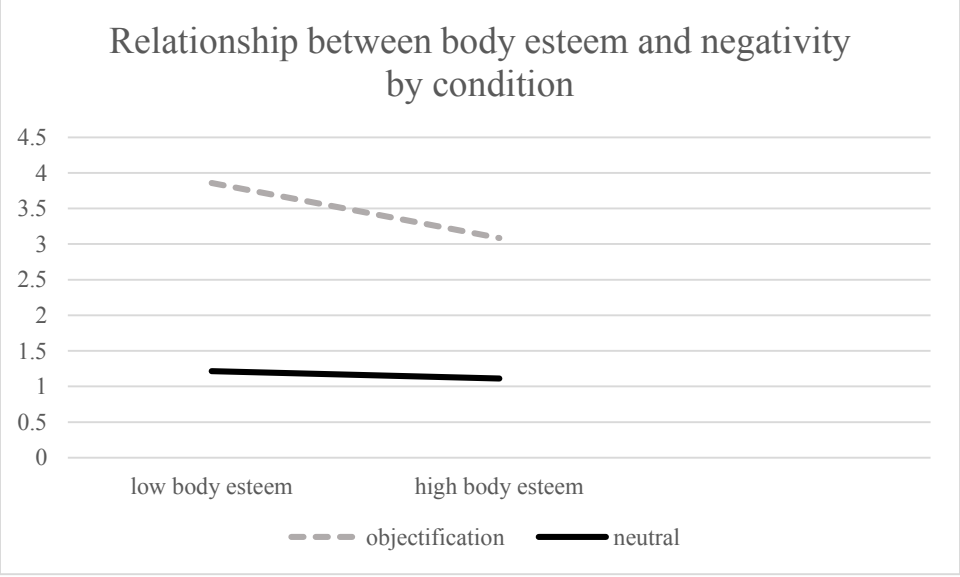

Figure 1. Interaction between body esteem and condition (objectification versus neutral) on narrative negativity from the preliminary study. Higher scores equal higher negativity.

For negative emotions, there was a main effect of condition (B = -1.28, SE = .15 t = -8.79, p < .001) indicating that there were more negative emotions in the objectification condition.

Additionally there was a main effect of body esteem (B = -.09, SE = .04, t = -2.37, p = .02), indicating that higher esteem was associated with less negative emotions. There was also a significant interaction (B = .18, SE = .07, t = 2.42, p = .02). I then conducted follow-up simple slope tests. Again, within the objectification memory condition, body esteem was significantly and negatively associated with negativity (B = 0.19, SE = .05, t = -3.47, p < .01). Again, there was no significant relationship within the neutral memory condition (p = .90; see Figure 2). Follow-up predicted means tests indicated that negative emotion was higher in the objectification condition at both low (B = -1.62, SE = .20, t = -8.19, p < .001) and high body esteem (B = -.94, SE = .20, t = -4.81, p < .001), again indicating that negative emotion is generally higher in the objectification condition, but that this effect is tempered at high body esteem. These results suggest that body esteem may be a protective factor when contemplating unpleasant objectifying memories.

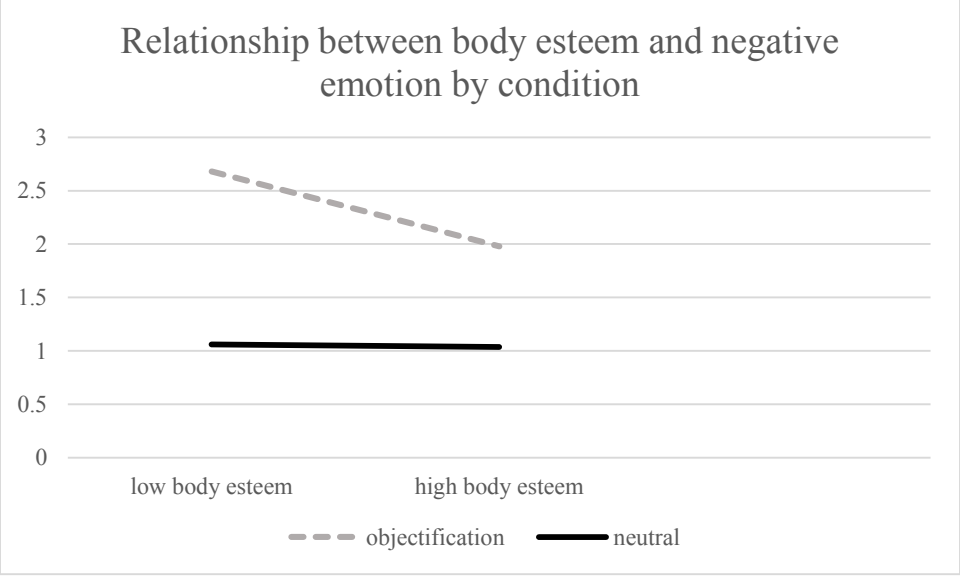

Figure 2. Interaction between body esteem and condition (objectification versus neutral) on narrative negative emotion from the preliminary study. Higher scores equal higher negative emotion.

I then moved on to analyze appearance as a contingency of self-worth as a moderator. Again, for all analyses, both terms were entered in the first step of the regression, with the interaction in the second. For narrative positivity, there was a significant main effect of condition in that positivity was lower in the objectification condition ($B = 1.78$, $SE = .19$, $t = 9.22$, $p < .001$). There was no main effect of contingency ($p = .44$), and the interaction was non-significant ($p = .12$).

For positive emotions, there was similarly a main effect of condition whereby there were fewer positive emotions in the objectification condition ($B = .76$, $SE = .13$, $t = 5.78$, $p < .001$). Again there was no main effect of contingency ($p = .38$), and the interaction was non-significant ($p = .38$).

For negativity, there was a main effect of condition ($B = -2.29$, $SE = .18$, $t = -12.97$, $p < .001$). There was no main effect for contingency ($p = .18$) and the interaction was non-significant ($p = .17$).

For negative emotions there was a main effect of condition ($B = -1.27$, $SE = .15$, $t = -8.48$, $p < .001$). There was no main effect for contingency ($p = .12$), and the interaction was non-significant ($p = .11$).

Overall, results support that there may be an interaction between memory type and body esteem for negativity and negative emotions, whereby higher body esteem is associated with lessened negative components within the memories after an objectification prime. There do not appear to be any interactions on positive dimensions. Additionally, results do not support there being any interactions between appearance as a self-worth contingency and condition on the coding variables.

Competence versus neutral memories

I then shifted analyses to focus on how competence memories compare to neutral memories. Since competence memories may contain both negative (feeling judged) and positive (feeling valued for something intrinsic) components, it is possible that competence memories may produce some ambivalence, or even positive value.

The following analyses parallel the previous. Those in the objectification memory condition were excluded. Condition was dummy coded with competence memory as 0 and neutral memory as 1. Body esteem was centered. For narrative positivity, there was neither a main effect of body esteem (p = .39) nor condition (p = .34). The interaction was also non-significant (p = .63).

For positive emotions, there was a marginal main effect of body esteem whereby esteem was negatively associated with positive emotion (B = -.10, SE = .06, t = -1.82, p = .08). There was no main effect of condition (p = .27). The interaction was marginally significant (B = .20, SE = .11, t = 1.84, p = .07). Follow-up simple slope tests revealed there to be a significant and negative relationship between body esteem and positive mood only within the competence condition (B = -.21, SE = .08, t = -2.62, p = .01; see Figure 3). The relationship within the neutral memory condition was non-significant (p = .91). Predicted means tests indicated that there was only a significant difference in positive mood by condition at low body esteem (B = -.62, SE = .29, t = -2.12, p = .04). The overall pattern indicates that for those low in body esteem, the competence memory condition was associated with the greatest positive mood.

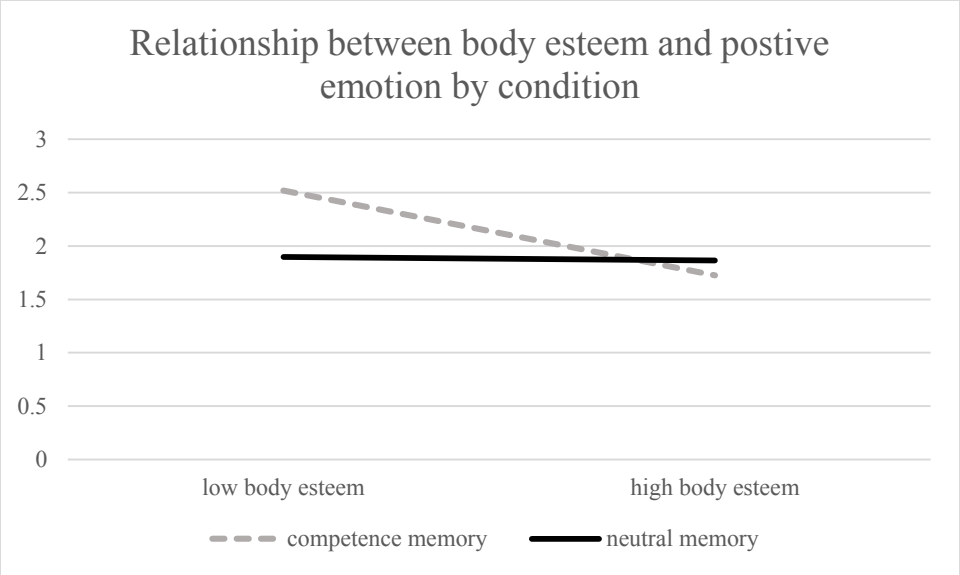

Figure 3. Interaction between body esteem and condition (competence versus neutral) on narrative positive emotion from the preliminary study. High scores equal higher positive emotion.

For negativity, there was a main effect of condition (B = -.77, SE = .25, t = -3.03, $p < .01$ whereby there was more negativity in the competence condition. There was no main effect of body esteem (p = .93) and the interaction was non-significant (p = .73).

For negative emotions there was a main effect of condition (B = -.46, SE = .12, t = -3.78, $p < .001$) whereby there were more negative emotions in the competence condition. There was no main effect of body esteem (p = .92) and the interaction was non-significant (p = .92).

I then moved on to analyze appearance as a contingency of self-worth as a moderator. Again, for all analyses, both terms were entered in the first step of the regression, with the interaction in the second. For positivity, there were neither main effects for condition (p = .29), nor contingency (p = .99), nor was there a significant interaction (p = .63). The same held for positive emotion with no main effect for condition (p = .36) or contingency (p = .67), nor was there a significant interaction (p = .76).

For negativity there was a significant main effect of condition (B = -.79, SE = .25, t = -3.15, p < .01) whereby there was more negativity in competence narratives, with no main effect for contingency (p = .38) and no interaction (p = .47). Similarly for negative emotions, for negativity there was a significant main effect of condition (B = -.47, SE = .12, t = -3.83, p < .001) whereby there were more negative emotions in competence narratives, with no main effect for contingency (p = .62) and no interaction (p = .65).

Although the only effect to emerge when comparing competence and neutral memories was marginal, that effect does preliminarily indicate that for those low in body esteem, contemplating an experience in which one's competence is assessed may have some beneficial impact.

Objectification versus competence memories

Finally, I directly compared the objectification and competence narratives. Neutral memory participants were excluded, and condition was dummy coded with objectification memory as 0 and competence memory as 1.

Again, body esteem was centered. For positivity, there was a significant main effect of condition (B = 1.45, SE = .30, t = 4.79, p < .001) whereby the competence memory condition was associated with more positive memories. There was no main effect for body esteem (p = .97) nor a significant interaction (p = .18).

For positive emotion, there was a significant main effect of condition (B = .95, SE = .20, t = 4.72, p < .001) whereby competence narratives contained significantly more positive emotion. There was no main effect for body esteem (p = .14). There was a significant interaction (B = -.25, SE = .10, t = -2.46, p = .02). I therefore conducted follow-up simple slope tests. Within the competence condition, body esteem was negatively associated with position emotions within the

narratives (B = -.21, SE = .07, t = -2.87, p < .01 see Figure 4). There was no significant relationship for the objectification condition (p = .57). Additionally, follow-up predicted means tests indicated that there was a significant difference between conditions at low body esteem (B = 1.42, SE = .27, t = 5.25, p < .001), whereby for women with low body esteem, the competence condition was associated with greater positive emotion. There was no significant difference at high body esteem (p = .09). Overall, this interaction indicates that for those with low body esteem, contemplating a memory of a time being judged based on competence or intelligence leads to a memory more imbued with positive feelings. No such effect occurs for those high in body esteem. Additionally there is no difference between those high and low in body esteem on positive emotions within the objectification condition.

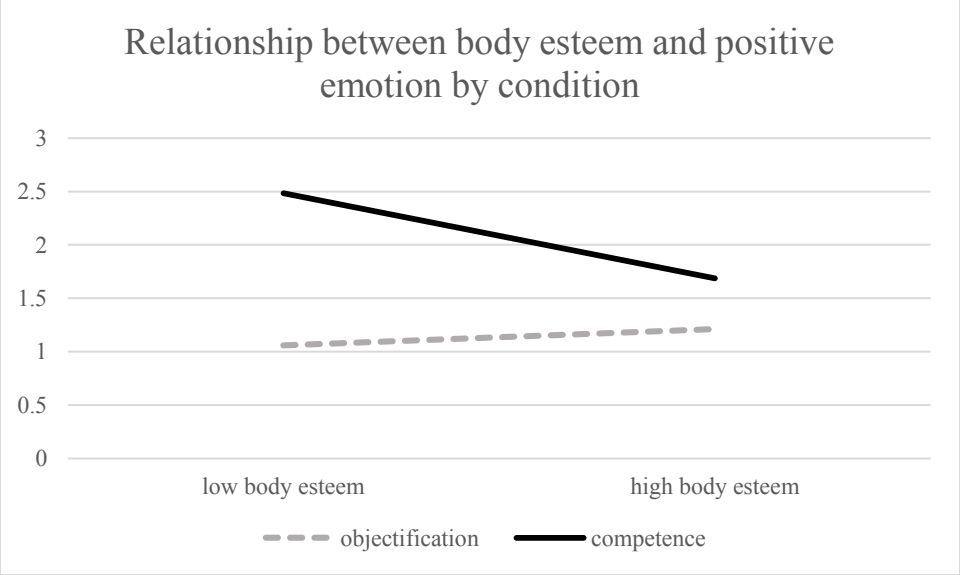

Figure 4. Interaction between body esteem and condition (objectification versus competence) on narrative positive emotion from the preliminary study. Higher scores equal higher positive emotion.

For negativity there was a significant main effect of condition (B = -1.49, SE = .31, t = -4.88, p < .001) whereby there was more negativity in objectification narratives, with no main effect for body esteem (p = .25) and no interaction (p = .17).

For negative emotions, there was a significant main effect of condition (B = -.78, SE = .20, t = -3.94, p < .001) whereby there were more negative emotions in competence narratives. There was a marginal main effect for body esteem (B = -.10, SE = .05, t = -2.28, p = .08), whereby body esteem was associated with less negative emotions. There was a marginal interaction (B = .19, SE = .10, t = 1.80, p = .08). Follow-up simple slope tests revealed a significant and negative relationship between body esteem and negative mood within the objectification condition (B = -.19, SE = .07, t = -2.58, p = .01; see Figure 5). The relationship within the competence condition was non-significant (p = .99). Follow-up predicted means tests revealed there to be a significant difference in negative emotion by condition only at low body esteem (B = -1.13, SE = .28, t = -4.12, p < .001). There was no difference by condition at high body esteem (p = .12). Overall the interaction suggests that for those low in body esteem, the objectification memory condition is more likely to yield a narrative containing negative emotions than a competence memory. For those high in body esteem, there is no significant difference in negative emotion by condition.

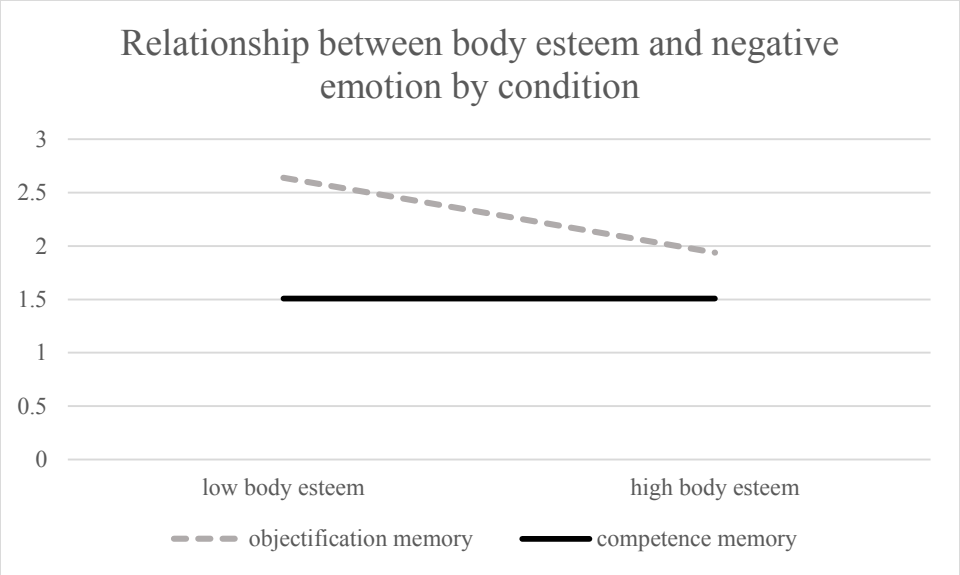

Figure 5. Interaction between body esteem and condition (objectification versus competence) on narrative negative emotion from the preliminary study. Higher scores equal higher negative emotion.

I then moved on to analyses investigating contingency as a moderator. For positivity, there was a significant main effect of condition (B = 1.45, SE = .30, t = 4.81, p < .001) whereby the competence memory condition was associated with more positivity. There was no main effect of contingency (p = .36), nor a significant interaction (p = .52). For positive emotions, there was a significant main effect of condition (B = .94, SE = .21, t = 4.56, p < .001) whereby the competence memory condition was associated with more positive emotions. There was no main effect of contingency (p = .94), nor a significant interaction (p = .32).

For negativity, there was a significant main effect of condition (B = -1.49, SE = .30, t = -4.92, p < .001) whereby the competence memory condition was associated with less negativity. There was no main effect of contingency (p = .14), nor a significant interaction (p = .77). For negative emotions, there was a significant main effect of condition (B = -.78, SE = .20, t = -3.90, p < .001) whereby the competence memory condition was associated with less negativity. There was no main effect of contingency (p = .16), nor a significant interaction (p = .28).

These analyses with contingency as a moderator support findings from previous analyses, indicating that appearance as a contingency of self-worth does not moderate the relationship between condition, and any positive or negative components in the narratives. Body esteem demonstrated more success as a moderator, with multiple significant interactions.

Summary of Results

When comparing objectifying to neutral memories, body esteem does moderate the relationship between memory types and negativity and negative emotions. These interactions indicate that upon contemplating an objectifying memory, body esteem is associated with lessened negativity and negative feelings, perhaps supporting that body esteem can be protective when contemplating unpleasant objectifying memories.

Additionally, body esteem also acts as a moderator when comparing neutral and competence memories, and comparing objectification and competence memories. For those low in body esteem, contemplating a competence memory appears to boost positive emotion. This may indicate that for those who do not derive self-worth through body esteem, contemplating a kind of experience that calls to mind being valued for something completely independent from one's appearance may be of value.

PRIMARY STUDY

Methods

The purpose of the primary study was to utilize the manipulation developed in the preliminary study in an experiment. Specifically, since I hypothesized that women's esteem regarding their physical attractiveness will impact women's existential well-being following objectification, I administered the same self-esteem and self-worth measures, the objectification memory manipulation, followed by a battery of meaning-oriented outcomes. Additionally, in order to establish whether the newly developed manipulation has an effect on other well-being outcomes associated with objectification, I administered more general well-being measures as well.

Participants and Design

189 undergraduate female participants were solicited through the North Dakota State University (NDSU) participant pool. Participants were offered course credit in exchange for participation. The study was programmed utilizing MediaLab software. The study was entirely computer-based, and was administered in private cubicles. Participants were informed that the study concerned attitudes and memories. Participation was voluntary, and participants were free to withdraw from the study at any time. All participants were fully debriefed as to the study's purpose upon completion.

Prior to all analyses, data from 11 participants were excluded due to writing about an objectification-related memory in one of the other conditions (7 participants), being a male (1 participant), writing an insufficient amount (i.e. one sentence; 1 participant), being unable to think of a memory (1 participant), and having missing data (1 participant), leaving 178 participants' data for analyses (M_{age} = 18.74, SD_{age} = 1.67). Among these participants 159 were

non-Hispanic white (89.3%), 9 were African American (5.1%), 3 were Asian American (1.7%), 3 were Latino/Hispanic (1.7%), and 4 responded they were "other" (2.2%).

Materials and Procedure

The primary study included the same Body Image measure (α = .94, *M* = 4.88, *SD* = 1.83), and Contingencies of Self-worth scale (see Table 3 for full reliabilities, means, and standard deviations) as in the preliminary study. I also administered the experimental manipulation developed in the preliminary, including all three conditions. Participants were randomly assigned to either the objectification memory condition, the competence memory condition, or the neutral memory condition. After excluding problem cases there were ultimately 62 participants in the objectification memory condition, 54 in the competence memory condition, and 62 in the neutral memory condition.

Table 3

Reliabilities, means and standards deviations for contingencies of self-worth dimensions in the primary study

	Reliability	Mean	SD
Appearance	.66	4.88	0.85
Family support	.62	5.23	0.66
Competition	.80	5.83	0.84
God's love	.96	4.77	1.77
Academic competence	.64	5.80	0.61
Virtue	.61	5.30	0.75
Approval from others	.81	4.00	1.23

Meaning and Well-being Outcomes. Participants then completed a battery of well-being measures, with a focus on existential well-being and meaning.

Meaning in Life. The first outcome administered was the 5-item presence subscale of the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006). Sample items include "My life has a clear sense of purpose." Participants rated their agreement with each

statement using a 1 (*absolutely untrue*) to 7 (*absolutely true*) scale. After reverse-scoring appropriate items, an average score was computed, with higher scores representing higher perceived presence of meaning (α = .91, *M* = 5.27, *SD* = 1.15).

Crisis of Meaning. Participants then completed the 5-item crisis of meaning subscale from the Sources of Meaning in Life Scale (SoMe; Schnell, 2010). The crisis subscale represents the extent to which participants are distressed by a lack of meaning in life. Sample items include "I feel pain from finding no purpose in life." Participants rated their agreement using a 1 (*strongly disagree*) to 6 (*strongly agree*) scale. An average was computed, with higher scores indicating greater levels of crisis (α = .91, *M* = 2.05, *SD* = 1.08).

Vitality. Meaning in life is associated with feeling energetic, alive, and self-actualized, a concept referred to as vitality (Ryan & Fredrick, 1997). I therefore administered the 7-item Subjective Vitality scale (Ryan & Frederick, 1997). Sample items include "at this time, I have energy and spirit." Participants rated their agreement with each statement using a 1 (*not true at all*) to 7 (*very true*) scale. An average was computed, with higher scores indicating greater vitality (α = .90, *M* = 4.11, *SD* = 1.28).

Anxiety. Participants then completed four state-like items selected from the State-Trait Anxiety Inventory (STAI; Spielberger, 1983). Sample items include "I am tense." Participants will rate their agreement from 1 (*not at all*) to 4 (*very much so*). An average was computed with higher scores indicating greater state anxiety (α = .67, *M* = 2.16, *SD* = 0.63).

***Satisfaction with Life*.** Participants then completed the 5-item Satisfaction with Life scale (SWL; Diener, Emmons, Larsen, & Griffin, 1985). Sample items include "The conditions of my life are excellent," and participants rated their agreement with each statement on a 1 (*strongly*

disagree) to 7 (*strongly agree*) scale. An average was computed, with higher scores indicating greater satisfaction with life (α = .86, *M* = 4.76, *SD* = 1.19).

PANAS. Finally, participants completed the 20-item Positive and Negative Affect schedule (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS is a state measure that assesses both positive and negative mood. Participants rated the extent to which they were feeling 20 different positive and negative emotions, using a 1 (*very slightly or not at all*) to 5 (*extremely*) scale. Positive and negative affective scores were averaged separately, with higher scores representing higher positive (α = .93, *M* = 2.99, *SD* = .90) and negative affect (α = .89, *M* = 1.67, *SD* = .69) respectively.

Analysis and Results

I first conducted a MANOVA comparing all three conditions to analyze any direct impact the experimental manipulation may have had on the dependent measures. Despite my prediction that the objectification prompt as opposed to the neutral or competence prompts might lead to heightened levels of anxiety and negative affect, or diminished levels of satisfaction with life and positive affect, the MANOVA indicated that there were no significant main effects of condition on any of the crucial dependent measures. The only effect of condition was on the manipulation check ($F(2, 178) = 54.57$, $p < .001$; see Table 4 for means and standard deviations). Follow-up LSD tests indicated that women felt significantly more objectified in the objectification condition than those in either the neutral ($p < .001$) or competence ($p < .001$) condition. Interestingly, participants in the competence condition felt significantly more objectification in the competence condition than in the neutral condition ($p = .03$). This may indicate that for this participant group, calling to mind an experience being judged increased general self-consciousness. Overall, the objectification condition increased these feelings to the greatest extent of all three conditions.

Table 4

Means and standards deviations for the manipulation checks items in the primary study by condition

	Mean	SD
Objectification memory	4.61	1.64
Neutral memory	2.05	1.38
Opposite-objectification memory	2.65	1.20

Since the experimental manipulation yielded no noteworthy main effects, before investigating interactions, I elected to conduct a correlational analysis between the predicted moderators (body esteem and contingencies of self-worth) and the dependent measures (see Table 5 for all correlations).

Table 5

Correlations from the primary study

	1	2	3	4	5	6	7
1. Body esteem	---						
2. Appearance	-.48**	---					
3. Family support	.08	.24**	---				
4. Competition	-.15*	.46**	.18*	---			
5. God's Love	.22**	-.14	.29**	.01	---		
6. Academics	-.21**	.43**	.31**	.45**	.05	---	
7. Virtue	.00	.09	.31**	.18*	.27**	.21**	---
8. Approval	-.38**	.44**	.06	.21**	-.03	.24**	.07
9. Meaning	.39**	-.27**	.22**	-.09	.28**	-.03	-.02
10. Crisis	-.40**	.16*	-.20**	.10	-.22**	.00	.03
11. Vitality	.38**	-.19*	.10	-.09	.18*	-.10	.16*
12. Anxiety	-.32**	.23*	-.11	-.01	-.07	.03	-.07
13. Satisfaction with Life	.52**	-.30**	.21**	-.12	-.21**	.02	-.01
14. Positive Mood	.37**	-.22**	.13	.03	.18*	-.09	.13
15. Negative Mood	-.19*	.08	-.13	.07	-.05	-.01	-.02

	8	9	10	11	12	13	14	15
1. Body esteem								
2. Appearance								
3. Family support								
4. Competition								
5. God's Love								
6. Academics								
7. Virtue								
8. Approval	---							
9. Meaning	-.30**	---						
10. Crisis	.29**	-.63**	---					
11. Vitality	-.22**	.49**	-.48**	---				
12. Anxiety	.29**	-.43**	.57**	-.48**	---			
13. Satisfaction with Life	-.33**	.56**	-.61**	.49**	-.50**	---		
14. Positive Mood	-.29**	.44**	-.35**	.69**	-.40**	.47**	---	
15. Negative Mood	.17*	-.40**	.61**	-.40**	.62**	-.49**	-.21**	---

Some patterns of significant correlation were unsurprising; for example, all of the existential variables were associated with each other, presumably representing a similar underlying construct. Some correlations were unexpected; for example, level of body esteem was significantly and negatively correlated with having appearance as a contingency for self-worth (r = -.48, p <.001). This appears to indicate that the better women felt about their bodies, the less they reported caring about appearance as it related to self-worth. Additionally, body esteem was significantly associated with all of the existential and well-being variables, indicating that body esteem was positively associated with all positive indicators of well-being, and negatively associated with indicators of lessened well-being. Conversely, appearance as a contingency of self-worth was negatively associated with many indicators of well-being. Overall, these results appear to support the importance of having positive body image among women, while simultaneously suggesting that women who attach less importance to their appearance have better well-being and existential outcomes.

Another interesting series of patterns emerged with another one of the contingencies included—God's love. The importance of God's love was significantly associated with well-being (e.g. meaning in life; r = 2.84, p < .001). This particular finding is unsurprising given the well-documented literature on the meaning and well-being benefits associated with religiosity (Batson & Stocks, 2004; Emmons, 2005; Steger & Frazier, 2005). More relevant to the present research is that the God's love contingency was significantly and positively associated with body esteem (r = .22, p < .01), and negatively, albeit marginally, with the appearance contingency. Although these results are correlational, they suggest that the God's love contingency might be relevant to women's attitudes towards their bodies and self-worth, and thus might be valuable to consider as a moderator in further analyses.

The crucial hypothesis is that body image, and possibly physical attractiveness as a contingency of self-worth, will moderate the relationship between the manipulation and the existential well-being outcomes. To search for potential interactions, I conducted a series of hierarchical regression analyses to assess whether there were any interactions between either of the potential moderators and condition on the existential outcomes. Again I elected to conduct a series of regressions, where I compared objectification memories to neutral, then competence memories to neutral, and finally objectification memories directly against competence memories.

Objectification versus neutral memories

Those in the competence memory condition were excluded from the following analyses. Condition was dummy coded with objectification memory as 0 and neutral memory as 1, and body esteem was centered. For meaning in life, there was a significant main effect of body esteem (B = .23, SE = .05, t = 4.24, p < .001) whereby body esteem was associated with higher meaning, but there was no main effect for condition (p = .91) nor an interaction (p = .53).

For crisis of meaning, there was a significant main effect of body esteem (B = -.26, SE = .05, t = -5.15, p < .001) whereby body esteem was associated with lower crisis, but there was no main effect for condition (p = .68) nor an interaction (p = .25).

For vitality, there was a significant main effect of body esteem (B = .24, SE = .06, t = 3.96, p < .001) whereby body esteem was associated with lower crisis, but there was no main effect for condition (p = .67) nor an interaction (p = .69).

For anxiety, there was a significant main effect of body esteem (B = -.13, SE = .03, t = -3.98, p < .001) whereby body esteem was associated with less anxiety. There was no main effect for condition (p = .73) nor an interaction (p = .72).

For satisfaction with life, there was a significant main effect whereby higher body esteem was associated with greater satisfaction with life (B = .35, SE = .05, t = 6.58, p < .001). There was no main effect for condition (p = .44) nor an interaction (p = .69).

For positive mood, there was a main effect for body esteem (B = .16, SE = .05, t = 3.49, p < .01), with higher body esteem associated with greater positive mood. There was no main effect of condition (p = .60) nor an interaction (p = .26). For negative mood, there was a marginal main effect of body esteem (B = .07, SE = .04, t = -1.84, p = .07), with greater body esteem negatively associated with negative mood. There with neither a main effect of condition (p = .59), nor an interaction (p = .96).

I then centered the appearance as a self-worth contingency variable, and conducted another set of regressions to look for interactions between condition and contingency as a moderator. For meaning in life, there was a significant main effect of contingency, whereby higher contingency was associated with lower meaning (B = -.37, SE = .11, t = -3.35, p < .01). There was neither a main effect of condition (p = .81), nor an interaction (p = .87).

For crisis of meaning, there was a significant main effect of contingency (B = .29, SE = .11, t = 2.60, p = .01) whereby higher contingency was associated with higher crisis. There was no main effect for condition (p = .39). There was a marginal interaction (B = -.42, SE = .23, t = -1.87, p = .06). I then conducted follow-up simple slope tests. Within the objectification memory condition, contingency was significantly and positively associated with crisis (B = .45, SE = .14, t = 3.22, p < .01). There was no significant relationship within the neutral memory condition (p = .89; see Figure 6). Predicted means tests indicated a marginal difference by condition at high contingency (B = -.26, SE = .13, t = -1.95, p = .05) whereby those with high appearance contingency in the objectification condition had the highest crisis of meaning. Overall, the

interaction indicates that for those who highly value appearance as a self-worth condition, contemplating an objectifying memory may be especially detrimental to this meaning outcome.

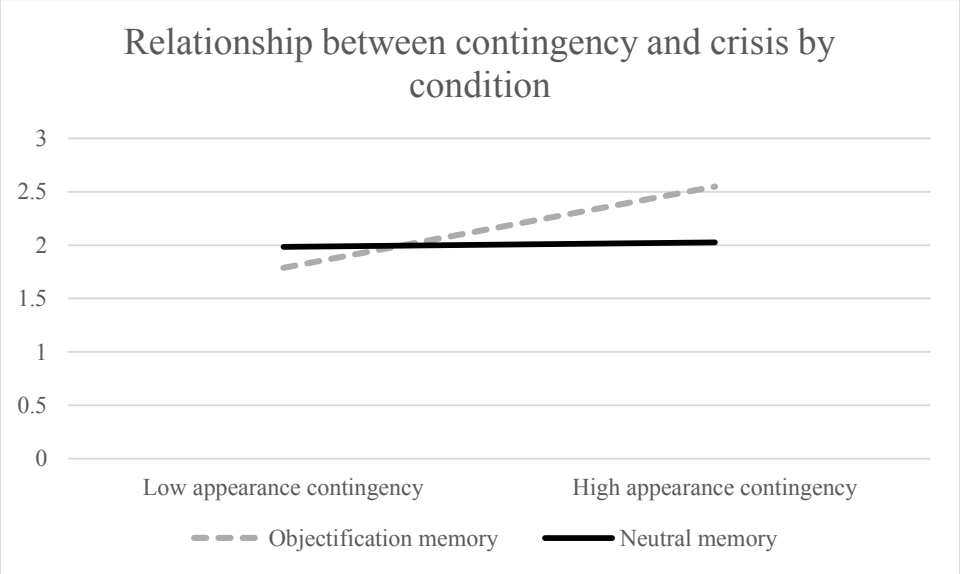

Figure 6. Interaction between appearance contingency and condition (objectification versus neutral memories) on crisis of meaning. Higher scores equal higher crisis of meaning.

For vitality, there was a main effect whereby higher contingency was associated with diminished vitality (B = -.34, SE = .13, t = -2.75, p < .01). There was no main effect of condition (p = .94) nor an interaction (p = .69).

For anxiety, there was a main effect whereby higher contingency was associated with greater anxiety (B = .25, SE = .07, t = 3.88, p < .001). There was no main effect of condition (p = .51) nor an interaction (p = .35).

For satisfaction with life, there was a main effect whereby higher contingency was associated with diminished satisfaction with life (B = -.47, SE = .12, t = -3.94, p < .001). There was no main effect of condition (p = .21) nor an interaction (p = .86).

For positive mood, there was a main effect for contingency (B = -.26, SE = .10, t = -2.79, p < .01) with higher contingency being negatively associated with positive mood. There was neither a main effect of condition (p = .42) nor an interaction (p = .49). For negative mood, there

was neither a main effect for contingency (p = .12), a main effect of condition (p = .49), nor an interaction (p = .30).

Overall, results do not support a strong moderating role for either body esteem or contingency when comparing objectifying and neutral memories. The only interaction effect to emerge was marginal, but does provide an indication that appearance contingency may moderate the impact of objectification primes on at least one existential outcome—crisis of meaning.

Competence versus neutral memories

Those in the objectification memory condition were excluded from the following analyses. Condition was dummy coded with competence memory as 0 and neutral memory as 1, and body esteem was centered. For meaning in life, there was a significant main effect of body esteem (B = .24, SE = .06, t = 4.30, p < .001) whereby body esteem was associated with higher meaning, but there was no main effect for condition (p = .77) nor an interaction (p = .41).

For crisis of meaning, there was a significant main effect of body esteem (B = -.19, SE = .05, t = -3.99, p < .001) whereby body esteem was associated with less crisis, but there was no main effect for condition (p = .96) nor an interaction (p = .87).

For vitality, there was a significant main effect of body esteem (B = .26, SE = .06, t = -4.14, p < .001) whereby body esteem was associated with higher vitality, but there was no main effect for condition (p = .21) nor an interaction (p = .54).

For anxiety, there was a significant main effect of body esteem (B = -.10, SE = .03, t = -3.43, p < .01) whereby body esteem was associated with lower anxiety, but there was no main effect for condition (p = .80) nor an interaction (p = .53).

For satisfaction with life, there was a significant main effect of body esteem (B = .34, SE = .05, t = 6.81, p < .001) whereby body esteem was associated with higher satisfaction, but there was no main effect for condition (p = .16) nor an interaction (p = .51).

For positive mood, there was a significant main effect of body esteem (B = .21, SE = .04, t = 5.31, p < .001) whereby body esteem was associated with greater positive mood, but there was no main effect for condition (p = .36) nor an interaction (p = .87). For negative mood, there was a main effect of body esteem (B = -.07, SE = .03, t = -2.11, p = .04) whereby body esteem was associated with diminished negative mood, but there was no main effect for condition (p = .33) nor an interaction (p = .80). Overall, these null results do not support a moderating role for body esteem for the impact of competence versus neutral memories.

I then centered the appearance as a self-worth contingency variable, and conducted another set of regressions. For meaning, there was a main effect of contingency (B = -.37, SE = .14, t = -2.70, p < .01) whereby contingency was negatively associated with meaning. There was neither a main effect of condition (p = .86) nor an interaction (p = .88).

For crisis, there were neither main effects for contingency (p = .99), nor condition (p = .82) nor an interaction (p = .86).

For vitality there was a marginal main effect for contingency (B = -.26, SE = .15, t = -1.71, p = .09) with greater contingency associated with diminished vitality. There was no main effect for condition (p = .19) nor an interaction (p = .37).

For anxiety there were neither main effects for contingency (p = .34), nor condition (p = .90) nor an interaction (p = .14).

For satisfaction with life, there was a main effect of contingency (B = -.40, SE = .13, t = -3.0, $p < .01$) whereby contingency was negatively associated with satisfaction. There was neither a main effect for condition (p = .30) nor an interaction (p = .49).

For positive mood, there was a main effect for contingency (B = -.25, SE = .10, t = -2.57, p = .01) with contingency being negatively associated with positive mood. There was no main effect of condition (p = .32), nor was there an interaction (p = .38). For negative mood, there were neither main effects for contingency (p = .91) nor condition (p = .39), nor was there an interaction (p = .78). As with body esteem, these results do not support a moderating role for contingency.

Overall, these results do not support any interactions between either body esteem or contingency and condition on well-being outcomes, specifically when comparing competence and neutral memories.

Objectification versus competence memories

Finally, I directly compared objectification and competence memory primes, and conducted a series of regressions to search for interactions. I dummy coded objectification memories as 0 and competence memories as 1.

I then centered the body esteem variable. For meaning in life, there was a significant main effect of body esteem (B = .27, SE = .05, t = 5.14, $p < .001$) whereby body esteem was associated with higher meaning, but there was no main effect for condition (p = .59) nor an interaction (p = .81).

For crisis there was a significant main effect of body esteem (B = -.25, SE = .05, t = -4.76, $p < .001$) whereby body esteem was associated with diminished crisis, but there was no main effect for condition (p = .69) nor an interaction (p = .20).

For vitality there was a significant main effect of body esteem (B = .28, SE = .06, t = 4.66, p < .001) whereby body esteem was associated with higher meaning, but there was no main effect for condition (p = .43) nor an interaction (p = .81).

For anxiety there was a significant main effect of body esteem (B = -.11, SE = .03, t = -3.45, p < .01) whereby body esteem was associated with diminished anxiety, but there was no main effect for condition (p = .88) nor an interaction (p = .35).

For satisfaction with life there was a significant main effect of body esteem (B = .32, SE = .05, t = 6.12, p < .001) whereby body esteem was associated with higher satisfaction, but there was no main effect for condition (p = .62) nor an interaction (p = .83).

For positive mood there was a main effect of body esteem (B = .16, SE = .04, t = 3.83, p < .001) whereby body esteem was associated with greater positive mood, but there was no main effect for condition (p = .15) nor an interaction (p = .27). For negative mood there was a main effect of body esteem (B = -.07, SE = .04, t = -2.14, p = .04) whereby body esteem was negatively associated with negative mood. There was no main effect for condition (p = .64) nor was there an interaction (p = .85).

Finally, I centered contingency and conducted another series of regressions. For meaning, there was a significant main effect whereby higher contingency was associated with diminished meaning (B = -.35, SE = .12, t = -3.01, p = .02). There was neither a main effect for condition (p = .97) nor an interaction (p = .99).

For crisis, there was a significant main effect for contingency (B = .25, SE = .12, t = 2.21, p = .03) whereby contingency was positively associated with crisis, but no main effect for condition (p = .36). There was a significant interaction (B = -.47 SE = .23, t = -2.01, p < .05). I therefore conducted follow-up simple slope and predicted means tests. Results mirrored the

interaction between contingency and condition when comparing objectification and neutral memories (see Figure 7). Within the objectification memory condition, there was a significant and positive association between contingency and crisis (B = .45, SE = .15, t = 3.01, p < .01). There was no such association in the competence memory condition (p = .91). Additionally, the predicted means tests revealed significant differences in crisis by condition only at high contingency (B = -.63, SE = .30, t = -2.10, p = .04), with those high in crisis within the objectification condition having the highest crisis.

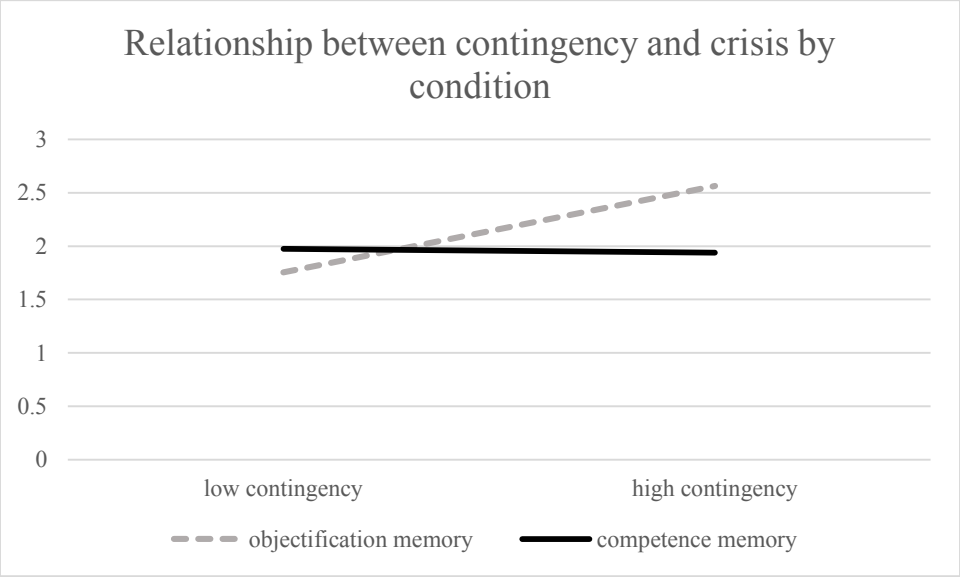

Figure 7. Interaction between appearance contingency and condition (objectification versus competence memories) on crisis of meaning. Higher scores equal higher crisis of meaning.

For vitality, there was a marginal main effect whereby higher contingency was associated with diminished vitality (B = -.24, SE = .13, t = -1.76, p = .08). There was neither a main effect for condition (p = .19) nor an interaction (p = .52).

For anxiety, there was a significant main effect of contingency whereby greater contingency was associated with increased anxiety (B = .17, SE = .07, t = 2.49, p = .01). There was no main effect for condition (p = .61). There was also a significant interaction (B = -.33, SE = .13, t = -2.49, p = .01; see Figure 8). Follow-up simple slope tests revealed that there was a

significant and positive association between contingency and anxiety within the objectification condition (B = .30, SE = .08, t = 3.55, p < .01), with no significant relationship within the competence condition (p = .79). Additionally, the difference by condition was only significant at high contingency (B = -.614, SE = .17, t = -2.15, p = .03). Anxiety was the highest for those high in contingency within the objectification condition.

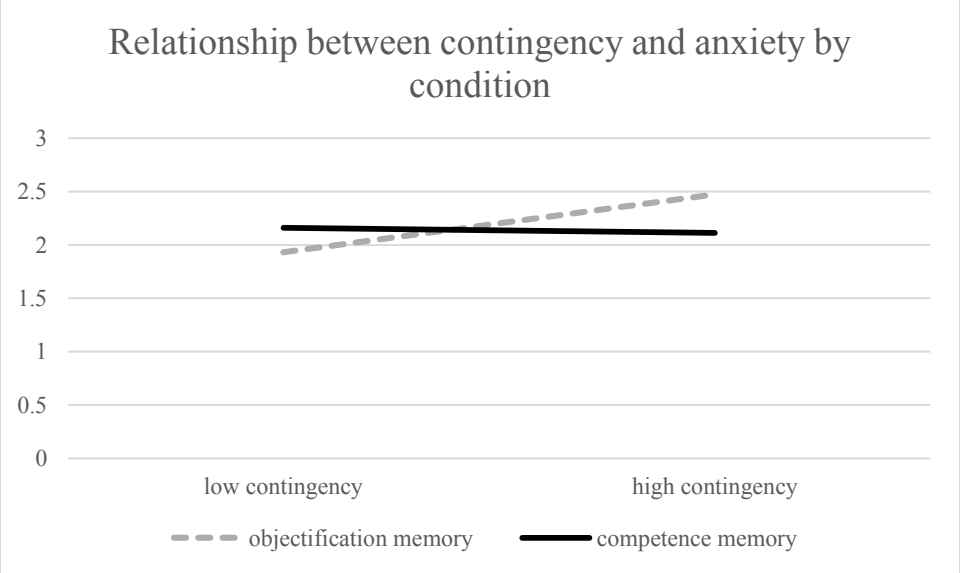

Figure 8. Interaction between appearance contingency and condition (objectification versus competence memories) on anxiety. Higher scores equal higher anxiety.

For satisfaction with life, there was a significant main effect whereby higher contingency was associated with diminished satisfaction (B = -.39, SE = .12, t = -3.29, p < .01). There was neither a main effect for condition (p = .85) nor an interaction (p = .57).

For positive mood, there was a main effect of contingency whereby contingency was negatively associated with positive mood (B = -.20, SE = .09, t = -2.18, p = .03). There was also a marginal main effect of condition whereby positive mood was lower in the objectification condition (B = .30, SE = .16, t = 1.82, p = .07). The interaction was non-significant (p = .83). For negative mood, there was no main effect for contingency (p = .24). There was neither a main effect of condition (p = .83) nor an interaction (p = .18).

The preceding analyses did not show support for body esteem as a moderator for any existential or well-being dependent measures when comparing objectification and competence memories. Contingency did emerge as a moderator, in particular for negative outcomes of crisis and anxiety. For those higher in appearance as a self-worth contingency, contemplating an objectifying memory as opposed to a competence one was more likely to result in heightened negative outcomes.

God's love: Objectification versus neutral memories

Given some unexpected patterns of correlation regarding the God's love contingency variable, I conducted a parallel series of hierarchical regressions, this time with God's love as a moderator. First, directly comparing objectification and neutral memories, I dummy coded the objectification condition as 0 and the neutral condition as 1. I then centered the God's love variable.

For meaning, there was a significant main effect whereby God's love was associated with greater meaning (B = .13, SE = .05, t = 2.47, p = .02). There was no main effect for condition (p = .71). There was a marginal interaction (B = -.19, SE = .11, t = -1.81, p = .07). I conducted follow-up simple slope tests. There was a significant and positive association between God's love and meaning within the objectification condition (B = .21, SE = .07, t = 3.07, p < .01; see Figure 9). There was no relationship within the neutral condition (p = .81). Although predicted means tests did not reveal the differences to be significant at low (p = .12) or high (p = .31), the pattern that emerged supports that highly valuing God's love may protect meaning while contemplating objectifying memories. In fact, meaning was the highest for those who reported highly valuing God's love who received the objectification prime.

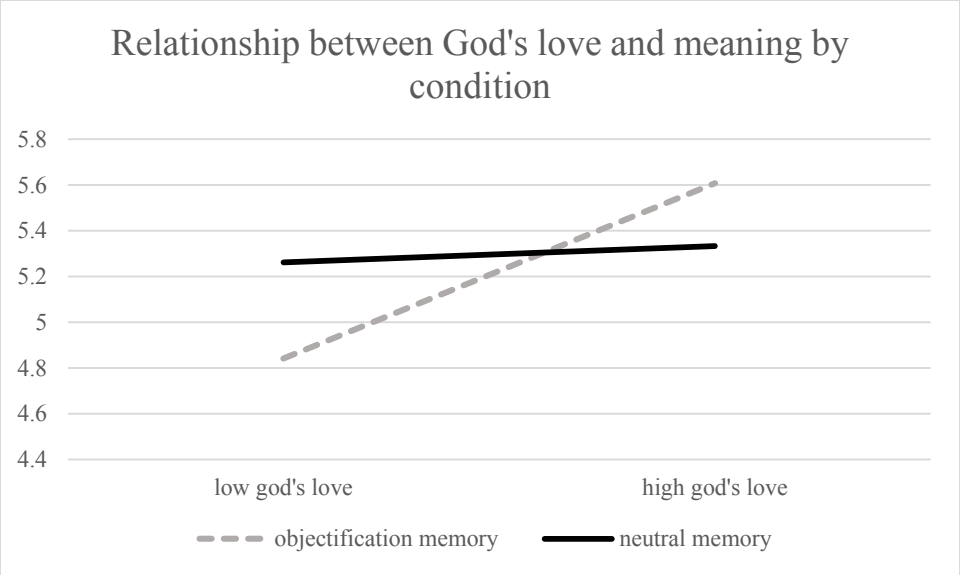

Figure 9. Interaction between God's love and condition (objectification versus neutral memories) on meaning. Higher scores equal higher meaning.

For crisis of meaning, there was a marginal main effect of God's love whereby more highly valuing God's love was negatively associated with crisis (B = -.09, SE = .05, t = -1.75, p = .08). There was neither a main effect for condition (p = .34) nor an interaction (p = .57).

For vitality, there was neither a significant main effect for God's love (p = .77), nor for condition (p = .96). There was a significant interaction (B = -.38, SE = .12, t = -3.19, p < .01). Follow-up simple slope tests revealed that within the objectification condition, there was a significant and positive relationship between valuing God's love and vitality (B = .18, SE = .08, t = 2.30, p = .02; see Figure 10). Within the neutral memory condition, there appeared to be the opposite pattern, with God's love being negatively associated with vitality (B = -.20, SE = .09, t = -2.23, p = .03). Predicted means tests indicated a significant difference in vitality by condition at both low (B = .70, SE = .30, t = 2.31, p = .02) and high (B = -.67, SE = .20, t = -2.23, p = .03). This particular interaction appeared to be an almost perfect crossover effect, with God's love positively and significantly associated with vitality in the objectification condition, but negatively and significantly associated within the neutral condition. While I might have

hypothesized that highly valuing God's love would be protective when contemplating a potentially unpleasant objectification-oriented memory, the opposite pattern emerging when contemplating a neutral memory wouldn't necessarily follow.

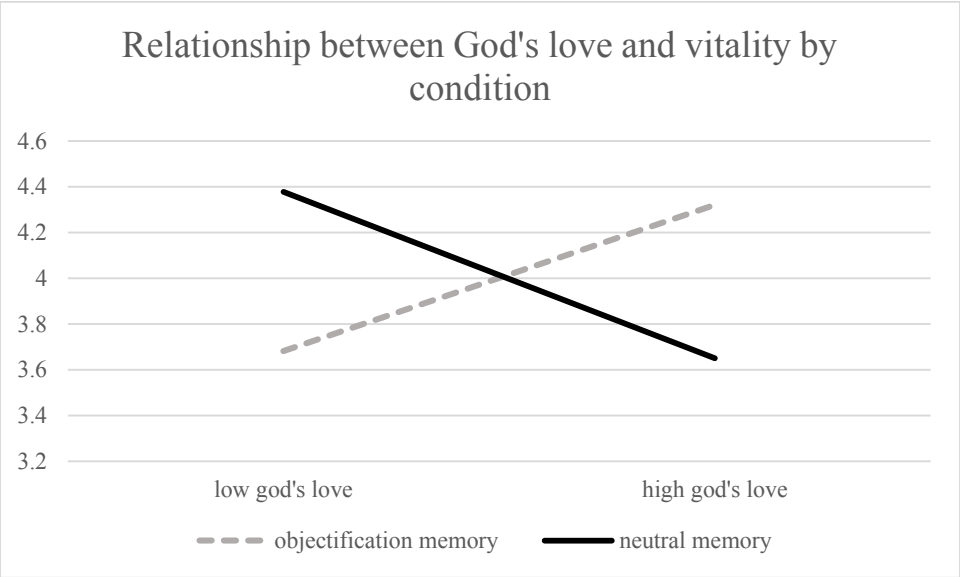

Figure 10. Interaction between God's love and condition (objectification versus neutral memories) on vitality. Higher scores equal higher vitality.

For anxiety, there were neither main effects for God's love (p = .66) nor condition (p = .43). The interaction was non-significant (p = .61).

For satisfaction with life, there were neither main effects for God's love (p = .34) nor condition (p = .17). The interaction was non-significant (p = .47).

For positive mood, there were no significant main effects either for God's love (p = .28) nor for condition (p = .36), nor an interaction (p = .11). For negative mood, there were neither main effects for God's love (p = .64) nor condition (p = .45) nor a significant interaction (p = .57).

God's love: Competence versus neutral memories

I then moved on to analyze the moderating role of the God's love variable when comparing competence memories to neutral memories. I dummy coded the competence memory condition as 0 and the neutral memory condition as 1, and centered the God's love variable.

For meaning, there was a significant main effect where God's love was positively associated with meaning (B = .17, SE = .07, t = 2.52, p = .01). There was no main effect of condition (p = .71). There was also a significant interaction (B = -.32, SE = .13, t = -2.45, p = .02). I then conducted follow-up simple slope tests. There was a significant effect within the competence memory condition (B = .34, SE = .10, t = 3.55, p < .01; see Figure 11) but none in the neutral memory condition (p = .82). Predicted means tests indicated that there was only a significant difference by condition at low God's love (B = .62, SE = .31, t = 2.02, p < .05), with those who were low in God's love within the competence condition having the lowest meaning. Overall, this pattern seems to indicate that for those low in God's love, thinking about a time being judged based on competence or intelligence diminishes existential well-being.

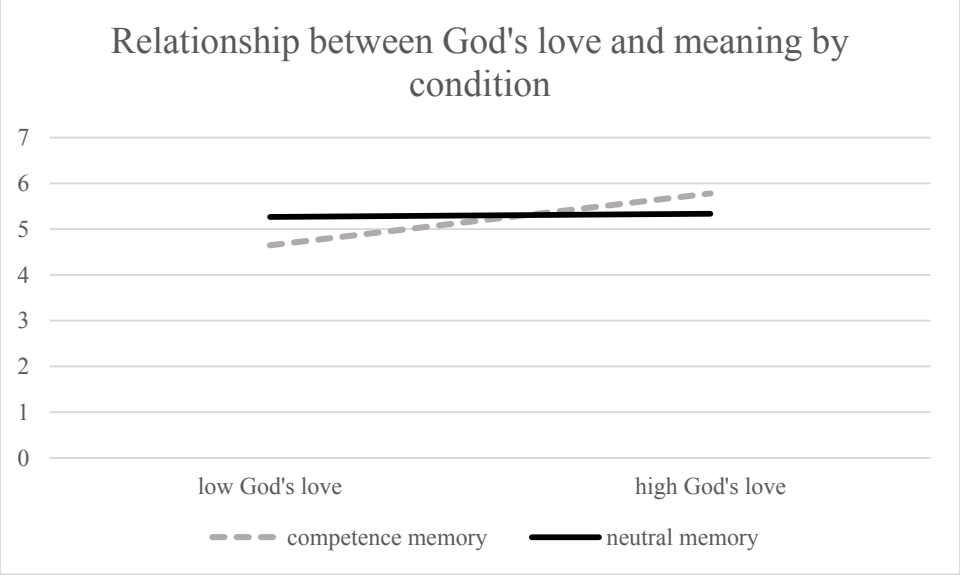

Figure 11. Interaction between God's love and condition (competence versus neutral memories) on meaning. Higher scores equal higher meaning.

For crisis, there was a main effect of God's love, whereby God's love was negatively associated with crisis of meaning (B = -.14, SE = .06, t = -2.41, p = .02). There was neither a main effect for condition (p = .97) nor an interaction (p = .13).

For vitality, there were neither main effects for God's love (p = .25) nor condition (p = .22). There was a significant interaction (B = -.62, SE = .14, t = -4.56, p < .001). Based on follow-up simple slope tests, there was a significant negative relationship between vitality and God's love in the neutral memory condition (B = -.20, SE = .09, t = -2.17, p = .03), and a significant positive relationship in the competence memory condition (B = .42, SE = .10, t = -4.20, p < .001; see Figure 12). Additionally, predicted means tests demonstrated that there was a significant difference in vitality by condition at both high (B = -1.32, SE = .32, t = -4.15, p < .001) and low God's love (B = .75, SE = .32, t = 2.32, p = .02). Overall, these results indicate that those who highly valued God's love had the highest vitality in the competence memory condition.

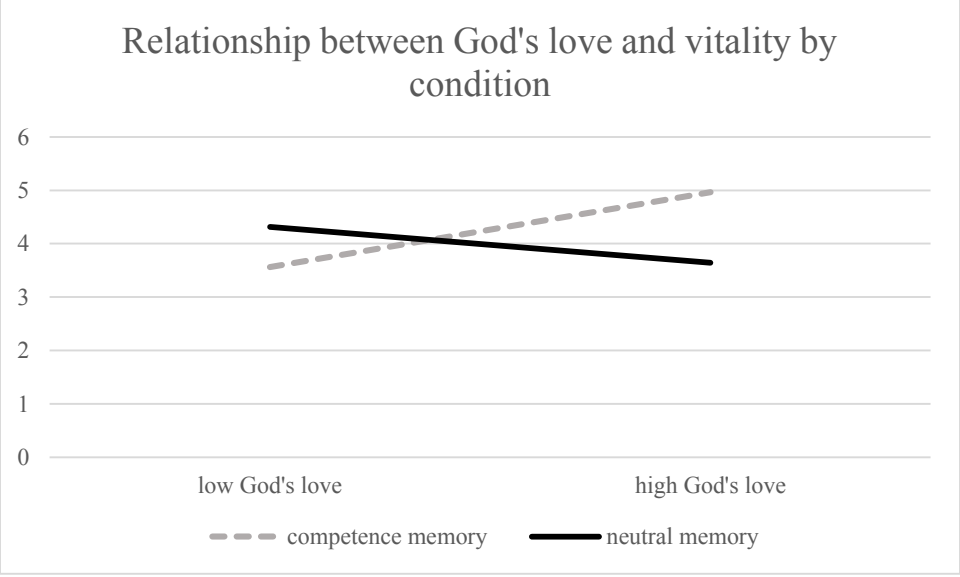

Figure 12. Interaction between God's love and condition (competence versus neutral memories) on vitality. Higher scores equal higher vitality.

For anxiety, there were neither a main effect for God's love (p = .22) nor condition (p = .82), nor was there an interaction (p = .82).

For satisfaction with life, there was a significant main effect of God's love, with God's love being positively associated with satisfaction (B = .18, SE = .06, t = 2.82, p < .01). There was no main effect of condition (p = .21). There was a significant interaction (B = -.38, SE = .12, t = -3.03, p < .01). Follow-up simple slope tests revealed that there was only a significant association between God's love and satisfaction in life within the competence condition (B = .38, SE = .09, t = 4.21, p < .001; see Figure 13). That relationship within the neutral memory condition was non-significant (p = .93). Additionally, predicted means tests revealed that there was only a significant difference in satisfaction by condition at low God's love (B = .90, SE = .29, t = 3.08, p < .01). Overall, the interaction indicates that in terms of satisfaction with life, those high in God's love are relatively unaffected by the competence prime. For those low in God's love, contemplating a memory of judgment based on intelligence diminishes satisfaction.

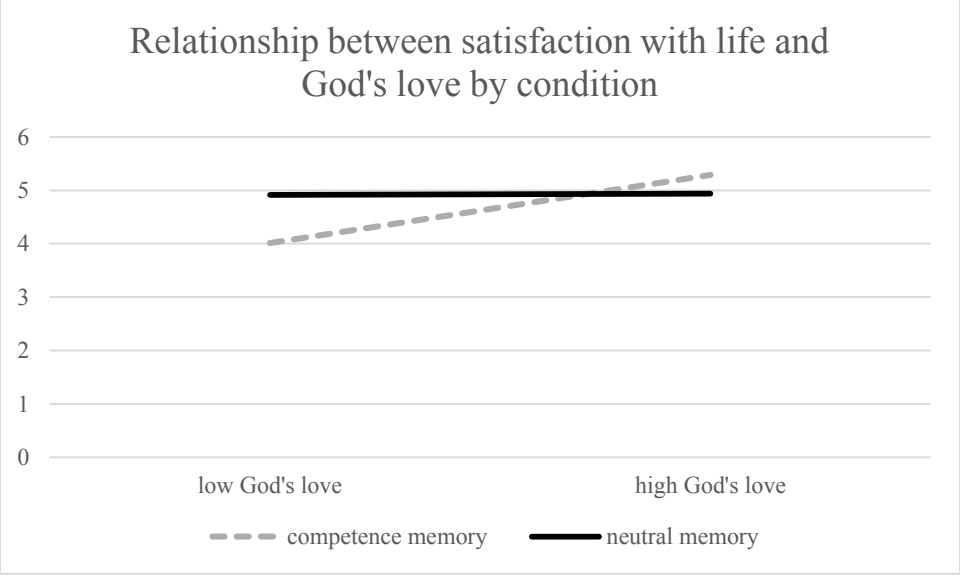

Figure 13. Interaction between God's love and condition (competence versus neutral memories) on satisfaction with life. Higher scores equal higher satisfaction with life.

For positive mood, there was neither a main effect of God's love (p = .22) nor condition (p = .36). There was a significant interaction (B = -.21, SE = .10, t = -2.18, p = .03). Follow-up simple slope tests indicated that there was only a significant effect within the competence memory condition (B = 1.73, SE = .07, t = 2.46, p = .02; see Figure 14), in which there was a positive relationship between God's love and positive mood. The relationship within the neutral memory condition was non-significant (p = .59). Predicted means tests indicated that there was only a difference in positive mood by condition at high God's love (B = -.49, SE = .22, t = -2.20, p = .03). The pattern that emerged suggests that those high in God's love within the competence memory condition had the highest positive mood.

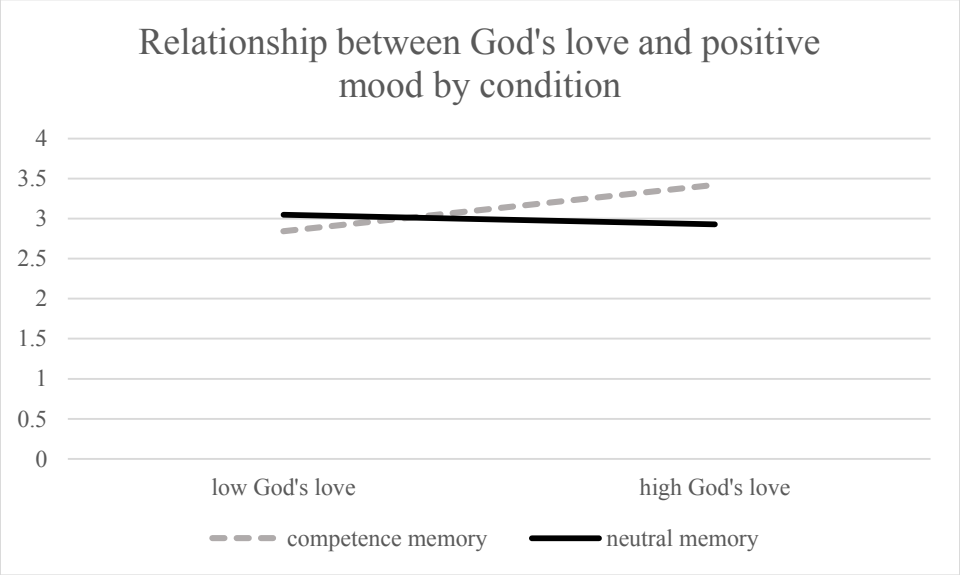

Figure 14. Interaction between God's love and condition (competence versus neutral memories) on positive mood. Higher scores equal higher positive mood.

For negative mood, there was neither a main effect for God's love (p = .37) nor condition (p = .34). There was a significant interaction (B = .16, SE = .08, t = 2.08, p = .04). Follow-up simple slope analyses revealed that there was a significant and negative relationship between God's love and negative mood within the competence condition (B = -.12, SE = .06, t = -2.16, p = .03; see Figure 15). Predicted means tests showed that there was only a significant difference

in negative mood by condition at low God's love (B = -3.96, SE = .18, t = -2.17, p = .03). The overall interaction suggests that for those low in God's love, the competence memory condition results in the highest negative mood.

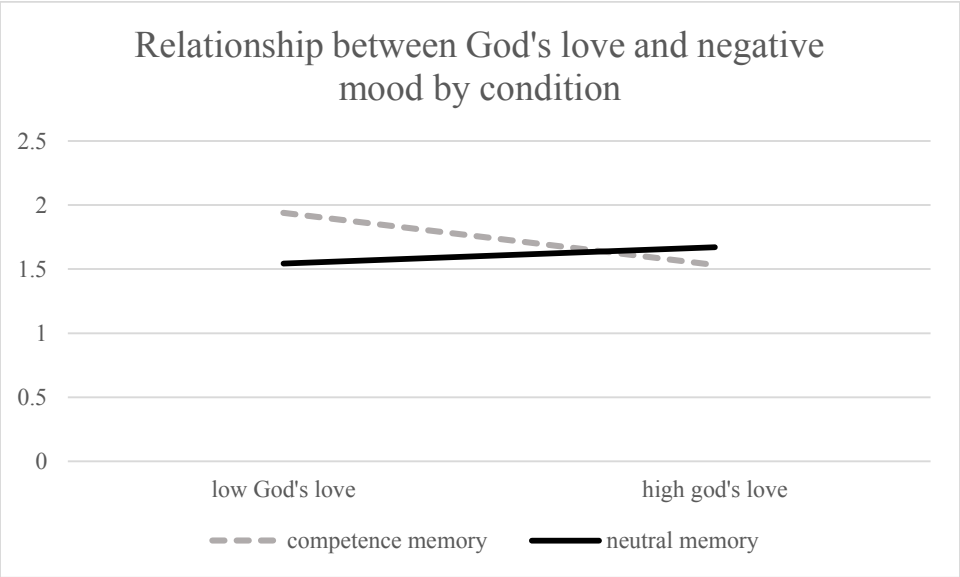

Figure 15. Interaction between God's love and condition (competence versus neutral memories) on negative mood. Higher scores equal higher negative mood.

God's love: Objectification versus competence memories

Finally, I dummy coded the objectification memory condition as 0, and the competence memory condition as 1, and centered the God's love variable. For meaning, there was a main effect of God's love (B = .26, SE = .06, t = 4.65, p < .001) with God's love being positively associated with meaning. There was no effect for condition (p = .82) nor an interaction (p = .27).

For crisis of meaning, there was a significant main effect for God's love (B = -.16, SE = .06, t = -.281, p < .01) with God's love being negatively associated with crisis. There was neither an effect of condition (p = .43) nor an interaction (p = .35).

For vitality, there was a main effect for God's love (B = .27, SE = .06, t = 4.34, p < .001), with God's love being positively associated with vitality. There was no main effect for condition (p = .29). There was a marginal interaction (B = .24, SE = .13, t = 1.93, p = .06). I followed up

with simple slope tests, which revealed a significant and positive relationship between God's love and vitality in both the objectification (B = .18, SE = .08, t = 2.26, p = .03) and competence (B = .42, SE = .10, t = 4.24, p < .001) conditions (see Figure 16). Predicted means tests showed that the difference in vitality by condition was only significant at high God's love (B = .67, SE = .32, t = 2.13, p = .04). Overall, the interaction demonstrates that those high in God's love within the competence condition had the highest vitality.

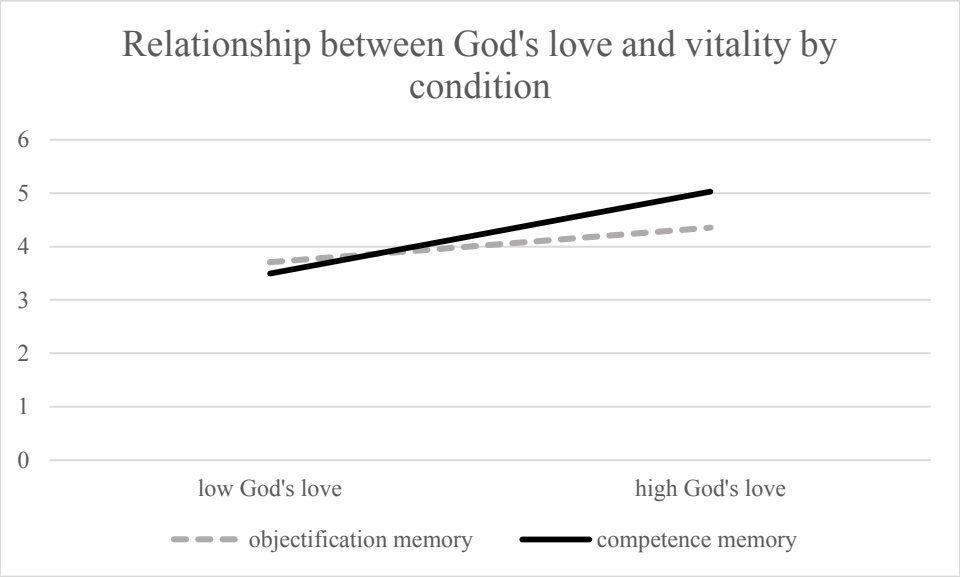

Figure 16. Interaction between God's love and condition (objectification versus competence memories) on vitality. Higher scores equal higher vitality.

For anxiety, there were no main effects for either God's love (p = .58) nor condition (p = .54), nor an interaction (p = .49).

For satisfaction with life, there was a significant main effect for God's love (B = .20, SE = .06, t = 3.43, p < .01) whereby God's love was positively associated with satisfaction. There was no main effect for condition (p = .95). There was a significant interaction (B = .29, SE = .12, t = 2.41, p = .02). Follow-up simple slope tests revealed that within the competence condition, there was a significant and positive relationship between God's love and satisfaction (B = .38, SE = .09, t = 4.06, p < .001; see Figure 17). There was no effect within the objectification condition

(p = .211). The predicted means tests were marginal for both low (B = -.53, SE = .31, t = -1.71, p = .09) and high (B = .53, SE = .30, t = 1.75, p = .08). The pattern of this interaction appears to be that there is a strong relationship between God's love and satisfaction with life within the competence condition, with those low in God's love within the competence condition having the lowest satisfaction, and those high in God's love within the competence condition having the highest satisfaction.

Figure 17. Interaction between God's love and condition (objectification versus competence memories) on satisfaction with life. Higher scores equal higher satisfaction with life.

For positive mood, there was a significant main effect for God's love (B = .14, SE = .04, t = 3.08, p < .01) with God's love being associated with greater positive mood. There was a marginal main effect for condition (B = .27, SE = .16, t = 1.69, p = .09) with those in the competence condition having greater positive mood. The interaction was non-significant (p = .51). For negative mood, there was neither a main effect for God's love (p = .20) nor condition (p = 79). The interaction was non-significant (p = .11).

Overall, there were many significant interactions that emerged when God's love was included as a moderator. Most of the effects that emerged were on positive well-being variables.

It seems that for both objectification and competence memories (as opposed to neutral), there is often a positive relationship between God's love and positive outcomes. Perhaps this indicates that heightened God's love is associated with greater resilience when thinking about experiences during which a person feels they have been judged in any way. Perhaps such memories may even boost positive outcomes, since highly valuing God's love might be a useful resource that people turn to when confronted with judgmental experiences.

Content Coding

For the primary study I once again had two trained research assistants code the narratives for the same positive, negative, and emotional content as the preliminary study. Given the possibility for God's love to be a source of protection from negative well-being and emotional consequences of contemplating the different kinds of memories, I also had the coders make a dichotomous assessment as to whether a narrative contained religious themes or not (inter-rater reliability for positivity: $\alpha = .89$; negativity: $\alpha = .92$; positive emotion: $\alpha = .88$; negative emotion: $\alpha = .80$; for presence of religious content: $\alpha = .92$).

Out of 178 cases included in the analyses, there were 6 narratives that both coders agreed on there being religious content; 2 upon which they did not agree; and 170 completely non-religious narratives. The following is an example of a narrative both coders agreed contained religious content from the objectification condition:

> "Sometimes I feel judged by my mother on my physical appearance. I think that she wishes I were more in-shape, and worked out more often. She has made comments about how much better I feel when I work out but sometimes I take offense to her encouragements about working out as attacks on my physical appearance. I know that she loves me for who I am, yet I can feel judged sometimes. I also feel judged by a very close friend of mine about my appearance, I do not think that she thinks of my appearance as being attractive, although I do not look poorly on myself for my appearance. I know that I am God's creation and He has made me beautiful."

The following is an example of a religious narrative in the competence condition:

> "When I was younger I got into doing a lot of morally wrong things and was judged by several of my friends and peers and had lots of rumors started about me. Such as being pregnant or a drug addict. This hurt me for a very long time until I truly found God in my life and took a step back to look at who I really am."

The following is an example of a narrative with religious themes in the neutral condition:

> "A few weeks ago I had a conference with my English professor, and I was kinda [*sic*] nervous, but I knew that everyone had to do it. She was going to read our rhetorical analysis essay draft, and give us feedback. I don't think of myself as a strong writer, so I was afraid I was doing it wrong. When she was done grading it she said that it was great. I was surprised. After that the day went as planned. I went to a few classes, then went to mass at night with a few friends that I have met through the Newman center. The following day was also good, because I was so happy the day before."

Though there were relatively few narratives with overt religious themes, making this coding dimension not particularly useful as an outcome or moderator, these examples are qualitatively illustrative. It appears that when someone evokes God in response to an experience in which they are being judged in any way, it is expressed differently than when evoking God or religiosity in ordinary or everyday terms. Both the narratives from the objectification and competence memory condition evoke God's intrinsic love and knowledge of one's inner self as a source of comfort when experiencing negative judgment from others. More ordinary religious memories may more likely evoke normal experiences such as going to church or social meetings with fellow church-goers.

I then moved on to analyze the coding dimensions using a MANOVA with follow-up LSD tests. There were significant differences by condition on positivity ($F(2, 178) = 88.66$, $p < .001$), negativity ($F(2, 178) = 135.67$, $p < .001$), positive emotion ($F(2, 178) = 38.88$, $p < .001$) and negative emotion ($F(2, 178) = 75.57$, $p < .001$).

Follow-up tests revealed that the objectification memory was significantly less positive than both the neutral and competence memories (both p's $< .001$), and contained less positive emotions (both p's $< .001$). Additionally, objectification memories were significantly more

negative than neutral and competence memories (both p's < .001), and had significantly more negative emotions (both p's < .001).

Comparing neutral and competence memories, competence memories were significantly less positive than neutral ($p < .001$) and had significantly less positive emotions ($p < .01$). Additionally, competence memories were significantly more negative ($p < .001$) and had significantly more negative emotions ($p < .001$). As opposed to the results from the preliminary study, this indicates that although the competence memories were more positive than objectification memories, they were both less positive and more negative than neutral memories. This indicates that perhaps for this participant group as opposed to the previous, the competence memories did not have as many positive features as those from the preliminary study did.

I next ran a correlational analysis between the key individual differences (body esteem, appearance contingency, and God's love) and the coding dimensions (see Table 6 for all correlations). This analysis included all three conditions. The only novel effect to emerge was that body esteem was negatively associated with narrative negativity and negative emotions. This provides further support that body esteem may be a protective factor, and increases the likelihood that one will leave negative features out of memory writings, regardless of condition.

Table 6

Coding correlations from the primary study

	1.	2.	3.	4.	5.	6.	7.
1. Body esteem	---						
2. Appearance contingency	-.48**	---					
3. God's love	.22**	-.14	---				
4. Positivity	.06	-.07	-.00	---			
5. Positive emotion	.02	-.01	.02	.89**	---		
6. Negativity	-.17*	.11	-.02	-.92**	-.77**	---	
7. Negative emotion	-.19*	.17*	.05	-.81**	.90**	-.66**	---

Finally, I moved onto the hierarchical regressions, examining interactions between condition and individual differences in coding dimensions outcomes. I repeated the same process from previous regression analyses.

Objectification versus neutral memories

First I centered the body esteem variables, and dummy coded the objectification condition as 0 and the neutral condition as 1. For positivity, there was a significant main effect of condition ($B = 1.94$, $SE = .12$, $t = 16.60$, $p < .001$) with there being greater positivity in the neutral condition. There was no main effect for body esteem ($p = .97$). There was also a significant interaction ($B = 1.94$, $SE = .12$, $t = 16.60$, $p < .001$). I followed up with simple slope tests. Results revealed that there was no significant relationship in the objectification ($p = .12$) nor the neutral memory condition ($p = .12$; see Figure 18). Results of predicted means tests revealed significant differences in positivity by condition both at low ($B = 2.20$, $SE = .16$, $t = 13.45$, $p < .001$) and high body esteem ($B = 1.69$, $SE = .16$, $t = 10.36$, $p < .001$), both indicating that positivity in the objectification memory condition is lower whether one has high or low body esteem. The nature of the interaction appears to be that for those high in body esteem, the

objectification condition has less of a deleterious effect on narrative positivity. This possibly indicates that even for those high in body esteem, an objectifying memory is unpleasant, but that it is less so than for those low in body esteem.

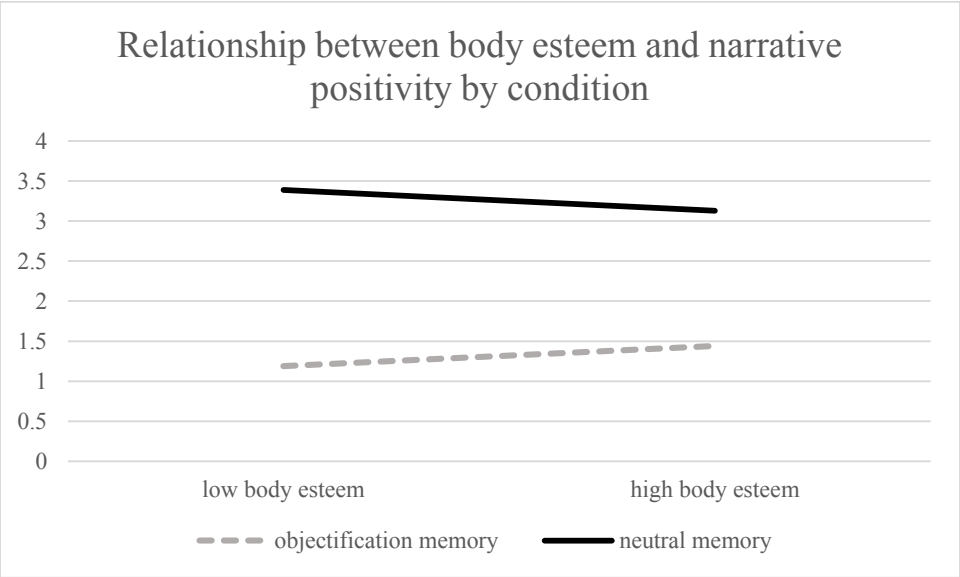

Figure 18. Interaction between body esteem and condition (objectification versus neutral memories) on narrative positivity. Higher scores equal higher positivity.

For positive emotion, there was a significant main effect of condition, whereby there was more positive emotion in the neutral memory condition ($B = 1.00$, $SE = .09$, $t = 11.86$, $p < .001$). There was no main effect for body esteem ($p = .52$). The interaction was also non-significant ($p = .34$).

For negativity, there was a significant main effect of condition ($B = -2.26$, $SE = .10$, $t = -23.17$, $p < .001$) with there being greater negativity in the objectification condition. There was also a main effect of body esteem ($B = -.09$, $SE = .03$, $t = -3.18$, $p < .01$), with greater body esteem being associated with less negativity. There was also a significant interaction ($B = .12$, $SE = .06$, $t = 2.23$, $p = .03$). Simple slope tests revealed a significant and negative association between body esteem and negativity within the objectification condition ($B = -.15$, $SE = .04$, $t = -3.87$, $p < .001$; see Figure 19). The relationship within the neutral condition was non-significant

(p = .53). A predicted means test revealed a significant difference by condition at both low (B = -2.48, SE = .14, t = -18.16, p < .001) and high body esteem (B = -2.05, SE = .14, t = -15.07, p < .001), with negativity being higher in the objectification condition for those both high and low in body esteem. Again, the pattern that emerges suggests that objectification memories evoke more negativity, but that this relationship is tempered for those high in body esteem.

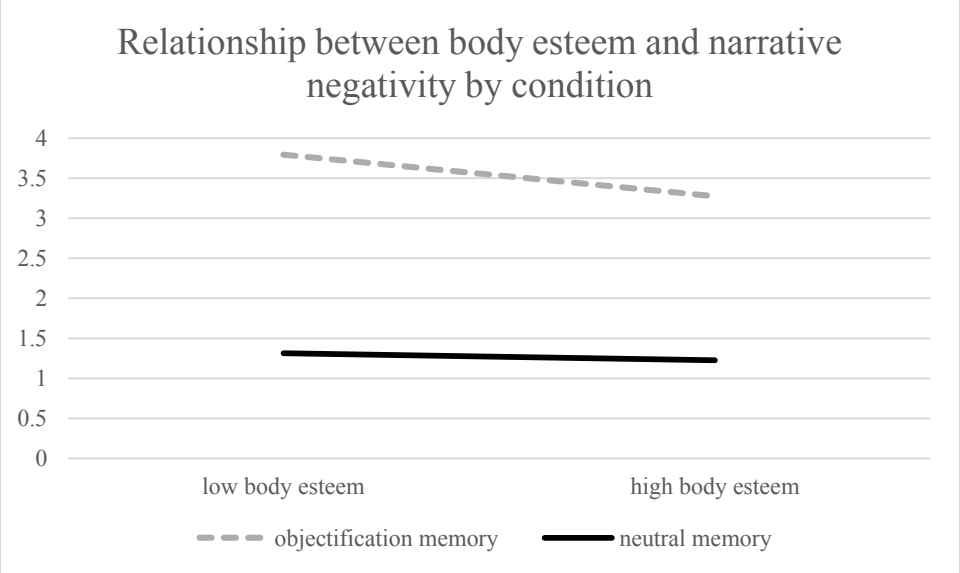

Figure 19. Interaction between body esteem and condition (objectification versus neutral memories) on narrative negativity. Higher scores equal higher negativity.

For negative emotion, there was a significant main effect for condition (B = -1.10, SE = .08, t = -13.96, p < .001) with there being greater negative emotion in the objectification condition. There was also a main effect of body esteem (B = -.06, SE = .02, t = -2.68, p < .01) with body esteem negatively associated with negative emotions. There was also a significant interaction (B = .10, SE = .05, t = -2.10, p = .04). Follow-up simple slope tests revealed a significant and negative relationship between body esteem and negative emotion only within the objectification condition (B = -l.11, SE = .03, t = -3.41, p < .01; see Figure 20). The relationship within the neutral condition was non-significant (p = .71). Predicted means tests revealed a significant difference by condition at both low (B = -1.27, SE = .11, t = -11.45, p < .001) and

high body esteem (B = -.94, SE = .11, t = -8.52, p < .001), with negative emotion being higher in the objectification condition for those both high and low in body esteem. As with the previous result on negativity, though, having high body esteem appears to diminish the extent to which an objectification memory contains negative feelings.

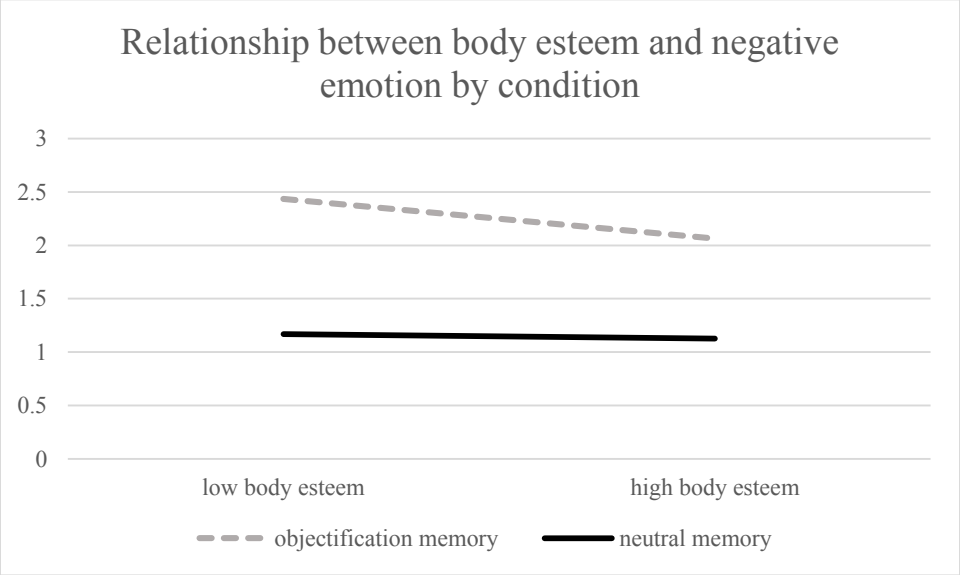

Figure 20. Interaction between body esteem and condition (objectification versus neutral memories) on negative emotion. Higher scores equal higher negative emotion.

Next, I centered appearance as a self-worth contingency, and conducted another series of regressions. For positivity, there was a significant main effect of condition (B = 1.94, SE = .12, t = 16.71, p < .001) with positivity being lower in the objectification condition. There was no main effect for contingency (p = .70). There was also a significant interaction (B = .28, SE = .14, t = 1.99, p < .05). Follow-up simple slope tests revealed that the relationship between contingency and positivity was not significant in either the objectification (p = .13) nor the neutral condition (p = .19; see Figure 21). Follow-up predicted means tests showed that there were differences in condition both at low (B = 1.71, SE = .16, t = 10.39, p < .001) and high contingency (B = 2.18, SE = .17, t = 13.12, p < .001) with the objectification being associated with diminished positivity at all levels of contingency. Mirroring results from the body esteem analyses, though, it appears

that for those low in appearance contingency, the impact of the objectification condition is diminished.

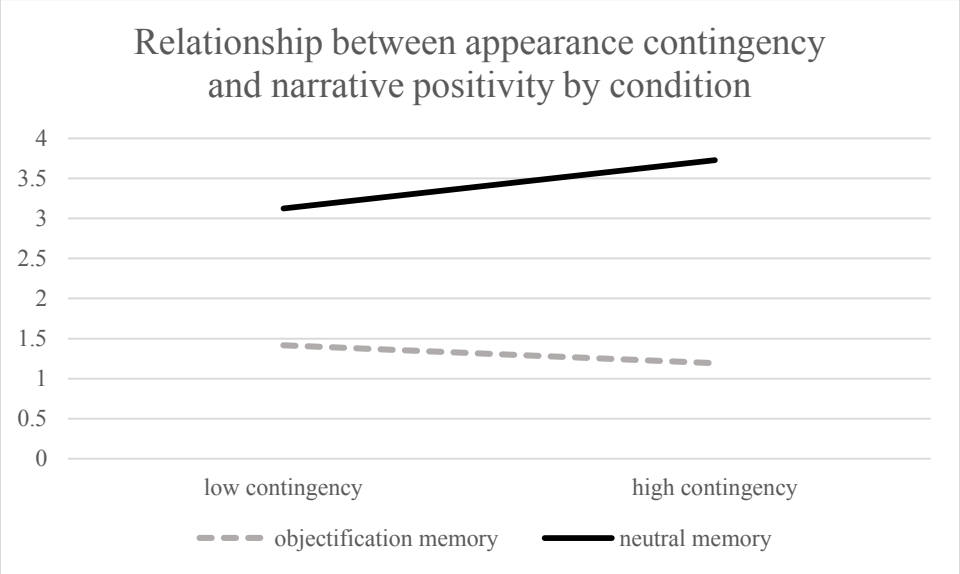

Figure 21. Interaction between appearance contingency and condition (objectification versus neutral memories) on narrative positivity. Higher scores equal higher positivity.

For positive emotion, there was a significant main effect of condition (B = 1.00, SE = .08, t = 11.89, p < .001) with the objectification memory condition associated with diminished positive emotion. There was no main effect of contingency (p = .54) and the interaction was non-significant (p = .19).

For negativity, there was a significant main effect of condition (B = -2.29, SE = .10, t = -22.98, p < .001) with the objectification condition associated with greater negativity. There was a marginal main effect of contingency (B = .10, SE = .06, t = 1.73, p = .09) with greater contingency associated with greater negativity. The interaction was non-significant (p = .10).

For negative emotions, there was a significant main effect of condition (B = -1.12, SE = .08, t = -14.32, p < .001) with the objectification condition positively associated with negative emotions. There was also a main effect of contingency (B = .13, SE = .05, t = 2.93, p < .01) with greater contingency associated with higher negative emotion. There was also a significant

interaction (B = -.23, SE = .09, t = -2.49, p = .01). Follow-up simple slope tests revealed a significant and positive association between contingency and negative emotion within the objectification condition (B = .22, SE = .06, t = 3.89, p < .001; see Figure 22). The relationship within the neutral memory condition was non-significant (p = .90). Follow-up predicted means tests showed that there were significant differences by condition at both low (B = -.92, SE = .11, t = -8.44, p < .001) and high contingency (B = -1.32, SE = .11, t = -11.91, p < .001), with negative emotions being higher in the objectification condition at both levels of contingency. Again, the interaction appears to be driven by the fact that at low contingency, the negative impact of the objectification condition is diminished.

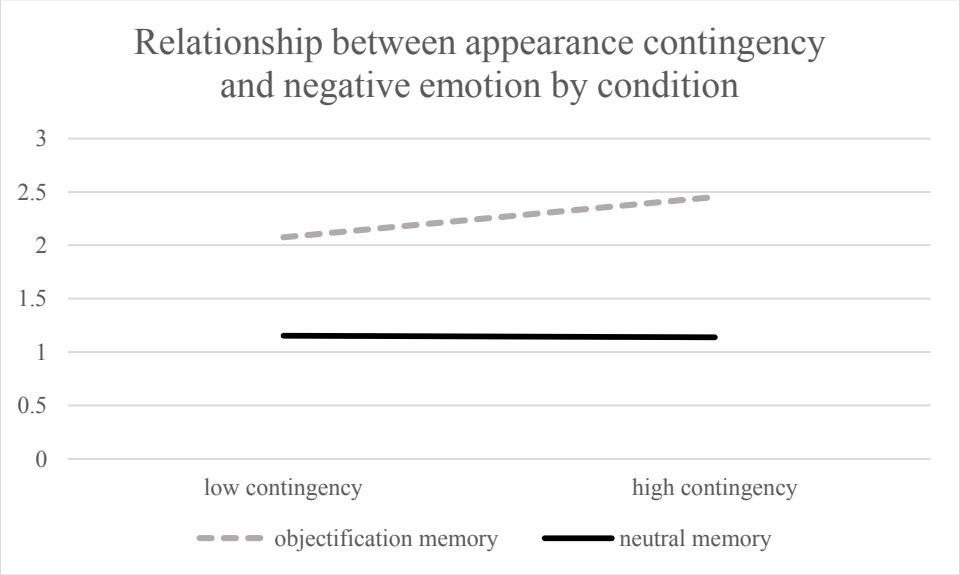

Figure 22. Interaction between appearance contingency and condition (objectification versus neutral memories) on negative emotion. Higher scores equal higher negative emotion.

I then centered the God's love variables and conducted another series of regressions. For positivity, there was a main effect of condition (B = 1.94, SE = .12, t = 16.74, p < .001) with the objectification condition associated with diminished positivity. There was no main effect of God's love (p = .74), and the interaction was non-significant (p = .54).

For positive emotions, there was a main effect of condition (B = .99, SE = .08, t = 11.88, p < .001) with the objectification condition associated with diminished positive emotions. There was no main effect of God's love (p = .46), and the interaction was non-significant (p = .45).

For negativity, there was a main effect of condition (B = -2.30, SE = .10, t = -22.82, p < .001) with the objectification condition associated with heightened negativity. There was no main effect of God's love (p = .70), and the interaction was non-significant (p = .39).

For negative emotions, there was a main effect of condition (B = -1.13, SE = .08, t = -14.08, p < .001) with the objectification condition associated with heightened negative emotions. There was no main effect of God's love (p = .22), and the interaction was non-significant (p = .51).

Overall, the main findings to emerge indicate that having either high body esteem or low appearance contingency is associated with a diminished negative response to the objectification memory condition. This is in contrast to the preliminary study, which found support for body esteem as a moderator, but not contingency. For those in the primary study, contemplating an objectifying experience consistently evokes a more negative and less positive response than a neutral memory, but either having high regard for one's appearance, or caring less about one's appearance tempers these effects. For these particular outcomes, God's love does not appear to be a moderator.

Competence versus neutral memories

I then dummy coded competence memories as 0 and neutral memories as 1. Again, I centered the body image variable first. For positivity, there was a significant main effect of condition (B = .91, SE = .18, t = 5.09, p < .001) with positivity being higher in the neutral memory condition. There was no main effect of body esteem (p = .39) and the interaction was

non-significant (p = .54). For positive emotion, there was a significant main effect of condition (B = .35, SE = .14, t = 2.45, p = .02) with positive emotions being higher in the neutral memory condition. There was no main effect of body esteem (p = .46) and the interaction was non-significant (p = .80).

For negativity, there was a significant main effect of condition (B = -1.17, SE = .16, t = -7.28, p < .001) with greater negativity within the competence condition. There was no main effect for body esteem (p = .52) and the interaction was non-significant (p = .95). For negative emotions, there was a significant main effect of condition (B = -.59, SE = .09, t = -6.59, p < .001) with greater negative emotions in the competence condition. There was no main effect for body esteem (p = .37) and the interaction was non-significant (p = .73).

I then centered the appearance contingency variable. For positivity, there was a significant main effect of condition whereby positivity was greater in the neutral condition (B = .92, SE = .18, t = 5.11, p < .001). There was no main effect for contingency (p = .94) and the interaction was non-significant (p = .26). For positive emotions, there was a significant main effect of condition whereby positive emotions were greater in the neutral condition (B = .36, SE = .14, t = 2.47, p = .02). There was no main effect for contingency (p = .61) and the interaction was non-significant (p = .49).

For negativity, there was a significant main effect of condition (B = -1.17, SE = .16, t = -7.28, p < .001) with greater negativity within the competence condition. There was no main effect for appearance contingency (p = .47) and the interaction was non-significant (p = .38). For negative emotions, there was a significant main effect of condition (B = -.59, SE = .09, t = -6.56, p < .001) with greater negative emotions in the competence condition. There was no main effect for body esteem (p = .50) and the interaction was non-significant (p = .43).

Finally, I centered the God's love variable. For positivity, there was a significant main effect of condition (B = .92, SE = .18, t = 5.08, p < .001) with greater positivity in the neutral condition. There was no main effect of God's love (p = .94) and the interaction was non-significant (p = .45). For positive emotions, there was a significant main effect of condition (B = .36, SE = .15, t = 2.49, p = .01) with greater positive emotions in the neutral condition. There was no main effect of God's love (p = .86) and the interaction was non-significant (p = .46).

For negativity, there was a significant main effect of condition (B = -1.18, SE = .16, t = -7.30, p < .001) with greater negativity in the competence condition. There was no main effect for God's love (p = .46) and the interaction was non-significant (p = .96). For negative emotions, there was a significant main effect of condition (B = -.58, SE = .09, t = -6.48, p < .001) with greater negative emotions in the competence condition. There was no main effect for God's love (p = .93) and the interaction was non-significant (p = .76).

Overall, no novel effects or interactions emerged when comparing competence and neutral memories.

Objectification versus competence memories

Lastly, I dummy coded the objectification condition as 0, and the competence condition as 1. Again I centered the body esteem variable. For positivity, there was a significant main effect of condition (B = 1.01, SE = .15, t = 6.55, p < .001) with greater positivity within the competence condition. There was no main effect of body esteem (p = .52) and the interaction was non-significant (p = .29). For positive emotions, there was a significant main effect of condition (B = .64, SE = .12, t = 5.26, p < .001) with greater positive emotions within the competence condition. There was no main effect of body esteem (p = .82) and the interaction was non-significant (p = .68).

For negativity, there was a significant main effect of condition (B = -1.08, SE = .16, t = -6.58, $p < .001$) with greater negativity associated with the objectification condition. There was also a significant main effect for body esteem (B = -.09, SE = .04, t = -2.0, $p < .05$) with body esteem associated with less negativity. The interaction was non-significant ($p = .17$). For negative emotions, there was a significant main effect of condition (B = -.50, SE = .11, t = -4.55, $p < .001$) with greater negative emotions associated with the objectification condition. There was also a significant main effect for body esteem (B = -.07, SE = .03, t = -2.23, $p = .03$) with body esteem associated with less negative emotions. The interaction was non-significant ($p = .19$).

I then centered the contingency variable. For positivity, there was a significant main effect of condition (B = 1.01, SE = .15, t = 6.67, $p < .001$) with the competence condition associated with greater positivity. There was no main effect for contingency ($p = .14$) and the interaction was non-significant ($p = .91$). For positive emotions, there was a significant main effect of condition (B = .64, SE = .12, t = 5.26, $p < .001$) with the competence condition associated with greater positive emotions. There was no main effect for contingency ($p = .80$) and the interaction was non-significant ($p = .96$).

For negativity, there was a significant main effect of condition (B = -1.11, SE = .16, t = -6.68, $p < .001$), with the competence condition associated with less negativity. There was a marginal main effect of contingency (B = .17, SE = .09, t = 1.88, $p = .06$) with greater contingency associated with greater negativity. The interaction was non-significant ($p = .91$). For negative emotions, there was a significant main effect of condition (B = -.52, SE = .11, t = -4.80, $p < .001$) with greater negative emotions in the objectification condition. There was also a significant main effect of contingency (B = .16, SE = .06, t = 2.72, $p = .01$) with greater

contingency associated with greater negative emotions. The interaction was non-significant (p = .25).

Lastly I centered the God's love variable. For positivity, there was a significant main effect of condition (B = 1.03, SE = .15, t = 6.75, p < .001) with the competence condition associated with greater positivity. There was no main effect for God's love (p = .60) and the interaction was non-significant (p = .63). For positive emotions, there was a significant main effect of condition (B = .64, SE = .12, t = 5.29, p < .001) with the competence condition associated with greater positive emotions. There was no main effect for God's love (p = .78) and the interaction was non-significant (p = .67).

For negativity, there was a significant main effect of condition (B = -1.13, SE = .17, t = -6.81, p < .001) with the objectification condition associated with greater negativity. There was no main effect for God's love (p = .88) and the interaction was non-significant (p = .64). For negative emotions, there was a significant main effect of condition (B = -.55, SE = .11, t = -4.92, p < .001) with the objectification condition associated with greater negative emotions. There was no main effect for God's love (p = .48) and the interaction was non-significant (p = .47).

When comparing objectification and competence memories, there does not appear to be a case for any of the individual differences as moderators on the coding dimension variables.

Summary of results

First, correlational analyses revealed that body esteem and appearance contingency were strongly and negatively associated. Body esteem was positively associated with many well-being outcomes, whereas appearance contingency was negatively associated. Although one might predict that those who feel best about their appearance may be those that care the most about appearance, this was not the case in this sample. This provides a preliminary indication that

having high self-regard in terms of one's appearance may be helpful to women, while caring too strongly about one's appearance may be damaging and make it less likely that one will have a high self-image in this regard.

Additionally, the correlational analyses also revealed that God's love had an interesting pattern of association, being positively associated with the body esteem variable. This result led to the speculation that the God's love variable could be relevant in further analyses.

A series of regression analyses meant to uncover interactions between the individual differences of body esteem and/or contingency and the condition on the well-being outcomes yielded some novel outcomes. Whereas the preliminary study found that body esteem over contingency acts as a moderator on the narrative coding outcomes, the primary study largely uncovered interactions in which contingency was the moderator. Specifically, it appears that for those high in appearance contingency, contemplating an objectifying memory is particularly likely to yield negative well-being outcomes (e.g. crisis of meaning). Although unpredicted, these outcomes make sense; the previous study indicated that body esteem at times tempers the negative results of objectifying memories, and contingency is negatively associated with body esteem. Overall, it appears that those who care the most about maintaining their appearance may be more likely to have poor body esteem, and thus contemplating objectifying memories may be particularly difficult. Conversely, being low in appearance contingency renders it less likely that an unpleasant objectifying memory will yield negative outcomes.

A variety of interactions emerged with God's love as a moderator. Specifically, there appears to be a positive relationship between God's love and a variety of positive well-being outcomes, specifically in conditions where participants contemplated objectifying or competence memories. It appears that when contemplating any kind of external judgment, having a high

sense of valuing God's love is likely to boost positive outcomes. This may indicate that God's love is associated with a kind of psychological resilience when faced with experiences where one is being negatively judged by others. Perhaps the strong association between God's love and positive outcomes in these conditions indicates that for those individuals who value God's love, those kinds of experiences bring "online" comforting thoughts and beliefs associated with their religion or spirituality. Qualitative assessment of narratives that contained overt religious themes supports the notion that negative judgments may at times prompt religious individuals to seek comfort in contemplating God's unconditional love. Given how few narratives explicitly evoked God or religious themes though, these conclusions are speculative and further research would be needed for any more definitive conclusions.

Content coding of the primary study narratives supported and expanded on findings from the preliminary study. The role of body esteem as a moderator was replicated from the previous study—although objectifying memories unilaterally seem to contain more negative and less positive content, having high body esteem appears to diminish this relationship. As opposed to the previous study, contingency also emerged as a moderator when analyzing the coding variables. In this case, having low appearance contingency was also associated with a diminished reaction to the objectifying narratives. Although these effects did not emerge in the preliminary study, it does further support the moderating role of contingency that emerged when analyzing the well-being variables. Given that the participant samples were very different (i.e. an online sample with a diverse span of ages versus a participant pool of mostly young undergraduate students) some differences in the results between studies are not unexpected.

GENERAL DISCUSSION

Sexual objectification creates a societal landscape where women are more vulnerable to certain damaging well-being outcomes. Despite this, objectification and self-objectification persists. If we know that objectification is harmful, why is it so pervasive? TMT would suggest that this may be because it is a potent worldview that women are socialized to genuinely accept, and to utilize to pursue a sense of self-worth and value in society. TMT research indicates that despite the important function worldviews play in our ability to manage the terror of death, not all worldviews are necessarily positive or healthy. For example, our death anxieties drive us to pernicious levels of nationalism and prejudice (e.g. Greenberg, Landau, Kosloff, Soenke, & Solomon, 2016; Pyszczynski, Rothschild, Motyl, & Abdollahi, 2009). Priming death can increase people's likelihood of engaging in behaviors that serve to bolster their self-esteem, even if such a behavior is directly harmful or dangerous (e.g. Ben-Ari, Florian, & Mikulincer, 1999; Routledge, Arndt, & Goldenberg, 2004). Objectification may be just such a kind of worldview—one that is accepted as a legitimate avenue to pursue self-esteem, despite the fact that it may ultimately undermine health and well-being.

The aim of the present research was to assess whether objectification may function as a worldview in this way. That is to say, despite objectification's possible damaging impact on women's health and well-being, perhaps it is a source of structure and self-worth in women's lives. I therefore sought to investigate whether for some women, objectification culture might be part of their attempt to gain status, and for women who perceive themselves to be succeeding at meeting the cultural standards (e.g. those with high body esteem), perhaps objectification can even be a source of meaning. While the results did not directly support this exact framework, a variety of results emerged. Having high body esteem can indeed at times temper the negative

impact of objectification. This indicates that for women who do perceive themselves as meeting the standards of objectification culture, objectifying experiences may not seem quite so aversive. On the other hand, for women who do not have high body esteem, objectifying experiences may be particularly negative.

Additionally, some results supported that for women who are least likely to report caring about their outward appearance, again objectifying experiences may be less aversive. These results in particular emerged when assessing well-being and meaning-oriented outcomes. These results, though, do mirror the body esteem results, in that being low (as opposed to high in the case of body esteem) in this specific trait appears protective in the face of negative objectifying experiences. Interestingly, body esteem and appearance contingency are negatively associated. Therefore, it may follow that it is for women who both have high regard for their appearance, while simultaneously not caring too much about their appearance, that objectification does the least damage. Further research is needed to assess how common it is in our ubiquitous culture of objectification for women to possess this specific constellation of traits.

Our results partially support the hypothesis that objectification may be a worldview, or at least that beliefs about one's body may help explain the perpetuation of objectification. Some of the results from the two studies support the notion that for women high in body esteem, objectification does not yield so many negative consequences as for those low in body esteem. This may mean that part of why objectification culture persists is that for women who perceive themselves as properly living up to the standards of objectification culture, objectifying experiences might not seem so acutely negative or hurtful, and thus they might not mind continuing to live in such a culture. This supports previous research that high self-esteem may diminish the likelihood that objectification leads to negative mental health consequences

(Thøgersen-Ntoumani, Ntoumanis, Cumming, Bartholomew, & Pearce, 2011; Tylka & Sabik, 2010). The present research, though, did not demonstrate that body esteem altered objectification's impact on more existential-oriented well-being outcomes.

Additionally, other results indicated that for women low in appearance contingency, objectifying experiences similarly do not seem to yield so many negative consequences. The contingency variable in fact, was found to be more relevant to the well-being outcomes included in the primary study. This may mean that a more powerful way for women to become resilient to the negative consequences of objectification would be to try and adopt a worldview in which self-worth and meaning do not hinge on one's outward appearance. As opposed to having high body esteem, which may hinge on adhering to society's standards, not caring about the standards of objectification culture removes one from that objectification game entirely.

Some unexpected results emerged with another dimension from the contingencies of self-worth scale—God's love. The God's love dimension assesses how much one values and cares about a personal relationship with a higher power. The fact that a high sense of God's love was associated with positive outcomes, and even moderated the impact of the experimental primes, was unexpected but ultimately unsurprising. Religion is a powerful psychosocial resource (Batson & Stocks, 2004; Emmons, 2005; Steger & Frazier, 2005). One's relationship to a higher power can be deeply personal, and for many people profoundly connected to beliefs about life's value and meaning. As opposed to the appearance contingency, the God's love contingency evokes one's attachment to a source of self-worth that is ultimately intrinsically derived, whereas standards about one's appearance are often tied up with society's external standards for beauty and perfection. Whereas objectification culture dictates narrow and stringent standards for self-worth and ultimately societal status and reward (Etcoff, 1999), perhaps religion and spirituality

offer a more stable and profound sense of worth and purpose. For women, a compelling reason to turn to religion may be to find solace in a society that is frequently harshly judgmental.

Additionally, this set of studies included a third experimental condition—the competence manipulation. This condition was intended to be similar to an objectification prime in some ways (e.g. feeling judged in a social context) but distinct from objectification in crucial ways (e.g. a woman's body is not the focus). The results do reveal that being judged in an objectifying way is very distinct from being assessed based on your competence or intelligence. Though the competence memories were not as pleasant as the neutral memories, they evoked much less negativity than the objectifying memories. Additionally, some of the results support that for women who do not have a high sense of self-esteem regarding their appearance, recalling a time being judged for something completely outside of one's appearance may actually be useful. Although these memories do call to mind potentially negative experiences of social judgment, for women who do not derive self-esteem from their bodies, they may find such experiences a respite from a culture in which their bodies and appearance are often the focus. Although priming such memories may have some therapeutic promise (particularly for women low in body esteem) it may be somewhat of a double-edged sword, since such memories do not tend to evoke entirely positive feelings. More research is needed on how contemplation of these kinds of memories impacts women's mental states and well-being.

Ultimately, these results provide insight that may advance work on objectification interventions. There already exists a body of literature indicating that the pernicious effect of objectification can be attenuated if women and girls receive interventions focused on improving body image and embodiment (Menzel & Levine, 2011l; Tylka & Augustus-Horvath, 2011). One specific way this has been tested is by encouraging girls to participate in competitive athletics;

this accomplishes a number of positive body image changes, including increasing the extent to which women view their body as a vessel for agentic achievement, as opposed to purely a thing to be looked at (Rubin, Nemeroff, & Russo, 2004). The current results do support the notion that encouraging body esteem is an important avenue for improving women's health outcomes by preventing the damaging consequences of objectification. The results also point to possible novel avenues of intervention research. Since objectification culture's strict standards may make it difficult for many women to achieve a sense of high body esteem, perhaps one of the other individual differences found to be relevant can be pursued as an intervention strategy. That is to say, perhaps interventions could also attempt to create therapies aimed at reducing women's sense of appearance contingency. By highlighting other sources of self-worth besides appearance, the focus could be shifted off of body image entirely. Additionally, religious beliefs may be protective in this regard as well. By having women call to mind more intrinsic sources of self-worth, whether religion or some other highly stable source of value and self-regard, again the focus may be shifted off of their body or appearance.

There are some limitations to the current study, some of which may provide directions for future research. One is that the samples of these two studies are quite different both in how they were recruited and the participant characteristics. The primary study was composed entirely of undergraduate students from a Midwest university. The subjects skewed young, and predominantly white. The preliminary study was recruited from an online participant pool who were paid for their participation. This population had a much more diverse age range, and was also predominantly white, but with a more diverse and representative racial sample. Although results from both largely supported each other, future research should more fully examine both how age and race interact with women's experiences of objectification. Presumably, young

women have very different experiences of objectification than women who have lived longer. Given that the vast majority of objectification research utilizes samples of undergraduate university students (see Tiggemann, 2011 for a review), future work should be mindful of age as a factor in how objectification impacts women, as well as trying to recruit more age-diverse samples.

Additionally, in the interest of creating a more intersectional approach to the sexualization and objectification of women, future work should seek to understand how women of varying races experience objectification, and how the objectifying gaze of society impacts them differently. Relatively little research has attempted to assess how ethnic or cultural differences impact the effect of objectification. Some studies have not found support for a relationship between ethnicity and harm due to objectification (e.g. Harrison & Fredrickson, 2003; Hebl, King, & Lin, 2004), but at least some work has found that the impact of objectification is more severe among minority women (Fredrickson, Forbes, Grigorian & Jarcho, 2007). Given these inconsistent findings, perhaps future work using objectification primes utilizing writing tasks similar to that of the present series of studies may be able to uncover how experiences of objectification differ by race or ethnicity.

Another limitation of the current set of studies is that both are underpowered to investigate more complex models or interactions of personality traits and objectification. That is to say, the present analyses looked at the individual differences of body esteem and contingency in separate regression models, since any three-way interactions would be insufficiently powered as to be conclusive. Further research recruiting larger participant pools could be useful in looking at how individual differences coalesce and create various kinds of experiences and reactions to objectification culture. For example, larger subject numbers would enable the usage of

multivariate techniques to assess how different personality characteristics hang together in large samples, such as cluster analysis. Such analyses would enable research to uncover how likely it is for women to have both high body esteem and low appearance contingency. More generally, such research would create the possibility for more nuanced analyses.

This set of studies also used a novel experimental manipulation to induce feelings of objectification among women. As this is a novel induction, it needs to be further used and tested to assess its impact and usefulness. This particular experimental induction was specifically formulated for its dual-purpose—not only was the memory writing task meant to evoke the kinds of mind states that a directly objectifying experience would (e.g. having participants try a swimsuit on while in the laboratory; Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998), but the content of what the women wrote could also be used in analyses. Thus I conceptualized this induction as a promising option for future experimental work on objectification. Though this induction is easy to use and administer, it does have the drawback of being less of a powerful objectification prime. Therefore, more research is needed to assess how successful the writing task is at evoking objectification.

Finally, there are limitations to the current experimental approach. A great deal of objectification research relies on cross-sectional or longitudinal research (see Moradi & Huang, 2008). This work is important as it is better able to identify the causes and consequences of objectification over a longer period of time, rendering it more useful for assessing real-life risks for mental disorders due to stable individual factors over the course of a woman's life. The present experimental work identified individual differences not necessarily used in objectification research (particularly the appearance contingency variable and the God's love variable). Often the correlational work on objectification assesses risk through factors included

within the larger objectification model, such as self-objectification (e.g. Noll & Fredrickson, 1998) and self-surveillance (e.g. Tiggemann & Slater, 2001). Self-esteem, given its relevance to the objectification model, has been successfully included in previous research on objectification (e.g. Tylka & Sabik, 2010). My results support that body esteem may affect how objectification impacts women. More novel are the effects from the present research demonstrating that the appearance contingency or God's love contingencies may moderate the impact of objectification on existential well-being outcomes. Thus, there may be value in future work that includes these factors in cross-sectional objectification research.

Overall, this research is an important step in furthering our understanding of objectification theory. A large body of research confirms that objectification is damaging, but the present research helps further our understanding of the individual differences that impact how women react to objectifying experiences. This work helps us understand women's unique reactions to and perspectives on the objectifying experiences they encounter. Hopefully, such work will ultimately aid researchers develop further interventions to help circumvent the damaging consequences objectification has on women and girls in our society.

REFERENCES

American Psychological Association. (2007*). Report of the APA task force on the Sexualization of Girls*. Washington DC: Author. Retrieved from http://www.apa.org/pi/wpo/sexualization_report_summary.pdf.

Antonovsky, A. (1993). The structure and properties of the Sense of Coherence scale. *Social Science & Medicine, 36,* 725–733.

Bartky, S. (1990). *Feminism and domination: Studies in the phenomenology of oppression.* New York, NY: Routledge.

Batson, C. D., & Stocks, E. L. (2004). Religion: Its core psychological functions. In J. Greenberg, S. L. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 141–155). New York, NY: Guilford Press.

Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford Press.

Baumeister, R. F., & Vohs, K. D. (2002). The pursuit of meaningfulness in life. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 608–618). New York, NY: Oxford University Press.

Ben-Ari, O. T., Florian, V., & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: A test of terror management mechanisms. *Journal of Personality and Social Psychology*, *76*, 35-45.

Berscheid, E., Dion, K., Walster, E., & Walster, G. W. (1971). Physical attractiveness and dating choice: A test of the matching hypothesis. *Journal* of *Experimental Social Psychology, 7,* 173-189.

Boyle, P. A., Barnes, L. L., Buchman, A. S., & Bennett, D. A. (2009). Purpose in life is associated with mortality among community-dwelling older persons. *Psychosomatic Medicine, 71,* 574–579.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6,* 3–5.

Burke, B. L., Martens, A., & Faucher, E. H. (2010). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review*, *14*, 155-195

Calogero, R. M., Tantleff-Dunn, S., & Thompson, J. (2011). Objectification theory: An introduction. In R. M. Calogero, S. Tantleff-Dunn, J. Thompson (Eds.), *Self-objectification in women: Causes, consequences, and counteractions* (pp. 3-21). Washington, DC US: American Psychological Association.

Cash, T. F., Fleming, E. C., Alindogan, J., Steadman, L., & Whitehead, A. (2002). Beyond body image as a trait: The development and validation of the Body Image States Scale. *Eating Disorders: The Journal of Treatment & Prevention*, *10*, 103-113.

Cox, C. R., Goldenberg, J. L., Arndt, J., & Pyszczynski, T. (2007). Mother's Milk: An Existential Perspective on Negative Reactions to Breast-Feeding. *Personality and Social Psychology Bulletin*, *33*, 110-122.

Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of Self-Worth in College Students: Theory and Measurement. *Journal of Personality and Social Psychology*, *85*, 894-908.

Debats, D. L., van der Lubbe, P. M., & Wezeman, F. R. A. (1993). On the psychometric properties of the Life Regard Index (LRI): A measure of meaningful life. *Personality and Individual Differences, 14,* 337–345.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuit: Human needs and the self-determination of behavior. *Psychological Inquiry, 11,* 227–268.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49, 71–75.

Emmons, R. A. (2005). Striving for the sacred: Personal goals, life meaning, and religion. *Journal of Social Issues, 61*, 731–745.

Etcoff, N. (1999). *Survival of the prettiest: The science of beauty*. New York, NY, US: Anchor Books/Doubleday.

Florian, V., & Mikulincer, M. (1998). Symbolic immortality and the management of the terror of death: The moderating role of attachment style. *Journal of Personality and Social Psychology*, *74*, 725-734.

Frankl, V. E. (1997). *Man's search for ultimate meaning*. New York, NY US: Insight Books/Plenum Press.

Fredrickson, B. L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, *21*, 173-206.

Frederick, D. A., Forbes, G. B., Grigorian, K. E., & Jarcho, J. M. (2007). The UCLA Body Project I: Gender and ethnic differences in self-objectification and body satisfaction among 2,206 undergraduates. *Sex Roles*, *57*, 317-327.

Fredrickson, B. L., Roberts, T., Noll, S. M., Quinn, D. M., & Twenge, J. M. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology*, *75*, 269-284.

Goldenberg, J. L. (2013). Immortal objects: The objectification of women as terror management. In S. J. Gervais (Ed.), *Objectification and (de)humanization: 60th Nebraska symposium on motivation* (pp. 73-95). New York, NY, US: Springer Science + Business Media.

Goldenberg, J. L., Goplen, J., Cox, C. R., & Arndt, J. (2007). 'Viewing' pregnancy as an existential threat: The effects of creatureliness on reactions to media depictions of the pregnant body. *Media Psychology*, *10*, 211-230.

Goldenberg, J. L., Hart, J., Pyszczynski, T., Warnica, G. M., Landau, M., & Thomas, L. (2006). Ambivalence toward the body: Death, neuroticism, and the flight from physical sensation. *Personality and Social Psychology Bulletin*, *32*, 1264-1277.

Goldenberg, J. L., Heflick, N. A., & Cooper, D. P. (2008). The thrust of the problem: Bodily inhibitions and guilt as a function of mortality salience and neuroticism. *Journal of Personality*, *76*, 1055-1080.

Goldenberg, J. L., & Roberts, T. (2004). The Beast within the Beauty: An Existential Perspective on the Objectification and Condemnation of Women. In J. Greenberg, S. L. Koole, T. Pyszczynski (Eds.), *Handbook of Experimental Existential Psychology* (pp. 71-85). New York, NY, US: Guilford Press.

Grabe, S., Routledge, C., Cook, A., Andersen, C., & Arndt, J. (2005). In Defense of the Body: The Effect of Mortality Salience on Female Body Objectification. *Psychology of Women Quarterly*, *29*, 33-37.

Greenberg, J. (2008). Understanding the vital human quest for self-esteem. *Perspectives on Psychological Science*, *3*, 48-55.

Greenberg, J., Landau, M. J., Kosloff, S., Soenke, M., & Solomon, S. (2016). How our means for feeling transcendent of death foster prejudice, stereotyping, and intergroup conflict: Terror management theory. In T. D. Nelson (Eds.), *Handbook of prejudice, stereotyping, and discrimination, 2nd ed.* (pp. 107-148). New York, NY, US: Psychology Press.

Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), Public self and private self (pp. 189– 212). New York: Springer-Verlag.

Hall, J. A. (1984). *Nonverbal sex differences: Communication accuracy and expressive style.* Baltimore, MD: Johns Hopkins University Press.

Harlow, L. L., Newcomb, M. D., & Bentler, P. M. (1986). Depression, self-derogation, substance use, and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of Clinical Psychology, 42,* 5–21.

Harrison, K., & Fredrickson, B. L. (2003). Women's sports media, self-objectification, and mental health in black and white adolescent females. *Journal of Communication, 53*, 216-232.

Haslam, N. (2006). Dehumanization: An Integrative Review. *Personality and Social Psychology Review*, *10*, 252-264.

Hebl, M. R., King, E. B., & Lin, J. (2004). The Swimsuit Becomes Us All: Ethnicity, Gender, and Vulnerability to Self-Objectification. *Personality and Social Psychology Bulletin*, *30*, 1322-1331.

Kenyon, G. M. (2000). Philosophical foundations of existential meaning. In G. T. Reker & K. Chamberlain (Eds.), *Exploring existential meaning: Optimizing human development across the life span* (pp. 7–22). Thousand Oaks, CA: Sage.

Kinnier, R. T., Metha, A. T., Keim, J. S., & Okey, J. L. (1994). Depression, meaninglessness, and substance abuse in 'normal' and hospitalized adolescents. *Journal of Alcohol and Drug Education*, *39*, 101-111.

Krause, N. (2007). Longitudinal study of social support and meaning in life. Psychology and Aging, 22, 456–469.

Lifton, R. J. (1983). *The broken connection: On death and the continuity of life*. Arlington, VA, US: American Psychiatric Association.

Mascaro, N., & Rosen, D. H. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of Personality*, *73*, 985-1014.

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York, NY: Wiley.

Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's mechanical Turk. *Behavior Research Methods*, *44*, 1-23.

Menzel, J. E., & Levine, M. P. (2011). Embodying experiences and the promotion of positive body image: The example of competitive athletics. In R. M. Calogero, S. Tantleff-Dunn, J. K. Thompson (Eds.), *Self-objectification in women: Causes, consequences, and counteractions* (pp. 163-186). Washington, DC, US: American Psychological Association

Miller, J. D., Crowe, M., Weiss, B., Maples-Keller, J. L., & Lynam, D. R. (2017). Using online, crowdsourcing platforms for data collection in personality disorder research: The example of Amazon's Mechanical Turk. *Personality Disorders: Theory, Research, and Treatment*, *8*, 26-34.

Moradi, B., & Huang, Y. (2008). Objectification theory and psychology of women: A decade of advances and future directions. *Psychology of Women Quarterly*, *32*, 377-398.

Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, *22*, 623-636.

Ortner, S. B. (1974). Is female to male as nature is to culture? In M. Z. Rosaldo & L. Lamphere (Eds.), Woman, culture, and society (pp. 67-87). Stanford, CA: Stanford University Press.

Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as a participant pool. *Current Directions in Psychological Science*, *23*, 184-188

Park, N., Park, M., & Peterson, C. (2010). When is the search for meaning related to life satisfaction? *Applied Psychology: Health and Well-Being*, *2*, 1-13.

Pyszczynski, T., Rothschild, Z., Motyl, M., & Abdollahi, A. (2009). The cycle of righteous destruction: A Terror Management Theory perspective on terrorist and counter-terrorist violence. In W. K. Stritzke, S. Lewandowsky, D. Denemark, J. Clare, F. Morgan, W. K. Stritzke, ... F. Morgan (Eds.), *Terrorism and torture: An interdisciplinary perspective* (pp. 154-178). New York, NY, US: Cambridge University Press.

Routledge, C., & Arndt, J. (2008). Self-sacrifice as self-defence: Mortality salience increases efforts to affirm a symbolic immortal self at the expense of the physical self. *European Journal of Social Psychology*, *38*, 531-541.

Routledge, C., Arndt, J., & Goldenberg, J. L. (2004). A Time to Tan: Proximal and Distal Effects of Mortality Salience on Sun Exposure Intentions. *Personality and Social Psychology Bulletin*, *30*, 1347-1358.

Rosenblatt, A., Greenberg, J., Solomon, S., Pyszczynski, T., & Lyon, D. (1989). Evidence for terror management theory: I. The effects of mortality salience on reactions to those who violate or uphold cultural values. *Journal of Personality and Social Psychology*, *57*, 681-690.

Rubin, L. R., Nemeroff, C. J., & Russo, N. F. (2004). Exploring Feminist Women's Body Consciousness. *Psychology of Women Quarterly*, *28*, 27-37.

Rudman, L. A., & Mescher, K. (2012). Of animals and objects: Men's implicit dehumanization of women and likelihood of sexual aggression. *Personality and Social Psychology Bulletin*, *38*, 734-746.

Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, *65*, 529-565

Santos, V., Paes, F., Pereira, V., Arias-Carrión, O., Silva, A. C., Carta, M. G., & ... Machado, S. (2013). The role of positive emotion and contributions of positive psychology in depression treatment: Systematic review. *Clinical Practice and Epidemiology in Mental Health*, *9,* 221-237.

Schnell, T. (2010). Existential indifference: Another quality of meaning in life. *Journal of Humanistic Psychology*, *50*, 351-373.

Singer, J. A., Singer, B. F., & Berry, M. (2013). A meaning-based intervention for addiction: Using narrative therapy and mindfulness to treat alcohol abuse. In J. A. Hicks & C. Routledge (Eds.), *The experience of meaning in life: Classical perspectives, emerging themes, and controversies* (pp. 379-391). New York, NY, US: Springer Science + Business Media.

Seligman, M. E. P. (2002). *Authentic happiness.* New York: Free Press.

Snow, J. T., & Harris, M. B. (1985). Maintenance of weight loss: Demographic, behavioral and attitudinal correlates. *Journal of Obesity and Weight Regulation, 4*, 234-255.

Solomon, S., Greenberg, J., & Pyszczynski, T. (2004). The Cultural Animal: Twenty Years of Terror Management Theory and Research. In J. Greenberg, S. L. Koole, T. Pyszczynski (Eds.), *Handbook of Experimental Existential Psychology* (pp. 13-34). New York, NY, US: Guilford Press.

Spielberger, C. D. (1983). *Manual for the State–Trait Anxiety Inventory (Form Y*). Palo Alto, CA: Mind Garden.

Steger, M. F., & Frazier, P. (2005). Meaning in life: One link in the chain from religiousness to well-being. *Journal of Counseling Psychology, 52*, 574–582.

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology, 53,* 80-93.

Szymanski, D. M., Moffitt, L. B., & Carr, E. R. (2011). Sexual objectification of women: Advances to theory and research. *The Counseling Psychologist*, *39*, 6-38

Thøgersen-Ntoumani, C., Ntoumanis, N., Cumming, J., Bartholomew, K. J., & Pearce, G. (2011). Can self-esteem protect against the deleterious consequences of self-objectification for mood and body satisfaction in physically active female university students?. *Journal of Sport & Exercise Psychology*, *33*, 289-307.

Tiggemann, M. (2011). Mental health risks of self-objectification: A review of the empirical evidence for disordered eating, depressed mood, and sexual dysfunction. In R. M. Calogero, S. Tantleff-Dunn, J. K. Thompson, R. M. Calogero, S. Tantleff-Dunn, J. K.

Thompson (Eds.) , *Self-objectification in women: Causes, consequences, and counteractions* (pp. 139-159). Washington, DC, US: American Psychological Association

Tiggemann, M., & Slater, A. (2001). A test of objectification theory in former dancers and non-dancers. *Psychology of Women Quarterly*, *25*, 57-64.

Tuana, N. (1993). *The less noble sex: scientific, religious, and philosophical conceptions of woman's nature.* Bloomington, IN: Indiana University Press.

Tylka, T. L., & Augustus-Horvath, C. L. (2011). Fighting self-objectification in prevention and intervention contexts. In R. M. Calogero, S. Tantleff-Dunn, J. K. Thompson, R. M. Calogero, S. Tantleff-Dunn, J. K. Thompson (Eds.) , *Self-objectification in women: Causes, consequences, and counteractions* (pp. 187-214). Washington, DC, US: American Psychological Association.

Tylka, T. L., & Sabik, N. J. (2010). Integrating social comparison theory and self-esteem within objectification theory to predict women's disordered eating. *Sex Roles*, *63*, 18-31.

Ungar, T., Ungar, A., & Kim, M. (2011). Comments on meaninglessness and suicidal risk. *International Forum for Logotherapy*, *34*, 72-75.

Vaes, J., Paladino, P., & Puvia, E. (2011). Are sexualized women complete human beings? Why men and women dehumanize sexually objectified women. *European Journal of Social Psychology*, *41*, 774-785.

Vail, K. I., Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J. (2010). A terror management analysis of the psychological functions of religion. *Personality and Social Psychology Review*, *14*, 84-94.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063–1070.

Wolf. N. (1991). *The beauty myth: How images of beauty are used against women.* New York: Anchor Books.

Wright, P. J., & Tokunaga, R. S. (2016). Men's objectifying media consumption, objectification of women, and attitudes supportive of violence against women. *Archives of Sexual Behavior*, *45*, 955-964.

Zurbriggen, E. L., & Roberts, T. (2013). *The sexualization of girls and girlhood: Causes, consequences, and resistance*. New York, NY, US: Oxford University Press.

APPENDIX A. CONTINGENCIES OF SELF-WORTH

Please respond to each of the following statements by circling your answer using the scale from "1 = Strongly disagree" to "7 = Strongly agree." If you haven't experienced the situation described in a particular statement, please answer how you think you would feel if that situation occurred.

1. When I think I look attractive, I feel good about myself.
2. My self-worth is based on God's love.
3. I feel worthwhile when I perform better than others on a task or skill.
4. My self-esteem is unrelated to how I feel about the way my body looks.
5. Doing something I know is wrong makes me lose my self-respect.
6. I don't care if other people have a negative opinion about me.
7. Knowing that my family members love me makes me feel good about myself.
8. I feel worthwhile when I have God's love.
9. I can't respect myself if others don't respect me.
10. My self-worth is not influenced by the quality of my relationships with my family members.
11. Whenever I follow my moral principles, my sense of self-respect gets a boost.
12. Knowing that I am better than others on a task raises my self-esteem.
13. My opinion about myself isn't tied to how well I do in school.
14. I couldn't respect myself if I didn't live up to a moral code.
15. I don't care what other people think of me.
16. When my family members are proud of me, my sense of self-worth increases.
17. My self-esteem is influenced by how attractive I think my face or facial features are.

18. My self-esteem would suffer if I didn't have God's love.

19. Doing well in school gives me a sense of self-respect.

20. Doing better than others gives me a sense of self-respect.

21. My sense of self-worth suffers whenever I think I don't look good.

22. I feel better about myself when I know I'm doing well academically.

23. What others think of me has no effect on what I think about myself.

24. When I don't feel loved by my family, my self-esteem goes down.

25. My self-worth is affected by how well I do when I am competing with others.

26. My self-esteem goes up when I feel that God loves me.

27. My self-esteem is influenced by my academic performance.

28. My self-esteem would suffer if I did something unethical.

29. It is important to my self-respect that I have a family that cares about me.

30. My self-esteem does not depend on whether or not I feel attractive.

31. When I think that I'm disobeying God, I feel bad about myself.

32. My self-worth is influenced by how well I do on competitive tasks.

33. I feel bad about myself whenever my academic performance is lacking.

34. My self-esteem depends on whether or not I follow my moral/ethical principles.

35. My self-esteem depends on the opinions others hold of me.

APPENDIX B. BODY-ESTEEM

For each of the items below, rate your level of agreement from 1 (*strongly disagree*) to 9 (*strongly agree*). Read the items carefully to be sure the levels of agreement reflects how to generally feel most of the time.

1. I am extremely satisfied with my physical appearance.
2. I am extremely satisfied with my body size and shape.
3. I am extremely satisfied with my weight.
4. I feel extremely physically attractive.
5. I always feel good about my looks.
6. I look better than the average person looks.

APPENDIX C. OBJECTIFICATION MEMORY PROMPT

Please think of a time when you were judged based on your body or appearance. Specifically, think of a time when your appearance or attractiveness was judged, and your intelligence or personality was ignored. Then, for 5 minutes, write about this experience. Try and recall what happened, as well as your reactions and how you felt following this experience.

APPENDIX D. NEUTRAL MEMORY PROMPT

Please think of a time when you had an average day. Specifically, think of a time when your day went as planned, and what happened. Then, for 5 minutes, write about this day. Try and recall what happened, as well as your reactions and how you felt following this day.

APPENDIX E. COMPETENCE MEMORY PROMPT

Please think of a time when you were judged based on your personality, intelligence, or other such qualities. Specifically, think of a time when your competence or personality was judged, and your body or appearance was ignored. Then, for 5 minutes, write about this experience. Try and recall what happened, as well as your reactions and how you felt following this experience.

APPENDIX F. MANIPULATION CHECK

Please rate your level of agreement with the following statements regarding the writing task you just completed, using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale.

1. To what extent did writing about your memory make you feel judged based on your appearance?
2. To what extent did writing about you memory make you feel that your intelligence or personality did not matter?
3. To what extent did writing about your memory make you feel self-conscious about your appearance?

APPENDIX G. DEMOGRAPHICS

Please respond to the following items.

1. How old are you?
2. Are you currently in a relationship?
3. How long have you been in your current relationship?
4. Have you ever taken a women and gender studies course?
5. Are you a feminist?
6. Please rate your familiarity with feminist theory.

APPENDIX H. NARRATIVE CODING DIMENSIONS

1. To what extent is the experience described in this writing positive?

2. To what extent is the experience described in this writing negative?

3. To what extent does the person describing this experience seem upset?

4. To what extent does the person describing this experience seem anxious?

5. To what extent does the person describing this experience seem angry?

6. To what extent does the person describing this experience seem happy?

7. To what extent does the person describing this experience seem enthusiastic?

8. To what extent does the person describing this experience seem flattered?

9. Does this writing contain any religious theme(s)?

APPENDIX I. MEANING IN LIFE

Please think about how you currently feel and respond to the following statements as truthfully and accurately as you can. Also please remember that these are very subjective questions and that there are no right or wrong answers.

1. I understand my life's meaning.
2. My life has a clear sense of purpose.
3. I have a good sense of what makes my life meaningful.
4. I have discovered a satisfying life purpose.
5. My life has no clear purpose.

APPENDIX J. CRISIS OF MEANING

The following questionnaire deals with many realms of your life. Some of the questions you won't be able to answer immediately. They are about topics you don't talk about every day. Therefore, take your time to answer them. Please answer them as honestly as possible and based on how you are feeling RIGHT NOW. Note that there are not right or wrong answers. It is only your personal opinion that counts. To indicate your agreement or disagreement use the scale that accompanies each question.

1. I feel pain from finding no purpose in my life.
2. My life seems empty.
3. When I think about the meaning of my life I find only emptiness.
4. My life seems meaningless.
5. I don't see any sense in life.

APPENDIX K. SUBJECTIVE VITALITY

Please respond to each of the following statements in terms of how you are feeling RIGHT NOW. Indicate how true each statement is for you at this time, using the following scale.

1. At this moment, I feel alive and vital.
2. I don't feel very energetic right now.
3. Currently I feel so alive I just want to burst.
4. At this time, I have energy and spirit.
5. I am looking forward to each new day.
6. At this moment, I feel alert and awake.
7. I feel energized right now.

APPENDIX L. STATE ANXIETY

Below are a number of statements which people have used to describe themselves. Read each statement and then select the appropriate response to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1. I am tense.

2. I feel at ease.

3. I feel anxious.

4. I feel self-confident.

APPENDIX M. SATISFACTION WITH LIFE

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

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

APPENDIX N. POSITIVE AND NEGATIVE AFFECT SCHEDULE

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way right now. Use the following scale to record your answers:

1. Interested
2. Irritable
3. Distressed
4. Alert
5. Excited
6. Ashamed
7. Upset
8. Inspired
9. Strong
10. Nervous
11. Guilty
12. Determined
13. Scared
14. Attentive
15. Hostile
16. Jittery
17. Enthusiastic
18. Active

19. Proud

20. Afraid