

AN EXERCISE IN NOSTALGIA: THE ROLE OF HEALTH OPTIMISM IN THE  
RELATIONSHIP BETWEEN NOSTALGIA AND PHYSICAL WELL-BEING

by

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## An Exercise in Nostalgia: The Role of Health Optimism in the Relationship between Nostalgia and Physical Well-Being

Every year approximately half of all Americans make a New Year's resolution (Statistics Brain, 2014). In 2014, most people reported that their resolution was to engage in behaviors to improve their physical health (e.g., losing weight, staying fit, eating healthy, quitting smoking). Although Americans often set these goals with good intentions, research demonstrates that only 8% of them actually achieve their resolutions (Norcross, Mrykalo, & Blagys, 2002; Norcross, Ratzin & Payne, 1989). Given the number of individuals who struggle to maintain regular exercise and healthier lifestyles (e.g., Booth, Bauman, Owen, & Gove, 1997; Courneya et al., 2005; Warburton, Nicol, & Bredin, 2006), one challenge for American society is to identify effective methods for improving people's physical health.

One perspective that might be useful in understanding why people engage in health-relevant behaviors is research on nostalgia (see Sedikides, Wildschut, Arndt, & Routledge, 2008 for review). Nostalgia, defined as a sentimental longing for the past, has been shown to provide many psychological and social benefits including greater self-esteem and feelings of social connectedness (e.g., Wildschut, Sedikides, Arndt, & Routledge, 2006). Additionally, several studies have found that nostalgia increases feelings of optimism (Cheung et al., 2013), with some work revealing that dispositional optimism is associated with more positive and preventative health behavior (Scheier & Carver, 1992; Taylor et al., 1992). Despite evidence demonstrating the positive effects of nostalgic reverie (see Routledge, Wildschut, Sedikides, & Juhl, 2013 for review), it remains unclear whether nostalgia leads to greater physical well-being. The purpose of the present research was to explore whether nostalgia increases feelings of health optimism (Study 1 & 2), and the extent to which this heightened

optimistic thinking increases attitudes and behaviors associated with better physical health (Study 2).

### **Nostalgia**

The word *nostalgia* is derived from the Greek compound νόστος (pronounced *nosto*) meaning "homecoming" and ἄλγος (pronounced *algia*) meaning "pain, ache" (Liddell & Scott, 1958, p. 467). The term was originally coined as a medical disease in France during the 18<sup>th</sup> century where Swiss troops were commonly diagnosed with symptoms of loneliness, depression, weakness, and loss of appetite (Hofer, 1688/1934; also see Havlena & Holak, 1991; Rosen, 1975). By the 20th century, the field of psychiatry considered nostalgia to be a mental disorder, with patients characterized as being sad, anxious, and sleep deprived (Davis, 1979; McCann, 1941). Despite these historical interpretations of nostalgia, several theorists now argue that it serves as a psychological strength rather than a liability or pathology (e.g., Sedikides, Wildschut, Baden, 2004; Sedikides et al., 2008). According to these perspectives, nostalgia is a predominantly positive emotion associated with yearning for objects, events, and relationships from one's past (Holak & Havlena, 1998, p. 218; also see Belk, 1990; Holbrook & Schindler, 1991 for similar definitions).

Contemporary research in personality and social psychology has found that nostalgia fulfills a number of psychological functions. For example, several studies have shown that individuals become nostalgic when dealing with psychological threat. In one series of experiments, Wildschut and colleagues (2006) randomly assigned participants to either a negative mood induction (i.e., reading about the destruction caused by a tsunami), a positive mood induction (i.e., reading about the birth of a polar bear at the local zoo), or a neutral mood induction (i.e., reading about an unmanned mission to Saturn's largest moon).

Participants then completed several measures of nostalgic reverie. The results revealed that individuals were more likely to report greater nostalgic reverie in response to the negative mood induction compared to the other two conditions, suggesting that nostalgia serves as a form of defense when people are feeling stressed or distressed. These findings are supported by additional evidence showing that thoughts of meaninglessness (Routledge et al., 2011), feelings of loneliness (Wildschut et al., 2006; Wildschut, Sedikides, Routledge, Arndt, & Cordaro, 2010; Zhou, Sedikides, Wildschut, & Gao, 2008), and existential anxiety (Routledge & Arndt, 2005; Routledge et al., 2011; Routledge et al., 2013) all increase nostalgic reverie.

Nostalgia is also an important resource for individuals' well-being (e.g., Hepper, Ritchie, Sedikides, & Wildschut, 2012; Routledge, Arndt, Sedikides, & Wildschut, 2008; Routledge et al., 2011; Vess, Arndt, Routledge, Sedikides, & Wildschut, 2012; Wildschut et al., 2006, 2010; Zhou et al., 2008). For instance, research has found that nostalgia is associated with greater feelings of purpose in life and meaning in life (Routledge et al., 2011), it reduces defensiveness and lowers death-thought accessibility (Routledge et al., 2013), and it heightens personal growth and subjective well-being (Baldwin & Landau, 2014). Further, although nostalgia can be a bittersweet emotion associated with sadness (e.g., separation from or death of a loved one; Hepper et al., 2012; Sedikides et al., 2008; Verplanken, 2012; Wildschut et al., 2006; Wildschut, Sedikides, & Cordaro, 2011; Wildschut, Stephan, Sedikides, Routledge, & Arndt, 2008), research has found that written passages about nostalgic (vs. ordinary) events often contain greater feelings of positive affect (e.g., happiness, fondness) than negative affect (e.g., regret, sadness; Stephan, Sedikides, & Wildschut, 2012; Wildschut et al., 2006, 2010; Zhou, Wildschut, Sedikides, Shi, & Feng,

2012; Wildschut et al., 2008). This is consistent with theory and research suggesting that nostalgia has redemptive qualities where individuals have a tendency of turning negative psychological states into predominately positive ones (McAdams, 2001).

In addition to research on well-being, nostalgic reverie has been shown to lead to greater feelings of social connectedness. For example, in coding participants' written responses to nostalgia manipulations, researchers have found that individuals typically write about their social relationships (e.g., family members, romantic partners) during important life events (e.g., vacations, graduations, reunions; Holak & Havlena 1992; Wildschut et al., 2006). Additionally, activating thoughts of nostalgia leads to greater feelings of "love" and "protection," more interpersonal competence (e.g., self-disclosure), greater feelings of perceived social support, a higher likelihood of offering emotional support to others, and greater positive attitudes and trust toward out-group members (Turner, Wildschut, & Sedikides, 2012; Turner, Wildschut, Sedikides, & Gheorghiu, 2013; Wildschut et al., 2006, 2010). Overall, this research suggests that not only does nostalgia yield many psychological benefits, but it can also reignite meaningful relationships and re-establish symbolic connections with close others.

In summary, although nostalgia was once believed to be psychologically problematic (Sedikides et al., 2008; Sedikides et al., 2004), recent work suggests that it leads to increases in positive mood, self-worth, meaning in life, and fosters feelings of social connectedness. However, despite extensive literature demonstrating the psychological and social benefits of nostalgia reverie (see e.g., Routledge et al., 2013), research has yet to examine whether nostalgia can provide positive benefits for one's physical health. Given the positive association between dispositional optimism and greater psychological and physical well-

being (see Carver, Scheier, & Segerstorm, 2010 for review), nostalgia may motivate people to engage in greater preventative health behaviors by increasing more optimistic feelings about the future.

### **Optimism**

Over the past few decades, there has been growing interest among researchers to identify personality traits that predict better health (e.g., Bogg & Roberts, 2004; Friedman et al., 1993, 1995; Magee, Heaven, & Miller, 2013). One trait associated with greater well-being is dispositional optimism – that is, feeling hopeful about the future (Scheier & Carver, 1985, 1992). Having a more positive outlook on life is connected to better health as high (compared to low) optimistic individuals utilize more adaptive coping strategies (Carver et al., 2010; Solberg Nes, & Segerstrom, 2006), have more supportive relationships (e.g., Abend & Williamson, 2002; Trunzo & Pinto, 2003), and are more likely engage in preventative health behaviors (Rasmussen, Scheier, & Greenhouse, 2009; Warner, Schwarzer, Schüz, Wurm, & Tesch-Römer, 2012). For instance, Aspinwall and Taylor (1992) studied undergraduate students in their first semester of college and found an association between greater dispositional optimism and lower levels of stress, loneliness, and depression 3 months later (also see Scheier & Carver, 1992 for similar findings). Further, optimism can serve as a psychological buffer for those undergoing medical treatment (e.g., the elderly, new mothers, war veterans, cancer caregivers, & women with breast cancer; Carver & Gaines, 1987; Carver et al., 1994; Epping-Jordan et al., 1999; Giltay, Zitman, & Knomhout, 2006; Given et al., 1993; Thomas, Britt, Odle-Dusseau, & Bliese). Fitzgerald and colleagues (1993), for example, found that optimists reported having less psychological distress and greater satisfaction with life before and after having coronary artery bypass

surgery, with similar effects being found 5 years following surgery (e.g., Scheier et al., 1989).

The positive benefits of optimism are not exclusive to psychological health, with a number of studies demonstrating that optimism can increase physical well-being. For instance, findings from Scheier and Carver (1985, Study 3) revealed that optimists (compared to more pessimistic individuals) reported fewer signs of illness during the last 4 weeks of the semester. Within health domains, more optimistic individuals indicate better physical functioning (e.g., de Ridder, Fournier, & Bensing, 2004; Fournier, de Ridder, & Bensing, 2002; Motivala, Hurwitz, LaGreca et al., 1999), report less pain (e.g., Affleck et al., 2001; Costello et al., 2002; Mahler & Kulik, 2000; Smith & Zautra, 2004), have fewer physical symptoms (e.g., Fournier et al., 2002; Lyons & Chamberlain, 1994), and have a lower likelihood of being re-hospitalized after major surgery (Scheier et al., 1999; Tindle et al., 2012). Additional evidence for the beneficial effects of optimism was recently found in a meta-analysis of 84 studies across various health outcomes (e.g., cancer, heart disease, immune functioning, pain, pregnancy; Rasmussen et al., 2009; also see Warner, Schwarzer, Schüz, Wurm, & Tesch-Römer, 2012). For each of these outcomes, dispositional optimism significantly predicted better physical health ( $ps < .001$ ) with small to moderate effect sizes (.10 to .27).

Given the association between optimism, improved health, and positive coping (e.g., Carver et al., 2010; Hart & Hittner, 1995), one challenge for many psychologists is how to increase optimistic thinking (e.g., Seligman, 2011; Peters, Meevissen, & Hanssen, 2013; Pretzer & Walsh, 2001). From a nostalgia perspective, positivity derived from reflecting on one's past might also make people more optimistic about the future (e.g., Holak & Havlena,

1998; Sedikides et al., 2004; Wildschut et al., 2006). To examine this possibility, Cheung and colleagues (2013) randomly assigned participants to write about a nostalgic event versus an ordinary life event and responses were coded for optimistic thinking (70 words - e.g., *hope*, *optimistic*, *determined*). Results revealed that nostalgic narratives (versus ordinary narratives) contained more words relating to expressions of optimism. This was supported by additional evidence showing that participants reported greater feelings of optimism following thoughts of nostalgia versus an ordinary event (the control condition).

Although research has established an associative link between nostalgia and optimistic thinking, no studies have examined whether this optimistic bias extends to health-relevant behaviors. Thus, one question is whether nostalgic reverie increases feelings of health optimism. Further, despite the rich literature demonstrating the connection between optimistic thinking and reduced health problems (see e.g., Rasmussen et al., 2009), it is open to question whether nostalgia, by infusing more optimistic feelings about one's health, can lead to greater attitudes and behavior associated with better physical well-being. The present research was designed to answer these questions.

### **The Present Research**

The present work was designed to test the relationship between nostalgia, health optimism, and physical health. Although Cheung et al. (2013) found that nostalgia can provide a more positive outlook on life, this work only examined perceptions of general optimism, and did not look at optimistic thinking within any specific behavioral domain. Therefore, Study 1 was designed to see whether nostalgia yields greater optimism toward one's physical health. Further, in light of previous work showing how optimists (compared to pessimists) implement greater problem-focused coping strategies (e.g., concentrating efforts

to address potential health threats; Carver et al., 2010) and engage in more proactive behaviors to improve one's physical health (Rasmussen et al., 2009; Warner et al., 2012), it seems possible that nostalgia-induced health optimism might have similar beneficial effects on physical well-being. Thus, Study 2 tested a mediational model to examine whether recalling a nostalgic (vs. ordinary) event led to greater feelings of health optimism, which in turn, would yield greater attitudes and behaviors associated with better physical health.

### **Study 1**

To explore whether the positive benefits of nostalgic reverie extend to one's physical well-being, Study 1 tested whether nostalgia leads to greater health optimism. To do this, participants were exposed to a manipulation used extensively in past research (Routledge et al., 2013; Sedikides et al., 2008), in which they were randomly assigned to think and write about a nostalgic event versus an ordinary event (the control condition). Next, participants completed a measure of health optimism (Aspinwall & Brunhart, 1996) to assess the processing of health-risk information. It was hypothesized that participants would report greater feelings of health optimism in response to recalling a nostalgic event in comparison to an ordinary event.

### **Method**

#### **Participants**

One hundred and five students (56 female;  $M_{\text{age}} = 19.74$ ) from introductory psychology courses at Texas Christian University participated in exchange for partial course credit.

## Materials and Procedure

Participants completed a “personality and attitudes” study on the computer in a laboratory setting. After obtaining informed consent, everyone was instructed to work through a Qualtrics survey on the computer. All questionnaires were identical in content with the exception of the nostalgia manipulation. The order and content of the packets are described below (see Appendix A).

**Nostalgia manipulation.** Participants were randomly assigned to either a nostalgia condition or control condition used in previous research (see Routledge et al., 2013; Sedikides et al., 2008). In the nostalgia condition, participants were asked to think and write about a past event that made them feel the most nostalgic. Conversely, participants in the control condition were asked to think and write about an ordinary event in their life. Following the writing task, everyone answered three questions as a manipulation check (1 = *strongly disagree*; 9 = *strongly agree*): “Right now, I am feeling quite nostalgic,” “Right now, I am having nostalgic feelings,” and “I feel nostalgic at this moment.” ( $\alpha = .98$ ). These questions have been used extensively in previous nostalgia research (Juhl et al., 2010; Routledge et al., 2008, 2011, 2012; Vess et al., 2012; Wildschut et al., 2006, 2010; Zhou et al., 2008).

**Health optimism.** To see whether nostalgia induced optimism extends to health domains, participants completed a 16-item measure of health optimism (Aspinwall & Brunhart, 1996; also see Taylor et al., 1992 for similar items). The scale consisted of 11 positively worded items (e.g., “If I did get a serious illness, I would recover from it sooner than most other people” and “Positive thinking can prevent illness from occurring”) and five negatively worded items (e.g., “I will probably die from illness or accident instead of old

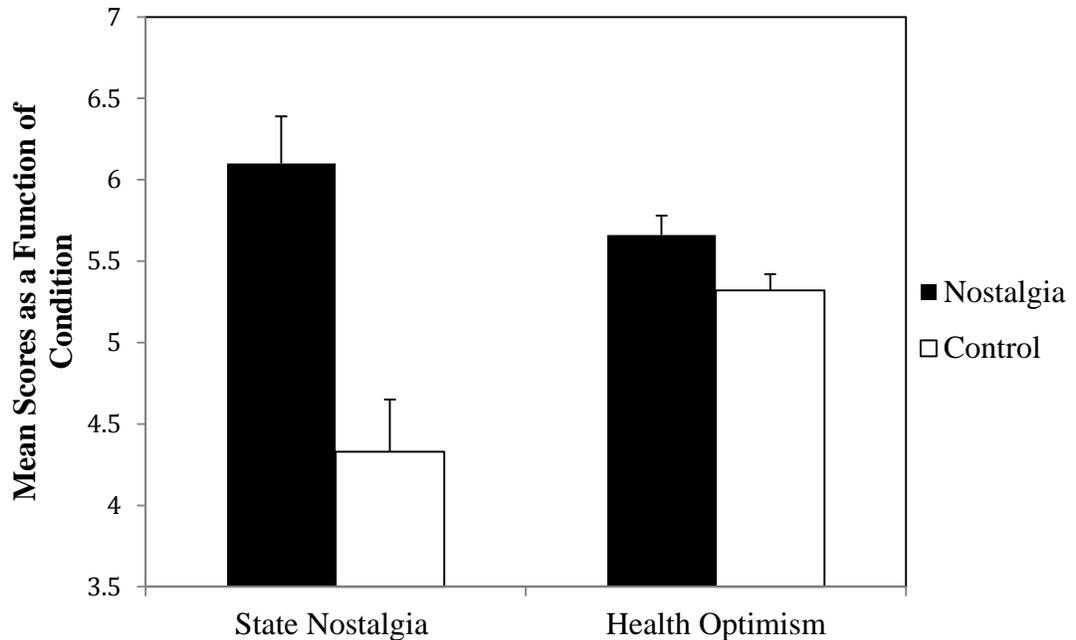
age” and “Most serious illnesses are genetic, so there is little that can be done to prevent them”). To reduce suspicion, four filler statements were also included (e.g., “I only think about my health when I am sick”). Responses to all items were reported on a 9-point scale (1 = *Strongly agree*; 9 = *Strongly disagree*). All negatively worded items were reverse-scored and averaged with the positive items to create an overall measure of health optimism ( $\alpha = .74$ ).

## Results and Discussion

**Manipulation check.** An independent  $t$ -test assessed whether the nostalgia manipulation increased feelings of state nostalgia. Participants who were asked to recall a nostalgic event ( $M = 6.10, SD = 2.13$ ) reported higher nostalgic reverie compared to participants in the control condition ( $M = 4.33, SD = 2.31$ ),  $t(103) = 4.09, p \leq .001, d = 0.80$ . Means for the conditions are graphically depicted in Figure 1.

**Health optimism.** An independent  $t$ -test also revealed a significant effect of nostalgia condition on health optimism scores,  $t(103) = 2.12, p = .03, d = 0.43$ . Specifically, the results revealed that participants reported greater feelings of health optimism following the nostalgia manipulation ( $M = 5.66, SD = 0.85$ ) compared to the control condition ( $M = 5.32, SD = 0.75$ ). See Figure 1 for means for the different conditions.

Figure 1. Mean scores as a function of nostalgia condition. Higher scores indicate increased state nostalgia and health optimism.



These results provide initial support that nostalgia promotes health optimism. Specifically, participants who recalled a nostalgic (vs. ordinary) event reported greater feelings of optimism toward their physical health. This extends the results of previous research by showing that nostalgia not only increases optimism (Cheung et al, 2013), but that nostalgic reverie leads to a greater optimistic bias about one's physical health.

One limitation of this study, however, was that it did not examine whether nostalgic reverie increases behavioral health intentions directly. Although the relationship between nostalgia and physical health has not been previously examined, extensive research demonstrates that there is a strong association between optimistic thinking and physical health outcomes (Rasmussen et al., 2009). For example, optimistic individuals place more importance on their health (Radcliffe & Klein, 2002; Taylor et al., 1992), are more

efficacious in the face of health threats (Aspinwall & Brunhart, 1996), engage in more preventative health behaviors (e.g., taking vitamins, eating low-fat foods, engaging in regular exercise; Scheier & Carver, 1992), and minimize potential health risks (e.g., engage in less excessive alcohol use, have sex with fewer anonymous partners; Ohannessian, Hesselbrock, Tennen, & Affleck, 1994; Taylor et al., 1992). In light of these findings, and the results of Study 1, nostalgia should motivate people to engage in greater health intentions and behaviors by yielding higher levels of health optimism.

## **Study 2**

Study 2 explored whether nostalgia-induced health optimism increases health intentions and behavior. To do this, participants received the same nostalgia manipulation and measure of health optimism described in Study 1. Following this, everyone completed the Health Behavior Checklist (HBC; Vickers, Conway, & Hervig, 1990), the health subscale of the Aspirations Index (Kasser & Ryan, 1996), and answered questions about their intentions to exercise. Finally, participants completed a measure of health behavior (i.e., seeking health information; e.g., Howell & Shepperd, 2013). By testing a mediational model, it was hypothesized that heightened health optimism following nostalgic reverie (vs. recalling an ordinary event) would lead to increased health intentions and behavior.

## **Method**

### **Participants**

Fifty-one students (34 female;  $M_{\text{age}} = 20.59$ ) from introductory psychology classes at Texas Christian University participated in exchange for partial course credit. All materials took approximately 35 min to complete and participants were thoroughly debriefed upon

completion of the study. The order and content of the packets are described below (see Appendix A).

**Nostalgia manipulation.** Participants completed the same nostalgia manipulation (recalling a nostalgic vs. ordinary event) and 3-item manipulation check ( $\alpha = .99$ ) described in Study 1.

**Health optimism.** Everyone completed the same measure of health optimism from the previous experiment ( $\alpha = .71$ ).

**Health attitudes.** Participants completed five items from the Aspirations Index (Kasser & Ryan, 1996) to assess their intrinsic aspiration to achieve a healthier lifestyle. Each item consisted of a statement (e.g., “To keep myself healthy and well,” “To feel good about my level of physical fitness”) and everyone rated: (a) the personal importance of each aspiration (i.e., health importance;  $\alpha = .93$ ) and (b) the perceived likelihood of attaining each aspiration in the future (i.e., health likelihood;  $\alpha = .94$ ) using a scale ranging from 1 (*Strongly disagree*) to 9 (*Strongly agree*).

**Health intentions.** Participants completed two measures of health intentions. First, everyone received an adapted version of the Health Behavior Checklist (HBC; Vickers, Conway, & Hervig, 1990). Specifically, this measure assesses a wide range of health-related behaviors (e.g., “I intend to get at least 30 minutes of exercise 5 days a week;” “I intend to eat at least five servings of fruit and vegetables each day;” “I intend to limit the amount of alcohol and other drugs that I consume”) and participants reported the extent to which they intend to engage in each behavior in the future from 1 (*Strongly disagree*) to 9 (*Strongly agree*). All items were averaged together to create a composite score ( $\alpha = .84$ ).

For the second measure, all participants were told that an exercise challenge was being held in the psychology department and were asked about their interest in signing-up and committing to the challenge (i.e., to exercise four times a week for a total of 4 weeks). Specifically, everyone was asked about their willingness to participate (i.e., “How interested are you in participating in the exercise challenge?;” “How important do you think having the exercise challenge is?;” “Do you think it is important to implement an exercise challenge like this for undergraduate students?;”  $\alpha = .89$ ). All responses were made on a 9-point scale (1 = *Strongly disagree*; 9 = *Strongly agree*).

**Health behavior.** Following previous research (Howell & Shepperd, 2013), participants were presented with two news articles with the opportunity to seek additional information. The health-relevant article focused on the importance of having a health versus unhealthy diet. In contrast, the neutral article discussed a spelling bee tournament held in the state of Missouri. The length and word count for the two articles were approximately the same. Further, a pilot test found no significant difference in participants’ preference and liking for the different articles,  $t(26) = 0.98, p = .34$ . For the current study, health behavior was determined by whether people chose the health-relevant article over the neutral one.

## **Results and Discussion**

**Manipulation check.** Results from an independent  $t$ -test revealed that the nostalgia manipulation had a significant effect on state nostalgia scores,  $t(49) = 5.10, p \leq .001, d = 1.42$ . Specifically, participants who recalled a nostalgic event ( $M = 6.88, SD = 2.34$ ) reported higher state nostalgia compared to participants in the control condition ( $M = 3.72, SD = 2.09$ ).

**Health optimism.** An independent *t*-test was used to assess whether nostalgia condition (recalling a nostalgic vs. ordinary event) yielded greater feelings of health optimism. The results revealed that nostalgic participants reported greater feelings of health optimism ( $M = 5.98, SD = 0.81$ ) compared to the control condition ( $M = 5.25, SD = 0.81$ ),  $t(49) = 3.23, p = .002, d = .90$ .

**Health attitudes and intentions.** Separate independent samples *t*-tests examined the effect of nostalgia (recalling a nostalgic vs. ordinary event) on health attitudes and intentions. Results revealed that, in comparison to the control condition, nostalgic participants reported greater health importance,  $t(49) = 2.60, p = .01, d = .74$ ; health likelihood,  $t(49) = 2.10, p = .04, d = .59$ ; health intentions,  $t(49) = 2.30, p = .03, d = .64$ ; and expressed greater interest in participating in the exercise challenge,  $t(49) = 2.26, p = .03, d = .64$  (see Table 1 for means and standard deviations as a function of condition).

Table 1

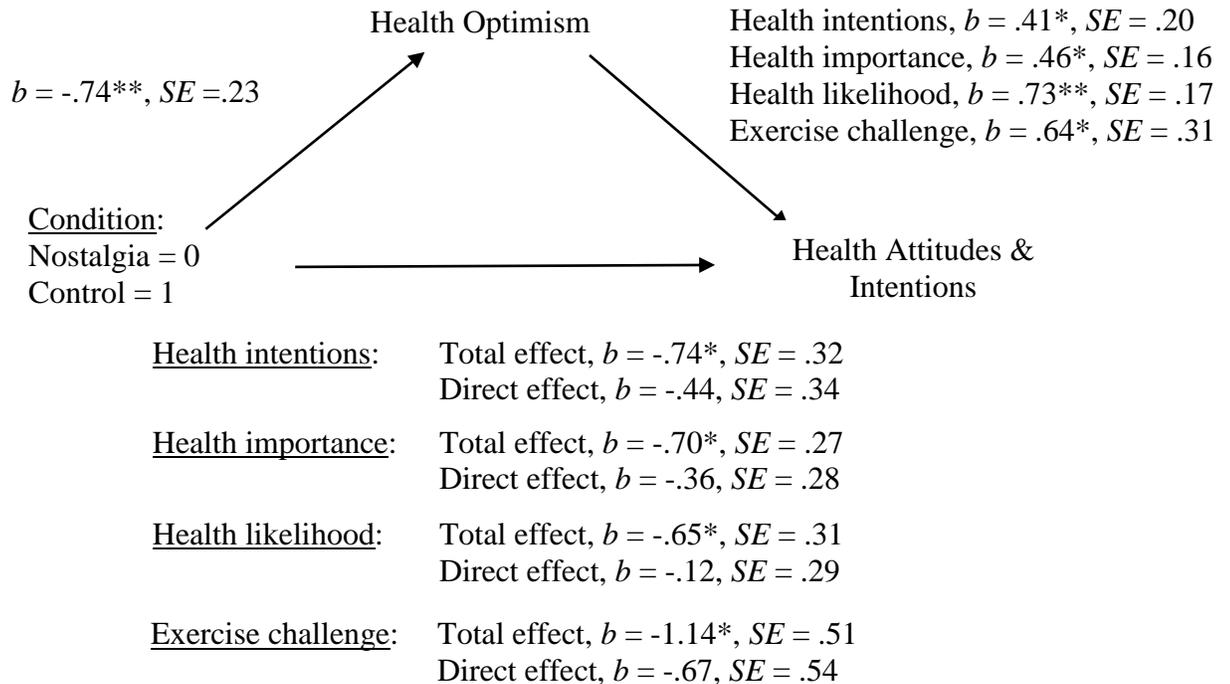
*Means and Standard Deviations by Nostalgia Condition (Study 2)*

	Nostalgia Condition		Control Condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
State Nostalgia	6.88	2.34	3.72	2.09
Health Optimism	5.98	.81	5.25	.81
Health Importance	8.35	.77	7.65	1.10
Health Likelihood	7.86	1.03	7.21	1.17
Health Intentions	6.78	1.16	6.04	1.14
Exercise Challenge	7.06	1.66	5.91	1.93

**Health behavior.** A logistic regression examined the effect of nostalgia condition (recalling a nostalgic vs. ordinary event) on article selection. Specifically, the results revealed that nostalgia condition was not a significant predictor of article selection,  $b = 0.19$  ( $SE = .61$ ),  $p = .75$ ,  $R^2 = .003$ . Given that the results of the logistic regression were not significant, this variable was not selected for further analyses.

**Mediational analysis.** Additional analyses examined whether feelings of health optimism mediated the effect of nostalgia condition on health attitudes and intentions. Utilizing Preacher and Hayes' (2008) bootstrapping procedure, health importance, health likelihood, health intentions, and exercise challenge scores were regressed separately onto nostalgia condition, with health optimism entered as the mediator. Five thousand bootstrap resamples were performed and the 95% confidence interval for the indirect effect did not contain zero (health importance: -.69, -.13; health likelihood: -.93, -.23; health intentions: -.71, -.08; exercise challenge: -1.12, -.07). Figure 2 presents the unstandardized betas, standard errors, and  $p$ -values for all of the path models.

Figure 2. The indirect effect of nostalgia on health attitudes and intentions through health optimism. Unstandardized betas are reported in all path models. \*Indicates significance at  $p \leq .05$ , \*\*indicates significance at  $p \leq .01$ .



The current study revealed two important findings. First, following Study 1, participants reported greater feelings of health optimism after thinking about nostalgia versus an ordinary event. This provides additional evidence that nostalgia has the potential to increase an optimistic bias for social behavior broadly (Cheung et al., 2013) and health-relevant decisions specifically (Study 1). Second, Study 2 demonstrated that nostalgia-induced health optimism increased positive attitudes toward preventative health behaviors. Specifically, participants reported greater health aspirations and intentions to the extent that they felt more optimistic following the nostalgia manipulation. These findings are consistent with previous research showing that more optimistic (vs. pessimistic) individuals make greater efforts to safeguard their health and engage in more preventative health behaviors

(Aspinwall & Brunhart, 1996; Radcliffe & Klein, 2002; Scheier & Carver, 1992; Taylor et al., 1992). Unlike previous research, however, the current results suggest that sentimental recollections from the past have the potential to exaggerate these effects.

Unfortunately, the current study did not find a significant effect of nostalgia on health behavior (i.e., article selection). It could be that the measure came too late in the questionnaire packet when the effectiveness of the nostalgia manipulation had worn off. Additionally, this may not have been the best measure in comparison to other direct assessments of physical health behavior (e.g., exercise behavior, food consumption; Giannini, 2013; Robinson, Harris, Thomas, Aveyard, & Higgs, 2013; Stahl & Insana, 2013). One recommendation for future research is to continue to examine the role of nostalgia-induced optimism on well-being using different health-relevant outcomes (e.g., exercise, eating habits, sleep quality). Although the results revealed that nostalgic reverie did not change health behavior, the current work collectively contributes to a better understanding of the benefits of nostalgic reverie on physical well-being. With the prevalence of adults who consistently suffer from inactivity, and the incidences of illness and disease that accompany lack of regular exercise (United States Department of Health and Human Services, 2002; Warburton et al., 2006), these findings highlight nostalgia's potential to enhance the physical well-being of individuals.

### **General Discussion**

For many individuals, achieving and maintaining a healthier lifestyle is important for well-being and can prevent many diseases and conditions (e.g., heart disease, obesity, lung disease, disability; Woolf & Aron, 2013). However, given the rise in obesity, sedentariness, and lack of exercise in the United States and elsewhere (Health and Social Care Information

Centre, 2014; Ogden, Carroll, Kit, & Flegal, 2012; Park, 2012; World Health Organization, 2014), it seems especially important to identify strategies to motivate and improve people's physical health. For this reason, the present research examined the association between nostalgia, optimism, and physical well-being. The results revealed that, in comparison to control conditions, participants who recalled a nostalgic event reported higher levels of health optimism (Studies 1 & 2), which in turn, led to greater attitudes and intentions toward better health (Study 2). This work is the first to my knowledge to examine the overlap between nostalgia and health by suggesting that one route to physical well-being is through sentimentally recalling persons and/or experiences from the past.

These findings have important implications for research on nostalgia. Whereas previous work has focused exclusively on the psychological and social benefits of nostalgic reverie (e.g., Sedikides et al., 2008; Routledge et al., 2013), the current studies provide initial evidence that these benefits also extend to one's physical condition. This is potentially important as people may experience anger and frustration from an inability to lose weight after weeks of eating healthy and regular exercise. Given that people are more prone to engage in nostalgic reverie when they are experiencing of anxiety, boredom, and doubt (e.g., Routledge et al., 2013), the current results suggest that nostalgia, through the promotion of optimistic thinking, has the potential to help people develop more adaptive coping strategies when faced with physical adversity by being less avoidant, more engaged, and becoming healthier individuals. Further, the present findings widen the scope of nostalgia's proclivity to increase an optimistic bias. Whereas Cheung and colleagues (2013) showed that nostalgia led to greater feelings of general optimism for one's future, the present research expands on these results by identifying a form of optimistic thinking that is domain specific (i.e., health).

This is important as nostalgia has the potential to facilitate improvement, if not success, in health domains where pessimism might be present. Additionally, nostalgia may counter declines in health optimism by renewing people's pursuit of health-relevant goals.

The current results also have important implications for research on optimism and health. Dispositional optimism is associated with feelings of happiness, satisfaction with life, and subjective well-being, which have all been found to increase physical health and life expectancy (e.g., Diener & Chan, 2011; Gallagher, Lopez, & Pressman, 2013). The present studies help to qualify this relationship further by demonstrating that nostalgia is an important resource for individuals. By increasing health optimism through nostalgic reverie, people may help to ameliorate serious threats to their physical condition (e.g., cardiovascular disease, diabetes), as well as increase their psychological well-being (e.g., reduce stress, anxiety, and depression; Warburton et al., 2006). Given that the largest improvements in health often occur among non-active individuals who become physically active (Warburton et al.), nostalgia may be especially important for persons in most need of improving their physical condition. Further, nostalgia may be a beneficial resource for patients coping with, and recovering from chronic or terminal illnesses (e.g., cancer), in the same way research has demonstrated optimism can (see Carver et al., 2010).

Of course, the present research is not without limitations. The current studies consisted entirely of undergraduate samples. It is possible that college students, given they are probabilistically a less vulnerable population to physical ailments, are the most likely to be optimistic about their physical health. Although the effects of nostalgia have been shown to transcend age, gender, and culture (e.g., Hepper et al., 2014; Wildschut et al., 2006), future work should replicate these findings with non-collegiate populations. Another limitation is

that both studies utilized a state nostalgia manipulation instead of assessing individual differences in nostalgia proneness. People who score high (vs. low) on dispositional nostalgia may have a greater tendency to avoid serious illness, have fewer work absences, and be more likely to have sustainable exercise routines and dietary regiments.

Further, although the current research found that health optimism mediated the relationship between nostalgia and well-being, other potential mediating variables should be examined. For example, nostalgia may have increased health optimism because it led people to perceive themselves as being less susceptible to infectious disease (e.g., Perceived Vulnerability to Disease Scale; Duncan, Schaller, & Park, 2009). Further, nostalgia-induced health optimism may have led to greater perceptions of self-control (i.e., locus of control; Rotter, 1966), resulting in higher health-benefitting attitudes and behaviors. It is also important to examine potential moderating variables on the relationship between nostalgia and health optimism. For instance, given the positive association between childhood socio-economic status and optimistic thinking (Heinonen et al., 2006), individuals who reap the most health benefits from nostalgia-induced health optimism may be those who were reared in high (vs. low) income environments. Further, in light of work on the association between optimism and social support (Carver, Lehman, & Antoni, 2003; MacLeod & Conway, 2005; Segerstrom, 2007), nostalgia may elicit greater health optimism for people who have their relationship needs met. Future work should examine these possibilities.

Finally, given that the present research demonstrated nostalgia's proclivity to increase individuals' health intentions, it would be interesting to examine how nostalgia-induced health optimism influences actual physical health. Because health habits are often deeply ingrained and difficult to change, future research needs to examine whether engaging in

instances of nostalgic reverie leads to greater health optimism, which in turn, promotes longstanding commitment to actual health behaviors as well as better physical longevity. For instance, by equipping participants with wireless wristbands called *Fitbits*, researchers have the potential to monitor long-term health activity (e.g., heart rate, calories burned, distance traveled). Additionally, with respect to health, optimistic individuals have better immune functioning as they experience less stress (Baldwin, Chambliss, & Towler, 2003; Brydon, Walker, Wawrzyniak, Chart, & Steptoe, 2009; De Moor et al., 2006; Ebrecht et al., 2004; Hayes & Weathington, 2007; Tuten & Neidermeyer, 2004), negative affect (Isaacowitz, 2005; King, Rowe, Kimble, & Zerwic, 1998; Marshall, Wortman, Kusulas, Hervig, Vickers, 1992; Segerstrom, 2001; Stanton & Snider, 1993), and engage in more adaptive health behaviors (Segerstrom, 2001; Segerstrom, Castaneda, & Spencer, 2003; Scheier et al., 1989; Scheier & Carver, 1992; Taylor et al., 1992). In light of the current research, nostalgia-induced health optimism might enhance immune system functioning by increasing the number of helper T and natural killer cells in the human body (Segerstrom, Taylor, Kemeny, & Fahey, 1998; Segerstrom, 2006).

Despite these limitations, the current research has important implications for physical well-being. Given that many individuals struggle to achieve and maintain a healthy lifestyle, it seems especially important to find effective ways to improve one's physical condition. As the present research suggests, nostalgia may serve as a meaningful health intervention. For example, counselors, dieticians, personal trainers, and even individuals themselves, can utilize nostalgia to help combat sedentariness, malnutrition, and health-risk behaviors while further incentivizing those who primarily seek to maintain a healthier lifestyle. Further, by fostering more optimistic feelings about one's physical health, nostalgia can help to thwart

goal-stifling pessimism (e.g., see Pretzer & Walsh, 2001; Segerstrom, 2006), replenish optimism that may diminish over time (e.g., Sweeny, Carroll, & Shepperd, 2006; Sweeny & Krizan, 2013), and help those coping with distress (e.g., recent breast cancer diagnosis, episodes of depression; Antoni et al., 2001; Seligman, Schulman, DeRubeis, & Hollon, 1999; Seligman, Schulman, & Tryon, 2007). Overall, when it comes to the difficult task of staying true to a New Year' resolution, it appears that one may benefit from looking back on the past, as well as, looking forward to the future.

## References

- Abend, T. A., & Williamson, G. M. (2002). Feeling attractive in the wake of breast cancer: Optimism matters, and so do interpersonal relationships. *Personality and Social Psychology Bulletin*, 28, 427–436. doi:10.1177/0146167202287001
- Affleck, G., Tennen, H., Zautra, A., Urrows, S., Abeles, M., & Karoly, P. (2001). Women's pursuit of personal goals in daily life with fibromyalgia: A value-expectancy analysis. *Journal of Consulting and Clinical Psychology*, 69, 587-596. doi:10.1037/0022-006X.69.4.587
- Antoni, M. H., Lehman, J. M., Kilbourn, K. M., Boyers, A. E., Culver, J. L., Alferi, S. M., ... & Carver, C. S. (2001). Cognitive-behavioral stress management intervention decreases the prevalence of depression and enhances benefit finding among women under treatment for early-stage breast cancer. *Health Psychology*, 20, 20. doi:10.1037/0278-6133.20.1.20
- Aspinwall, L. G., & Brunhart, S. M. (1996). Distinguishing optimism from denial: Optimistic beliefs predict attention to health threats. *Personality and Social Psychology Bulletin*, 22, 993-1003. doi:10.1177/01461672962210002
- Aspinwall, L. G., & Taylor, S. E. (1992). Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 61, 755–765. doi:10.1037/0022-3514.63.6.989
- Baldwin, D. R., Chambliss, L. N., & Towler, K. (2003). Optimism and stress: An African-American college student perspective. *College Student Journal*, 37, 276-285.

- Baldwin, M., & Landau, M. J. (2014). Exploring nostalgia's influence on psychological growth. *Self and Identity, 13*, 162-177. doi:10.1080/15298868.2013.772320
- Belk, R. W. (1990). The role of possessions in constructing and maintaining a sense of past. *Advances in Consumer Research, 17*, 669-676.
- Bogg, T., & Roberts, B. W. (2004). Conscientiousness and health-related behaviors: A meta-analysis of the leading behavioral contributors to mortality. *Psychological Bulletin, 130*, 887-919. doi:10.1037/0033-2909.130.6.887
- Booth, M. L., Bauman, A., Owen, N., & Gore, C. J. (1997). Physical activity preferences, preferred sources of assistance, and perceived barriers to increased activity among physically inactive Australians. *Preventive Medicine: An International Journal Devoted to Practice and Theory, 26*, 131-137. doi:10.1006/pmed.1996.9982
- Brydon, L., Walker, C., Wawrzyniak, A. J., Chart, H., & Steptoe, A. (2009). Dispositional optimism and stress-induced changes in immunity and negative mood. *Brain, Behavior, and Immunity, 23*, 810-816. doi:10.1016/j.bbi.2009.02.018
- Carver, C. S., & Gaines, J. G. (1987). Optimism, pessimism, and postpartum depression. *Cognitive Therapy and Research, 11*, 449-462. doi:10.1007/BF01175355
- Carver, C. S., Lehman, J. M., & Antoni, M. H. (2003). Dispositional pessimism predicts illness-related disruption of social and recreational activities among breast cancer patients. *Journal of Personality and Social Psychology, 84*, 813-821. doi:10.1037/0022-3514.84.4.813

- Carver, C.S., Pozo-Kaderman, C., Harris, S.D., Noriega, V., Scheier, M.F., Robinson, D.S., Ketcham, A.S., Moffat, F.L., & Clark, K.C. (1994). Optimism versus pessimism predicts the quality of women's adjustment to early stage breast cancer. *Cancer*, *73*, 1213–1220.
- Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology Review*, *30*, 879-889. doi:10.1016/j.cpr.2010.01.006
- Cheung, W. Y., Wildschut, T., Sedikides, C., Hepper, E. G., Arndt, J., & Vingerhoets, A. J. J. M. (2013). Back to the future: Nostalgia increases optimism. *Personality and Social Psychology Bulletin*, *39*, 1484-1496. doi:10.1177/0146167213499187
- Costello, N. L., Bragdon, E. E., Light, K. C., Sigurdsson, A., Bunting, S., Grewen, K., & Maixner, W. (2002). Temporomandibular disorder and optimism: Relationships to ischemic pain sensitivity and interleukin-6. *Pain*, *100*, 99-110. doi:10.1016/S0304-3959(02)00263-4
- Courneya, K. S., Friedenreich, C. M., Quinney, H., Fields, A. A., Jones, L. W., Vallance, J. H., & Fairey, A. S. (2005). A longitudinal study of exercise barriers in colorectal cancer survivors participating in a randomized controlled trial. *Annals of Behavioral Medicine*, *29*, 147-153. doi:10.1207/s15324796abm2902\_9
- Davis, F. (1979). *Yearning for yesterday: A sociology of nostalgia*. New York, NY: The Free Press.
- De Moor, J. S., De Moor, C. A., Basen-Engquist, K., Kudelka, A., Bevers, M. W., & Cohen, L. (2006). Optimism, Distress, Health-Related Quality of Life, and Change in Cancer Antigen 125 Among Patients With Ovarian Cancer Undergoing Chemotherapy. *Psychosomatic Medicine*, *68*, 555-562. doi:10.1097/01.psy.0000222379.71389.91

- de Ridder, D., Fournier, M., & Bensing, J. (2004). Does optimism affect symptom report in chronic disease? What are its consequences for self-care behaviour and physical functioning? *Journal of Psychosomatic Research*, *56*, 341–350. doi:10.1016/S0022-3999(03)00034-5
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, *3*, 1-43. doi:10.1111/j.1758-0854.2010.01045.x
- Duncan, L. A., Schaller, M., & Park, J. H. (2009). Perceived vulnerability to disease: Development and validation of a 15-item self-report instrument. *Personality and Individual Differences*, *47*, 541-546. doi:10.1016/j.paid.2009.05.001
- Ebrecht, M., Hextall, J., Kirtley, L., Taylor, A., Dyson, M., & Weinman, J. (2004). Perceived stress and cortisol levels predict speed of wound healing in healthy male adults. *Psychoneuroendocrinology*, *29*, 798-809. doi:10.1016/S0306-4530(03)00144-6
- Epping-Jordan, J.E., Compas, B.E., Osowiecki, D.M., Oppedisano, G., Gerhardt, C., Primo, K., & Krag, D.N. (1999). Psychological adjustment to breast cancer: Processes of emotional distress. *Health Psychology*, *18*, 315–326. doi:10.1037/0278-6133.18.4.315
- Fitzgerald, T. E., Tennen, H., Affleck, G., & Pransky, G. S. (1993). The relative importance of dispositional optimism and control appraisals in quality of life after coronary artery bypass surgery. *Journal of Behavioral Medicine*, *16*, 25–43. doi:10.1007/BF00844753

- Fournier, M., de Ridder, D., & Bensing, J. (2002). How optimism contributes to the adaptation of chronic illness. A prospective study into the enduring effects of optimism on adaptation moderated by the controllability of chronic illness. *Personality and Individual Differences, 33*, 1163-1183. doi:10.1016/S0191-8869(02)00006-5
- Friedman, H. S., Tucker, J. S., Schwartz, J. E., Tomlinson-Keasey, C., Martin, L. R., Wingard, D. L., & Criqui, M. H. (1995). Psychosocial and behavioural predictors of longevity: The aging and death of the 'Termites'. *American Psychologist, 50*, 69-78. doi:10.1037/0003-066X.50.2.69
- Friedman, H. S., Tucker, J. S., Tomlinson-Keasey, C., Schwartz, J. E., Wingard, D. L., & Criqui, M. H. (1993). Does childhood personality predict longevity? *Journal of Personality and Social Psychology, 65*, 176-185. doi:10.1037/0022-3514.65.1.176
- Gallagher, M. W., Lopez, S. J., & Pressman, S. D. (2013). Optimism is universal: Exploring the presence and benefits of optimism in a representative sample of the world. *Journal of Personality, 81*, 429-440. doi:10.1111/jopy.12026
- Giannini, A. (2013). *Comparison of the FitBit Zip to the ActiCal accelerometer in children and adults* (Doctoral dissertation, University of Delaware).
- Giltay, E. J., Zitman, F. G., & Kromhout, D. (2006). Dispositional optimism and the risk of depressive symptoms during 15 years of follow-up: The Zutphen Elderly Study. *Journal of Affective Disorders, 91*, 45-52. doi:10.1016/j.jad.2005.12.027

- Given, C. W., Stommel, M., Given, B., Osuch, J., Kurtz, M. E., & Kurtz, J. C. (1993). The influence of cancer patients' symptoms and functional states on patients' depression and family caregivers' reaction and depression. *Health Psychology, 12*, 277–285. doi:10.1037/0278-6133.12.4.277
- Hart, K.E., & Hittner, J.B. (1995). Optimism and pessimism: Associations to coping and anger-reactivity. *Personality and Individual Differences, 19*, 827-839. doi:10.1016/S0191-8869(95)00104-2
- Havlena, W. J., & Holak, S. L. (1991). “The good old days:” Observations on nostalgia and its role in consumer behavior. *Advances in Consumer Research, 18*, 323–329.
- Hayes, C. T., & Weathington, B. L. (2007). Optimism, stress, life satisfaction, and job burnout in restaurant managers. *The Journal of Psychology: Interdisciplinary and Applied, 141*, 565-579. doi:10.3200/JRLP.141.6.565-580
- Health and Social Care Information Centre. (2014, February 26 February). Statistics on obesity, physical activity and diet: England 2014. *Health and Social Care Information Centre*. Retrieved from <http://www.hscic.gov.uk/catalogue/PUB13648/Obes-phys-acti-diet-eng-2014-rep.pdf>
- Heinonen, K., Räikkönen, K., Matthews, K. A., Scheier, M. F., Raitakari, O. T., Pulkki, L., & Keltikangas-Järvinen, L. (2006). Socioeconomic Status in Childhood and Adulthood: Associations With Dispositional Optimism and Pessimism Over a 21-Year Follow-Up. *Journal of Personality, 74*, 1111-1126. doi:10.1111/j.1467-6494.2006.00404.x
- Hepper, E. G., Ritchie, T. D., Sedikides, C., & Wildschut, T. (2012). Odyssey’s end: Lay conceptions of nostalgia reflect its original Homeric meaning. *Emotion, 12*, 102-119. doi:10.1037/a0025167

- Hepper, E. G., Wildschut, T., Sedikides, C., Ritchie, T. D., Yung, Y-F., Hansen, N. ... Zhou, X. (2014). Pancultural nostalgia: Prototypical conceptions across cultures. *Emotion*. doi:10.1037/a0036790
- Herzberg, P., Glaesmer, H., & Hoyer, J. (2006). Separating optimism and pessimism: A robust psychometric analysis of the Revised Life Orientation Test (LOT-R). *Psychological Assessment, 18*, 433-438. doi:10.1037/1040-3590.18.4.433
- Holak, S. L., & Havlena, W. J. (1992). Nostalgia: An Exploratory Study of Themes and Emotions in the Nostalgic Experience. *Advances in Consumer Research, 19*.
- Holak, S. L., & Havlena, W. J. (1998). Feelings, fantasies, and memories: An examination of the emotional components of nostalgia. *Journal of Business Research, 42*, 217-226. doi:10.1016/S0148-2963(97)00119-7
- Hofer, J. (1934). Medical dissertation on nostalgia or homesickness (C. K. Anspach, Trans.). *Bulletin of the Institute of the History of Medicine, 2*, 376– 391. (Original work published 1688).
- Holbrook, M. B., & Schindler, R. M. (1991). Echoes of the Dear Departed Past: Some Work in Progress On Nostalgia. *Advances in Consumer Research, 18*.
- Howell, J. L., & Shepperd, J. A. (2013). Reducing health-information avoidance through contemplation. *Psychological Science, 24*, 1696-1703. doi:10.1177/0956797613478616
- Isaacowitz, D. M. (2005). The Gaze of the Optimist. *Personality and Social Psychology Bulletin, 31*, 407-415. doi:10.1177/0146167204271599

- Juhl, J., Routledge, C., Arndt, J., Sedikides, C., & Wildschut, T. (2010). Fighting the future with the past: Nostalgia buffers existential threat. *Journal of Research in Personality*, *44*, 309-314. doi:10.1016/j.jrp.2010.02.006
- Kasser, T. & Ryan, R. M. (1996), Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, *22*: 280-287. doi:10.1177/0146167296223006
- King, K. B., Rowe, M. A., Kimble, L. P., & Zerwic, J. J. (1998). Optimism, coping and longterm recovery from coronary artery surgery in women. *Research in Nursing & Health*, *21*, 15-26. doi:10.1002/(SICI)1098-240X(199802)21:1<15::AID-NUR3>3.0.CO;2-W
- Liddell, H. G., & Scott, R. (1958). A Greek-English Lexicon. A New Edition revised and augmented throughout by HS Jones.
- Lyons, A., & Chamberlain, K. (1994). The effects of minor events, optimism and self-esteem on health. *British Journal of Clinical Psychology*, *33*, 559-570. doi:10.1111/j.2044-8260.1994.tb01152.x
- MacLeod, A. K., & Conway, C. (2005). Well-being and the anticipation of future positive experiences: The role of income, social networks, and planning ability. *Cognition and Emotion*, *19*, 357-373. doi:10.1080/02699930441000247
- Magee, C. A., Heaven, P. L., & Miller, L. M. (2013). Personality change predicts self-reported mental and physical health. *Journal of Personality*, *81*, 324-334. doi:10.1111/j.1467-6494.2012.00802.x.

- Mahler, H. M., & Kulik, J. A. (2000). Optimism, pessimism and recovery from coronary bypass surgery: Prediction of affect, pain and functional status. *Psychology, Health & Medicine*, 5, 347-358. doi:10.1080/713690216
- Marshall, G. N., Wortman, C. B., Kusulas, J. W., Hervig, L. K., & Vickers, R. r. (1992). Distinguishing optimism from pessimism: Relations to fundamental dimensions of mood and personality. *Journal of Personality and Social Psychology*, 62, 1067-1074. doi:10.1037/0022-3514.62.6.1067
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, 5, 100–122.
- McCann, W. H. (1941). Nostalgia: a review of the literature. *Psychological Bulletin*, 38, 165.
- Motivala, S. J., Hurwitz, B. E., LaGreca, A. M., Llabre, M. M., Marks, J. B., Skyler, J. S., & Schneiderman, N. (1999). Aberrant parasympathetic and hemodynamic function distinguishes a subgroup of psychologically distressed individuals with asymptomatic Type-I diabetes mellitus. *International Journal of Behavioral Medicine*, 6, 78-94. doi:10.1207/s15327558ijbm0601\_6
- Norcross, J. C., Mrykalo, M. S., & Blagys, M. D. (2002). Auld Lang Syne: Success predictors, change processes, and self-reported outcomes of New Year's resolvers and nonresolvers. *Journal of Clinical Psychology*, 58, 397-405. doi:10.1002/jclp.1151
- Norcross, J.C., Ratzin, A.C., & Payne, D. (1989). Ringing in the new year: The change processes and reported outcomes of resolutions. *Addictive Behaviors*, 14, 205-212. doi:10.1016/0306-4603(89)90050-6

- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2012). Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *Jama*, *307*, 483-490.
- Ohannessian, C., Hesselbrock, V. M., Tennen, H., & Affleck, G. (1994). Hassles and uplifts and generalized outcome expectancies as moderators on the relation between a family history of alcoholism and drinking behaviors. *Journal of Studies on Alcohol*, *55*, 754-763.
- Park, A. (2012, July 18). Lack of exercise as deadly as smoking, study finds. *Time*. Retrieved from <http://healthland.time.com/2012/07/18/lack-of-exercise-as-deadly-as-smoking-study-finds/>
- Peters, M. L., Meevissen, Y. C., & Hanssen, M. M. (2013). Specificity of the best possible self intervention for increasing optimism: Comparison with a gratitude intervention. *Terapia Psicológica*, *31*, 93-100.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891. doi:10.3758/BRM.40.3.879
- Pretzer, J. L., & Walsh, C. A. (2001). Optimism, pessimism, and psychotherapy: Implications for clinical practice. In E. C. Chang (Ed.), *Optimism & pessimism: Implications for Theory, Research, and Practice* (pp. 321-346). Washington, DC US: American Psychological Association. doi:10.1037/10385-015

- Radcliffe, N. M., & Klein, W. M. (2002). Dispositional, unrealistic, and comparative optimism: Differential relations with the knowledge and processing of risk information and beliefs about personal risk. *Personality and Social Psychology Bulletin*, 28, 836-846. doi:10.1177/0146167202289012
- Robinson, E., Harris, E., Thomas, J., Aveyard, P., & Higgs, S. (2013). Reducing high calorie snack food in young adults: a role for social norms and health based messages. *International Journal of Behavioral Nutrition and Physical Activity*, 10, 73. doi:10.1186/1479-5868-10-73
- Rosen, G. (1975). Nostalgia: A “forgotten” psychological disorder. *Psychological Medicine*, 5, 340–354.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80, 1-28. doi:10.1037/h0092976
- Routledge, C., & Arndt, J. (2005). Time and terror: managing temporal consciousness and the awareness of mortality. In A. Strathman & J. Joireman (Eds.), *Understanding behavior in the context of time: Theory, Research, and Applications* (pp. 59–84). Mahwah, NJ: Erlbaum.
- Routledge, C., Arndt, J., Sedikides, C., & Wildschut, T. (2008). A blast from the past: The terror management function of nostalgia. *Journal of Experimental Social Psychology*, 44, 132-140. doi:10.1016/j.jesp.2006.11.001
- Routledge, C., Arndt, J., Wildschut, T., Sedikides, C., Hart, C. M., Juhl, J., ... Schlotz, W. (2011). The past makes the present meaningful: Nostalgia as an existential resource. *Journal of Personality and Social Psychology*, 101, 638-652. doi:10.1037/a0024292

- Routledge, C., Wildschut, T., Sedikides, C., & Juhl, J. (2013). Nostalgia as a resource for psychological health and well-being. *Social and Personality Psychology Compass*, 7, 808-818. doi:10.1111/spc3.12070
- Routledge, C., Wildschut, T., Sedikides, C., Juhl, J., & Arndt, J. (2012). The power of the past: Nostalgia as a meaning-making resource. *Memory*, 20, 452-460. doi:10.1080/09658211.2012.677452
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: Assessment and implication of generalized outcome expectancies. *Health Psychology*, 4, 219-247. doi:10.1037/0278-6133.4.3.219
- Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research*, 16, 201–228. doi:10.1007/BF01173489
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078. doi:10.1037/0022-3514.67.6.1063
- Scheier, M. F., Matthews, K. A., Owens, J. F., Magovern, G. J., Lefebvre, R. C., Abbott, R. A., & Carver, C. S. (1989). Dispositional optimism and recovery from coronary artery bypass surgery: the beneficial effects on physical and psychological well-being. *Journal of Personality and Social Psychology*, 57, 1024. doi:10.1037/0022-3514.57.6.1024

- Scheier, M. F., Matthews, K. A., Owens, J. F., Schulz, R., Bridges, M. W., Magovern, G. J., & Carver, C. S. (1999). Optimism and rehospitalization after coronary artery bypass graft surgery. *Archives of Internal Medicine*, *159*, 829-835.  
doi:10.1001/archinte.159.8.829
- Sedikides, C., Wildschut, T., Arndt, J., & Routledge, C. (2008). Nostalgia: Past, present, and future. *Current Directions in Psychological Science*, *17*, 304-307.  
doi:10.1111/j.1467-8721.2008.00595.x
- Sedikides, C., Wildschut, T., & Baden, D. (2004). Nostalgia: Conceptual issues and existential functions. In J. Greenberg, S. Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp. 200-214). New York, NY: Guilford Press.
- Segerstrom, S. C. (2001). Optimism and attentional bias for negative and positive stimuli. *Personality and Social Psychology Bulletin*, *27*, 1334-1343.  
doi:10.1177/01461672012710009
- Segerstrom, S. C. (2006). How does optimism suppress immunity? Evaluation of three affective pathways. *Health Psychology*, *25*, 653-657. doi:10.1037/0278-6133.25.5.653
- Segerstrom, S. C. (2007). Optimism and resources: Effects on each other and on health over 10 years. *Journal of Research in Personality*, *41*, 772-786.  
doi:10.1016/j.jrp.2006.09.004
- Segerstrom, S. C. (2011). *Breaking Murphy's law: How optimists get what they want from life-and pessimists can too*. Guilford Press.

- Segerstrom, S. C., Castañeda, J. O., & Spencer, T. E. (2003). Optimism effects on cellular immunity: Testing the affective and persistence models. *Personality and Individual Differences, 35*, 1615-1624. doi:10.1016/S0191-8869(02)00384-7
- Segerstrom, S. C., Taylor, S. E., Kemeny, M. E., & Fahey, J. L. (1998). Optimism is associated with mood, coping, and immune change in response to stress. *Journal of Personality and Social Psychology, 74*, 1646-1655. doi:10.1037/0022-3514.74.6.1646
- Seligman, M. E. (2011). *Learned optimism: How to change your mind and your life*. Random House LLC.
- Seligman, M. E., Schulman, P., DeRubeis, R. J., & Hollon, S. D. (1999). The prevention of depression and anxiety. *Prevention & Treatment, 2*, 8a.
- Seligman, M. E., Schulman, P., & Tryon, A. M. (2007). Group prevention of depression and anxiety symptoms. *Behaviour Research and Therapy, 45*, 1111-1126.
- Smith, B. W., & Zautra, A. J. (2004). The role of purpose in life in recovery from knee surgery. *International Journal of Behavioral Medicine, 11*, 197-202.  
doi:10.1207/s15327558ijbm1104\_2
- Solberg Nes, L., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and Social Psychology Review, 10*, 235-251.  
doi:10.1207/s15327957pspr1003\_3
- Stahl, S. T., & Insana, S. P. (2013). Caloric expenditure assessment among older adults: Criterion validity of a novel accelerometry device. *Journal of Health Psychology*.  
doi:10.1177/1359105313490771
- Stanton, A. L., & Snider, P. R. (1993). Coping with a breast cancer diagnosis: A prospective study. *Health Psychology, 12*, 16-23. doi:10.1037/0278-6133.12.1.16

- Statistics Brain. (2014). New Years Resolution Statistics. *Statistics Brain*. Retrieved from <http://www.statisticbrain.com/new-years-resolution-statistics/>
- Stephan, E., Sedikides, C., & Wildschut, T. (2012). Mental travel into the past: Differentiating recollections of nostalgic, ordinary, and positive events. *European Journal of Social Psychology, 42*, 290-298. doi:10.1002/ejsp.1865
- Sweeny, K., Carroll, P. J., & Shepperd, J. A. (2006). Is optimism always best? Future outlooks and preparedness. *Current Directions in Psychological Science, 15*, 302-306. doi:10.1111/j.1467-8721.2006.00457.x
- Sweeny, K., & Krizan, Z. (2013). Sobering up: A quantitative review of temporal declines in expectations. *Psychological Bulletin, 139*, 702. doi:10.1037/a0029951
- Taylor, S. E., Kemeny, M. E., Aspinwall, L. G., Schneider, S. G., Rodriguez, R., & Herbert, M. (1992). Optimism, coping, psychological distress, and high-risk sexual behavior among men at risk for Acquired Immunodeficiency Syndrome (AIDS). *Journal of Personality and Social Psychology, 63*, 460-473. doi:10.1037/0022-3514.63.3.460
- Thomas, J. L., Britt, T. W., Odle-Dusseau, H., & Bliese, P. D. (2011). Dispositional optimism buffers combat veterans from the negative effects of warzone stress on mental health symptoms and work impairment. *Journal of Clinical Psychology, 67*, 866-880. doi:10.1037/0022-3514.63.3.460
- Tindle, H., Belnap, B., Houck, P. R., Mazumadar, S., Scheier, M. F., Matthews, K. A., & ... Rollman, B. L. (2012). Optimism, response to treatment of depression, and rehospitalization after coronary artery bypass graft surgery. *Psychosomatic Medicine, 74*, 200-207. doi:10.1097/PSY.0b013e318244903f

- Trunzo, J. J., & Pinto, B. M. (2003). Social support as a mediator of optimism and distress in breast cancer survivors. *Journal of Consulting and Clinical Psychology, 4*, 805–811.  
doi:10.1037/0022-006X.71.4.805
- Turner, R. N., Wildschut, T., & Sedikides, C. (2012). Dropping the weight stigma: Nostalgia improves attitudes toward persons who are overweight. *Journal of Experimental Social Psychology, 48*, 130-137. doi:10.1016/j.jesp.2011.09.007
- Turner, R. N., Wildschut, T., Sedikides, C., & Gheorghiu, M. (2013). Combating the mental health stigma with nostalgia. *European Journal of Social Psychology, 43*, 413-422.  
doi:10.1002/ejsp.1952
- Tuten, T. L., & Neidermeyer, P. E. (2004). Performance, satisfaction and turnover in call centers: The effects of stress and optimism. *Journal of Business Research, 57*, 26-34.  
doi:10.1016/S0148-2963(02)00281-3
- U.S. Department of Health and Human Services. (2002, June 20). Physical activity fundamental to preventing disease. *U.S. Department of Health and Human Services*. Retrieved from <http://aspe.hhs.gov/health/reports/physicalactivity/physicalactivity.pdf>
- Verplanken, B. (2012). When bittersweet turns sour: Adverse effects of nostalgia on habitual worriers. *European Journal of Social Psychology, 42*, 285-289.  
doi:10.1002/ejsp.1852
- Vess, M., Arndt, J., Routledge, C., Sedikides, C., & Wildschut, T. (2012). Nostalgia as a resource for the self. *Self and Identity, 11*, 273-284.  
doi:10.1080/15298868.2010.521452

- Vickers Jr, R. R., Conway, T. L., & Hervig, L. K. (1990). Demonstration of replicable dimensions of health behaviors. *Preventive Medicine, 19*, 377-401. doi:10.1016/0091-7435(90)90037-K
- Warburton, D. E., Nicol, C. W., & Bredin, S. S. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174*, 801-809. doi:10.1503/cmaj.1060147
- Warner, L. M., Schwarzer, R., Schütz, B., Wurm, S., & Tesch-Römer, C. (2012). Health-specific optimism mediates between objective and perceived physical functioning in older adults. *Journal of Behavioral Medicine, 35*, 400-406. doi:10.1007/s10865-011-9368-y
- Wildschut, T., Sedikides, C., Arndt, J., & Routledge, C. (2006). Nostalgia: Content, triggers, functions. *Journal of Personality and Social Psychology, 9*, 975-993. doi:10.1037/0022-3514.91.5.975
- Wildschut, T., Sedikides, C., & Cordaro, F. (2011). Self-regulatory interplay between positive and negative emotions: The case of loneliness and nostalgia. In I. Nyklicek, A. J. J. M. Vingerhoets, & M. Zeelenberg (Eds.), *Emotion regulation and well-being* (pp. 67-83). New York, NY: Springer.
- Wildschut, T., Sedikides, C., Routledge, C., Arndt, J., & Cordaro, F. (2010). Nostalgia as a repository of social connectedness: The role of attachment-related avoidance. *Journal of Personality and Social Psychology, 98*, 573-586. doi:10.1037/a0017597

- Wildschut, T., Stephan, E., Sedikides, C., Routledge, C., & Arndt, J. (2008) Feeling happy and sad at the same time: Nostalgia informs theories of affect. *Paper presented at the 9th Annual Meeting of the Society for Personality and Social Psychology, Albuquerque, NM.*
- Woolf, S. H., & Aron, L. (Eds.). (2013). *US Health in International Perspective: Shorter Lives, Poorer Health*. National Academies Press.
- World Health Organization. (2014). Obesity and overweight. *World Health Organization*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs311/en/>
- Zhou, X., Sedikides, C., Wildschut, C., & Gao, D. (2008). Counteracting loneliness: On the restorative function of nostalgia. *Psychological Science, 19*, 1023–1029. doi:10.1111/j.1467-9280.2008.02194.x
- Zhou, X., Wildschut, T., Sedikides, C., Shi, K., & Feng, C. (2012). Nostalgia: The gift that keeps on giving. *Journal of Consumer Research, 39*, 39-50. doi:10.1086/662199

## APPENDIX A: MATERIALS

1. Questionnaires:
  - a. Health Risk Attitudes (Studies 1 & 2)
  - b. Personal Need for Structure (Studies 1 & 2)
  - c. Social Desirability (Studies 1 & 2)
  - d. Nostalgia Manipulation (Studies 1 & 2)
    - i. Nostalgia Writing Prompt
    - ii. Ordinary Event Writing Prompt
  - e. State Nostalgia Measure (Studies 1 & 2)
  - f. Health Optimism (Studies 1 & 2)
  - g. Aspirations Index (Study 2)
  - h. Health Behavior Checklist (Study 2)
  - i. Behavioral Measure- Exercise Challenge (Study 2)
  - j. Behavioral Measure- Seeking Health Information (Study 2)
  - k. Reactions to the Study (Studies 1 & 2)
  - l. Demographic Information (Studies 1 & 2)

Health Risk Attitudes Scale (van Osch, 2007)

On the following pages you will find several statements. Read through each statement. Please circle the number which best reflects your opinion. There are no right or wrong answers. We are interested in your opinion.

- | Strongly disagree |   |   |   |   |   |   |   |   | Strongly agree |  |
|-------------------|---|---|---|---|---|---|---|---|----------------|--|
| 1                 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                |  |
- \_\_\_ 1. I think I take good care of my body.
- \_\_\_ 2. I don't want to have to consider the consequences for my health in everything that I do.
- \_\_\_ 3. It is important to me that I organize my life so that I will later enjoy good health.
- \_\_\_ 4. If it concerns my health, then I see myself as someone who avoids risks.
- \_\_\_ 5. Uncertainty about the consequences of a medical intervention is, in general, part of the game.
- \_\_\_ 6. My health means everything to me.
- \_\_\_ 7. When I look back at my past, I think that, in general, I did take risks with my health.
- \_\_\_ 8. If the doctor cannot offer me certainty about the possible consequences of a medical intervention, then I would rather not undergo it.
- \_\_\_ 9. Safety first, where my health is concerned.
- \_\_\_ 10. To enjoy good health now and in the future, I am prepared to forego a lot.
- \_\_\_ 11. People say that I take risks with my health because of my habits.
- \_\_\_ 12. I'm not very fussy about my health.
- \_\_\_ 13. In general I would estimate that I would not have much of a problem with undergoing a high risk operation.

Personal Need for Structure (Neuberg & Newsom, 1993; McCrae & Costa, 1983)

Read each of the following statements and decide how much you agree according to your attitudes, beliefs, and experiences. It is important for you to realize that there are no “right” or “wrong” answers to these questions. People are different, and we are interested in how you feel. Please respond according to the following 6-point scale:

- 1 = strongly disagree
- 2 = moderately disagree
- 3 = slightly disagree
- 4 = slightly agree
- 5 = moderately agree
- 6 = strongly agree

- \_\_\_ 1. It upsets me to go into a situation without knowing what I can expect from it.
- \_\_\_ 2. I’m not bothered by things that interrupt my daily routine.
- \_\_\_ 3. I enjoy having a clear and structured mode of life.
- \_\_\_ 4. I like to have a place for everything and everything in its place.
- \_\_\_ 5. I enjoy being spontaneous.
- \_\_\_ 6. I find that a well-ordered life with regular hours makes my life tedious.
- \_\_\_ 7. I don’t like situations that are uncertain.
- \_\_\_ 8. I hate to change my plans at the last minute.
- \_\_\_ 9. I hate to be with people who are unpredictable.
- \_\_\_ 10. I find that a consistent routine enables me to enjoy life more.
- \_\_\_ 11. I enjoy the exhilaration of being in unpredictable situations.
- \_\_\_ 12. I become uncomfortable when the rules in a situation are not clear.

Social Desirability (Crowne & Marlow; 1960).

Listed below are a number of statements concerning personal attitudes and traits. Read each statement and decide whether it is true or false as it pertains to you personally. As it pertains to you, if the statement is true, circle the letter T; if the statement is false, circle the letter F.

- T F 1. Before voting I thoroughly investigate the qualifications of all candidates.
- T F 2. I never hesitate to go out of my way to help someone in trouble.
- T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- T F 4. I have never intensely disliked anyone.
- T F 5. On occasion, I have had doubts about my ability to succeed in life.
- T F 6. I sometimes feel resentful when I don't get my way.
- T F 7. I am always careful about the manner of my dress.
- T F 8. My table manners at home are as good as when I eat out in a restaurant.
- T F 9. If I could get into a movie without paying for it and be sure I was not seen, I would probably do it.
- T F 10. On a few occasions, I have given up doing something because I thought too little of my ability.
- T F 11. I like to gossip at times.
- T F 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- T F 13. No matter who I'm talking to, I'm always a good listener.
- T F 14. I can remember 'playing sick' to get out of something.
- T F 15. There have been occasions when I took advantage of someone.
- T F 16. I'm always willing to admit when I've made a mistake.
- T F 17. I always try to practice what I preach.
- T F 18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.
- T F 19. I sometimes try to get even, rather than forgive and forget.
- T F 20. When I don't know something, I don't at all mind admitting it.
- T F 21. I'm always courteous, even to people who are disagreeable.
- T F 22. At times I have really insisted on having things my own way.
- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would never think of letting someone else get punished for my wrongdoing.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people express ideas different from my own.
- T F 27. I never take a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune they only got what they deserved.
- T F 33. I have never deliberately said something that hurt someone's feelings.

Nostalgia Manipulation: Nostalgia Condition (Wildschut, Sedikides, Arndt & Routledge, 2006).

**PLEASE READ THE INSTRUCTIONS CAREFULLY**

According to the Oxford Dictionary, ‘nostalgia’ is defined as a ‘sentimental longing for the past.’ Please think of a nostalgic event in your life - a nostalgic event that has personal meaning for you. Specifically, try to think of a past event that makes you feel most nostalgic. Bring this nostalgic experience to mind. Immerse yourself in this nostalgic experience. How does it make you feel?

Then, write about this experience in the space below. Describe the experience and how it makes you feel nostalgic. Be as thorough as possible in describing how you are feeling. When you are done, you can continue on to the next page.

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Control Condition

**PLEASE READ THE INSTRUCTIONS CAREFULLY**

Please think of an ordinary event in your life that took place in the last week. Try to bring this event to mind and think it through as though you were an observer of the event, rather than directly involved. Imagine the event as though you were an historian recording factual details (e.g. I got on the number 37 bus.)

Then please write about this everyday event in the space below. Write a purely objective, factual, and detailed account (e.g. like in a court of law, avoiding emotionally expressive words). When you are done, you can continue on to the next page.

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State Nostalgia Measure (Wildschut et al., 2006)

The following statements refer to how you feel right now. Check the mark that indicates your level of agreement or disagreement.

Strongly disagree

Strongly agree

1      2      3      4      5      6      7      8      9

1. Right now, I am feeling quite nostalgic.
2. Right now, I am having nostalgic feelings.
3. I feel nostalgic at this moment.

Health Optimism (Aspinwall & Brunhart, 1996)

In these items, we are asking for your opinion. There are no right or wrong answers. The following statements refer to how you feel right now. Please indicate your agreement or disagreement by using the following scale.

Strongly disagree

Strongly agree

1      2      3      4      5      6      7      8      9

- \_\_\_ 1. I am unlikely to get sick because my body is good at fighting off infections.
- \_\_\_ 2. If I did get a serious illness, I would recover from it sooner than most other people.
- \_\_\_ 3. There is little one can do to prevent serious illness.
- \_\_\_ 4. If I had a serious illness, I could cure myself if I wanted to.
- \_\_\_ 5. I will probably die from illness or accident instead of old age.
- \_\_\_ 6. Most serious illnesses are genetic, so there is little that can be done to prevent them.
- \_\_\_ 7. Positive thinking can prevent illness from occurring.
- \_\_\_ 8. Positive thinking can improve recovery from serious illness.
- \_\_\_ 9. I have often thought about what it would be like to have a serious medical illness.
- \_\_\_ 10. If I did get a serious medical illness, I would probably have more trouble adjusting to it than other people.
- \_\_\_ 11. I am healthier than most people I know.
- \_\_\_ 12. Most illnesses are caused by too much stress.
- \_\_\_ 13. If I had a serious illness, my treatment would be successful.
- \_\_\_ 14. If I did get a serious illness, I would put up a better fight than most other people.
- \_\_\_ 15. Avoiding illnesses like cancer and heart attacks requires too many changes in diet and exercise to be worthwhile.
- \_\_\_ 16. I take better care of myself than most people.
- \_\_\_ 17. I am unlikely to get sick because I take vitamins.
- \_\_\_ 18. When I am sick, I wait a long time before seeing the doctor.
- \_\_\_ 19. I am unlikely to get sick because I eat a well-balanced diet.
- \_\_\_ 20. I only think about my health when I am sick.

### Aspirations Index (Kasser & Ryan, 1996)

Everyone has long-term Goals or Aspirations. These are the things that individuals hope to accomplish over the course of their lives. In this section, you will find a number of life goals, presented one at a time, and we ask you three questions about each goal. (a) How important is this goal to you? (b) How likely is it that you will attain this goal in your future? and (c) How much have you already achieved this goal thus far? Please use the following scale in answering each of the three questions about each life goal.

1	2	3	4	5	6	7
not at all			moderately			very

**Life-goal:** To be physically healthy.

1. How important is this to you?
2. How likely is it that this will happen in your future?
3. How much have you already attained this goal?

**Life-goal:** To feel good about my level of physical fitness.

4. How important is this to you?
5. How likely is it that this will happen in your future?
6. How much have you already attained this goal?

**Life-goal:** To keep myself healthy and well.

7. How important is this to you?
8. How likely is it that this will happen in your future?
9. How much have you already attained this goal?

**Life-goal:** To be relatively free from sickness.

10. How important is this to you?
11. How likely is it that this will happen in your future?
12. How much have you already attained this goal?

**Life-goal:** To have a physically healthy life style.

13. How important is this to you?
14. How likely is it that this will happen in your future?
15. How much have you already attained this goal?

Health Behavior Checklist (HBC; Vickers, Conway, & Hervig, 1990)

Respond to each statement by indicating how much you agree or disagree with it. Answer these questions as they are true for you RIGHT NOW.

Which intentions do you have for the next weeks and months?

I intend to...

Strongly disagree

Strongly agree

1      2      3      4      5      6      7      8      9

- 1. get 8 hours of sleep every night.
- 2. eat at least 5 servings of fruit and vegetables each day.
- 3. limit eating of fats, sweets and sodium (salt).
- 4. limit fast food to once per week or less.
- 5. limit the amount of alcohol (and other drugs) consumed.
- 6. brush my teeth after every meal.
- 7. floss every night before bed.
- 8. drink plenty of water, and limit sugary drinks.
- 9. get at least 30 minutes of exercise five days a week.
- 10. not smoke, and I avoid secondhand smoke.
- 11. always wear a safety belt when riding in a car.
- 12. wear a helmet when cycling.
- 13. wear sunscreen and/or a hat when exposed to direct sunlight.
- 14. wash my hands frequently and keep my hands out of my mouth.
- 15. get a physical exam every year.
- 16. visit the dentist twice per year.
- 17. use medications only as prescribed.
- 18. take a multivitamin every day.

## Exercise Challenge Sign-up

Faculty and students in the Psychology department are interested in organizing an exercise challenge starting at the beginning of the Fall 2014 semester. Although this idea is still in the preliminary phase, this exercise challenge would aim to motivate people who want to improve their physical health to engage in regular exercise for a minimum of four times a week for a total of four weeks. As a psychology student, your input regarding this prospective exercise challenge is extremely valuable. Please answer the following questions below.

Strongly disagree

Strongly agree

1      2      3      4      5      6      7      8      9

1. How interested are you in participating in the exercise challenge?
2. How important do you think having the exercise challenge is?
3. Do you think it is important to implement an exercise challenge like this for undergraduate students?

## Behavioral Measure-Seeking Health Information

Please read each of the article describes below. Following this, you will have asked to select which article you would like to read in its full length. Based on which article is most interesting to you, please select which article you would like to read.

### Article #1

health news

#### **What Separates a Healthy and Unhealthy Diet?**

December 6, 2013 - That difference translates to about \$550 a year, according to a new meta-analysis of studies evaluating the retail costs of food, grouped by healthfulness. It's chump change for middle-class eaters, but a big gap for low-income families. Researchers says that's a problem that can be solved.



### Article #2

the two-way

#### **Weeks Later, Epic Spelling Bee Ends in Missouri**

March 8, 2014 - It took more than 90 rounds and a delay of two weeks, after judges ran out of words. But Jackson County Mo., finally has its spelling bee champion, after two stellar spellers broke a tie Saturday.



I would like to read the full version of article #1 \_\_\_\_\_

I would like to read the full version of article #2 \_\_\_\_\_



## Demographic Information

What is your gender? \_\_\_\_\_

What is your age? \_\_\_\_\_

What is your relationship status?

1. Single
2. Married (if selected, specify for how long): \_\_\_\_\_
3. In a relationship (if selected, specify for how long): \_\_\_\_\_

Which race best describes you?

1. American Indian/Alaska Native
2. Asian
3. Latino/Hispanic
4. Native Hawaiian or Other Pacific Islander

Islander

5. White/non-Hispanic
6. Black or African-American
7. Other (specify): \_\_\_\_\_

How familiar are you with the word “nostalgia”?

1	2	3	4
NOT AT ALL	SOMEWHAT	REASONABLY WELL	VERY MUCH

In general, how would you say your health is?

1	2	3	4	5	6	7	8	9
VERY BAD								VERY GOOD

Compared to other persons of my sex and age, my current health is...

1	2	3	4	5	6	7	8	9
VERY BAD								VERY GOOD

Overall, how confident are you about your ability to take good care of your health?

1	2	3	4	5
NOT AT ALL	A LITTLE	SOMEWHAT	VERY	COMPLETELY

How often in the past 12 months were you say you were worried or stressed about having enough money to buy nutritional meals?

1	2	3	4	5
NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS

About how many cups of fruit (including 100% pure fruit juice) do you eat or drink eat day?

0 = None

1 = ½ cups or less

2 = ½ cup to 1 cup

3 = 1 to 2 cups

4 = 2 to 3 cups

5 = 3 to 4 cups

6 = 4 or more cups

Reference: 1 cup of fruit could be:

- 1 small apple
- 1 large banana
- 1 large orange
- 8 large strawberries
- 1 medium pear
- 2 large plums
- 32 seedless grapes
- 1 cup (8 oz.) fruit juice
- ½ cup dried fruit
- 1 inch-thick wedge of watermelon

About how many cups of vegetables (including 100% pure vegetable juice) do you eat or drink eat day?

0 = None

1 = ½ cups or less

2 = ½ cup to 1 cup

3 = 1 to 2 cups

4 = 2 to 3 cups

5 = 3 to 4 cups

6 = 4 or more cups

Reference: 1 cup of vegetables could be:

- 3 broccoli spears
- 1 cup cooked leafy greens
- 2 cups lettuce or raw greens
- 12 baby carrots
- 1 medium potato
- 1 large sweet potato
- 1 large ear of corn
- 1 large raw tomato
- 2 large celery sticks
- 1 cup of cooked beans

How much sugar-sweetened soda do you usually drink each day? Do not include diet soda.

- 0 = None
- 1 = 12 ounces (1 can) or less
- 2 = 13 to 24 ounces (2 cans)
- 3 = 25 to 36 ounces (3 cans)
- 4 = 37 to 48 ounces (4 cans)
- 5 = more than 48 ounces

Do you feel as though you maintain a healthy diet?

1 2 3 4 5 6 7 8 9  
NOT AT ALL VERY MUCH SO

In a typical week, how many days do you do any physical activity or exercise of at least moderate intensity, such as brisk walking, bicycling at a regular pace, and swimming at a regular pace?

- 0 = None
- 1 = 1 day per week
- 2 = 2 days per week
- 2 = 2 days per week
- 3 = 3 days per week
- 4 = 4 days per week
- 5 = 5 days per week
- 6 = 6 days per week
- 7 = 7 days per week

On the days that you do physical activity or exercise of at least moderate intensity, how long are you typically doing these activities?

Minutes \_\_\_\_\_ Hours \_\_\_\_\_

In a typical week, outside of your job or work around the house, how many days do you do physical activities specifically designed to strengthen your muscles such as lifting weights or circuit training (do not include cardio exercise such as walking, biking, or swimming)?

- 0 = None
- 1 = 1 day per week
- 2 = 2 days per week
- 2 = 2 days per week
- 3 = 3 days per week
- 4 = 4 days per week
- 5 = 5 days per week
- 6 = 6 days per week
- 7 = 7 days per week

Over the past 30 days, in your leisure time, how many hours per day, on average, do you sit and watch TV or movies, surf the web, or play video games? Do not include “active gaming” such as Wii.

\_\_\_\_\_ Hours per day

About how tall are you without shoes?

\_\_\_ Feet and \_\_\_ inches

About how much do you weigh, in pounds, without shoes?

\_\_\_\_\_ Pounds

How much sleep do you usually get on a workday or school day (i.e., weekday)?

\_\_\_ Hours      \_\_\_ Minutes

How much sleep do you usually get on a non-workday or non-school day (i.e., weekend)?

\_\_\_ Hours      \_\_\_ Minutes

## VITA

Mike Kersten was born November 14, 1988, in Visalia, California. He is the son of Daniel and Sharon Kersten. A 2007 graduate of El Diamante High School, Visalia, California, he received a Bachelor of Science degree in 2012 from California State University Dominguez Hills, Carson, California where he majored in Psychology. In 2012 he began his graduate studies at Texas Christian University, where he is pursuing his doctoral degree in Experimental Social Psychology.

## ABSTRACT

### AN EXERCISE IN NOSTALGIA: THE ROLE OF HEALTH OPTIMISM IN THE RELATIONSHIP BETWEEN NOSTALGIA AND PHYSICAL WELL-BEING

by Mike Kersten, M.S., 2014  
Department of Psychology  
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The present research examined whether nostalgia-induced health optimism promotes attitudes and behaviors associated with better physical health. Participants, in two experiments, were randomly assigned to write about either a nostalgic (vs. ordinary) event. Following this, everyone completed a measure of health optimism (Studies 1 & 2) followed by various health intention scales (Study 2). The results revealed that, in comparison to control conditions, nostalgic reverie led to greater health optimism. Further, mediational analyses showed that this heightened optimism increased participants' health behavior intentions (e.g., eating nutritionally, exercising). These findings suggest that nostalgia may be used as a mechanism to increase the importance, perceived efficacy, and behavior associated with better physical health.