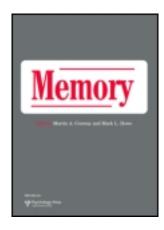
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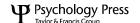
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The power of the past: Nostalgia as a meaning-making resource

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In three experiments we tested whether nostalgia bolsters meaning in life relative to two other modes of autobiographical thought: imagining a desired future experience and recalling a positive past experience. In Experiment 1 participants thought about a nostalgic or desired future experience and then completed a presence of meaning scale. Thinking about a nostalgic (compared to desired future) experience increased perceived presence of meaning. In Experiment 2 we examined whether nostalgia can additionally reduce the search for meaning. Participants thought about a nostalgic, desired future or recent positive experience, and then completed a search for meaning scale. Nostalgia, relative to both comparison conditions, decreased the search for meaning. Finally we tested whether, by virtue of its capacity to increase meaning, nostalgia can mitigate threats to meaning. In Experiment 3 participants were exposed to either absurd or representational art, under the guise that they would later have to interpret its meaning, and then thought about either a nostalgic or a recent positive experience. Meaning was subsequently measured. The absurd art interpretation condition decreased the perceived presence of meaning but nostalgic reflection attenuated this effect.

Keywords: Nostalgia; Meaning; Well-being.

Humans are meaning-making animals (Becker, 1971). A substantial amount of theoretical and empirical activity within the psychological sciences has been directed towards understanding the many ways people find and maintain the sense that their lives are meaningful (Greenberg, Koole, & Pyszczynski, 2004). A recent programme of research (Juhl, Routledge, Arndt, Sedikides, & Wildschut, 2010; Routledge, Arndt, Sedikides, & Wildschut, 2008; Routledge et al., 2011) advances the notion that nostalgia, a sentimental longing for the past, is one resource that enables people to attain and maintain the perception that their lives are meaningful. In the current article we build on this foundation to develop further a compelling

empirical case for nostalgia's role in the creation and preservation of meaning in life. We address two questions. Does nostalgia elevate meaning compared to other positively valenced modes of temporal thought? When people are exposed to stimuli that undermine meaning, can nostalgia mitigate these meaning threats?

NOSTALGIA AS A PSYCHOLOGICAL RESOURCE

The present work follows recent theory and research that takes a functional approach to the study of nostalgia (Sedikides, Wildschut, Arndt, &

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Routledge, 2008; Sedikides, Wildschut, & Baden, 2004; Sedikides, Wildschut, Routledge, Arndt, & Zhou, 2009). This body of evidence indicates that nostalgia serves three global psychological functions: it generates positive affect, it maintains and enhances positive self-esteem, and it serves as a repository of social connectedness. In this research nostalgia was typically manipulated by having participants recall either a nostalgic or ordinary autobiographical experience. Subsequently participants completed measures assessing the postulated functions of nostalgia. Nostalgia (compared to control) increased positive mood (Wildschut, Sedikides, Arndt, & 2006), increased both explicit Routledge, (Wildschut et al., 2006) and implicit (Vess, Arndt, Routledge, Sedikides, & Wildschut, 2010) selfesteem, and boosted social connectedness as assessed, for instance, by decreased loneliness and stronger affiliative tendencies (Loveland, Smeesters, & Mandel, 2010; Wildschut et al., 2006; Wildschut, Sedikides, Routledge, Arndt, & Cordaro, 2010: Zhou, Sedikides, Wildschut, & Gao, 2008). In all, the evidence favours a functional account of nostalgia by showing that nostalgia promotes psychological resources that facilitate well-being.

NOSTALGIA AND MEANING

Building on this evidence, a recent programme of research began exploring a fourth psychological function of nostalgia: Does nostalgia help people find and maintain a sense of meaning in life? This research programme started with the proposition that people turn to the past, in part, to manage existential concerns about an inevitable future death (Routledge & Arndt, 2005; Sedikides et al., 2004). Past literature indicates that heightened death awareness increases efforts to attain meaning (Arndt, Landau, Vail, & Vess, in press) and that meaning keeps death cognition from turning into death anxiety (Routledge & Juhl, 2010). To find out if nostalgia can be used as an existential resource to mitigate the effects of death awareness on meaning, Routledge et al. (2008) measured nostalgia proneness and then induced death cognition with a task in which participants wrote about their own mortality (mortality salience). Subsequently Routledge et al. assessed meaning in life. Mortality salience decreased meaning, but only for participants low in nostalgia proneness. High (compared to low) nostalgia proneness

attenuated the deleterious effects of mortality salience on meaning in life.

More recently researchers began considering nostalgia as a broader existential resource that not only helps people navigate mortality concerns, but also aids them more generally in efforts to attain and preserve a sense of life meaning (Routledge et al., 2011). In two correlational studies higher levels of nostalgia (measured as a trait and state) were significantly associated with higher levels of meaning in life (measured as a trait and state). Then, in an experiment, nostalgia was successfully manipulated by presenting participants with nostalgic (compared to non-nostalgic) song lyrics. Subsequently participants completed a state meaning in life scale. Exposure to nostalgic (compared to non-nostalgic) song lyrics increased perceptions of meaning. Further experiments found that a meaning-threatening essay (a philosophical article questioning the significance of human life) increased nostalgia. In turn, recalling a nostalgic (compared to ordinary autobiographical) experience reduced negative responses to this meaning-threatening essay. Finally, two experiments demonstrated that recalling a nostalgic (compared to ordinary autobiographical) experience bolstered psychological well-being and mitigated stress for participants with meaning deficits (low scores on a trait measure of meaning in life). In all, this preliminary set of findings is consistent with the idea that nostalgia constitutes a meaning-making resource.

THE CURRENT RESEARCH

The key objective of the current research was to continue to map out nostalgia's role in the creation and preservation of meaning in life. To achieve this we addressed two important issues. First, nostalgia has typically been manipulated by having participants recall either a nostalgic or ordinary autobiographical experience. One concern, then, is that recall of nostalgic experiences has been compared to recall of mundane or routine experiences (i.e., experiences that are perhaps devoid of meaning). Clearly a more stringent test is required that compares nostalgia to other modes of temporal thought that participants would find desirable and implicate meaningful engagement with life experiences. In the current research we therefore examine if nostalgia serves a meaning function relative to a desired future experience (Experiments 1 and 2) or a

recent and positive past experience (Experiments 2 and 3).

A second important issue concerns nostalgia's capacity to preserve meaning, when meaning is challenged. Previous findings (Routledge et al., 2011) indicate that reading an essay that called into question the significance of human life on Earth (compared to a control essay) increased nostalgia. Nostalgia, in turn, rendered people more tolerant of the threatening essay. Although suggestive of nostalgia's capacity to mitigate meaning threats, this evidence is inconclusive because perceived meaning in life was not assessed. Experiment 3 addresses this critical omission. In particular we exposed participants to absurd (structure threatening) or representational (structure preserving) art and informed them that they would be asked to determine the meaning of the art (Proulx, Heine, & Vohs, 2010). We then induced nostalgia (compared to a recent positive experience) and assessed meaning in life. The literature suggests that a well-structured, orderly, and predictable world helps provide existential meaning, and that a lack of structure erodes meaning (Landau et al., 2004; Proulx et al., 2010; Vess, Routledge, Landau, & Arndt, 2009). Accordingly, we hypothesised that being asked to make sense of absurd (compared to representational) art would undermine the sense of meaning in life. Critically we hypothesised that, if nostalgia bolsters meaning, it would mitigate this potentially detrimental effect of trying to make sense of absurd art on meaning.

EXPERIMENT 1

Experiment 1 tested the role of nostalgia as a meaning-making resource by comparing the effect of nostalgia on presence of meaning in life with another mode of temporal thought relevant to finding meaning in life. Specifically, one way in which people derive meaning from life is by anticipating desired future states that are typically the result of goal-directed behaviour (Emmons, 2003). Young adults (e.g., college students) in particular have many meaning-relevant experiences (e.g., getting married) and accomplishments (e.g., career success) ahead of them. Thus, for such individuals, thinking about desired future events may inspire perceptions of life as meaningful. In the current experiment we ask: Does reflecting nostalgically on the past increase meaning relative to contemplating desired future events? Such an effect would speak to the potent connection between reflecting nostalgically on the past and maintaining a meaningful conception of one's current life. If, however, nostalgia functions similarly to other temporal contemplations, little difference between these two conditions should emerge. Participants thus wrote about a nostalgic event or a desired future event and then completed an established measure of meaning (Steger, Oishi, & Kashdan, 2009).

Method

Participants. Participants were 24 (11 female; M age = 20) undergraduate students from a Midwestern US university, who took part in exchange for course credit. They were informed that the study concerned personality and life attitudes, completed all materials on a computer in partitioned cubicles in the following order, and were debriefed.

Nostalgia induction. Instructions in the nostalgia condition were similar to those used in previous research (Routledge et al., 2008, 2011; Wildschut et al., 2006; Zhou et al., 2008). Participants were first provided with the definition of nostalgia ("According to the New Oxford Dictionary of English, nostalgia is defined as a sentimental longing for the past") and were then instructed to bring to mind a nostalgic event and type four keywords relevant to this nostalgic event. Participants in the desired-future-event condition were instructed to think about a desired future event or experience that would stand out in their mind as truly important and type four keywords relevant to this event.

Meaning. We assessed presence of meaning with the five-item Presence of Meaning in Life subscale (Steger, Frazier, Oishi, & Kaler, 2006). Specifically, participants were asked to indicate the extent to which they currently agreed with statements such as "I have a good sense of what makes my life meaningful" ($1 = absolutely \ untrue$, $7 = absolutely \ true$). The items formed a reliable index ($\alpha = .93$; M = 5.14, SD = 1.26). The scale is correlated with other measures of meaning (Steger et al., 2006).

Results and discussion

A one-way ANOVA examining the effects of experimental condition on presence of meaning

was significant. Participants in the nostalgia condition (M = 5.65, SD = 1.00) reported higher levels of presence of meaning than those in the desired-future-event condition (M = 4.63, SD = 1.32), F(1, 22) = 4.48, p < .05. Nostalgia, relative to thinking about a desired future event, heightened a sense of meaning.

EXPERIMENT 2

In Experiment 2 we sought to elucidate the link between nostalgia and meaning in two additional ways. First, to test further the uniqueness of nostalgia, we added a control condition in which participants brought to mind a recent positive experience. This condition provides an informative contrast given that positive emotions can increase perceived meaning in life (Hicks, Schlegel, & King, 2010; King, Hicks, Krull, & Del Gaiso, 2006). Second, this experiment also sought to extend the present analysis by measuring a different facet of how people experience meaning. When individuals lack a sense of meaning, they are more inclined to search for it (Juhl & Routledge, 2012; Park, 2010; Steger, Kashdan, Sullivan, & Lorentz, 2008; Vess et al., 2009). Thus a convergent approach to assessing the provision of meaning through nostalgia would be to measure participants' desire to search for meaning in life. In short, if nostalgia bolsters meaning, it should decrease the need to further search for meaning. Also, if nostalgia is a particularly potent source of meaning, then it should reduce the search for meaning relative to bringing to mind a recent positive or desired future experience.

Method

Participants. Participants were 43 (26 female; M age = 20) undergraduate students from a Midwestern US university, who took part in exchange for course credit. They learned that the study concerned personality and life attitudes, completed all materials on a computer in partitioned cubicles in the following order, and were debriefed.

Nostalgia induction. Instructions in the nostalgia and future-desired-event conditions were identical to those used in Experiment 1. Participants in the recent-positive-event condition were instructed to think about a positive or happy experience from the past week that they would describe as good and to then type four keywords relevant to this experience.

Search for meaning. We assessed participants' active searching for meaning in life with the fiveitem Search for Meaning in Life subscale of Steger et al.'s (2006) Meaning in Life Questionnaire. Specifically participants were asked to indicate the extent to which they currently agreed with statements such as "I am looking for something that makes my life feel meaningful" and "I am seeking a purpose or mission for my life" $(1 = absolutely \ untrue, \ 7 = absolutely \ true)$. The items formed a reliable index $(\alpha = .77, M = 5.20, SD = .85)$.

Results and discussion

A one-way ANOVA testing the effect of experimental conditions on search for meaning was significant, F(2, 40) = 4.36, p < .05. We used planned orthogonal contrasts to localise this effect. First we compared the nostalgia condition to the two control conditions (pooled). As predicted, participants in the nostalgia condition evidenced decreased search for meaning (M=4.70, SD=.92) relative to participants in the future-desired and recent-positive conditions pooled (M = 5.45, SD = .71), F(1, 40) = 8.40,p < .01. Next we compared the two control conditions (future-desired vs recent-positive event). Participants in the future-desired-event condition (M = 5.52, SD = .82) did not differ on search for meaning from participants in the recent-positive condition (M = 5.37, SD = .58), F(1, 40) = .26,p = .62.

Using a new control condition, and assessing a different facet of meaning (i.e., search for meaning), Experiment 2 further showed that nostalgia constitutes a source of meaning. Reflecting on a nostalgic experience, relative to a desired future experience or a recent positive experience, decreased the reported search for meaning. We suggest that this effect occurs because, in supplying a sense that life is meaningful, nostalgia attenuates the need to further search for meaning. In addition to demonstrating the potency of nostalgia in meaning-making efforts, this experiment takes an initial step toward identifying the causal antecedents of the search for meaning. This is an important addition to the literature, given that past research on this striving has been mostly correlational (Park, 2010; Steger et al., 2008).

EXPERIMENT 3

In Experiment 3 we sought to examine further nostalgia's capacity to bolster meaning. Life is full of experiences that can undermine a sense of meaning (e.g., reminders of mortality, Routledge & Juhl, 2010; social exclusion by valued others, Stillman et al., 2009). Recent theory and research focusing on efforts to structure and make sense of the world suggests that they involve securing a sense of meaning (Juhl & Routledge, 2010; Landau et al., 2004; Proulx et al., 2010; Vess et al., 2009). An organised, predictable, and stable world (i.e., a meaningful world) provides the requisite foundation for establishing the sense that one's life has meaning (Arndt et al., in press). Consistent with this possibility, Proulx and colleagues (2010) proposed that stimuli that violate one's expectations about the world would threaten meaning. To test this proposal Proulx et al. exposed participants to absurd or representational art with the expectation that they would later be asked to make sense of the art, and then assessed their desire to see the world in a clear, unambiguous, and orderly way (need for structure; Thompson, Naccarato, Parker, & Moskowitz, 2001). Viewing absurd art increased participants' need for structure, a pattern that the authors interpreted as evidence for threatened meaning (i.e., structure seeking as meaning making). In the current experiment we investigated this type of meaning threat and the capacity of nostalgia to counter it. Specifically we presented participants with absurd or representational art, under the guise that they would later have to interpret its meaning. We then manipulated nostalgia and assessed presence of meaning. If viewing absurd art with the challenge of explaining it decreases some sense that life has meaning and nostalgia promotes views of life as meaningful, then nostalgia should mitigate this effect of viewing absurd art.

Method

Participants. Participants were 34 (24 female; M age = 20) undergraduate students from a Midwestern US university, who took part in exchange for course credit. They were informed that the study referred to personality and attitudes, completed all materials on computers in separate cubicles in the following order, and were debriefed.

Meaning threat. Participants were presented with a piece of art on a computer screen and were then told to spend a few minutes studying the piece of art, because they would later be asked to explain what they thought the meaning of the art was. In the absurd art condition participants viewed Rene Magritte's The Son of Man. This painting challenges expectations about the visual world, as it consists of an unexpected juxtaposition of objects—an apple hovering in front of a man's face. In the representational art condition participants viewed John Constable's Landscape With a Double Rainbow. This painting displays a rainbow on the beach. Previous research (Proulx et al., 2010) has established that viewing this absurd piece (compared to this representational piece) with the anticipation of having to describe its meaning increases participants' need for structure, which is considered to be indicative of threatened meaning (Proulx et al., 2010). Consistent with Proulx et al.'s procedure we followed this task with a mood measure to test if the art manipulation impacts affect (Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988; positive affect: M = 2.98, SD = .81; negative M = 1.53; SD = .57). Proulx and colleagues found no effect on positive or negative mood, demonstrating that the absurd art condition is not simply a negative mood induction.

Nostalgia induction and meaning measure. Participants received the nostalgic or recent-positive-event instructions used in Experiment 2. Participants then completed the presence of meaning scale used in Experiment 1 (Steger et al., 2006; $\alpha = .86$, M = 4.32, SD = 1.23).

Results

We conducted a 2 (nostalgia vs past positive) \times 2 (absurd vs representational art) ANOVA on presence of meaning. There was a main effect for nostalgia such that participants in the nostalgia condition (M = 4.92, SD = 1.07) evidenced higher meaning scores than participants in the recent-positive condition (M = 3.73, SD = 1.10), F(1, 30) = 13.65, p < 01. However, this main effect was qualified by a significant interaction, F(1, 30) = 5.93, p < 05 (Figure 1). We carried out pairwise tests to pinpoint the pattern of results. Within the recent-positive condition, participants challenged to explain the absurd art (M = 2.97, SD = 0.97) evidenced lower meaning scores than

participants faced with explaining the representational art (M = 4.26, SD = .88), F(1, 30) = 6.72,p < .05. Within the nostalgic condition, participants who viewed the absurd art (M = 5.11,SD = 1.30) did not differ on meaning scores from participants who viewed the representational art (M = 4.70, SD = 1.16), F(1, 30) = .70,p = .41. Additionally, within the representational art condition, nostalgic (M = 4.70, SD = 1.16) and positive-past (M = 4.26, SD = .88) participants did not differ on meaning scores, F(1, 30) = .85, p = .37. However, within the absurd art condition, nostalgic participants (M = 5.11, SD = 1.03) evidenced higher meaning scores than recent-positive participants (M = 2.97, SD = .97), F(1,30) = 17.72, p < .001. In short, being challenged to explain absurd art compromised meaning, and nostalgia mitigated this effect. Moreover, the artviewing manipulation had no effect on positive or negative affect (ps \geq .50) or any single item related to anxiety (e.g., nervous, distressed, upset, jittery; ps > .20). Thus, consistent with previous research, the absurd art condition did not induce negative affect or anxiety.

DISCUSSION

Three experiments provided evidence that nostalgia functions to provide a sense of life meaning. Nostalgia increased perceptions of meaning relative to thinking about a desired future event (Experiment 1), and nostalgia decreased the

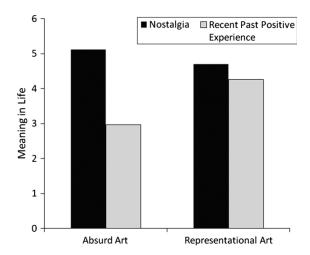


Figure 1. The effects of art viewing and temporal thought inductions on meaning.

Note: Higher scores on the y-axis indicate higher levels of perceived meaning in life.

search for meaning relative to thinking about a recent positive experience or a desired future event (Experiment 2). Further, confronting the challenge of explaining absurd art decreased perceptions of meaning, unless participants engaged in nostalgia after viewing the art (Experiment 3). The findings have several theoretical and applied implications.

On a theoretical level, the findings support the recent reconceptualisation of nostalgia. Nostalgia was originally viewed as a "cerebral disease" specific to Swiss mercenaries who were separated from their homeland (Hofer, 1688/1934, p. 387), and later it was considered a psychiatric condition or "immigrant psychosis" (Frost, 1938, p. 801). The view of nostalgia as a psychological problem did not change for some time. This view started to shift more recently when nostalgia became the subject of marketing research, which identified it as a useful predictor of consumer preferences (Holbrook, 1993; Schindler & Holbrook, 2003; Stern, 1992). The marketing analysis of nostalgia paved the way for reconsidering nostalgia as a positive psychological force, but, with its sole interest in predicting consumption-related outcomes, this research did not explore psychological states evoked by nostalgia.

The more recent social psychological study of nostalgia, however, has illuminated the potential for nostalgia to serve psychological functions. First, unlike the historical treatment in which nostalgia was perceived as a unique pathology confined to specific vulnerable populations (e.g., immigrants or soldiers away at war), contemporary research found that nostalgia is commonplace. For example, 79% of undergraduate respondents in one survey indicated that they experienced nostalgia at least once a week (Wildschut et al., 2006). Other studies have observed that nostalgia is prevalent among Chinese undergraduate students, factory workers, and even children (Zhou et al., 2008). Another study indicates that nostalgia is prevalent across the lifespan (Robertson et al., 2012). Critically, as previously discussed, nostalgia is psychologically advantageous as it increases positive mood, self-esteem, and social connectedness (Loveland et al., 2010; Wildschut et al., 2006, 2010). The current investigation builds on these findings by highlighting meaning in life as a fourth positive outcome of nostalgia. Nostalgia increases meaning relative to a recent experience of happiness and a desired future

event of great personal significance. Nostalgia is not a rare pathology. It is commonplace and functional.

Although the present research echoes other recent findings in demonstrating the benefits of nostalgia, future empirical efforts will do well to consider the possibility that nostalgia is not adaptive for everyone. For example, nostalgia's capacity to promote psychological well-being may be related to people's attitudes about the past (Zimbardo & Boyd, 1999). Content analyses of nostalgic narratives indicate that, although these narratives feature some negative affect (e.g., sadness, loss), positive affect is more prevalent (Wildschut et al., 2006). Further, the narratives tend to be redemptive such that negative experiences or feelings are resolved and positive feelings predominate. However, might it be that the largely positive and redemptive episodes of nostalgia are specific to people who have largely positive attitudes about the past? Might people with more negative attitudes about the past have more negatively flavoured nostalgic reflections? Or might these people find engaging in nostalgia to be a difficult or distressing exercise? Similarly, might specific traits related to chronic negative affect (e.g., neuroticism) make nostalgia a more unpleasant experience for some? Questions such as these are crucial for future research aimed at providing a more comprehensive picture of when nostalgia may and may not be advantageous.

The current findings, however, suggest that for many people nostalgia is a powerful tool for improving psychological health. A wide range of research has identified meaning in life as a key component of well-being (King & Napa, 1998; Park, 2010; Reker, Peacock, & Wong, 1987; Zika & Chamberlain, 1992). Meaning in life is associated with successful coping (Debats, Drost, & Hansen, 1995; Janoff-Bulman, 1992; Updegraff, Cohen Silver, & Holman, 2008) and the effectiveness of psychotherapy (Debats, 1996). Likewise, low levels of meaning are a predictor of depression (Wong, 1998) and a risk factor for suicide (Marsh, Smith, Piek, & Saunders, 2003). Deficiencies in meaning have also been considered as contributors to substance abuse and other risk-taking behaviours (Frankl, 1997; Harlowe, Newcomb, & Bentler, 1986; Orcutt, 1984; Padelford, 1974; Waisberg & Porter, 1994). Nostalgia may be a particularly effective means for attaining meaning, as waxing nostalgic increases meaning relative to thinking about other positive life experiences. In addition, nostalgia may have broad utility in helping people navigate experiences that threaten meaning, as a nostalgia induction mitigated the effects of a structure threat on meaning. Future empirical efforts should thus zero in on the intervention potential of nostalgia. For example, would daily nostalgia exercises help people cope with sustained stressors that threaten to undermine meaning (e.g., chronic illness, long periods of unemployment)? Nostalgia has an exciting theoretical and applied future as an aid to meaning-making endeavours.

As more is learned about the psychological implications of nostalgia, it will be important to continue to examine how nostalgia is distinct from other related constructs (e.g., positive memories). Several studies showcase a unique affective signature of nostalgia. Nostalgic narratives, for example, typically feature expressions of both positive and negative affect, but positive affect is more prevalent (Wildschut et al., 2006). Indeed, lay people perceive nostalgia as a combination of happiness and loss (Hepper, Ritchie, Sedikides, & Wildschut, 2012), and participants who recalled a nostalgic (compared to positive) event reported less activated positive affect (i.e., "active", "ecstatic") and more activated negative affect (i.e., "disturbed", "upset") (Stephan, Sedikides, & Wildschut, in press). However, participants in the nostalgic (compared to positive) event condition also reported stronger feelings of authenticity. Thus nostalgia appears to have the psychological benefits it does in spite of, or perhaps because of, its more complicated affective signature.

These findings dovetail with the present research to suggest that clear lines can be drawn between nostalgia and more straightforwardly positive reflections upon the future (Study 1) or past (Studies 2 and 3). Convergent support for the uniqueness of nostalgia also comes from studies using alternative means of inducing nostalgia. In Routledge et al. (2011, Study 2), for example, nostalgia was induced and its theoretically predicted effects observed, as a result of exposing participants to song lyrics that they had previously identified as nostalgic. Such effects would be hard to account for based on positive memories. In sum, nostalgia is more than just a positive

memory. It is the self-focused emotional process through which people recollect experiences that imbue their lives with meaning.

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