Wildschut, T., & Sedikides, C. (2024). Nostalgia and protection of psychological wellbeing during the COVID-19 pandemic. In M. K. Miller (Ed.), *The social science of the COVID-19 pandemic: A call to action for researchers* (pp. 362–374). Cambridge University Press.

Nostalgia and Protection of Psychological Well-Being During the COVID-19 Pandemic

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Abstract

We propose that the emotion of nostalgia (a sentimental longing for one's past), by acting as a balancing feedback mechanism, counteracts negative states likely to be induced by the COVID-19 pandemic. The first tenet of this regulatory model of nostalgia proposes that the emotion is triggered by negative states. In support, we review evidence that two negative states elicited by the pandemic—boredom and loneliness—undermine psychological adjustment, but also increase nostalgia. The second tenet of the regulatory model proposes that nostalgia, in turn, counteracts adversity by serving a number of key psychological functions. We review supporting evidence for nostalgia's capacity to strengthen meaning in life (countering boredom) and social connectedness (countering loneliness). By fostering psychological adjustment, nostalgia absorbs the detrimental impact of pandemic-induced distress and maintains homeostasis. As such, nostalgia contributes to preventing downward spirals of declining mental health during the pandemic. Lessons learned and future research ideas are offered.

Keywords: nostalgia, homeostasis, loneliness, boredom, meaning in life, help seeking, happiness, well-being

The COVID-19 pandemic has triggered a wave of nostalgia ("a sentimental longing or wistful affection for the past"; *The New Oxford Dictionary*). A Nielsen/MRC survey among 945 members of the US general public (ages 13+) during the initial stage of the pandemic (March 25-29, 2020) revealed that majorities of respondents had recently rewatched episodes of an old favorite television show (54%) and listened to music they used to listen to but had not heard in a while (55%).[1] Nostalgic trends have also emerged on social media. The subreddit r/Nostalgia has enjoyed growing popularity since the start of the pandemic, and tweets with the phrase "I Miss" have surged on Twitter.[2] New nostalgic social media challenges have sprung up, which invite users to post pictures of their younger selves (#MeAt20), recreate childhood photographs (#ImJustAKid), or describe favorite pastimes and products from their past (#DistractA90sKid).[3] Old-fashioned board games have come back in vogue and sepia-tinted broadcasts of classic sporting events have attracted captivated audiences.[4]

Why does pandemic-induced malaise trigger nostalgia? In turn, what does nostalgia do for the beleaguered person? We will address these questions from the perspective of the regulatory model of nostalgia (Wildschut & Sedikides, 2021). This model proposes that nostalgia shapes people's experiences of the COVID-19 pandemic by acting as a homeostatic corrective: negative states trigger nostalgia, which, in turn, restores balance by counteracting these negative states. To set the stage, the first part of our chapter outlines the model by means of illustrative studies. We present evidence that aversive psychological states, such as those created by the pandemic, trigger nostalgia. We next show how, in turn, nostalgia serves a number of important psychological functions. We then combine these threads by reviewing studies that tested the complete model, demonstrating the positive downstream effects of adversity-induced nostalgia. In the second part of our chapter, we present the findings from six studies conducted during the

COVID-19 pandemic. Based on the regulatory model, these studies demonstrated how loneliness (an aversive state) during the pandemic undermined well-being, but also animated nostalgia. Nostalgia, in turn, was positively associated with well-being, counteracting the adversity of loneliness (see Chapter # for more on well-being). In concluding the chapter, we consider lessons learned and future opportunities. We begin, however, by briefly addressing the definitional question: what is nostalgia?

What is Nostalgia?

Studies in which lay persons were asked to identify which features or attributes they considered most characteristic (or prototypical) of the construct 'nostalgia' revealed that they conceptualized nostalgia as a predominantly positive, social, and past-oriented emotion (Hepper et al., 2012). In nostalgic reverie, one brings to mind a fond and personally meaningful event, typically involving one's childhood or a close relationship. The person often sees the event through rose-colored glasses, misses that time or relationship, and might even long to return to the past. As a result, they feel sentimental, mostly happy but with a tinge of sadness. These lay conceptions of nostalgia dovetail with contemporary dictionary definitions, as do the findings of content analyses and automated text analyses of nostalgic narratives (Wildschut et al., 2018). This prototypic view of nostalgia transcends cultural boundaries (Hepper et al., 2014).

Triggers of Nostalgia

The first tenet of the regulatory model proposes that aversive states, such as those induced by the COVID-19 pandemic, trigger nostalgia. Boredom is a case in point. The pandemic has imposed constraints on people that have eroded their sense of agency and induced aversive feelings of boredom (Boylan et al., 2020). van Tilburg and colleagues (2013, Study 2) hypothesized that boredom would increase nostalgia. To test this, they experimentally

manipulated boredom by randomly assigning participants to trace a line through either three (low-boredom condition) or nine (high-boredom condition) large spirals. The manipulation successfully induced boredom. The researchers then instructed participants to retrieve an unspecified autobiographical memory (i.e., a past event) and to indicate how nostalgic they felt after recalling the event. Participants rated two items (i.e., "Right now, I am feeling quite nostalgic," "Right now, I'm having nostalgic feelings"), which were averaged to create an index. Participants in the high-boredom condition felt more nostalgic than those in the low-boredom condition. Boredom increased nostalgia.

Loneliness serves as another example. A longitudinal survey among a nationwide sample of US adults revealed that loneliness increased significantly during the initial phase of the pandemic (April to September, 2020). Respondents who reported that they were under stay-at-home, shelter-in-place, or lockdown orders evinced higher loneliness levels than those reporting no restrictions (Killgore et al., 2020; cf. Luchetti et al., 2020). Wildschut and colleagues (2006, Study 4) examined the impact of an experimental loneliness induction on momentary feelings of nostalgia. They manipulated loneliness via false feedback. U.K. undergraduates first completed 15 items measuring loneliness. In the high-loneliness condition, the researchers phrased these items to elicit agreement by prefacing them with the words "sometimes" (e.g., "I sometimes feel isolated from others"). In the low-loneliness condition, they phrased the items to elicit disagreement by prefacing them with the stem "always" (e.g., "I always feel isolated from others"). As intended, participants in the high-loneliness (compared to low-loneliness) condition were more likely to agree with the statements. The researchers then informed participants in the high-loneliness condition that they fell in the 62nd percentile of the loneliness distribution and therefore were "above average on loneliness." Those in the low-loneliness condition were told

that they fell in the 12th percentile and therefore were "very low on loneliness." Participants then generated reasons for their purported loneliness level and completed a (successful) manipulation check. Next, nostalgia was assessed by instructing participants to rate how much they missed 18 aspects of their past (e.g., "my family," "music," "having someone to depend on," "holidays I went on"; Batcho, 1995). We averaged the 18 responses to create a nostalgia index. Participants in the high-loneliness condition felt more nostalgic than those in the low-loneliness condition. Loneliness increased nostalgia. These findings invite an important question: when triggered, what does nostalgia do for people who experience adversity?

Functions of Nostalgia

The second tenet of the regulatory model proposes that nostalgia serves a number of key psychological functions. These functions fall into four broad domains: social, self-oriented, existential, and future-oriented. Within the social domain, nostalgia promotes perceived social connectedness and interpersonal competence, which provide the scaffolding for prosocial goals, action tendencies, and behavior (Sedikides & Wildschut, 2019). With regard to its self-oriented function, nostalgia builds, maintains, and enhances self-positivity. Specifically, it heightens the accessibility of positive self-attributes and boosts self-esteem (Vess et al., 2012). As for the existential domain, nostalgia is a source of meaning in life and fosters a sense of continuity between one's past and present self (Sedikides & Wildschut, 2018). Relating to its future-oriented function, nostalgia raises optimism, inspiration, and creativity (Sedikides & Wildschut, 2020). We zoom in on two domains that are particularly pertinent to the COVID-19 pandemic: existential and social.

Chasson and colleagues (2021) examined the presence and search for meaning in life in two samples of new mothers: one that was recruited before the pandemic and one during the

pandemic. New mothers reported lower presence of meaning in life and higher search for meaning in life during the pandemic than prior to it. Can nostalgia replenish meaning in life? Reid and colleagues (2015) examined the relation between scent-evoked nostalgia and meaning among U.S. undergraduates. Participants sampled, in random order, 12 pleasantly or neutrally scented oils presented in glass tubes (e.g., Chanel #5, baby powder, lavender). They rated each scent for nostalgia (i.e., "How nostalgic does this scent make you feel?") and responded to two meaning items (i.e., "life is meaningful," "life has a purpose"). Higher levels of scent-evoked nostalgia were positively correlated with greater meaning in life.

To test the causal impact of nostalgia on meaning in life, Routledge and colleagues (2011, Study 2) experimentally induced nostalgia with song lyrics. The study involved two sessions, approximately one week apart. In the initial session, participants were instructed to generate the titles and performing artists of three songs that made them feel nostalgic. During the interim period that followed, the researchers randomly allocated participants to conditions and yoked each participant in the nostalgia condition to a participant in the control condition (i.e., creating pairs of participants). They then retrieved, for each participant assigned to the nostalgia condition, the lyrics of one of the three personally nostalgic songs they listed in the initial session. In the subsequent experimental session, the researchers presented these lyrics to both participants in each yoked pair. Thus, the lyrics were constant across conditions but only participants in the nostalgia condition viewed lyrics of a personally nostalgic song. After reading the lyrics, participants completed the Presence of Meaning in Life scale (Steger et al., 2006). Participants in the nostalgia condition reported greater presence of meaning in life than yoked controls. Nostalgia increased meaning in life.

Turning to the social domain, the COVID-19 pandemic has disrupted the provision of

healthcare (e.g., cessation of in-person counselling, reduced availability of medical facilities), creating even greater obstacles to adequate professional support than usual, and discouraging people from seeking help when they need it (Lueck, 2021). Juhl and colleagues (2021, Study 4) hypothesized that nostalgia, by virtue of its capacity to strengthen social bonds and interpersonal trust, can promote help seeking. To test this, they experimentally induced nostalgia with the Event Reflection Task. Participants were randomly assigned to reflect on either a personally-experienced nostalgic event (nostalgia condition) or an ordinary (e.g., everyday, regular) event (control condition). After bringing the relevant event to mind, participants listed four keywords capturing its essence and provided a brief written account. Following a (successful) manipulation check, they first rated four items assessing social connectedness ("With this event in mind, I feel connected to loved ones," "... protected," "... loved," "... I can trust others") and then worked on an (unsolvable) insight problem, in which they had to trace each line of a geometric figure only once, without lifting the pencil and without retracing any existing lines. They were instructed to contact the experimenter by pushing a red button on an intercom system, if they wanted help solving the insight problem. Participants in the nostalgia condition sought help sooner than those in the control condition. This beneficial effect of nostalgia on help seeking was mediated by perceived social connectedness.

The Complete Regulatory Model

So far, we have presented evidence for discrete paths in the regulatory model. The first path links aversive states, such as boredom and loneliness, to increased nostalgia. The second path links nostalgia to vital psychological outcomes, including increased meaning in life and help seeking. We now consider two studies by Zhou and colleagues (2008, Studies 1-2) that tested the complete regulatory model by examining both paths simultaneously. The researchers examined

the relations among loneliness, nostalgia, and perceived social support. The regulatory model posits that loneliness affects social support in two distinct ways. The direct effect of loneliness is negative: Loneliness undermines feeling socially supported. Yet, the indirect effect of loneliness via nostalgia is positive: Loneliness increases nostalgia, which, in turn, boosts perceptions of social support.

The first study by Zhou's team was a survey among Chinese migrant children and teenagers, in which the researchers assessed individual differences in loneliness (UCLA Loneliness Scale; Russell, 1996; e.g., "How often do you feel completely alone?"), nostalgia (Southampton Nostalgia Scale; Barrett et al., 2010; e.g., "How often do you experience nostalgia?"), and social support (Multidimensional Scale of Perceived Social Support; Zimet et al., 1988; e.g., "I can count on my friends when things go wrong"). Participants who were high (compared to low) in loneliness perceived less social support, but they were also more nostalgic. In turn, nostalgia strengthened perceptions of social support, thereby offsetting the negative impact of loneliness. In their second study, the team experimentally manipulated loneliness in a sample of Chinese university students by giving them false feedback regarding questionnaire scores (as described earlier in this chapter). Following the loneliness induction, participants' momentary nostalgia and social support were assessed with state versions of the Southampton Nostalgia Scale and Multidimensional Scale of Perceived Social Support, respectively. Participants in the high-loneliness (compared to low-loneliness) condition perceived less social support, but they also felt more nostalgic. Nostalgia, in turn, strengthened their perceptions of social support.

In summary, a rich body of empirical evidence supports the regulatory model of nostalgia across diverse domains. Nostalgia offsets adversity and maintains homeostasis.

The Regulatory Role of Nostalgia During the COVID-19 Pandemic

Having outlined the regulatory model of nostalgia, we now turn to the second part of our chapter, which sees nostalgia "in action" during the COVID-19 pandemic. The pertinent evidence stems from six studies completed at various stages of the pandemic by Zhou and colleagues (2021, Studies 1-6). Studies 1-3 were surveys conducted in China (March 8-14, 2020), the U.S. (April 3-12, 2020), and the U.K. (April 20-21, 2020), examining the cross-sectional relations among loneliness, nostalgia, and happiness. In Study 1 (N = 1,546), loneliness was operationalized as social isolation ("During the outbreak, have you been living alone for more than a week?"; 0 = *no*, 1 = *yes*). Social isolation refers to objective lack of social interactions, whereas loneliness refers to the subjective perception that one lacks meaningful social interactions. Although they are conceptually distinct, social isolation is a good proxy of loneliness (Savikko et al., 2005). Happiness was measured with two items: "For the past week, how happy has your life been?", "For the past week, how meaningful has your life been?" (1 = *not at all*, 7 = *very much*). The researchers assessed nostalgia with a validated (Hepper et al., 2012) 3-item measure (e.g., "I feel nostalgic;" 1 = *not at all*, 7 = *very much*). Results revealed that lonely participants were less happy than nonlonely ones, but they also felt more nostalgic. Nostalgia, in turn, was positively associated with happiness. When happiness was regressed onto both loneliness and nostalgia simultaneously, loneliness negatively predicted happiness, whereas nostalgia positively predicted it. The direct effect of loneliness was negative: Loneliness was prognostic of less happiness. Yet, the indirect effect of loneliness via nostalgia was positive: Loneliness predicted higher nostalgia, which, in turn, was associated with more happiness.[5]

To test the robustness and generality of Study 1 findings, Zhou's team next surveyed U.S. (Study 2; N = 1,572) and U.K. (Study 3; N = 571) samples. Both surveys used identical

measures. Loneliness was assessed with two items: “How isolated from the rest of the world did you feel in the past week?” (1 = *not at all*, 7 = *very much*), “How lonely did you feel in the past week?” (1 = *not at all lonely*, 7 = *very lonely*). Happiness was assessed with three items: “I consider myself as (1 = *not a very happy person*; 7 = *a very happy person*)”, “Compared with my peers, I consider myself (1 = *much less happy*, 7 = *much more happy*)”, “I think my life is (1 = *not meaningful at all*, 7 = *very meaningful*)”. Nostalgia was measured as in Study 1. Indices of loneliness, happiness, and nostalgia were created by averaging the corresponding items. Study 1 findings were replicated in both new samples. Loneliness was negatively associated with happiness, but positively associated with nostalgia. Nostalgia, in turn, was positively associated with happiness. When happiness was regressed onto both loneliness and nostalgia, loneliness was a negative predictor, whereas nostalgia was a positive one. Again, the direct effect of loneliness on happiness was negative, but its indirect effect via nostalgia was positive.

The results of these three cross-sectional studies converged in supporting the regulatory model of nostalgia across cultures. Loneliness during the pandemic was associated negatively with happiness but positively with nostalgia. Nostalgia, through its positive link with happiness, counteracted loneliness. An integrative data analysis (IDA; Curran & Hussong, 2009), which pooled the three studies and tested associations in the aggregated sample, reinforced these conclusions. Cross-sectional studies, however, cannot definitively determine direction of causation. Whereas evidence indicates that loneliness causes unhappiness (Cacioppo et al., 2006), and loneliness causes nostalgia (Wildschut et al., 2006), support for a causal path from nostalgia to increased happiness is limited. Zhou and colleagues filled this gap in their next three (experimental) studies (Studies 4-6). Additionally, they asked, for the first time, whether experimentally-induced nostalgia has lasting effects—up to two days—on happiness.

Study 4 (N = 209) was conducted from April 19-24, 2020, Study 5 (N = 196) from April 29-30, 2020, and Study 6 (N = 190) from December 21-22, 2020. Participants in all three studies were Western MTurkers. Each study involved two time points (T1 and T2). At T1, nostalgia was induced with the Event Reflection Task. This was followed by a manipulation check and collection of the well-being measures. In Study 4, happiness was assessed with two items (e.g., "Right now, I consider myself ..." 1= *not a very happy person*; 7 = *a very happy person*). In Studies 5-6, happiness was measured with three items (e.g., "Right now, how much do you experience happiness?"). In all three studies, positive affect and negative affect were assessed with the Positive and Negative Affect Schedule (Watson et al., 1988). At T2, one or two days after the original assessment, participants completed the same measures as at T1. In Studies 4-5, this was preceded by a brief induction booster. Participants in the nostalgia (control) condition read: "In our previous questionnaire, you were asked to recall a nostalgic (ordinary) event and write down a few keywords. Do you still remember the event? Please write it down in the blank space below." In Study 6, this induction booster was omitted to examine whether its absence would weaken the intervention's impact at T2.

In addition to testing the effects of the nostalgia intervention on measures of well-being at each time point within each study, the researchers also pooled the data across studies in an IDA. For the sake of parsimony and to avoid repetition, we focus on the IDA results. The IDA took the form of a 2 (nostalgia vs. control) × 2 (T1 vs. T2) × 3 (Study 4 vs. Study 5 vs. Study 6) multilevel analysis, with time points nested within participants and study membership treated as a fixed characteristic of each participant in the pooled sample. Results revealed that the nostalgia induction (compared to control) significantly increased happiness and positive affect (but had no effect on negative affect). The absence of higher-order interactions indicated that these beneficial

effects did not decline significantly from T1 to T2 and did not vary between studies. Further, the absence of significant Nostalgia × Time × Study three-way interactions indicates that the absence of an induction booster in Study 6 did not result in a diminution of the nostalgia effects at T2 (compared to Studies 4-5). It is tempting, then, to conclude that the beneficial effects of a brief nostalgia induction can endure for up to two days. Still, separate analyses of Study 6 showed that the nostalgia effects on T2 happiness and positive affect were in the predicted direction but non-significant, potentially due to participant attrition. A cautious interpretation suggests that a booster was sufficient to reinstate nostalgia's beneficial effects at T2, but more research is needed to ascertain if it is necessary.

Jointly, these six studies, conducted during the pandemic, demonstrate that nostalgia is a valuable psychological resource that is harnessed during periods of social isolation, and contributes to preventing downward spirals of declining mental health. Nostalgia inductions are easy to implement and can be self-initiated, raising the prospect of cost- and time-effective interventions.

Lesson Learned

Nostalgia has a checkered past. The term was coined in 1688 by Johannes Hofer, a medical student, who combined the Greek words *nostos* ("homecoming") and *algos* ("suffering") to denote a collection of negative physical symptoms displayed by itinerants, in particular Swiss mercenaries. Nostalgia was thought to be the suffering caused by an incessant desire to return home, with symptoms including weeping, fainting, stomach ache, fever, palpitations, and suicidal ideation. Hofer's classification of nostalgia as medical or neurological disease remained influential through the 18th and 19th century. Views changed in the 20th century, albeit not for the better. Nostalgia was regarded a psychiatric disorder marked by anxiety, sadness, pessimism,

loss of appetite, and insomnia.

Over the past 15 years, a growing body of empirical research has reversed the tide and formed the basis for a new look on nostalgia. The picture of nostalgia that has emerged is not of a medical disease, psychiatric disorder, or psychological illness but, rather, of a nourishing and invigorating psychological resource. Nostalgia does not cause adverse symptoms but, instead, is recruited to counter those symptoms and maintain psychological equanimity. Hofer (and many contemporary or succeeding writers) made an inferential error by confusing the direction of causation between symptoms and nostalgia. We sympathize because nostalgia is enigmatic; what other emotion is positively associated with both boredom and meaning in life, or with both loneliness and happiness? An important lesson, then, is that one should resist the temptation to infer that, because nostalgia "occurs in the context of present fears discontents, anxieties, or uncertainties" (Davis, 1979, pp. 34-35), it must be maladaptive. The COVID-19 pandemic has vividly illustrated that adversity and nostalgia are often contiguous in time but—just as a viral infection is followed by an immune response—this association should be attributed to the emotion's functional, rather than dysfunctional, role.

Conclusion

Nostalgia plays an important role in shaping people's experiences of the COVID-19 pandemic. We have highlighted the utility of a regulatory model for understanding the nostalgic response to adversity. An urgent question for future research pertains to the potential therapeutic role of nostalgia. Recent studies have documented the benefits of nostalgia for vulnerable populations, including people living with dementia (Ismail et al., 2018), refugees (Wildschut et al., 2019), and bereaved people (Reid et al., 2021). We propose that there is now sufficient evidence for the efficacy of nostalgia inductions to warrant the development of therapeutic

interventions, and have recently completed the first steps in this direction (Layous et al., 2021).

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For Further Reading

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