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**Examining Nostalgia's Potential to Increase Solidarity-Based Protest against Ageism:
The Case of "Age Demands Action"**

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Abstract

International movement slogans such as “age demands action” have been used to mobilize the general public against ageism. This chapter asks why people might be willing to engage in such solidarity-based protest. Although little is known about this, theoretically specific ingroup-oriented motivations for social protest might apply (e.g., politicized identity), but also more other-oriented motivations (i.e., toward the elderly) might uniquely apply. We review a series of experiments designed to examine whether inducing elderly-related *nostalgia* increases individuals’ solidarity-based protest intentions against ageism. Results showed that experimentally induced nostalgia did neither increase such intentions, nor the ingroup-oriented motivations. Intriguingly, our findings did show an increased perception of the past that one wants to see reinstated in the future (i.e., a goal template). We discuss the implications of these findings and what they imply for future research and the practice of social protest against ageism.

Keywords: nostalgia, solidarity, social protest, elderly, ageism

Examining Nostalgia's Potential to Increase Solidarity-Based Protest against Ageism: The Case of "Age Demands Action"

International movements and campaigns have used slogans such as "age demands action" to mobilize people to combat ageism (Kang & Kim, 2022). This is important because ageism and the negative stereotypes about the elderly (i.e., as warm but incompetent; Cuddy et al., 2005; Fiske et al., 2002) reflect a type of group-based discrimination that maintains or generates inequality in society. This chapter asks why people may be willing to protest out of solidarity with the elderly in society (i.e., solidarity-based protest¹). This is psychologically relevant because many people will become part of this group with the passage of time, and because stereotypes about the elderly as warm yet incompetent may invite a need for allyship and solidarity (Radke et al., 2020).

Theoretically, established motivations for ingroup-oriented protest may apply (i.e., identity, moral, injustice and efficacy motivations; Agostini & Van Zomeren, 2021; see also Cakal et al., this volume; Leal et al., this volume; Pliskin et al., this volume), but we know little about whether other-oriented motivations might be uniquely involved as well. In this chapter, we review experimental evidence for the possibility that solidarity with the elderly may be increased through inducing *nostalgia*, defined as a sentimental longing for the past (Sedikides & Wildschut, 2020), related to the elderly. This causal hypothesis has not been experimentally tested, which is important to do with an eye to the practice of mobilizing people for solidarity-based protest.

A broader scientific unknown is whether motivations for solidarity-based protest are similar to, or different from, established motivations for ingroup-oriented protest (e.g., Gorska et al., 2020; Klavina & Van Zomeren, 2020; Thomas et al., 2022; see also Lasticova et al., this volume). This literature has identified ingroup-oriented predictors such as group identification and moral conviction (Agostini & Van Zomeren, 2021; see also Dono et al., this volume), but also hints at other-oriented predictors such as empathy and sympathy for the

¹ We use the term "social protest" while acknowledging that the dominant term in the literature is "collective action". As Agostini and Van Zomeren (2021) argue, however, the latter term conceptually is strongly associated with a specific identity management strategy. As the literature has not only built on but also moved beyond this view (see also Van Zomeren, this volume), particularly in the context of *solidarity*-based protest, we prefer the use of a more descriptive term.

outgroup (e.g., Radke et al., 2020). As nostalgia is thought to involve a “warm glow” toward others, inducing nostalgia may be uniquely able to motivate people to act in solidarity with others. Feeling nostalgic about the time spent with one’s grandparents, for example, may increase individuals’ solidarity-based protest intentions against ageism.

To explore this possibility, we review a series of experiments (total $N = 1,189$) in the context of the *Age Demands Action* campaign (<https://www.decadeofhealthyageing.org/find-knowledge/innovation/research-projects/age-demands-action>), organized by the international *Help Age* movement seeking to expose ageism and protect human rights in older age. We experimentally manipulated whether elderly-focused nostalgia was induced (versus a control condition) to observe whether solidarity-based protest intentions with the elderly were increased (and if so, whether this could be explained through established motivations for protest). The goal of the chapter is thus to evaluate nostalgia’s potential to causally increase solidarity-based protest intentions in the context of ageism, with an eye to evaluating its usefulness as a mobilization tool, and advancing our theoretical understanding of motivations for solidarity-based protest.

Nostalgia’s Potential to Increase Solidarity-based Protest Intentions against Ageism

Solidarity-based protest is defined as ingroup members’ protest on behalf of an outgroup — typically to help improve that outgroup’s position in society (e.g., Agostini & Van Zomeren, 2021; Klavina & Van Zomeren, 2020; Louis et al., 2019; see Lasticova et al., this volume). Little is known about whether induced nostalgia increases solidarity-based protest intentions, but the available research offers pointers suggesting it might. Nostalgia is both social and motivating (e.g., Sedikides & Wildschut, 2020) to the extent that it can foster social connectedness (with the nostalgizer feeling supported, protected, loved, and trusting; e.g., Sedikides & Wildschut, 2019; Wildschut et al., 2014). Nostalgia can also tighten bonds with members of the ingroup (e.g., Smeekes, 2015; Smeekes & Verkuyten, 2014), but also with members of an outgroup. For example, when a younger person nostalgizes about a grandfather, induced nostalgia has been found to reduce perceived stigmatization of the elderly (e.g., Turner et al., 2018; Turner & Stathi, 2023).

Reducing stigmatization, however, is not the same as motivating social protest. A key

feature of nostalgia is nevertheless that it includes longing sentimentally for the past to *rematerialize* in the future (e.g., Sedikides et al., 2008; Wildschut et al., 2006). Smeeke et al. (2023) found that ingroup-related nostalgia motivated Dutch majority members to protect the continuity of the ingroup. Similarly, a study on the “Umbrella” movement in Hong Kong (Cheung et al., 2017) suggested that ingroup-related nostalgia related positively to willingness to act for the movement (see also Adam-Troian et al., 2021). Perhaps, then, experimentally induced elderly-related nostalgia may also increase solidarity-based protest intentions against ageism.

Some contextualization may be appropriate (see Cakal et al., this volume; Di Cristofaro & Pellegrini, this volume; Hasan-Aslih & Penic, this volume). Indeed, there is a tension between the focus of solidarity-based protest on standing up for *others’* rights, and the predominance of individualistic norms in societies that do not necessarily put a psychological premium on expressing solidarity with others (Van Zomeren, 2016). This may be particularly relevant for solidarity with outgroups in need of allyship, such as the elderly (Cuddy et al., 2005). This makes it even more important to understand whether inducing nostalgia could be effectively used as a mobilization tool in political and cultural contexts where solidarity is not a given, as this would be a valuable insight for social movement and campaign strategies in combating ageism.

Induced Nostalgia’s Relationships with Motivations for Social Protest

A secondary question is whether any causal effect of nostalgia would be unique, or could be explained by established motivations for social protest (i.e., group identification, anger about injustice, group efficacy beliefs and moral convictions; for a meta-analysis, see Agostini & Van Zomeren, 2021; see also Becker, 2012; Simon & Klandermans, 2001; Urbanska et al., 2019). This is not unlikely given that correlational evidence positively links feelings of nostalgia to feelings of *anger* about injustice (Cheung et al., 2017), whereas nostalgia’s fostering of social connectedness with members of the group involved in the nostalgic memory (Sedikides & Wildschut, 2019; Turner & Stathi, 2023) fits conceptually with a sense of *group identification* (e.g., Smeeke et al., 2023).

Less is known about whether induced nostalgia affects *group efficacy beliefs* (i.e.,

beliefs that a group goal can be achieved through joint action; Agostini & Van Zomeren, 2021; Van Zomeren et al., 2012; see also Cohen-Chen, this volume; Hamann et al., this volume) and *moral convictions* (i.e., attitudes grounded in one's core values; Agostini & Van Zomeren, 2021; Pauls et al., 2022; see Dono et al., this volume; Leal et al., this volume). However, given that all four motivations are established predictors of social protest, we measured all these motivations in the studies we will review below.

A tertiary question was to explore the novel idea that induced nostalgia increases the activation of a *goal template* --- the mental picture one has of the past that one wants to see reinstated in the future. Stronger activation of such a goal template may generate a stronger motivation to do something to achieve this goal in the future. Given this possibility, we were interested whether induced nostalgia would increase the activation of a goal template, and what that goal template would look like.

Reviewing a Systematic Set of Four Experiments

We conducted a set of four experiments ($N = 1,189$) in which we induced nostalgia and measured felt nostalgia as a manipulation check. Experiment 1 tested the nostalgia manipulation's effectiveness, whereas Experiments 2-4 tested the hypothesis that induced nostalgia about the elderly increases solidarity-based protest intentions in the context of Age Demands Action. Experiments 2-4 measured established motivations (i.e., group identification, group-based anger, group efficacy beliefs), solidarity-based protest intentions, moral conviction (as an established motivation assumed to be more stable and resistant to experimental manipulation; Skitka et al., 2021), and, while instructing participants to think back to the memory task, the goal template. This order reflected the priorities we set in the studies, which enabled us to evaluate the manipulation's causal effect on solidarity-based protest intentions (and if such an effect was found, whether this could be explained by the ingroup-oriented motivations most likely to be affected by a manipulation).

We used online samples from different sources and countries: Experiments 1-3 involved Amazon's MTurk samples (targeting US participants), whereas Experiment 4 involved a Prolific sample (targeting UK participants). Given our focus on solidarity-based protest on behalf of the elderly, we sampled from the general population of mostly younger

adults and we manipulated their nostalgia at a personal level (i.e., by asking them to recall nostalgic autobiographical memories involving the elderly). In the research process, we moved from a more explorative approach in the first studies (i.e., testing the manipulation, developing new measures, exploring whether induced nostalgia increases solidarity-based protest intentions) to a more confirmatory approach in the final study. We obtained ethical approval from the University of Groningen for Experiments 1-3 and from the University of Sheffield for Experiment 4. Given our explorative approach, we did not preregister the experiments or data analysis plans, and included exploratory measures that we will not focus on in this chapter. Supplementary materials can be found on our Open Science Framework project page: https://osf.io/kz5dt/?view_only=7ddc3e1c8f7f48468b1fd7400d62d734.

Experiment 1. Experiment 1 examined whether induced nostalgia for the elderly evoked stronger nostalgia, and a stronger goal template. This enabled us to test the efficacy of the nostalgia manipulation outside of the Age Demands Action campaign we would use as the solidarity-based protest context for Experiments 2-4, and to pretest the goal template measure. We targeted a sample size of 250, and received 253 responses from U.S. MTurk workers, of whom 40 failed an attention check or indicated (in response to a post-study question) that we should not include their data in the analyses as they had not taken the study seriously. The final sample ($N = 213$) included 122 men, 89 women, and two non-binary individuals. Participant age ranged from 20 to 73 years ($M = 38$, $SD = 11$). Participants were randomly assigned to the nostalgia ($n = 111$) or control ($n = 102$) condition.

The manipulation was similar to the one used by Turner et al. (2018). In the experimental condition, participants were instructed to bring to mind a nostalgic event in their lives that involved interacting with an older adult (i.e., 65 years or older). In the control condition, they brought to mind a neutral (i.e., “neither positive nor negative”) event in their lives that involved interacting with an older adult. We assessed the effectiveness of the manipulation with two highly correlated items ($r = .95$; Turner et al., 2018): “Right now, I am feeling quite nostalgic” and “I feel nostalgic at the moment” (1 = *strongly disagree* to 7 = *strongly agree*). We self-generated two items ($r = .85$) intended to capture the extent to which the recalled past event produced a goal template: “This past event painted a clear picture of

the past that I would like to get back or create again in the future” and “This past event painted a concrete picture of the past that I am longing for to get back or create in the future.”

We used Welch’s t -test in all experiments (Delacre et al., 2017). As can be seen in Table 4.1, participants in the nostalgia condition reported feeling more nostalgic, $t(146.2) = 10.50, p < .001, d = 1.44, 95\% \text{ CI } [1.14, 1.74]$, and reported a clearer goal template than controls, $t(190.07) = 7.14, p < .001, d = 0.97, 95\% \text{ CI } [0.69, 1.26]$. Experiment 1 thus demonstrated the effectiveness of the nostalgia manipulation, although still outside of the social movement campaign we used as context for Experiments 2-4.

INSERT TABLE 4.1 HERE

Experiments 2-4. Experiments 2-4 systematically tested whether induced nostalgia increased solidarity-based protest intentions in the context of “Age Demands Action”. This means that before the nostalgia manipulation was administered, participants received information about ageism and about the aim of the *Age Demands Action* movement and campaign. After the manipulation, we measured the motivations for protest, solidarity-based protest intentions, and, while instructing participants to think back to the memory task, goal template. As can be seen in Table 4.2 and 4.4, across the studies all ingroup-oriented motivations positively and significantly correlated with solidarity-based social protest intentions, validating the ageism context of the study as one applicable to the psychology of social protest.

INSERT TABLE 4.2 HERE

Experiment 2 Method. We sought to recruit 250 participants. We received 255 responses from U.S. MTurk workers, of whom we excluded 37 for failing attention check or requesting exclusion, resulting in 218 participants. Upon reflection, we decided to increase the sample size to strengthen statistical power. An a priori power analysis indicated that, to detect an effect size of $d = .30$ in a two-tailed independent samples t -test, assuming $\beta = .80$

and $\alpha = .05$, we would require at least 352 participants. Consequently, we opted to recruit a second sub-sample of at least 175 participants. We received another 187 responses from MTurk workers, of whom we excluded 40 based on the same criteria as before. The final sample included 365 MTurk workers (188 men, 176 women, and one non-binary individual). Their ages ranged from 19 to 75 years ($M = 36$, $SD = 11$). We randomly assigned participants to the nostalgia ($n = 182$) or control ($n = 183$) condition. Given the two sub-samples, we applied the Pocock boundary alpha-correction at .029 level to reduce the possibility of Type I error in the main analyses (Lakens, 2014; Pocock, 1977).

First, participants were introduced to the context and issue of ageism. In particular, we asked them to familiarize themselves with leaflets from the organization *Help Age*, which campaigns to address ageism in society². We also presented them with flyers from the *Age Demands Action* campaign, for instance saying “Age discrimination and ageism are still commonplace across the world and urgent actions is needed to stop it”. Next, we randomly assigned them to either the nostalgia or control condition. The manipulation and manipulation check items that followed were the same as in Experiment 1.

Then, we measured motivations and solidarity-based protest intentions, adapted from previous research (e.g., Van Zomeren et al., 2011). For group identification, we differentiated between two target groups. For each, we used two items to measure the extent to which participants identified with the relevant non-politicized (older adults; e.g., “I identify with older adults”; $r = .79$) and politicized (campaign supporters; e.g., “I identify with supporters of the *Age Demands Action* campaign”; $r = .84$) identities. For group-based anger ($\alpha = .95$), we used five anger terms (angry, irritated, furious, displeased, and outraged) to measure

² The information read: “Research shows that older adults are becoming increasingly subject to discrimination throughout society on the basis of their age, for example in the workplace. Nevertheless, most people know little about ageism. We therefore ask you to read information about this and answer questions on this issue. Older adults used to be much more valued in society, for example as sources of wisdom. Yet in today's society, many believe that older adults are less physically and mentally competent in the workplace, and beyond compared to their younger counterparts. Research shows that employers, for instance, do not want to hire and retain older workers, even when it concerns older adults who are fully capable and competent. Research also shows that older adults often internalize these stereotypes and begin to hold negative attitudes toward themselves, which has a negative impact on their well-being. Please take some time to read through the next pages, which contain information about the *Age Demands Action* campaign from the Help Age International organization. This is an organization aimed at fighting ageism in society. Importantly, supporters of this organization come from all walks of life, as they feel that age discrimination is unfair and thus a moral issue.”

anger in relation to discrimination faced by older adults (1 = *don't feel strongly at all* to 7 = *feel very strongly*). For group efficacy beliefs ($\alpha = .96$), participants responded to four items measuring efficacy beliefs (e.g., “I believe that supporters of the *Age Demands Action* campaign, together, can reduce discrimination of older adults” and “I believe that supporters of the *Age Demands Action* campaign, through joint actions, can reduce discrimination of older adults”).

Participants indicated their intentions to engage in solidarity-based protest (5 items, $\alpha = .91$) related to the campaign (e.g., “I would participate in a demonstration against discrimination of older adults”, “I would sign a petition to reduce discrimination of older adults”). For moral conviction ($\alpha = .91$), participants responded to three items (“My opinion about discrimination of older adults is a reflection of my core moral beliefs and convictions / based on a moral stance / connected to my beliefs about fundamental right and wrong”). The goal template items were the same as in Experiment 1.

Experiment 3 Method. Experiment 3 was similar to Experiment 2 except for that we changed the control condition to reflect a contrast condition. We thus instructed participants in the new control condition to recall a *negative* interaction with an older adult. All measures were reliable: nostalgia manipulation check ($r = .92$), identification with older adults ($r = .88$), identification with campaign supporters ($r = .82$), group-based anger ($\alpha = .95$), group efficacy beliefs ($\alpha = .94$), moral conviction ($\alpha = .89$), solidarity-based protest intentions ($\alpha = .93$), and goal template ($r = .86$).

We targeted a sample size of 250. We recruited 260 U.S. MTurk participants, from whom we excluded 47 based on the same criteria as in prior experiments. The final sample consisted of 213 participants (114 women, 98 men, one non-binary person). Their age ranged from 19 to 72 years ($M = 38$, $SD = 12$). We randomly assigned participants to the nostalgia ($n = 114$) or control ($n = 99$) condition.

Experiment 4 Method. For this final experiment, we recruited as many participants as our remaining research budget for this project would allow, obtaining 433 responses from U.K. Prolific users. We excluded 35 based on the same criteria as before. The final sample included 398 participants (245 men, 151 women, two non-binary) aged between 18 and 60

years ($M = 26$ years, $SD = 8$). We randomly assigned participants to the nostalgia ($n = 206$) or control ($n = 192$) condition. The nostalgia manipulation was identical to the one implemented in Experiments 1-2, and most measures were identical to those administered in Experiments 2-3. All scales were reliable: nostalgia manipulation check ($r = .87$), solidarity-based protest intentions ($\alpha = .89$), identification with older adults ($r = .63$), identification with campaign supporters ($r = .77$), group-based anger ($\alpha = .92$), group efficacy beliefs ($\alpha = .93$), and moral conviction ($\alpha = .87$).

To better understand the content and meaning of a goal template, we included the two items from Experiments 1-3 ($r = .73$) while adding 10 new items (see Table 4.3). We self-generated 12 items tapping into four types of goal template we operationalized into different sets of items (see Table 4.3 for the items' factor loadings and subscales we created based on exploratory factor analysis with Oblimin rotation). To ensure that the factors were meaningfully distinct and interpretable, we used a conservative cut-off of .70 to determine whether specific items loaded sufficiently on relevant factors, and did not include items that did not load on their designated factor. Results showed three factors: Items 1, 2, and 4 (thus including the two items used in Experiments 1-3) loaded on the first factor (*emotional goal template*). Items 5, 7, and 8 loaded on the second factor, which we labelled a *past norm goal template*, as it describes a shift in attitudes (e.g., "This past event made me think of a time when older adults were more respected"). Items 11 and 12 loaded on the third factor, which we labelled *action goal template* (e.g., "This past event makes me want to support the Age Demands Action campaign," "This past event makes me feel it is worthwhile to participate in the Age Demands Action campaign")³.

INSERT TABLE 4.3 HERE

Results Experiment 2. As can be seen in Table 4.1 and 4.2, replicating Experiment 1, participants in the experimental condition reported feeling more nostalgic, $t(296.55) = 12.11$,

³ We also explored grouping the items into two factors, basically differentiating the action-focused items from all the others. Such a different scaling, however, resulted in the same interpretation of the results.

$p < .001$, $d = 1.27$, 95% CI [1.04, 1.49], and reported a stronger goal template, than controls, $t(332.9) = 8.64$, $p < .001$, $d = 0.90$, 95% CI [0.69, 1.12].

By contrast, the effect of induced nostalgia on solidarity-based protest intentions was not significant, $t(361.86) = 1.28$, $p = .202$, $d = 0.13$, 95% CI [-0.07, 0.33]. Although there was hence no effect to explain by other motivations, we explored whether the nostalgia manipulation increased any of the established motivations we measured. This was not the case. The effects of nostalgia on identification with older adults, $t(362.47) = 0.71$, $p = .480$, $d = 0.07$, 95% CI [-0.13, 0.28], identification with campaign supporters, $t(363) = 1.50$, $p = .135$, $d = 0.16$, 95% CI [-0.05, 0.36], group-based anger $t(362.7) = 1.83$, $p = .069$, $d = 0.19$, 95% CI [-0.01, 0.40], group efficacy beliefs $t(360.95) = 1.59$, $p = .112$, $d = 0.17$, 95% CI [-0.03, 0.37], and moral conviction, $t(362) = 0.83$, $p = .408$, $d = 0.09$, 95% CI [-0.12, 0.29], were also not significant.

Results Experiment 3. As can be seen in Table 4.1 and 4.2, participants in the nostalgia condition reported feeling more nostalgic, $t(159.53) = 9.39$, $p < .001$, $d = 1.29$, 95% CI [0.99, 1.59], and reported a stronger goal template than controls, $t(158.64) = 12.26$, $p < .001$, $d = 1.68$, 95% CI [1.37, 2.00].

Replicating Experiment 2, the effect of nostalgia on solidarity-based protest intentions was once more not significant, $t(207.84) = 0.57$, $p = .566$, $d = .08$, 95% CI [-0.19, 0.35]. Participants in the nostalgia condition reported higher identification with older adults than controls, $t(206.56) = 2.25$, $p = .025$, $d = 0.31$, 95% CI [0.04, 0.58], but did not report significantly higher identification with campaign supporters than controls, $t(209.83) = 1.85$, $p = .066$, $d = 0.25$, 95% CI [-0.02, 0.52]. The effects of nostalgia on group-based anger, $t(207.96) = 0.67$, $p = .504$, $d = 0.09$, 95% CI [-0.18, 0.36], group efficacy beliefs, $t(210.12) = -0.67$, $p = .503$, $d = -0.09$, 95% CI [-0.36, 0.18], and moral conviction, $t(202.31) = 1.84$, $p = .067$, $d = 0.25$, 95% CI [-0.02, 0.52], were all non-significant, offering basically the same pattern of results as obtained in Experiment 2, except for an incidental effect on group identification.

Results Experiment 4. Given the null findings in Experiments 2 and 3, we wanted Experiment 4 to reflect a definitive test and hence collected the largest sample we could

afford. As can be seen in Table 4.1 and Table 4.4, participants in the nostalgia condition felt more nostalgic, $t(344.17) = 3.88, p < .001, d = 0.39, 95\% \text{ CI } [0.19, 0.59]$, and reported a stronger goal template (i.e., on the same 2-item measure as in previous studies) than controls, $t(381.83) = 2.03, p = .043, d = 0.20, 95\% \text{ CI } [0.01, 0.40]$.

INSERT TABLE 4.4 HERE

Yet once more, the effect of nostalgia on solidarity-based protest intentions was not significant, $t(393.34) = -0.91, p = .363, d = -0.09, 95\% \text{ CI } [-0.29, 0.11]$. The effects of nostalgia on identification with older adults, $t(390.21) = -0.03, p = .978, d = -0.01, 95\% \text{ CI } [-0.20, 0.19]$, identification with campaign supporters, $t(382.22) = 0.16, p = .877, d = 0.02, 95\% \text{ CI } [-0.18, 0.21]$, group-based anger, $t(391.96) = -0.35, p = .728, d = -0.03, 95\% \text{ CI } [-0.23, 0.16]$, and moral conviction, $t(389.43) = 0.70, p = .485, d = 0.07, 95\% \text{ CI } [-0.13, 0.27]$, were not significant either. In this study, an incidental effect of the nostalgia manipulation on group efficacy beliefs was significant, $t(386.21) = -1.97, p = .049, d = -0.20, 95\% \text{ CI } [-0.22, 0.18]$, yet in the opposite direction than what one may expect: Nostalgic participants reported somewhat lower group efficacy beliefs than controls.

As we included the new goal template items to better understand what kind of goal template was affected by the nostalgia manipulation, we explored its effects on the three subscales. In line with Experiments 1-3, participants in the nostalgia condition reported a stronger *emotional goal template* than controls, $t(378) = 2.39, p = .017, d = 0.24, 95\% \text{ CI } [0.04, 0.44]$, but they did neither report a clearer past norm goal template, $t(389) = 1.41, p = .159, d = 0.14, 95\% \text{ CI } [-0.06, 0.34]$, nor a clearer action goal template, $t(396) = -0.57, p = .570, d = -0.06, 95\% \text{ CI } [-0.25, 0.14]$. Thus, the nostalgia manipulation consistently induced nostalgia and an emotional goal template, but equally consistently failed to induce social protest intentions and its established motivations.

Insights, Implications, and Conclusion

In this chapter, we have reviewed a systematic set of experiments aiming to increase solidarity-based protest intentions in the context of ageism (e.g., Kang & Kim, 2022) through

manipulating elderly-related nostalgia (Turner et al., 2018). The results showed a consistent pattern relevant to the social and political psychology of social protest: The nostalgia manipulation did not increase solidarity-based protest intentions against ageism. It also did not consistently increase any of the established motivations for social protest (i.e., morality, identity, anger and efficacy motivations; Agostini & Van Zomeren, 2021; see Cakal et al., this volume; Hamann et al., this volume; Leal et al, this volume; Pliskin et al., this volume), while at the same time, across the studies, all those motivations consistently positive and strongly correlated with solidarity-based protest intentions (fitting meta-analytic findings from Agostini & Van Zomeren, 2021).

INSERT TABLE 4.5 HERE

Null effects are notoriously difficult to interpret. To draw a careful conclusion about this, we conducted a mini meta-analysis (Goh et al., 2016; Viechtbauer, 2010) and an integrative data analysis (Curran & Hussong, 2009), which enabled us to move beyond within-study analyses while also taking advantage of increased statistical power. If we would still find a null effect of induced nostalgia on solidarity-based protest intentions using those analyses, so was our reasoning, then we could more confidently interpret it as an actual null effect --- or at least as a causal effect too small to be meaningful for the practice of social protest. As can be seen in Tables 4.5 and 4.6, these analyses confirmed that, across all studies or across all the data combined, induced nostalgia did not increase solidarity-based protest intentions. Furthermore, one of these analyses actually offered a new finding. The integrated data analysis indicated that the nostalgia manipulation increased politicized group identification, although with a very small effect size of $d = .12$.

INSERT TABLE 4.6 HERE

Given that we intentionally selected the experimental method to test whether such motivations and intentions would causally increase after a nostalgia induction (versus a

control condition), the consistent absence of such an effect is practically relevant. Indeed, for the practice of mobilizing people for solidarity-based protest, the results indicate that induced elderly-related nostalgia does not causally increase solidarity-based intentions against ageism, and in this respect may not be of much practical use for social movement campaigns against ageism. By contrast, all established motivations for social protest correlated positively and significantly across the studies (see Tables 4.2 and 4.4), suggesting that those motivations may be more relevant to focus on with an eye to the practice of solidarity-based social protest in the context of ageism. This also suggests more broadly that the same motivations that we know are key to in-group-oriented social protest are likely to apply to solidarity-based protest as well (Agostini & Van Zomeren, 2021).

The consistent null effect is theoretically intriguing as well. It implies that induced nostalgia may not always realize its social and motivational potential (e.g., Sedikides & Wildschut, 2020). Nevertheless, the findings did show that the nostalgia manipulation induced a general emotional goal template which, in turn, was positively correlated with solidarity-based protest intentions across studies (see Tables 4.2 and 4.4) --- a novel and important finding. However, because this template was always measured at the end of the study and preceded by instructions to think back to the memory task, future research is needed to further and more centrally examine its role in the psychology of social protest. For example, as the integrated data analysis indicated that the nostalgia manipulation increased (with a very small effect size) participants' politicized identification, future research could perhaps combine these findings to explore the idea that a nostalgia induction might be more effective when focused more on action-oriented goal templates that fit such politicized identities.

Indeed, Agostini and Van Zomeren (2021) have referred to the (politicized) identity and morality motivations as metaphorically reflecting the protester's "beating heart" (i.e., who "we" are and what "we" stand for; see Van Zomeren et al., 2018; see also Dono et al., this volume; Leal et al., this volume). Perhaps social movement campaigns such as "Age Demands Action" can embody this "beating heart" while making use of nostalgia inductions through forging such a normative, action-oriented fit between the nostalgized content and the

broader group context. This might lead perhaps to results more supportive of a direct causal effect of nostalgia on solidarity-based protest intentions. This also fits with the broader idea that using the past as a reference for whether and how to act toward reinstating the past in the future (e.g., “Make America Great Again”) could be an effective strategy (Lienen & Cohrs, 2021; Wohl et al., 2020). Future research is needed to better understand these interesting speculations.

A limitation of the studies reviewed is that they employed the same individualistic context and topic of ageism. Although a methodological strength in one way, it also makes the findings difficult to generalize beyond this topic and context. And although we assume that individualistic cultural norms are predominant that may not encourage solidarity with the elderly, it would be important in future research to empirically validate this assumption, and to explore whether induced nostalgia has more potential to causally increase solidarity-based protest intentions in less individualistic contexts --- and if so, why this may be the case. For example, other-oriented motivations such as empathy or sympathy may be important to include in such research (Radke et al., 2020).

In conclusion, the findings we reviewed in this chapter contribute to emerging insights on motivations for solidarity-based protest (e.g., Radke et al., 2020; Thomas et al., 2022), and suggest more practically that induced nostalgia is unlikely to directly motivate people for such protest. Nevertheless, our findings might also suggest that perhaps nostalgia’s “warm glow” toward the elderly may help to forge a psychological connection between the individual and those standing up for this discriminated outgroup. Indeed, perhaps this might be what the induction of nostalgia can help to achieve in the context of ageism --- to create a new psychological connection between the individual and the elderly. We believe that this may be particularly needed in political and cultural contexts where solidarity is not a given, and hence the topic of solidarity-based protest against ageism is important to study further. Indeed, although induced nostalgia is unlikely to be an effective mobilization tool, it may foster a first step toward allyship.

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Table 4.1*Means and Standard Deviations for Measures Across Conditions in Experiments 1-4*

	Experiment 1		Experiment 2		Experiment 3		Experiment 4	
	Nostalgia	Control	Nostalgia	Control	Nostalgia	Control	Nostalgia	Control
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Felt Nostalgia (manipulation check)	6.03 (1.04)	3.64 (2.07)	5.65 (1.27)	3.45 (2.10)	5.74 (1.19)	3.66 (1.91)	5.48 (1.17)	4.93 (1.63)
Goal template (2 items)	5.50 (1.43)	3.87 (1.85)	5.30 (1.40)	3.79 (1.90)	5.56 (1.22)	2.76 (1.97)	4.97 (1.37)	4.67 (1.55)
<i>Emotional template</i>	-	-	-	-	-	-	5.15 (1.23)	4.93 (1.43)
<i>Past norm template</i>	-	-	-	-	-	-	4.46 (1.41)	4.25 (1.50)
<i>Action template</i>	-	-	-	-	-	-	4.74 (1.36)	4.82 (1.27)
Solidarity-based protest intentions	-	-	4.62 (1.60)	4.40 (1.68)	4.61 (1.69)	4.48 (1.66)	4.60 (1.18)	4.71 (1.19)
Identification (older adults)	-	-	5.36 (1.19)	5.27 (1.23)	5.39 (1.41)	4.95 (1.41)	4.73 (1.23)	4.73 (1.30)
Identification (campaigners)	-	-	5.24 (1.40)	5.02 (1.39)	5.24 (1.51)	4.87 (1.41)	5.15 (1.06)	5.13 (1.20)

Group-based anger	-	-	4.71 (1.77)	4.37 (1.81)	4.95 (1.71)	4.79 (1.68)	5.04 (1.34)	5.08 (1.38)
Group efficacy beliefs	-	-	5.37 (1.29)	5.14 (1.38)	5.20 (1.28)	5.31 (1.18)	5.40 (1.07)	5.60 (0.85)
Moral conviction	-	-	5.60 (1.26)	5.48 (1.32)	5.76 (1.14)	5.46 (1.21)	5.55 (1.03)	5.47 (1.09)
<i>N</i>	111	102	183	182	114	99	206	192

Note. Dashes indicate that the measure was not included in the experiment. Values in bold indicate a statistically significant difference between the nostalgia and control condition. For comparison purposes between the experiments, the goal template measure refers to the 2-item measure also used in Experiments 1-3; below, we have included the statistics for the more specific measures used in Experiment 4.

Table 4.2*Correlations in Experiment 2 (Above Diagonal) and Experiment 3 (Below Diagonal)*

Variable	1	2	3	4	5	6	7	8
1. Felt Nostalgia (manipulation check)		.65***	.24***	.31***	.18***	.30***	.19***	.33***
2. Goal template	.70***		.26***	.29***	.16**	.31***	.26***	.36***
3. Identification (older adults)	.37***	.33***		.64***	.44***	.33***	.54***	.52***
4. Identification (campaigners)	.28***	.23***	.62***		.48***	.60***	.63***	.75***
5. Group-based anger	.19**	.10	.36***	.49***		.38***	.53***	.39***
6. Group efficacy beliefs	.17*	.03	.36***	.68***	.45***		.54***	.62***
7. Moral conviction	.28***	.19**	.50***	.65***	.56***	.52***		.59***
8. Solidarity-based protest intentions	.28***	.21***	.45***	.79***	.53***	.72***	.60***	

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4.3*Factor Loadings and Factor Variances for Goal Template Items in Experiment 4*

Item	Label	Factor 1	Factor 2	Factor 3
1. This past event painted a clear picture of the past that I would like to get back or create again in the future.	General: Emotional goal template	.83		
2. This past event painted a concrete picture of the past that I am longing for to get back or create again in the future.	General: Emotional goal template	.79		
3. This past event made me feel warm and fuzzy about older adults in the way I would like to think about them in the future.	General: Emotional goal template	.67		
4. This past event made me feel positive emotions that I wish I could feel about older adults in the future.	General: Emotional goal template	.81		
5. This past event painted a desirable picture of a time when there was less discrimination against older adults.	General: Past norm goal template		.85	
6. This past event made me think about how discrimination of older adults is more prevalent nowadays.	General: Past norm goal template		.43	.58
7. This past event made me think of a time when older adults were more respected.	General: Past norm goal template		.88	
8. This past event painted a desirable picture of a time when older adults were more respected.	General: Past norm goal template		.85	
9. I feel confident that I can take these experiences from the past and recreate them again in the future.	Specific: Procedural goal template	.76		
10. Thinking about this past event made me think about which steps I could take in order to get closer to this event again.	Specific: Procedural goal template	.58		
11. This past event makes me want to support the Age Demands Action campaign.	Specific: Action goal template			.85
12. This past event makes me feel it is worthwhile to participate in the Age Demands Action campaign.	Specific: Action goal template			.90
Variance explained (%)		28.6	20.4	19.6

Note. Factor loadings below .3 are not displayed. Items 1-2 were the original goal template items in Experiments 1-3.

Table 4.4*Correlations in Experiment 4*

	2	3	4	5	6	7	8	9	10
1. Self-report nostalgia (manipulation check)	0.45 ***	0.27 ***	0.33 ***	0.32 ***	0.39 ***	0.38 ***	0.26 ***	0.25 ***	0.25 ***
2. Emotional goal template	—	0.55 ***	0.43 ***	0.36 ***	0.31 ***	0.33 ***	0.20 ***	0.28 ***	0.25 ***
3. Past norm goal template		—	0.50 ***	0.38 ***	0.32 ***	0.28 ***	0.18 ***	0.32 ***	0.11 *
4. Action goal template			—	0.63 ***	0.35 ***	0.52 ***	0.35 ***	0.53 ***	0.37 ***
5. Solidarity-based protest intentions				—	0.45 ***	0.66 ***	0.48 ***	0.61 ***	0.50 ***
6. Group identification (older adults)					—	0.51 ***	0.30 ***	0.32 ***	0.40 ***
7. Group identification (campaigners)						—	0.42 ***	0.53 ***	0.47 ***
8. Group-based anger							—	0.42 ***	0.45 ***
9. Group efficacy beliefs								—	0.36 ***
10. Moral conviction									—

Note. * $p < .05$. ** $p < .01$, *** $p < .001$.

Table 4.5*Summary of Mini Meta-Analyses Models*

	Standardized mean difference model				
	<i>k</i>	<i>G</i>	<i>z</i>	<i>p</i>	95% CI
Solidarity-based protest intentions	3	0.03	0.45	.650	-0.10, 0.15
Group identification (older adults)	3	0.09	1.48	.139	-0.03, 0.22
Group identification (campaigners)	3	0.12	1.88	.060	-0.01, 0.25
Group-based anger	3	0.08	1.24	.216	-0.05, 0.21
Group efficacy beliefs	3	-0.05	-0.70	.486	-0.18, 0.08
Moral conviction	3	-0.04	-0.60	.545	-0.16, 0.09
Goal template	4	0.91	14.61	<.001	0.79, 1.04

Note. Significant effects are in bold.

Table 4.6*Integrative Data Analysis*

	Nostalgia <i>M (SD)</i>	Control <i>M</i> (<i>SD</i>)	<i>t</i>	<i>p</i>	<i>d</i>	95% CI
Solidarity-based protest intentions	4.61 (1.46)	4.54 (1.50)	0.72	.475	0.04	-0.07, 0.16
Group identification (older adults)	5.11 (1.30)	4.99 (1.32)	1.46	.144	0.08	-0.03, 0.20
Group identification (campaigners)	5.20 (1.30)	5.03 (1.32)	2.01	.044	0.12	<0.01, 0.23
Group-based anger	4.90 (1.60)	4.75 (1.65)	1.45	.149	0.08	-0.03, 0.20
Group efficacy beliefs	5.34 (1.20)	5.36 (1.17)	-0.24	.812	-0.02	-0.13, 0.10
Moral conviction	5.61 (1.14)	5.47 (1.21)	1.83	.066	0.11	-0.01, 0.22
Goal template	5.33 (1.32)	3.98 (1.89)	14.25	<.001	0.83	0.71, 0.95

Note. Significant effects are in bold.