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Collective Nostalgia and Ethnocentric Product Preferences:

On the Antecedents of the Domestic Country Bias

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### **Abstract**

Three experiments tested and supported the hypothesis that collective nostalgia—nostalgia that is experienced when one thinks of oneself in terms of a particular social identity or as a member of a particular group and that concerns events or objects related to this group—increases individuals' ethnocentric preference for ingroup (compared to outgroup) products. Greek participants who recalled collective nostalgic experiences shared with other Greeks (compared to controls) evinced a highly robust preference for Greek (compared to foreign) consumer products. This preference is referred to as domestic country bias. Following a systematic replicate-and-extend strategy, we demonstrated that both idiographic and nomothetic inductions of collective nostalgia increased domestic country bias (Experiment 1), that collective nostalgia increased domestic country bias across different product categories (Experiment 2), and that collective self-esteem mediated the effect of collective nostalgia on domestic country bias and did so independently of positive affect (Experiment 3). We discuss theoretical and practical implications.

### Public Significance Statement

Collective nostalgia—nostalgia that is experienced when one thinks of oneself as a member of a particular social group and that concerns events or objects related to this group—increases people’s preferences for domestic products. The effect is robust across product categories and is driven by collective self-esteem.

Nostalgia is ubiquitous in everyday life (Boym 2002; Sedikides et al. 2015), including in organizations, advertising, and consumer behavior (Merchant, Latour, Ford, and Latour 2013; Muehling and Pascal 2011; Stern 1992). For example, blue-chip companies, like Coca-Cola, General Mills, McDonald's, Miller Coors, Target, and Unilever, routinely use nostalgic marketing tactics to capitalize on the fact that product styles that were popular during an individual's youth affect their lifetime preferences (Elliott 2009; Schindler and Holbrook 2003). Personal nostalgia (i.e., sentimental longing for one's past) has been shown to influence people's decision-making (Lasaleta, Sedikides, and Vohs 2014; Zhou et al. 2012). Another type of nostalgia, though, is *collective* nostalgia, which refers to sentimental longing for events that occurred as part of a *group* with which one identifies. Does collective nostalgia affect individuals' preferences, and, if so, how?

We addressed these questions in the present article by illustrating that collective nostalgia fosters positive collective self-esteem, leading to consumer ethnocentrism, the proclivity to prefer domestic over foreign products that is known as domestic country bias (DCB; Balabanis and Diamantopoulos 2004; Cleveland, Laroche, and Papadopoulos 2009). We make two novel contributions to the literature. First, we establish that collective nostalgia exerts a strong influence on people's decisions across product categories. Second, we identify a key mechanism through which collective nostalgia influences consumer decisions. In particular, following a systematic replicate-and-extend strategy, we demonstrate that both idiographic and nomothetic inductions of collective nostalgia increase DCB (Experiment 1), that collective nostalgia increases DCB across different product categories (Experiment 2), and that collective self-esteem mediates the effect of collective nostalgia on DCB and does so above and beyond of positive affect (Experiment 3).

## Theoretical Background

### Collective Nostalgia

Nostalgic narratives are deeply rooted in social context. Although the self is the protagonist in these narratives, the self is strongly embedded in a social environment, such as family, friends, or other close group members (Hepper et al. 2012; Holak and Havlena 1992; Wildschut et al. 2006). The prominence of social context in nostalgic narratives has led scholars to speculate that nostalgia is part of the fabric that constitutes a shared social identity (see Sedikides et al. 2009 for a review). Nostalgic recollections are fond and personally meaningful, often drawing upon one's childhood or close relationships, and frequently viewed through rose-tinted glasses (Abeyta et al. 2015; Holak and Havlena 1992; Wildschut et al. 2006). Examples of nostalgic recollections are momentous events such as birthday celebrations, graduations, anniversaries, summer vacations, Thanksgiving holidays, or Christmas dinners. Laypersons view nostalgia to be a generally past-oriented, positive, and social emotion (Hepper et al. 2012). These lay conceptualizations of nostalgia are culturally shared (i.e., across 18 countries from five continents; Hepper et al. 2014) and mostly align with standard dictionary definitions of nostalgia “a sentimental longing or wistful affection for the past” (The New Oxford Dictionary of English, 1998, p. 1266).

Nostalgia confers vital psychological benefits, including self-esteem (Wildschut et al. 2006), social connectedness (Zhou et al. 2008), meaning in life (Juhl et al. 2010), and optimism (Cheung et al. 2013; for a review, see Sedikides and Wildschut 2016a). However, the extant literature is focused almost exclusively on personal nostalgia. Only recently has collective nostalgia—nostalgia that is experienced in the context of a particular social identity or as a member of a certain group and pertains to events or objects related to this group—become the target of empirical scrutiny. Wildschut et al. (2014) demonstrated that collective nostalgia has unique benefits for the ingroup, above and beyond those bestowed by personal

nostalgia. Individuals who reflected on nostalgic (as opposed to ordinary autobiographical) experiences that they shared with other students at their university showed more positive ingroup evaluations and stronger behavioral intentions to support the ingroup. Despite these promising first steps, research on collective nostalgia is still in its nascent. An important objective of the current article is to provide the first empirical evidence on how collective nostalgia influences consumer decisions, and we propose that it does so by strengthening consumers' preferences for domestic (ingroup) relative to foreign (outgroup) products (DCB).

### **Domestic Country Bias**

A critical cue for individuals when deciding whether or not to purchase a product is its country of origin, allowing for inferences about product characteristics and attributes such as quality, status, and authenticity (Batra et al. 2000; Bilkey and Nes 1982; Li and Monroe 1992; Steenkamp 1990). Besides its role as an informational cue, country of origin has symbolic and emotional relevance to consumers (Hong and Wyer 1989, 1990; Li and Wyer 1994), yielding a rich imagery with sensory, affective, and ritual connotations (Askegaard and Ger 1998; Maheswaran and Chen 2006; Papadopoulos and Heslop 1993) that are linked with stereotypical country-related associations (Chen, Mathur, and Maheswaran 2014; Swaminathan, Page, and Gürhan-Canli 2007). Country of origin also relates a product to national identity (Fournier 1998) and fosters national pride (Botschen and Hemetsberger 1998; Gao and Li, 2013). Indeed, consumers show DCB (Balabanis and Diamantopoulos, 2004; Cleveland et al. 2009) in regards to numerous countries and product categories (Bilkey and Nes 1982; Netemeyer, Durvasula, and Lichtenstein 1991; Reiersen 1967; Samiee 1994), although the magnitude of DCB varies considerably across countries and products (Balabanis

and Diamantopoulos 2004) and is less pronounced in individualist cultures (Gürhan-Canli and Maheswaran 2000).

The DCB is not limited to the realm of consumer products (Verlegh and Steenkamp 1999). Evidence from financial economics suggests that, despite the benefits of international diversification, most investors hold large portions of their wealth in domestic assets (Chan, Covrig, and Ng 2005; French and Poterba 1991). This preference for domestic stocks extends to geographically proximate investments (Becker, Ivković, and Weisbenner 2011). Coval and Moskowitz (1999) demonstrated that U.S. investment managers strongly prefer locally headquartered firms—specifically small and highly levered ones that produce non-traded goods. A similar preference for regional investments has been shown for private investors (Huberman 2001), although this preference is partly explained by superior local information (Ivković and Weisbenner 2005) and increased familiarity with local investment opportunities (Feng and Seasholes 2004).

Domestic product evaluations reflect ingroup preferences. For example, Rangan et al. (2015) illustrated that death-related media contexts lead consumers to evaluate domestic advertisements more favorably than foreign ones. Anxiety instigated by death prompts individuals to support their worldview by strengthening ingroup evaluations, as inferred from a brand's domestic origin. In this article, we test the generalizability of the link between favorable ingroup evaluations and DCB by shifting from the negative or threatening domain of death-related media contexts to the neutral or positive domain of collective nostalgia. Moreover, rather than focusing on the evaluation of advertisements, we move one step further and study whether the psychological drive to enhance one's ingroup translates into actual product choice and consumption.

We also contribute to the fledging literature on the antecedents of DCB (Ahmed & d'Astous, 2008; Shankarmahesh, 2006; Sharma, Shimp, & Shin, 1995) by providing causal

evidence for how collective nostalgia strengthens domestic rather than foreign product preferences. Most of the existing work in this domain is based on measuring rather than experimentally inducing and manipulating potential antecedents. For example, Sharma et al. (1995) proposed that consumer openness to foreign cultures, patriotism, collectivism-individualism, and conservatism serve as antecedents to ethnocentrism. They tested these antecedents in a cross-sectional (rather than experimental) design. Shankarmahesh (2006) discussed several other constructs presumed to underlie ethnocentrism, such as world-mindedness, animosity, materialism, and dogmatism.

To summarize, building on the findings that collective nostalgia is associated with a desire to support the ingroup and that domestic product evaluations reflect ingroup preferences, we hypothesize:

**H1** - Collective nostalgia increases domestic country bias.

### The Role of Collective Self-Esteem

What might be the psychological mechanism(s) linking collective nostalgia with increased DCB? Luhtanen and Crocker (1992) proposed that individuals vary not only in their evaluations of their personal identity (i.e., personal self-esteem), but also in their evaluations of their social or collective identity (i.e., collective self-esteem; CSE). Theoretical treatises (Brown and Humphreys 2002; Gabriel 1993; Sedikides et al. 2009; Volkan 1999) and empirical findings (Wildschut et al. 2014) indicate that collective nostalgia promotes positive CSE, which in turn, predicts consumer ethnocentrism (Lantz and Loeb 1998), that is, the belief that domestic products are superior to foreign ones and that one is (morally) obliged to consume the former and shun the latter (Shimp and Sharma 1987). Building on this literature, we hypothesize.



**H2** - The effect of collective nostalgia on the domestic country bias is mediated by collective self-esteem.

### **Overview of Experiments**

We evaluated our hypotheses, and assessed ancillary exploratory issues, in a series of three experiments that followed a systematic replicate-and-extend strategy. In particular, we tested the hypothesis that collective nostalgia increases DCB (Experiments 1 and 2). Then, we explored the possibility that this effect generalizes across different product categories (Experiment 2). Finally, we tested the hypothesis that collective self-esteem mediates the effect of collective nostalgia on DCB (Experiment 3), while exploring if this pattern is obtained when controlling for positive affect. We conducted all three experiments on an online platform (Qualtrics), with graduates of three Greek universities (Aristotle University of Thessaloniki, Panteion University, University of Athens) serving as participants. We incentivized participation in the form of a 10% chance to win €15 vouchers for iTunes.

### **Experiment 1**

In Experiment 1, we induced collective nostalgia following two approaches: idiographic and nomothetic (Allport 1937). To the extent that these convergent operations of collective nostalgia produce parallel results, confidence in the findings should be reinforced (Campbell and Fiske 1959). The idiographic approach focuses on the characteristics of unique individuals and their autobiographies. We adopted the idiographic induction of collective nostalgia developed and validated by Wildschut et al. (2014). Greek participants thought and wrote about a nostalgic event that they had personally experienced together with other Greeks. In the control condition, participants reflected on and wrote about an ordinary event that they had personally experienced together with other Greeks. The nomothetic

approach focuses on characteristics shared by classes or cohorts, where the individual is seen as an exemplar of these classes or cohorts. We developed and validated a nomothetic induction of collective nostalgia. Greek participants read a nostalgic description of childhood experiences that were common for members of their generation. In the control condition, participants read a neutral text. We expected for both idiographic and nomothetic inductions of collective nostalgia to increase DCB (H1).

## **Method**

*Participants and design.* Participants were 208 Greek volunteers (123 women; 85 men;  $M_{\text{age}} = 28.88$  years,  $SD_{\text{age}} = 3.39$  years), who were randomly assigned to the conditions of a 2 (collective nostalgia vs. control)  $\times$  2 (idiographic vs. nomothetic induction) factorial design.

*Procedure and materials.* For the idiographic induction, we presented participants in the collective-nostalgia condition with the dictionary definition of nostalgia (“a sentimental longing or wistful affection for one’s past”). We then asked them to think about a nostalgic event that they had personally experienced with other Greeks and write a minimum of 150 words about the experience and why it made them feel nostalgic. Participants then listed five keywords in relation to the event that they had just described. In the control condition, we instructed participants to think of an ordinary event that they had personally experienced with other Greeks and write a minimum of 150 words on it, followed by five keywords. Prior research supports the validity of this collective-nostalgia induction and shows that the collective-ordinary condition serves as a stringent control (Wildschut et al. 2014).

For the nomothetic induction, we asked participants in the collective-nostalgia condition to read a text that referred to common childhood experiences for individuals of their generation, listing the types of games children used to play, some favorite snacks

children used to eat, and general day-to-day activities that were the norm during their childhood in Greece (see Appendix A.1 for an English translation). In the control condition, we presented participants with a neutral text that served as a practical guide to taking pictures (see Appendix A.2 for an English translation). The texts were written in the same style and were of similar length. Results of a pilot test among 60 Greek nationals showed that participants felt significantly more nostalgic (“Right now, I am having nostalgic feelings” and “I feel nostalgic at the moment”; 1 = *not at all*, 7 = *very much*) in the collective-nostalgia ( $M = 6.07$ ,  $SD = 1.34$ ) than in the control ( $M = 1.00$ ,  $SD = 0.00$ ) condition, Kolmogorov-Smirnov non-parametric test = 0.967,  $p < .001$ .

Finally, we instructed participants to make a product choice. Specifically, they could choose to listen to a Greek or a foreign song (coded as: 0 = *foreign song*, 1 = *Greek song*). We counterbalanced the order of song options.

## Results

Participant sex did not qualify the statistical significance of the results reported below, neither did the counterbalancing factor; as such, we omitted these two factors from further analyses. We present proportions of Greek song choices in Figure 1. We ran a 2 (collective nostalgia vs. control)  $\times$  2 (idiographic vs. nomothetic induction) logistic analysis with song choice as the dependent variable. Results revealed a significant main effect of collective nostalgia (vs. control),  $\chi^2(1, N = 208) = 29.63$ ,  $p < .001$ ,  $r = .38$ .<sup>1</sup> Participants were more likely to select the Greek song in the collective-nostalgia (.72) than control (.34) condition, supporting H1.

We also obtained a significant main effect of induction method (idiographic vs. nomothetic),  $\chi^2(1, N = 208) = 4.15$ ,  $p = .042$ ,  $r = .14$ . Participants selected the Greek song

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<sup>1</sup>We calculated the effect size,  $r$ , using the formula:  $r = \sqrt{\frac{\chi^2}{N}}$

more frequently in the idiographic (.60) than nomothetic (.47) condition. Crucially, the Collective Nostalgia  $\times$  Induction Method interaction was not significant,  $\chi^2(1, N = 208) = 0.53, p = .469, r = .05$ . Following the logic of convergent operations (Campbell & Fiske, 1959), this small and nonsignificant interaction effect strengthens confidence in the generality of the collective nostalgia effect on DCB.

*Idiographic induction.* Supplementary analyses within the idiographic condition revealed that participants selected the Greek song more frequently in the collective-nostalgia (.81) than control (.38) condition,  $\chi^2(1, N = 104) = 19.33, p < .001, r = .43$ . Viewed from a different angle, participants in the collective-nostalgia condition expressed a significant preference ( $> .50$ ) for the Greek song,  $\chi^2(1, N = 52) = 19.69, p < .001, r = .62$ . Participants in the control condition, however, marginally preferred the foreign song,  $\chi^2(1, N = 52) = 2.77, p = .096, r = -.23$ .

[INSERT FIGURE 1 HERE]

*Nomothetic induction.* Within the nomothetic condition, participants also selected the Greek song more frequently in the collective-nostalgia (.64) than control (.29) condition,  $\chi^2(1, N = 104) = 12.59, p < .001, r = .35$ . Participants in the collective-nostalgia condition expressed a significant preference for the Greek song,  $\chi^2(1, N = 53) = 4.25, p = .039, r = .28$ . Surprisingly, participants in the control condition preferred the foreign song,  $\chi^2(1, N = 51) = 8.65, p = .003, r = -.41$ .

## Discussion

Experiment 1 supported H1. We used idiographic and nomothetic methods to induce collective nostalgia. Participants in the (idiographic and nomothetic) collective-nostalgia

condition chose a domestic song more frequently than control participants. Furthermore, participants in the collective-nostalgia condition manifested a significant preference ( $> .50$ ) for the domestic song. Surprisingly, control participants evinced a significant preference for the foreign song. This raises a legitimate question whether, relative to baseline, the control condition reduced DCB (rather than collective nostalgia increasing DCB). Given that this unexpected result occurred in both the idiographic (marginal) and nomothetic control condition, it cannot be attributed readily to idiosyncrasies of either condition. Although we see no obvious commonalities between the control conditions that could produce a reduction in DCB, we addressed this issue directly in Experiment 2 by including a pure baseline condition. In this no-recall condition, product choices were not preceded by a collective nostalgia (vs. control) induction.

Experiment 1 focused on a single product category (i.e., songs). The absence of stimulus sampling may limit the generalizability of its findings (Judd, Westfall, and Kenny 2012). To address this potential limitation, Experiment 2 included an additional product category: TV clips. To the extent that collective nostalgia increases DCB across product categories, confidence in the findings should be strengthened.

Finally, participants selected the Greek song more frequently in the idiographic than nomothetic condition. With the benefit of hindsight, we suspect that the idiographic method was more immersive and relevant to participants' national identity. For our present purposes, however, the key finding is that idiographic and nomothetic inductions of collective nostalgia produced parallel increases in DCB.

## **Experiment 2**

Experiment 2 employed a similar procedure as that of Experiment 1, with one modification. Given that induction method (idiographic vs. nomothetic) did not moderate the

effect of collective nostalgia in Experiment 1, we used only the idiographic induction. Experiment 2 also extended our research. First, in addition to the collective-nostalgia and collective-ordinary conditions, Experiment 2 included a no-recall condition. In this condition, participants did not recall an autobiographical event prior to their product choices, thus providing a true baseline. Second, Experiment 1 focused on a single product category (i.e., songs). This lack of stimulus sampling potentially limits the generalizability of our findings (Judd et al. 2012). To bolster evidence for the effect of collective nostalgia on DCB, we therefore added a product category. In addition to choosing between a Greek or foreign song, participants also chose between a Greek or foreign TV clip. We hypothesized that participants would exhibit the DCB in the collective-nostalgia condition compared to the collective-ordinary and no-recall conditions combined (H1). We explored the generalizability of this prospective finding by testing whether DCB would manifest across products. Finally, we did not expect for the collective-ordinary and no-recall conditions to differ significantly.

## **Method**

*Participants and design.* Participants were 121 Greek volunteers (63 men, 58 women;  $M_{\text{age}} = 32.66$  years,  $SD_{\text{age}} = 1.87$  years), who were randomly assigned to the collective-nostalgia, collective-ordinary, or no-recall condition.

*Procedure and materials.* In the collective-nostalgia condition, participants first read the dictionary definition of nostalgia (“a sentimental longing or wistful affection for the past”). Then, they recalled a nostalgic event that they had personally experienced with other Greeks and wrote a minimum of 150 words about the experience, followed by five keywords summarizing the event. In the collective-ordinary condition, participants thought of an ordinary event that they had personally experienced with other Greeks and wrote a minimum of 150 words about it, followed by five keywords. In the no-recall condition, participants did

not recall a past event but proceeded immediately to the manipulation check and product choices. All participants completed a 2-item manipulation check assessing state nostalgia (“Right now, I am having nostalgic feelings” and “I feel nostalgic at the moment” (1 = *not at all*, 7 = *very much*;  $\alpha = .93$ ;  $M = 4.19$ ,  $SD = 1.85$ ). Finally, they indicated (in counterbalanced order) whether they preferred to (1) listen to a Greek or foreign song, and (2) watch a Greek or foreign TV clip.

## Results

We used two planned orthogonal contrasts to partition significant omnibus effects of collective nostalgia (vs. no recall vs. collective ordinary). The first and focal contrast compared the collective-nostalgia condition to the pooled no-recall and collective-ordinary conditions (i.e., the control conditions). The second contrast compared the no-recall condition to the collective-ordinary condition. Participant sex did not qualify the statistical significance of any of the results reported below, with one exception, which we discuss below. We therefore omitted this variable from further analyses.

*Manipulation check.* Given that initial analyses revealed a significant main effect of sex on felt nostalgia, we kept this variable in the final analyses. Men ( $M = 4.67$ ,  $SD = 1.58$ ) reported higher levels of nostalgia than women ( $M = 3.66$ ,  $SD = 2.00$ ),  $F(1, 117) = 12.56$ ,  $p < .001$ ,  $\eta^2 = .09$ . We also obtained a significant omnibus effect for collective nostalgia (vs. collective ordinary vs. no recall),  $F(2, 117) = 3.79$ ,  $p = .025$ ,  $\eta^2 = .06$ . Planned contrasts revealed that, as intended, felt nostalgia was higher in the collective-nostalgia condition ( $M = 4.60$ ,  $SD = 1.73$ ) than in the pooled no-recall ( $M = 3.74$ ,  $SD = 1.83$ ) and collective-ordinary ( $M = 4.21$ ,  $SD = 1.95$ ) conditions,  $F(1, 117) = 7.14$ ,  $p = .009$ ,  $\eta^2 = .05$ . The latter conditions did not differ significantly,  $F(1, 117) = 0.27$ ,  $p = .602$ ,  $\eta^2 = .002$ . The manipulation was successful.

*Product choices.* There were no significant order effects on the dependent measures, so we collapsed the data across order for subsequent analyses. Participants indicated whether they preferred (1) the Greek or foreign song, and (2) the Greek or foreign TV clip. This yielded, for each participant, two dichotomous choices. To analyze DCB as a function of collective nostalgia (vs. no recall vs. collective ordinary) and product category (song vs. TV clip), we specified a hierarchical linear model, with the two dichotomous choices (level 1 units) nested within participants (level 2 units). Product category was a level-1 independent variable and collective nostalgia was a level-2 independent variable. We treated participants as a random variable, because their two choices were not independent. We tested this model in SAS PROC GLIMMIX.

We present proportions of Greek product choices in Figure 2. Results revealed a significant omnibus effect of collective nostalgia only,  $\chi^2(2, N = 121) = 26.87, p < .001$ . Planned contrasts indicated that participants were more likely to select the Greek (relative to foreign) product in the collective-nostalgia condition (.71) than in the pooled no-recall (.31) and collective-ordinary (.35) conditions,  $\chi^2(1, N = 121) = 26.72, p < .001, r = .47$ , supporting H1. The difference between the collective-ordinary and no-recall conditions was not significant,  $\chi^2(1, N = 121) = 0.12, p = .725, r = .03$ . Neither the main effect of product category ( $\chi^2[1, N = 121] = 0.07, p = .792, r = .02$ ) nor the Collective Nostalgia  $\times$  Product Category interaction ( $\chi^2[2, N = 121] = 3.69, p = .158$ ) was significant.

[INSERT FIGURE 2 HERE]

*Song choice.* Supplementary analyses revealed that the omnibus effect of collective nostalgia was significant for song selections,  $\chi^2(2, N = 121) = 11.58, p = .003$ . Participants selected the Greek song with higher frequency in the collective-nostalgia condition (.67) as



compared to the no-recall (.30) and the collective-ordinary (.44) conditions. The planned contrast between the collective-nostalgia condition and the pooled control conditions was significant,  $\chi^2(1, N = 121) = 10.05, p = .002, r = .29$ . The difference between the no-recall and collective-ordinary conditions was not significant,  $\chi^2(1, N = 121) = 1.58, p = .209, r = .11$ . Participants in the collective-nostalgia condition expressed a significant preference for the Greek song,  $\chi^2(1, N = 42) = 4.67, p = .031, r = .33$ . Those in the pooled control conditions, however, preferred the foreign song,  $\chi^2(1, N = 79) = 5.58, p = .018, r = -.27$ .

*TV clip choice.* The omnibus effect of collective nostalgia was also significant for TV clip selections,  $\chi^2(2, N = 121) = 25.79, p < .001$ . Participants selected the Greek TV clip with higher frequency in the collective-nostalgia condition (.76) as compared to the no-recall (.33) and the collective-ordinary (.26) conditions. The planned contrast between the collective-nostalgia condition and the pooled control conditions was significant,  $\chi^2(1, N = 121) = 25.45, p < .001, r = .46$ . The difference between the no-recall and collective-ordinary conditions was not significant,  $\chi^2(1, N = 121) = 0.45, p = .502, r = .06$ . Participants in the collective-nostalgia condition preferred the Greek TV clip,  $\chi^2(1, N = 42) = 11.52, p < .001, r = .52$ . Those in the pooled control conditions preferred the foreign TV clip,  $\chi^2(1, N = 79) = 13.78, p < .001, r = -.42$ .

## Discussion

In support of H1, Experiment 2 replicated the robust effect of collective nostalgia (vs. controls) on DCB. Importantly, product category (songs vs. TV clips) did not moderate the impact of collective nostalgia; collective nostalgia increased significantly participants' preference for Greek songs (as in Experiment 1) as well as Greek TV clips. Further replicating Experiment 1, Experiment 2 again demonstrated that participants in the collective-nostalgia condition showed a significant preference ( $> .50$ ) for domestic products, whereas

control participants preferred foreign products. By including a no-recall condition, we were able to disambiguate this finding. We obtained no significant difference between this no-recall condition, which provided a pure baseline, and the collective-ordinary condition. This indicates that (1) DCB is increased by recalling a collective nostalgic experience (as opposed to being decreased by recalling a collective ordinary experience), and (2) the collective-ordinary condition serves as an appropriate baseline for evaluating the impact of collective nostalgia. We return to control participants' relative preference for foreign products in the General Discussion.

Experiments 1-2 established a robust effect of collective nostalgia on DCB across different collective-nostalgia inductions (Experiment 1) and product categories (Experiment 2). In Experiment 3, we had two key objectives. First, we tested H2 by examining the mediating role of CSE in linking collective nostalgia with DCB. Second, we controlled for the potential role of positive affect.

### **Experiment 3**

Experiment 3 replicated Experiment 2, with two modifications. To begin, we did not include a no-recall condition, because Experiment 2 revealed no significant differences between the no-recall and collective-ordinary conditions. This attests to the suitability of the collective-ordinary condition to serve as a neutral baseline. Also, having obtained essentially identical results across product categories (songs, TV clips) in Experiment 2, we focused on preferences for songs only.

In addition, we extended our research in two ways. First, an important objective of Experiment 3 was to shed light on the question of how collective nostalgia strengthens DCB. Prior theory (Brown and Humphreys 2002; Gabriel 1993; Sedikides et al. 2009; Volkan 1999) and research (Wildschut et al. 2014) indicates that collective nostalgia promotes

positive CSE, which results in increased levels of group commitment, such as organizational citizenship behavior, group loyalty, and reduced turnover (Blader and Tyler 2009; Ellemers et al. 1999; Randsley de Moura et al. 2009; Sedikides et al. 2008). We therefore assessed CSE prior to the product choices and tested its mediational role. Second, we examined whether the effect of collective nostalgia is driven primarily by positive affect. Recent studies have accumulated more evidence pointing to the unique beneficial effects of personal nostalgia (Cheung et al. 2013; Sedikides et al. 2016; Stephan, Sedikides, and Wildschut 2012; Stephan et al. 2014; Turner, Wildschut, and Sedikides 2012; Turner et al. 2013; Van Tilburg, Igou, and Sedikides 2013; Zhou et al. 2012) and collective nostalgia (Wildschut et al. 2014), above and beyond PA. Nonetheless, we wanted to assess the role of positive affect in the current setting. We tested H2, namely that the effect of collective nostalgia on DCB would be mediated by CSE. Moreover, we explored whether this mediation would still be supported when controlling for positive affect.

## **Method**

*Participants and design.* Participants were 90 Greek volunteers (63 women, 27 men;  $M_{\text{age}} = 31.19$  years,  $SD_{\text{age}} = 2.03$  years) who were randomly assigned to the collective-nostalgia or collective-ordinary (control) condition.

*Procedure and materials.* The collective-nostalgia and collective-ordinary conditions were identical to Experiments 1-2. Following the manipulation, we administered a 2-item manipulation check assessing state nostalgia: “Right now, I am having nostalgic feelings” and “I feel nostalgic at the moment” (1 = *not at all*, 7 = *very much*;  $\alpha = .95$ ;  $M = 3.83$ ,  $SD = 1.84$ ).

Next, we administered the Collective Self-Esteem Scale (CSES; Luhtanen and Crocker 1992). The CSES evaluates peoples’ assessments of their social identity and their

group memberships (Greek nationality, in the present case). It consists of four 4-item subscales or facets: (1) Importance to Identity (henceforth, Identity) evaluates how important ingroup membership is to a person's self-concept; (2) Private CSE evaluates the extent to which people perceive the ingroup as a worthwhile entity; (3) Public CSE evaluates how the ingroup is perceived by outsiders; and (4) Membership CSE (henceforth, Membership) evaluates the degree to which people feel that they are a worthy member of the ingroup. These items are rated on a 7-point scale (1 = *not at all*, 7 = *very much*). We calculated the arithmetic mean of these items to compute a CSES total score ( $\alpha = .82$ ;  $M = 4.88$ ,  $SD = .79$ ) and also four separate scores corresponding to the four facets: Identity (e.g., "Being Greek is an important reflection of who I am";  $\alpha = .61$ ,  $M = 4.51$ ,  $SD = 1.17$ ); Private CSE (e.g., "Overall, I often feel that being Greek is not worthwhile" [reverse coded];  $\alpha = .72$ ,  $M = 5.59$ ,  $SD = .96$ ); Public CSE (e.g., "In general, others respect Greeks";  $\alpha = .43$ ,  $M = 4.25$ ,  $SD = .97$ ); and Membership (e.g., "I am a worthy Greek";  $\alpha = .61$ ,  $M = 5.17$ ,  $SD = .92$ ). Our primary analyses focused on the CSES total score, because previous factor analyses of the CSES revealed a general CSE factor, which subsumes the four subscales (Luhtanen and Crocker 1992). However, we also report supplementary analyses focused on the four subscales.

After the CSES, participants answered the following two items (Hepper et al. 2012; Stephan et al. 2015; Wildschut et al. 2006) to measure positive affect: "Right now, I am in a positive mood" and "Right now, I feel good" (1 = *not at all*, 7 = *very much*;  $\alpha = .81$ ;  $M = 4.79$ ,  $SD = 1.42$ ). Finally, participants indicated whether they would prefer to listen to a Greek song or a foreign song.

## Results

Participant sex did not qualify any of the significant results reported below, and we thus omitted this variable from subsequent analyses.

*Manipulation check.* As intended, participants in the collective-nostalgia condition ( $M = 4.69$ ,  $SD = 1.74$ ) reported significantly higher state nostalgia than those in the collective-ordinary condition ( $M = 3.01$ ,  $SD = 1.55$ ),  $F(1, 88) = 23.45$ ,  $p < .001$ ,  $\eta^2 = .21$ . The manipulation was effective.

*Song choice.* Results revealed a significant main effect of collective nostalgia (vs. control),  $\chi^2(1, N = 90) = 5.05$ ,  $p = .025$ ,  $r = .24$ . Participants were more likely to select the Greek song in the collective-nostalgia (.75) than control (.52) condition. Participants in the collective-nostalgia condition preferred the Greek song,  $\chi^2(1, N = 44) = 11.00$ ,  $p < .001$ ,  $r = .50$ . Those in the control condition did not significantly prefer either song,  $\chi^2(1, N = 46) = 0.09$ ,  $p = .768$ ,  $r = .04$ .

[INSERT TABLE 1 HERE]

*Mediation by collective self-esteem.* We present means, standard deviations, and inferential statistics in Table 1. Participants in the collective-nostalgia condition scored higher on collective self-esteem than those in the collective-ordinary condition (Table 1).

Furthermore, collective self-esteem was significantly correlated with selection of the Greek (compared to foreign) song, point-biserial  $r(90) = .41$ ,  $p < .001$ . This indicates that collective self-esteem qualifies as a potential mediator of the collective-nostalgia effect on DCB. To test mediation, we first regressed song choice on the collective-nostalgia manipulation and collective self-esteem. This logistic regression analysis revealed that, when controlling for the collective-nostalgia manipulation, collective self-esteem predicted increased selection of the Greek (compared to foreign) song,  $B = 1.17$ ,  $SE = 0.36$ ,  $\chi^2(1, N = 90) = 10.57$ ,  $p < .001$ ,  $r =$

.34. When controlling for collective self-esteem, the effect of collective nostalgia on song choice was no longer significant,  $\chi^2(1, N = 90) = 1.59, p = .207, r = .13$ . Next, employing the PROCESS macro (Hayes 2013, model 4), we tested the indirect effect (denoted as  $ab$ ) of collective nostalgia via collective-self-esteem on song choice (10,000 bootstrap samples). This indirect effect was significant (i.e., the 95% confidence excluded zero),  $ab = 0.57, SE = 0.29, 95\% CI = 0.26, 1.29$ . These results confirm H2.

*Supplementary mediational analyses.* Participants in the collective-nostalgia condition scored higher on three CSES subscales than those in the collective-ordinary condition: Public CSE, Private CSE, and Membership. The effect of collective nostalgia on Identity was not significant (Table 1). Supplementary mediational analyses involving, separately, the four CSES subscales yielded significant indirect effects of collective nostalgia on song choice via: Public CSE ( $ab = 0.44, SE = 0.24, 95\% CI = 0.02, 0.98$ ), Private CSE ( $ab = 0.43, SE = 0.23, 95\% CI = 0.09, 1.02$ ), and Membership ( $ab = 0.29, SE = 0.23, 95\% CI = 0.03, 0.92$ ). The indirect effect via Identity was not significant,  $ab = 0.11, SE = 0.17, 95\% CI = -0.17, 0.52$ . As a final step, we tested a model in which we entered Public CSE, Private CSE, and Membership (all significant mediators in the preceding analyses) as parallel mediators. In this analysis, only Private CSE emerged as a significant mediator of the link between collective nostalgia and song choice,  $ab = 0.36, SE = 0.24, 95\% CI = 0.04, 1.03$ . Neither Public CSE ( $ab = 0.10, SE = 0.31, 95\% CI = -0.58, 0.68$ ) nor Membership ( $ab = 0.11, SE = 0.21, 95\% CI = -0.18, 0.70$ ) was a significant mediator in this analysis. In all, these fine-grained supplementary analyses point to the important mediational role of participants' perception that the Greek ingroup is a worthwhile entity (i.e., Private CSE).

*Controlling for positive affect.* Participants in the collective-nostalgia condition did not score significantly higher on positive affect than those in the collective-ordinary condition (Table 1). This null effect renders a role for positive affect unlikely. Nonetheless, because

positive affect was positively correlated with selection of the Greek song, ( $r[90] = .20, p = .054$ ), we repeated the mediational analyses with positive affect as a covariate. When we controlled for positive affect, the indirect effect of collective nostalgia via collective-self-esteem (CSES total) on song choice remained significant,  $ab = 0.55, SE = 0.31, 95\% CI = 0.13, 1.32$ . We also repeated the analysis in which we entered Public CSE, Private CSE, and Membership as parallel mediators. Controlling for positive affect did not alter the results. As before, only Private CSE emerged as a significant mediator of the link between collective nostalgia and song choice,  $ab = 0.33, SE = 0.24, 95\% CI = 0.01, 1.00$ .

## Discussion

Experiment 3 offered yet further support for a robust effect of collective nostalgia on DCB (H1). Crucially, we obtained compelling evidence that this effect was mediated by CSE (H2). Despite the limitations of mediational analyses (Bullock, Green, and Ha 2010), we maintain that these analyses are informative, because they shed light on our hypothesis concerning the role of CSE (Fiedler, Schott, and Meiser 2011). Experiment 3 is consistent with accumulating evidence for a link between CSE and group as well as organizational commitment (Blader and Tyler 2009; Ellemers et al. 1999; Randsley de Moura et al. 2009; Sedikides et al. 2008; Wildschut et al. 2014).

Detailed analyses of the CSES facets reveal the specific mechanisms that link collective nostalgia with DCB. Results showed that collective nostalgia boosted participants' view that the Greek ingroup is a worthwhile entity (i.e., Private CSE), which, in turn, predicted DCB. It is noteworthy that, in prior research, collective nostalgia also strengthened participants' view that the ingroup (their University) is a worthwhile entity. Yet, this positive perception of the ingroup did not predict participants' intentions to support it by volunteering in a fundraising campaign. Instead, the effect of collective nostalgia on volunteering

intentions was mediated by the degree to which ingroup membership was central to the person's self-concept (i.e., Identity; Wildschut et al. 2014). One should be cautious in interpreting these different result patterns, but one possibility is that they point to specificity in the associations between, on the one hand, CSES facets and, on the other hand, different expressions of group and organizational commitment. Whereas costly expressions of group commitment, such as volunteering, may rest on a deeper sense of personal identification with the ingroup (Abrams 2013; Tropp and Wright 2001), mere positive regard for the ingroup may prompt ethnocentric views of domestic products and cultural achievements. This is a promising direction for future research. Suffice it to say that, at a more general level of analysis, both past (Wildschut et al. 2014) and present research supports the mediational role of CSE (as assessed by CSES total).

A secondary objective of Experiment 3 was to examine whether CSE would mediate the effect of collective nostalgia on DCB, even when controlling for positive affect. Nostalgia is distinct from positive memory retrieval per se (Sedikides et al. 2015). That is, whereas nostalgia often relates to positive experiences, not all positive experiences evoke nostalgia. For example, recalling a lucky event (e.g., finding one's wallet when one thought it was lost) generates positive affect but not nostalgia (Stephan et al. 2015). Indeed, when we controlled for positive affect, the indirect or mediated effect of collective nostalgia on DCB via CSE remained significant. In all, our results did not indicate that the effects of collective nostalgia merely reflect positive affect. The findings of Experiment 3 thereby add to evidence for the unique effects of collective nostalgia (Wildschut et al. 2014), while being consistent with the unique effects of personal nostalgia (Cheung et al. 2013; Sedikides et al. 2016; Stephan et al. 2012, 2014; Turner et al. 2012, 2013; Van Tilburg et al. 2013; Zhou et al. 2012), above and beyond positive affect.



## General Discussion

Three experiments tested and emphatically confirmed the hypothesis that collective nostalgia strengthens DCB (H1). Prior literature supports the notion that collective nostalgia is a group-level emotion that heightens social connectedness and strengthens CSE (Wildschut et al. 2014). The literature also suggests that consumers show a pronounced and strong predilection for domestic products (Cleveland et al. 2009). Our research combined these findings to investigate whether collective nostalgia, by virtue of its capacity to raise CSE, increases DCB. The findings of three experiments supported this hypothesis (H2). Following a replicate-and-extend strategy, we demonstrated that both idiographic and nomothetic inductions of collective nostalgia augmented DCB (Experiment 1), that collective nostalgia augmented DCB across different product categories (i.e., songs and TV clips; Experiment 2), and that CSE mediated the effect of collective nostalgia on DCB and did so above and beyond of positive affect (Experiment 3).

Across all three experiments, participants in the collective-nostalgia condition showed a significant preference ( $> .50$ ) for domestic products. Control participants, however, preferred foreign products in two out of three experiments (the exception being Experiment 3). The inclusion of a no-recall condition in Experiment 2 shed light on the latter finding. We found no significant difference between this no-recall condition and the collective-ordinary condition, indicating that DCB is increased by collective nostalgia (as opposed to being reduced by recalling a collective ordinary experience). Although unanticipated, control participants' relative preference for foreign products has a precedent. Balabanis and Diamantopoulos (2004) showed that UK participants evinced a strong preference for Japanese compared to UK TV sets. Heslop and Papadopoulos (1993) concluded that "universal domestic preference is a fallacy" (p. 45). Possible reasons for the baseline preference for foreign products among Greek individuals may relate to matching of product

category with “foreignness” or to high familiarity with such products. Indeed, foreign songs dominate the Greek airwaves and foreign shows dominate the Greek TV schedules.

Regardless, the reasons underlying control participants’ relative preference for foreign products is an interesting direction for future research.

### **Theoretical Contributions and Practical Implications**

In this article, we made two novel contributions to the literature. First, we established that collective nostalgia affects consumer decisions across products. Whereas considerable prior work has highlighted psychological benefits of personal nostalgia (Sedikides and Wildschut 2016b; Sedikides et al. 2008; Sedikides et al. 2015), ours is the first systematic investigation on the effects of collective nostalgia on consumer decisions, and in particular DCB. The magnitude of collective nostalgia’s effect on ethnocentric preferences was large and consistent across three studies. Most prior empirical evidence on antecedents of DCB (Ahmed & d’Astous, 2008; Shankarmahesh, 2006; Sharma et al., 1995) is based on measuring postulated precursors. By contrast, we experimentally manipulated the antecedent, collective nostalgia, and thereby provided clear causal evidence for its impact and relevance in the domain of ethnocentric consumer decisions. Second, we identified a key mechanism through which collective nostalgia increases the DCB. This mechanism was collective self-esteem. Collective nostalgia boosted participants’ view that their national ingroup is a worthwhile entity, which subsequently elevated DCB and did so independently of positive affect.

Our work has practical relevance, as it suggests that organizations and marketers could reach consumers and influence their decisions both in regards to individual consumption choices and in the context of group affiliations. By recalling collective nostalgic events, an individual is not only more likely to draw on personal experiences and memories

associated with a certain event, but also to make decisions that benefit the ingroup (i.e., choice of domestic over foreign products). Focusing on shared experiences is sufficient but not necessary to trigger collective nostalgia (Wildschut et al. 2014). For example, when thinking about themselves, many Americans will bring to mind iconic past events, such as the first moon landing, the Olympic games in Los Angeles, or the election of the first black U.S. president. If organizations and marketers use iconic events, such as these, target audiences evoke cohesive social experiences, leading them to respond to “more or less the same events in more or less the same way” (Smith et al. 2007, 443). Thus, collective nostalgia, as induced and strengthened by shared events, may confer benefits to large and abstract groups, whose members may never have met, yet experience similar feelings nevertheless when thinking about iconic events. Indeed, our results from Experiment 1 support this notion, as both idiographic, and (especially) nomothetic, inductions of collective nostalgia increased DCB.

Our findings are based on empirical evidence that relied on Greek participants living in Greece. Evidence on collective nostalgia relying on immigrants and refugees suggests that the effects of nostalgia would be amplified in that context, as nostalgia provides the core features of collective identity for immigrants and refugees living in a host country (Volkan 1999). Such evidence indicates that, in the context of domestic product preferences, using collective nostalgic marketing appeals in targeting immigrant and refugee groups may produce an even stronger preference for home country products. Similarly, appeals of national nostalgia, focusing on one’s national ingroup membership, may also strengthen domestic product preferences, as such appeals reinforce a sense of entitlement among ingroup members in relation to the outgroup (Smeekes, Verkuyten, and Martinovic 2014; Smeekes 2015).

Finally, that many companies advertise the location of the initial manufacturing process might also be interlinked with nostalgia and the DCB. Newman and Dhar (2014)

showed that people view products that are manufactured at a company's original location as more authentic and as more likely to contain the essence of the brand. Advertising a brand by referring to its heritage (e.g., Fuller's Brewery of London refers to their original building next to the Thames, established in 1845) likely evokes nostalgia, which in turn may lead consumers to choose it as the domestic and authentic option over foreign alternatives. Interestingly, unlike recent empirical evidence indicating that country of origin effects have an affective underpinning (Chen et al. 2014), our results show that affect is not a necessary condition for the preference of domestic over foreign products (see also Rangan et al. 2015).

### **Limitations and Future Research**

We demonstrated that collective nostalgia increases domestic product preferences, because it promotes CSE. Future research may shed light on the question whether or not the effects of collective nostalgia reveal intercultural differences. A contrast of collectivistic to more individualistic cultures may suggest variation in DCB as a function of levels of collective nostalgia. Our choice of Greece may provide a neutral starting point for that exploration, as Greece has been referred to as being in "the middle on the individualistic-collectivistic dimension" (Reitz et al. 2014, p. 757).

Another promising area is exploring whether collective nostalgia influences different product categories. We focused on songs and TV shows. Both have the potential to serve as socially connecting products, allowing people to share their experiences with others and derive some benefit from these interactions. It is worth testing if collective nostalgia operates differently for social and non-social products or experiences. It is also worth considering whether collective nostalgia could lead to the DCB even for products that are demonstrably inferior to foreign products; such a pattern would provide an explanation for why national economies are often slow to replace inferior products with better ones.

One final issue concerns the role of content in nostalgic reverie. Organizations and marketers typically control the content of their messages (in this case, collective nostalgia). As such, an improved understanding how the content of nostalgia affects DCB is needed. For example, does the influence of collective nostalgia on consumer preferences vary depending on whether nostalgia is directed to important persons from one's past as opposed to consumption items from one's past? What is the role of collective self-esteem in this case?

### **Coda**

Past research examined the effects of personal nostalgia on consumer decisions. Our work advanced this literature by highlighting the effects of collective nostalgia on ethnocentric preferences for ingroup products. Specifically, collective nostalgia increases DCB by fostering CSE. As a group-level emotion, collective nostalgia provides important insights into group processes and offers rich insights into future empirical directions on consumer behavior and consumer culture.

## APPENDIX

### Appendix A.1: English Translation of the Nostalgia Condition Text (Experiment 1)

Truth is I am not sure how we managed to survive. We spent our childhood years waiting. We had to wait 2 hours after a meal in order to go swimming, we were supposed to rest for 2 hours after lunch and we had to fast on a Sunday morning before going to the church. Even pain would go by waiting!

Looking back it's hard to believe that we are still alive. We used to travel in cars without seatbelts and airbags. We used to be in the car for 10-12 hours, 5 people crammed in a tiny car and we didn't complain. We didn't have ways to baby proof our doors, wardrobes, medicines, and windows. We used to go cycling without helmets, we used to catch a ride with strangers, and we used to go on motorcycles with no license. We used to leave our house in the morning, go play with our neighbors all day and wouldn't come back home till dawn. We didn't have cellphones.

We used to eat candy and sweets but we weren't overweight. We used to share bottled water and soda and no one ever got ill from it. We didn't have PlayStation, Nintendo, 99 different channels on TV, DVDs, home cinema systems, computers or the internet. We had friends. We used to just make plans and meet them. Often we wouldn't even make plans, we would just get out of the house, onto the streets, and meet with them and just chill or play chasing. That was about all the technology that we had.

We used to just walk around the neighborhood and shout to our friends from the streets. Without calling first and without getting our parents' permission... imagine; All alone in this cruel world... How did we even manage?

At school we would all play group games if someone didn't want to be part of it then that was their problem. Some were good students, others not and they would have to repeat a year.

We used to have a 3-month holiday in the summer and spent hours at the beach every day without having to worry about sunscreen and hats. We used to make big sand castles and go fishing with our friends. We used to chase girls we liked as an excuse to become intimate and wouldn't go online to find the courage to talk to them.

We used to be free, we used to fail but move on and used to succeed. And with all of that we grew up. If the above sounds familiar, then congratulations, you were lucky enough to be a child!

## Appendix A.2: English Translation of the Control Condition Text (Experiment 1)

### Photography lighting

This is one of the most important aspects of taking a photograph and how it turns out. It is also incredibly complicated as lighting is something that changes constantly: a photograph can be taken outside, or inside, in the day or at night, or even at a location where circumstances constantly change. In this article you will find some useful advice that will help you with this aspect of photography; advice that is tailored to photography newbies. So let's consider the following:

Taking a picture outside in the street. Here you need to be extra careful when selecting what day you'll be taking the pictures, as the weather is going to affect your pictures tremendously. For example if it's very cloudy you are likely to end up with moody, slightly boring pictures but then if it's a very bright day it might prove difficult to avoid a lot of contrast on the picture. The ideal weather would be sunny, but with a few clouds; extreme weather would always be more challenging. Also, in terms of timing, early in the morning or late in the afternoon are the best times to take pictures outside as the lighting is ideal.

Now what about taking a picture indoors? Well, the weather is equally important. You would get the best results if it's a sunny day. If however, there is not enough natural light, then you would of course have to use flash. Do remember that lighting can affect a photograph in various ways depending on how far the subject from the source of light (natural or flash) is. This means that if, for example, you are relying on natural light that comes in from the windows, the further away you are from the windows, the worse the picture will look.

In the instance where there is not enough natural light, the best way to take a good quality picture is to use flash. First of all you need to make sure that you are standing the correct distance from the subject. If you take a picture from closer than 1.5m, it is very likely that the flash will show a reflection in the picture. On the other hand if you take a picture from over 10m of distance it will probably be too dark. Therefore, the optimal distance would be anywhere from 1.5m to 10m. Don't be alarmed if by using flash you end up with red eyes in the picture; this is something that can be fixed by using special software. And lastly, make sure that there are no objects around that might be reflected in the picture!

## References

- Abeyta, A. A., Routledge, C., Roylance, C., Wildschut, T., & Sedikides, C. (2015). Attachment-Related Avoidance and the Social and Agentic Content of Nostalgic Memories. *Journal of Social and Personal Relationships*, 32, 406-413.
- Abrams, D. (2013). Social Identification and Group Processes. In J. M. Levine (Ed.), *Frontiers of Social Psychology: Group Processes* (pp. 268-295). New York, NY: Psychology Press.
- Ahmed, S. A., & d'Astous, A. (2008). Antecedents, Moderators and Dimensions of Country-of-Origin Evaluations. *International Marketing Review*, 25, 75-106.
- Allport, G. W. (1937). *Personality: A Psychological Interpretation*. New York, NY: Holt.
- Askegaard, S., & Ger, G. (1998). Product-Country Images: Towards a Contextualized Approach. *European Advances in Consumer Research*, 3, 50-58.
- Balabanis, G., & Diamantopoulos, A. (2004). Domestic Country Bias, Country-of-Origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach. *Academy of Marketing Science*, 32, 80-95.
- Batra, R., Ramaswamy, V., Alden, D., Steenkamp, J.-B. E. M., & Ramachander, S. (2000). Effects of Brand Local/Non-Local Origin on Consumer Attitudes in Developing Countries. *Journal of Consumer Psychology*, 9, 83-96.
- Becker, B., Ivković, Z., & Weisbenner, S. (2011). Local Dividend Clienteles. *Journal of Finance*, 66, 655-683.
- Bilkey, W. J., & Nes, E. (1982). Country-of-Origin Effects on Product Evaluations. *Journal of International Business Studies*, 13, 89-99.
- Blader, S. L., & Tyler, T. R. (2009). Testing and Extending the Group Engagement Model: Linkages Between Social Identity, Procedural Justice, Economic Outcomes, and Extrarole Behavior. *Journal of Applied Psychology*, 94, 445-464.
- Botschen, G., & Hemetsberger, A. (1998). Diagnosing Means-End Structures to Determine the Degree of Potential Marketing Program Standardization. *Journal of Business Research*, 42, 151-159.
- Boym, S. (2002). *The Future of Nostalgia*. New York, NY: Basic Books.



- Brown, A. D., & Humphreys, M. (2002). Nostalgia and the Narrativization of Identity: A Turkish Case Study. *British Journal of Management*, 13, 141-159.
- Bullock, J. G., Green, D. P., & Ha, S. E. (2010). Yes, But What's the Mechanism? (Don't Expect an Easy Answer). *Journal of Personality and Social Psychology*, 98, 550-558.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix. *Psychological Bulletin*, 56, 81-105.
- Chan, K., Covrig, V., & Ng, L. (2005). What Determines the Domestic Bias and Foreign bias? Evidence from Mutual Fund Equity Allocations Worldwide. *Journal of Finance*, 60, 1495-1534.
- Chen, C. Y., Mathur, P., & Maheswaran, D. (2014). The Effects of Country-Related Affect on Product Evaluations. *Journal of Consumer Research*, 41, 1033-1046.
- Cheung, W. Y., Wildschut, T., Sedikides, C., Hepper, E. G., Arndt, J., & Vingerhoets, A. J. J. M. (2013). Back to the Future: Nostalgia Increases Optimism. *Personality and Social Psychology Bulletin*, 39, 1484-1496.
- Cleveland, M., Laroche, M., & Papadopoulos, N. (2009). Cosmopolitanism, Consumer Ethnocentrism, and Materialism: An Eight-Country Study of Antecedents and Outcomes. *Journal of International Marketing*, 17, 116-146.
- Coval, J. D., & Moskowitz, T. J. (1999) Home Bias at Home: Equity Preference in Domestic Portfolios. *Journal of Finance*, 54, 2045-2073.
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-Categorisation, Commitment to the Group and Group Self-Esteem as Related But Distinct Aspects of Social Identity. *European Journal of Social Psychology*, 29, 371-389.
- Elliott, S. (2009, April 6). Warm and Fuzzy Makes a Comeback. (accessed August 5, 2013), [available at [http://www.nytimes.com/2009/04/07/business/media/07adco.html?\\_r=0](http://www.nytimes.com/2009/04/07/business/media/07adco.html?_r=0)]
- Feng, L., & Seasholes, M. S. (2004). Correlated Trading and Location. *Journal of Finance*, 59, 2117-2144.
- Fiedler, K., Schott, M., & Meiser, T. (2011). What Mediation Analysis Can (Not) Do. *Journal of Experimental Social Psychology*, 47, 1231-1236.

- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*, 24, 323-373.
- French, K. R., & Poterba, J. M. (1991). Investor Diversification and International Equity Markets. *American Economic Review*, 81, 222-226.
- Gabriel, Y. (1993). Organizational Nostalgia: Reflections on 'The Golden Age.' In S. Fineman (Ed.), *Emotion in Organizations* (pp. 118-141). London, UK: Sage.
- Gao, Z., & Li, N. (2013). The Priming Effect of News Context on Chinese Attitudes Toward Foreign Brands. *Journal of Asia-Pacific Business*, 14, 268-286.
- Gürhan-Canli, Z., & Maheswaran, D. (2000). Cultural Variations in Country of Origin Effects. *Journal of Marketing Research*, 37, 309-317.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: The Guildford Press.
- Hepper, E. G., Ritchie, T. D., Sedikides, C., & Wildschut, T. (2012). Odyssey's End: Lay Conceptions of Nostalgia Reflect its Original Homeric Meaning. *Emotion*, 12, 102-119.
- Hepper, E. G., Wildschut, T., Sedikides, C., Ritchie, T. D., Yung, Y.-F., Hansen, N., ... & Zhou, X. (2014). Pancultural Nostalgia: Prototypical Conceptions Across Cultures. *Emotion*, 14, 733-747.
- Heslop, L. A., & Papadopoulos, N. (1993). But Who Knows Where and When: Reflections on the Images of Countries and Their Products. In N. Papadopoulos and L. A. Heslop (Eds.), *Product-Country Images: Impact and Role in International Marketing* (pp. 39-75). Binghamton, NY: International Business Press.
- Holak, S. L., & Havelena, W. J. (1992). Nostalgia: An Exploratory Study of Themes and Emotions in the Nostalgic Experience. *Advances in Consumer Research*, 19, 381-387.
- Hong, S.-T., & Wyer Jr., R. S. (1989). Effects of Country of Origin and Product-Attribute Information on Product Evaluation: An Information Processing Perspective. *Journal of Consumer Research*, 16, 175-187.

- Hong, S.-T., & Wyer Jr., R. S. (1990). Determinants of Product Evaluations: Effects of the Time Interval Between Knowledge of a Product's Country of Origin and Information About its Specific Attributes. *Journal of Consumer Research*, 17, 277-288.
- Huberman, G. (2001). Familiarity Breeds Investment. *Review of Financial Studies*, 14, 659-680.
- Ivković, Z., & Weisbenner, S. (2005). Local Does as Local is: Information Content of the Geography of Individual Investors' Common Stock Investments. *Journal of Finance*, 60, 267-306.
- Judd, C. M., Westfall, J., & Kenny, D. A. (2012). Treating Stimuli as a Random Factor in Social Psychology: A New and Comprehensive Solution to a Pervasive but Largely Ignored Problem. *Journal of Personality and Social Psychology*, 103, 54-69.
- Juhl, J., Routledge, C., Arndt, J., Sedikides, C., & Wildschut, T. (2010). Fighting the Future with the Past: Nostalgia Buffers Existential Threat. *Journal of Research in Personality*, 44, 309-314.
- Lantz, G., & Loeb, S. (1998). An Examination of the Community Identity and Purchase Preferences Using the Social Identity Approach. *Advances in Consumer Research*, 25, 486-491.
- Lasaleta, J. D., Sedikides, C., & Vohs, K. D. (2014). Nostalgia Weakens the Desire for Money. *Journal of Consumer Research*, 41, 713-729.
- Li, W.-K., & Monroe, K. B. (1992). The Role of Country-of-Origin Information on Buyers' Product Evaluation: An In-Depth Interview Approach. Paper presented at the 1992 *AMA Summer Educators' Conference*.
- Li, W.-K., & Wyer, Jr., R. S. (1994). The Role of Country of Origin in Product Evaluations: Informational and Standard-of-Comparison Effects. *Journal of Consumer Psychology*, 3, 187-212.
- Luhtanen, R., & Crocker, J. (1992). A Collective Self-Esteem Scale: Self-Evaluation of One's Social Identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Maheswaran, D., & Chen, C. Y. (2006). Nation Equity: Incidental Emotions in Country-of-Origin Effects. *Journal of Consumer Research*, 33, 370-376.

- Merchant, A., Latour, K., Ford, J. B., & Latour, M. S. (2013). How Strong is the Pull of the Past? Measuring Nostalgia Evoked by Advertising. *Journal of Advertising Research*, 53, 150-165.
- Muehling, D. D., & Pascal, V. J. (2011). An Empirical Investigation of the Differential Effects of Personal, Historical, and Non-Nostalgic Advertising on Consumer Responses. *Journal of Advertising*, 40, 107-122.
- Netemeyer, R. G., Durvasula, S., & Lichtenstein, D. R. (1991). A Cross-National Assessment of the Reliability and Validity of the CETSCALE. *Journal of Marketing Research*, 28, 320-327.
- Newman, G. E., & Dhar, R. (2014). Authenticity is Contagious: Brand Essence and the Original Source of Production. *Journal of Marketing Research*, 51, 371-386.
- Papadopoulos, N., & Heslop, L. A. (1993). *Product-Country Images: Impact and Role in International Marketing*. New York, NY: Hayworth Press.
- Randsley de Moura, G., Abrams, D., Retter, C., Gunnarsdottir, S., & Ando, K. (2009). Identification as an Organizational Anchor: How Identification and Job Satisfaction Combine to Predict Turnover Intention. *European Journal of Social Psychology*, 39, 540-557.
- Rangan, P., Singh, S. N., Landau, M. J., & Choi, J. (2015). Impact of Death-Related Television Programming on Advertising Evaluation. *Journal of Advertising*, 44, 326-337.
- Reiersen, C. C. (1967). Attitude Changes Toward Foreign Products. *Journal of Marketing Research*, 4, 385-387.
- Reitz, A. K., Motti-Stefanidi, F., & Asendorpf, J. B. (2014). Mastering Developmental Transitions in Immigrant Adolescents: The Longitudinal Interplay of Family Functioning, Developmental and Acculturative Tasks. *Developmental Psychology*, 50, 754-765.
- Samiee, S. (1994). Customer Evaluation of Products in a Global Market. *Journal of International Business Studies*, 25, 579-604.

- Schindler, R. M., & Holbrook, M. S. (2003). Nostalgia for Early Experience as a Determinant of Consumer Preferences. *Psychology & Marketing*, 20, 275–302.
- Sedikides, C., Hart, C. M., & De Cremer, D. (2008). The Self in Procedural Fairness. *Social and Personality Psychology Compass*, 2, 2107-2124.
- Sedikides, C., & Wildschut, T. (2016a). Past Forward: Nostalgia as a Motivational Force. *Trends in Cognitive Sciences*, 20, 319-321.
- Sedikides, C., & Wildschut, T. (2016b). Nostalgia: A Bittersweet Emotion that Confers Psychological Health Benefits. In A. M. Wood & J. Johnson (Eds.), *The Wiley Handbook of Positive Clinical Psychology* (pp. 25-136). Hoboken, NJ: Wiley.
- Sedikides, C., Wildschut, T., Cheung, W.-Y., Routledge, C., Hepper, E. G., Arndt, J., Vail, K., Zhou, X., Brackstone, K., & Vingerhoets, A. J. J. M. (2016). Nostalgia Fosters Self-Continuity: Uncovering the Mechanism (Social Connectedness) and Consequence (Eudaimonic Wellbeing). *Emotion*, 16, 524-539.
- Sedikides, C., Wildschut, T., Routledge, C., Arndt, J., Hepper, E. G., & Zhou, X. (2015). To Nostalgize: Mixing Memory with Affect and Desire. *Advances in Experimental Social Psychology*, 51, 189-273.
- Sedikides, C., Wildschut, T., Routledge, C., Arndt, J., & Zhou, X. (2009). Buffering Acculturative Stress and Facilitating Cultural Adaptation: Nostalgia as a Psychological Resource. In Robert S. Wyer, Chi-Yue Chiu, & Ying-Yi Hong (Eds.), *Understanding Culture: Theory, Research and Application* (pp. 361-378). New York, NY: Psychology Press.
- Shankarmahesh, M. N. (2006). Consumer Ethnocentrism: An Integrative Review of Its Antecedents and Consequences. *International Marketing Review*, 23, 146-172.
- Sharma, S., Shimp, T. A., & Shin, J. (1995). Consumer Ethnocentrism: A Test of Antecedents and Moderators. *Journal of the Academy of Marketing Science*, 23, 26-37.

- Shimp, T. A., & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research*, 24, 280-289.
- Smeekes, A. (2015). National Nostalgia: A Group-Based Emotion that Benefits the In-Group but Hampers Intergroup Relations. *International Journal of Intercultural Relations*, 49, 54-67.
- Smeekes, A., Verkuyten, M., & Martinovic, B. (2014). Longing for the Country's Good Old Days: National Nostalgia, Autochthony Beliefs, and Opposition to Muslim Expressive Rights. *British Journal of Social Psychology*, 54, 561-580.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can Emotions be Truly Group-Level? Evidence Regarding Four Conceptual Criteria. *Journal of Personality and Social Psychology*, 93, 431-446.
- Steenkamp, J.-B. E. M. (1990). Conceptual Model of the Quality Perception Process. *Journal of Business Research*, 21, 309-333.
- Stephan, E., Sedikides, C., & Wildschut, T. (2012). Mental Travel into the Past: Differentiating Recollections of Nostalgic, Ordinary, and Positive Events. *European Journal of Social Psychology*, 42, 290-298.
- Stephan, E., Sedikides, C., Wildschut, T., Cheung, W.-Y., Routledge, C., & Arndt, J. (2015). Nostalgia-Evoked Inspiration: Mediating Mechanisms and Motivational Implications. *Personality and Social Psychology Bulletin*, 41, 1395-1410.
- Stephan, E., Wildschut, T., Sedikides, C., Zhou, X., He, W., Routledge, C., Cheung, W.-Y., & Vingerhoets, A. J. J. M. (2014). The Mnemonic Mover: Nostalgia Regulates Avoidance and Approach Motivation. *Emotion*, 14, 545-561.
- Stern, B. B. (1992). Historical and Personal Nostalgia in Advertising Text: The Fin de Siècle Effect. *Journal of Advertising*, 21, 11-22.
- Swaminathan, V., Page, K. L., & Gürhan-Canli, Z. (2007). My Brand or 'Our' Brand: The Effects of Brand Relationship Dimensions and Self-Construal on Brand Evaluations. *Journal of Consumer Research*, 34, 248-259.

- Tropp, L. R., & Wright, S. C. (2001). Ingroup Edentification as the Inclusion of Ingroup in the Self. *Personality and Social Psychology Bulletin*, 27, 585–600.
- Turner, R. N., Wildschut, T., & Sedikides, C. (2012). Dropping the Weight Stigma: Nostalgia Improves Attitudes Toward Persons Who are Overweight. *Journal of Experimental Social Psychology*, 48, 130-137.
- Turner, R. N., Wildschut, T., Sedikides, C., & Gheorghiu, M. (2013). Combating the Mental Health Stigma with Nostalgia. *European Journal of Social Psychology*, 43, 413-422.
- Van Tilburg, W. A. P., Igou, E. R., & Sedikides, C. (2013). In Search of Meaningfulness: Nostalgia as an Antidote to Boredom. *Emotion*, 13, 450-461.
- Verlegh, P. W. J., & Steenkamp, J.-B. E. M. (1999). A Review and Meta-Analysis of Country-of-Origin Research. *Journal of Economic Psychology*, 20, 521-546.
- Volkan, V. D. (1999). Nostalgia as a Linking Phenomenon. *Journal of Applied Psychoanalytic Studies*. 1, 169-179.
- Wildschut, T., Bruder, M., Robertson, S., van Tilburg, W. A. P., & Sedikides, C. (2014). Collective Nostalgia: A Group-Level Emotion that Confers Unique Benefits on the Group. *Journal of Personality and Social Psychology*, 107, 844-863.
- Wildschut, T., Sedikides, C., Arndt, J., & Routledge, C. (2006). Nostalgia: Content, Triggers, Functions. *Journal of Personality and Social Psychology*, 91, 975-993.
- Zhou, X., Sedikides, C., Wildschut, T., & Gao, D.-G. (2008). Counteracting Loneliness on the Restorative Function of Nostalgia. *Psychological Science*, 19, 1023-1029.
- Zhou, X., Wildschut, T., Sedikides, C., Shi, K., & Feng, C. (2012). Nostalgia: The Gift that Keeps on Giving. *Journal of Consumer Research*, 39, 39-50.

Table 1. Means, Standard Deviations (in Parentheses), and Inferential Statistics for Collective Self-Esteem Scale and Positive Affect as a Function of Collective-Nostalgia in Experiment 3.

Measure	Collective	Collective	$F(1, 88)$	$p$	$\eta^2$
	ordinary	nostalgia			
CSES total	4.64 (0.63)	5.13 (0.87)	9.45	.003	.10
Identity	4.41 (1.12)	4.60 (1.22)	0.59	.445	.01
Private CSE	5.34 (0.99)	5.84 (0.88)	6.38	.013	.07
Public CSE	3.86 (0.64)	4.66 (1.09)	18.10	< .001	.17
Membership	4.93 (0.85)	5.41 (0.95)	6.28	.014	.07
PA	4.75 (1.14)	4.83 (1.15)	0.11	.743	.001



Figure 1. Proportion of Greek song choices as a function of collective nostalgia (vs. control) and induction method (idiographic vs. nomothetic) in Experiment 1. Error bars represent 95% confidence intervals.

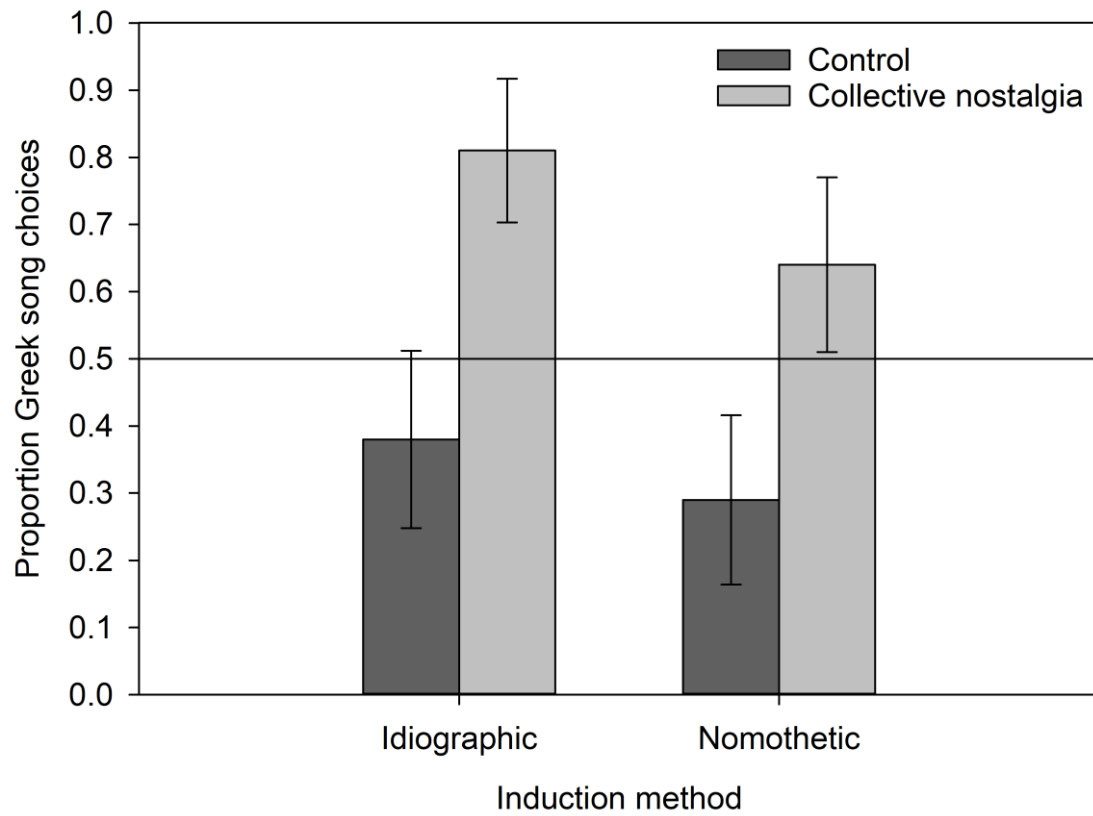


Figure 2: Proportion of Greek product choices as a function of collective nostalgia (vs. collective ordinary vs. no recall) and product category (songs vs. TV clips) in Experiment 2.

Error bars represent 95% confidence intervals.

