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In Solitude or In Company: Influence of Different Types of Nostalgic Memories on Self-Construal and Consumer Choice

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Abstract

How do different types of nostalgic memories – of solitary and social past events – affect consumer preferences for conformity (purchase preference for products endorsed by the majority vs. minority), and how is this influence mediated by self-construal? To answer this research question, an experiment was conducted with a sample of 192 students from a Turkish university. The results reveal that, those who remember a solitary nostalgic event show higher levels of independent self-construal and thereby, demonstrate a greater preference for the minority endorsed product option compared to those who recall a social nostalgic event. This effect is relevant when self-construal is assessed through distinctiveness activation index, but not when self and others thoughts index is used as a measure. The research provides insight into nostalgic memory and its effects on the self and consumer choice. Implications for marketing practitioners and policymakers are discussed.

Keywords: nostalgia, conformity, self-construal, consumer choice

Introduction

Imagine you see a commercial on TV which shows cookie monster preparing cookies whilst playing music through his iPhone (Unruly, 2016). Cookie monster is a character you used to watch and love as a child and hence, as you watch the commercial you feel a sense of nostalgia, recollecting the moments you had sitting alone in a couch watching it on TV as a child. You change the channel and see another commercial. This one displays the nostalgic Coca-Cola trucks (Coca-Cola Great Britain and Ireland, 2020). You see the trucks passing through a city, letting people know about the arrival of Christmas and bringing families together. You again feel nostalgia, yet now you remember your Christmas celebrations with family members and friends. Clearly, the two advertisements make you recall different nostalgic memories. Specifically, the social theme of the memories change. While the first advertisement induces memories of a solitary event, the latter triggers memories of social instances including family and friends. Nevertheless, how the differences in the social aspect of nostalgic memories can impact consumer choice (i.e., conformity) remains uncertain. Can nostalgic memories of events, where an individual is alone or with others, have different effects on the self and thereby lead to different consumer preferences?

Nostalgia is an important concept for marketing as it is extensively used to evoke favorable consumer responses. A prime example is the Super Bowl commercials, reaching up to 7 million dollars for a mere 30 seconds of airtime (Kis, 2024). To harness the power of such costly slots, numerous brands incorporate nostalgia into their advertisements and boost engagement levels (Taylor, 2023) and demands (Silverman, 2023). In a similar vein, the benefits of nostalgia have been underscored by previous studies, revealing that nostalgia increases purchase intention

(Zhou et al., 2019) and enhances brand and advertisement evaluations (Muehling, Sprott and Sultan, 2014).

Nostalgia marketing includes two key concepts, marketing stimulus and the nostalgic recollections induced by it. With aims of reviving the past, icons and themes belonging to the past are put in advertisements to trigger a sense of nostalgia (Ju et al., 2016). In turn the evoked nostalgia can produce favorable consumer outcomes through encouraging the recollection of a romanticized past (Zhou et al., 2019). While the evoked nostalgia has received great attention from previous research (e.g., Muehling, Sprott and Sultan, 2014; Zhou et al., 2019) another element inseparable from the nostalgia marketing framework has been neglected: the type of nostalgic memories facilitated by the marketing stimulus.

This negligence might stem from the increased emphasis given to the social aspect of nostalgic memories (Sedikides and Wildschut, 2019; Zhou et al., 2012). Some examples include Hertz (1990, p.195) and Davis (1979) who argue that when in nostalgia the mind becomes “peopled”, and past social figures become a part of one’s current experience, respectively. It appears that the social context of nostalgic memories is often regarded as inherent. Yet not all nostalgic memories are of social events, i.e., nostalgic-related (Batcho, 2007). Examples include recollections of solo activities, i.e., nostalgic-alone (Batcho, 2007) like fishing alone (Fan, Jiang and Hu, 2020) or moments spent in one’s bedroom (Batcho, 2007).

The reciprocal relationship between memory and the self as argued by previous research (Conway and Pleydell-Pearce, 2000; Wang and Conway, 2004; Wilson and Ross, 2003) as well as the malleable character of self-construal (Trafimow, Triandis and Goto, 1991) suggests that nostalgic-alone memories along with nostalgic-related ones can exert diverse influences on an individual’s self-construal, which represents how an individual perceives itself in relation to others (Markus and Kitayama, 1991). Considering self-construal’s impact on social behavior (see Cross, Hardin and Gercek-Swing, 2011, for a review), these influences can thereby shape the individual’s consumer preference for conformity, i.e., preference for majority vs. minority endorsed product.

Nonetheless, previous research has critical gaps in revealing this relationship, as it lacks a focus on different types of nostalgia and their respective impacts on self-construal and consumer choice. While a stream of research acknowledges the distinction in sociality between different nostalgic memories (e.g., Batcho, 2007), it has failed to consider how this distinction may impact consumer preference for conformity (preference for majority vs. minority endorsed products). Notably, in nostalgia literature, conformity in consumer choice is a scarce concept and, to my knowledge, it is examined in only a single study by Fan, Jiang and Hu (2020). The relationship between nostalgia and self-construal is also understudied. Although Jun, Park and Kim (2022) and Loveland, Smeesters and Mandel (2010) examine self-construal within the framework of nostalgia, these investigations merely include self-construal as a moderator of the nostalgia effect. Hence the scope of prior studies is limited to self-construal’s effect on nostalgia and not vice-versa.

Filling these gaps is crucial to offer practical and theoretical insights. The first reason is that conformity is extensively utilized in marketing (Hoyer and MacInnis, 2006). While some

brands rely on conformity, others leverage non-conformity with their advertising campaigns and slogans. Examples include Whiskas' "Eight out of ten cats prefer" (Huang et al., 2014) versus Diesel's "Be stupid" (Vianelli, Pegan and Valta, 2016), respectively. Illuminating how different nostalgic memories can impact consumer preference for conformity can enable these brands to harness the benefits of nostalgia while facilitating targeted consumer behavior through impacting self-construal. Furthermore, understanding nostalgia's impact on self-construal is essential, not merely to utilize nostalgia within a marketing context, but also to build upon existing theory regarding psychological frameworks such as the self-memory system (Conway and Pleydell-Pearce, 2000).

Purpose and Research Question

Against this backdrop, the purpose of the present study is to understand how different nostalgic memories varying in their social aspect can affect consumer preferences for conformity and self-construal. The study hypothesizes that while nostalgic memories of social events (nostalgic-related) can give rise to interdependent self-construal and thereby lead to conformity (Torelli, 2006; Tveleneva et al., 2023); nostalgic memories of solitary events (nostalgic-alone) may induce independent self-construal and a preference for self-differentiation (Escalas and Bettman, 2005). This hypothesized effect will be investigated through observing the impact of nostalgic-related and nostalgic-alone memories on majority and minority endorsed product preferences. While a higher purchase preference for a majority-endorsed product will indicate conformity, a preference for the minority-endorsed product will signify non-conformity. This behavior is expected to be commensurate with the goals of the respective self-construal type.

Accordingly, the following research question is presented:

Research Question: How do different types of nostalgic memories – nostalgic-related and nostalgic-alone – affect consumer preferences for conformity (purchase preference for products endorsed by the majority vs. minority), and how is this influence mediated by self-construal?

The study reveals several delimitations. It utilizes a sample of undergraduate students at a single university in Turkey. The decision to focus the study on university students was driven by the aim to obtain a homogenous sample (Geuens and De Pelsmacker, 2017) with high cognitive abilities (Weijters, Cabooter and Schillewaert, 2010). Additionally, by holding the culture variable constant the study aimed to control for the possible confounding effect of the chronically accessible self-construal fostered by the culture. Further, in examining the distinction in nostalgic memories, the nostalgic-alone and nostalgic-related framework proposed by Batcho (2007) was adopted. Therefore, the distinction in nostalgic memories was not investigated within the concepts of collective and personal nostalgia (e.g., Wildschut et al., 2014). While both sets of concepts reveal sociality differences in nostalgic memories, they do not fully overlap, necessitating a clear focus on either one of them. The chosen concept provides a better contrast between the solitary and social aspect of the recalled event in alignment with the purpose of the study (see Section Types of Nostalgic Memories Considered in the Present Study). Lastly, in accordance with the research question and aim of the research,

the study employs an experimental methodology, excluding other methods such as qualitative interviews.

Theoretical Framework

Nostalgia

Nostalgia – a bittersweet sentiment emerging through the recollection of the past (Davis, 1979) – has been pervasively utilized in a marketing context (Sullivan, 2009). It is relevant among all individuals regardless of characteristics such as age, gender and ethnicity (Sedikides, Wildschut and Baden, 2004) and affects prosocial behavior (Merchant, Ford and Rose, 2011) and purchase preferences (Holbrook, 1993; Lambert-Pandraud and Laurent, 2010).

Nostalgia has personal and social implications. On a personal level, it has been shown to combat loneliness (Zhou et al., 2008), increase optimism (Cheung et al., 2013), enhance creativity (Van Tilburg, Sedikides and Wildschut, 2015), promote self-positivity (Vess et al., 2012) and preserve self-continuity (Sedikides et al., 2015a). In the social context, nostalgia fulfills the desire for belonging (Gardner, Pickett and Knowles, 2005) and enhances social connectedness (Lasaleta, Sedikides and Vohs, 2014; Turner et al., 2013).

Nostalgia - Related vs. Alone

The social aspect of nostalgia can differ depending on the type of memories. For example, nostalgic memories associated with “loved ones” or “school” often include social themes, whereas recollections related to “TV shows” and “music” may lack these social elements (Batcho, 1995). Along the same lines, Batcho (2007) showed that nostalgia is not limited to experiences shared with others (nostalgic-related) and one can also feel nostalgic about solitary experiences (nostalgic-alone). The researcher illustrated that, while those who are highly nostalgic can show a preference towards social nostalgic themes, the induced nostalgic feeling does not vary between solitary and social memories, suggesting that both types of memories evoke similar levels of nostalgia. Further, Batcho (2007) supported the claim that some nostalgic memories can promote a unique and independent self (Sedikides, Wildschut and Baden, 2004), suggesting that nostalgic-alone memories can serve a function of individuation through facilitating higher focus on the self, while nostalgic-related memories can enhance social connectedness. Another study signifying sociality variations in nostalgic memories revealed that social events promote childhood happiness more than solitary ones (Batcho, Nave and DaRin, 2011). As also stated in Table 1, the study suggested that childhood well-being is more reliant on social connections rather than individual pleasures (Batcho, Nave and DaRin, 2011). The set of terms “social and solitary nostalgic memories” and “nostalgic-related and nostalgic-alone memories”, as proposed by Batcho (2007) will be used interchangeably throughout the present study denoting the same differentiation regarding the social aspect of nostalgic memories. Specifically, “solitary” and “nostalgic-alone” will refer to the nostalgic memories of past events where an individual is alone, while “social” and “nostalgic-related” will denote nostalgic memories of past events with others.

Nostalgia - Collective vs. Personal

In addition to the abovementioned set of nostalgic memories (i.e., nostalgic-alone, nostalgic-related), various studies examined a similar distinction within nostalgia through juxtaposing nostalgia related to individual experiences with that related to group experiences (see Table 1 for a summary of both sets of concepts). These studies have been conducted within the framework of collective and personal nostalgia (e.g., Jun, Park and Kim, 2022; Wildschut et al., 2014). According to Wildschut et al. (2014), collective nostalgia can occur when individuals recall experiences shared with others (e.g., family, friends), whereas personal nostalgia relates to personal and unique past experiences. Accordingly, in the research, to evoke collective nostalgia individuals were prompted to delve into their nostalgic experiences shared with others (e.g., group members). On the other hand, to trigger personal nostalgia they were encouraged to think about a nostalgic event experienced as individuals (Wildschut et al., 2014).

The stream of research which focused on the sociality differences between collective and personal nostalgic memories proposed convergent evidence on collective nostalgia as an emotion with a social relationship focus. Wildschut et al. (2014) revealed that collective nostalgia (vs. personal nostalgia, no nostalgia) positively affects evaluation and support for in-group members. Further, Jun, Park and Kim (2022) uncovered that collective nostalgia (vs. personal nostalgia) enhances positive outlook towards brand extension through boosting significance given to social relationships. On the other hand, Dimitriadou et al. (2019) focused solely on collective nostalgia and argued that it enhances preference for in-group products. The researchers showed that Greek individuals primed with nostalgic memories of events experienced with other Greek people exhibited a higher preference for domestic (Greek) products over foreign ones. This effect was mediated by collective self-esteem, which relates to the social identity of individual.

Types of Nostalgic Memories Considered in the Present Study

While both sets of concepts illustrate a similar distinction in terms of sociality, collective vs. personal nostalgia and nostalgic-related vs. nostalgic-alone are not interchangeable terms. This is because, while the concepts of nostalgic-alone and related focus on the self with regards to the social context during the past event, collective and personal nostalgia center on the past experience in relation to the social context, whether the experience is socially shared or personally unique. Accordingly, as Van Prooijen et al. (2022) argue, while personal nostalgia can include memories pertaining to others, the experience has to be personal. On the other hand, in collective nostalgia, the memory has to be shared with others. In a more straightforward sense, while nostalgic-alone memories necessitate personal nostalgia, nostalgic-related memories can encapsulate both personal and collective nostalgia. For instance, an individual can have both a uniquely personal nostalgic experience (being the only one whose homework got eaten by a dog in a group of friends) and a collective experience (doing homework together with peers) in the presence of others. On the other side of the relationship, collective nostalgia has to be nostalgic-related while personal nostalgia can both be alone and related, fulfilling the condition that the experience is unique. The present research will explore the nostalgic memory differences within the realm of “nostalgic-alone” and

“nostalgic-related” memories. The specific type of nostalgia that may stem from nostalgic-related memories (whether personal or collective) is not of concern here as the aim of the research is to get contrasting extreme conditions of the past self with regards to social surroundings and hence get a clear understanding of its impact on self-construal and conformity.

Table 1: Sociality differences in nostalgia

Nostalgic-Alone and Nostalgic-Related	Main Contributions
Batcho, Nave and DaRin (2011)	Retrospectively, childhood happiness is more affected by past social (vs. solitary) nostalgic events. Positive social (vs. solitary) events have a more constructive effect on childhood happiness. Further, negative social events diminish happiness to a greater extent than solitary negative experiences.
Batcho (2007)	Being highly nostalgic leads to a preference for nostalgic-related (vs. nostalgic-alone) song lyrics. This supports the link between nostalgia and social connectedness.
Collective and Personal Nostalgia	Main Contributions
Jun, Park and Kim (2022)	Collective (vs. personal) nostalgia increases positive evaluations for product extensions by increasing individuals' relational tendency.
Dimitriadou et al. (2019)	Collective nostalgia increases preference for domestic products by amplifying collective self-esteem.
Wildschut et al. (2014)	Collective (vs. personal) nostalgia provides benefits for the group. It enhances positive assessments regarding in-group members.

Social Influence and Conformity

Social influence refers to a “*change in an individual's thoughts, feelings, attitudes, or behaviors that results from interaction with another individual or a group*” (Rashotte, 2007, p. 4426). This influence reveals itself on a daily basis (Tveleneva et al., 2023) and shapes individual choices and actions regularly (Cialdini and Goldstein, 2004). In response to social influence, individuals may show a preference for a majority-endorsed item, driven by the belief that widespread preference signifies reliability (informational social influence) or to secure approval from their social group and prevent rejection (normative social influence) (Mason, Conrey and Smith, 2007). This process is also defined as conformity (Deutsch and Gerard, 1955).

While conformity may be a mechanism to fulfill social needs and prevent unfavorable social reactions, individuals may also desire uniqueness (Chan, Berger and Van Boven, 2012). A sharp similarity to others can lead to negative feelings (Snyder and Fromkin, 1980) and non-conformity can satisfy the uniqueness aims of individuals (Maslach, Stapp and Santee, 1985; Snyder and Fromkin, 1980). This non-conformity can be classified in two forms as anti-conformity and independence. Individuals can exhibit non-conformity through altering their preferences as a form of rebellion against influence (anti-conformity) or by steadfastly maintaining their initial opinions in response to influence (independence) (Nail, MacDonald and Levy, 2000).

Self-Construal and Conformity

The preference for conformity can be shaped by feelings such as nostalgia. Fan, Jiang and Hu (2020) show that, through leading to an increase in social-connectedness, nostalgia can foster conformity in consumer preferences. Yet, conformity is not solely influenced by nostalgia; it is also molded by individual variations, including factors like the need for uniqueness (Lynn and Harris, 1997; Tian, Bearden and Hunter, 2001), culture (Kim and Markus, 1999), and self-construal (Torelli, 2006; Tveleneva et al., 2023). Self-construal, as defined by Markus and Kitayama (1991) is “*the relationship between the self and others and, especially, the degree to which people see themselves as separate from others or as connected with others*” (p. 226). Markus and Kitayama (1991) argue that the self-perception variances in relation to others can be classified into two categories: independent and interdependent self-construal. While individuals with an interdependent self-construal define themselves in relation to others, those with an independent view of the self, have self-perceptions relatively detached from others (Markus and Kitayama, 1991). These distinctions in self-view in turn affect how individuals engage with others and make choices.

The primary objective of those with an interdependent self-construal is to maintain harmonious social relationships. On the other hand, the motivation of individuals with an independent-self construal is to set themselves apart from others (Heine et al., 1999). To elaborate, individuals with an independent self-construal aim for uniqueness and differentiation while downplaying associations with others when defining themselves (Markus and Kitayama, 1991). Compared to interdependents, they are more autonomous in their behavior and less willing to conform in

response to social influence (Markus and Kitayama, 1991). Interdependents, on the other hand, define themselves in relation to a social context, place more emphasis on social connections and are more affected by social influences (Markus and Kitayama, 1991). They conform to societal norms (Kim and Markus, 1999), aim to cultivate robust social connections (Lee, Aaker and Gardner, 2000), and seek assimilation (Ma, Yang and Murali, 2014).

Hence, while those with an interdependent self-construal prioritize forming harmonious relationships with others, independent individuals are self-oriented (Markus and Kitayama, 1991) and choose to stick to their own opinions resisting social pressure (Torelli, 2006). Juxtaposing the two types of self-construal reveals a difference in conformity behavior, indicating a greater tendency to conform by the interdependents (Torelli, 2006; Tveleneva et al., 2023).

In a marketing context, these two types of self-construal can influence the persuasiveness of advertisements (Agrawal and Maheswaran, 2005), brand evaluations (Ng and Houston, 2006) and product preferences (Ma, Yang and Murali, 2014). For example, consumers with an independent self-construal can prefer “really new products” – innovative products mostly utilized by a minority – as an expression of differentiation, while those with an interdependent self-construal can opt for incrementally new products – products that undergo updates but are actively used by majority – as the optimally distinctive choice (Ma, Yang and Murali, 2014).

Studies exploring the intersection of nostalgia, conformity, and self-construal yield comparable findings. Chen (2022), underscoring the conformity differences in interdependent and independent self-construal, shows that individuals with an independent self-construal, as opposed to those with an interdependent self-construal, are more susceptible to developing favorable attitudes in response to heritage brands that utilize brand revitalization strategy, whereas interdependent consumers exhibit a similar inclination towards a retro-branding strategy. This is because, heritage brands incorporating retro branding can have the potential to foster in-group social bonds and create an atmosphere conducive to fulfilling the assimilation goals of the interdependents (Ma, Yang and Murali, 2014). On the other hand, heritage brands that leverage brand revitalization stress the innovativeness of the brand related elements (Keller, 1999) and introduce modifications in both function and design aspects of a product (Kolbl, Konecnik and Kolar, 2015). Therefore, the distinctiveness emphasized in brand revitalization may appeal to individuals with an independent self-construal who seek differentiation. Both conditions enhance self-brand congruence which measures the extent to which consumers perceive a brand as consistent with their personality (Chen, 2022). Another research illuminates that those with an interdependent self-construal give more favorable responses to a public good in historical nostalgia, i.e. longing for the past that has not been actually experienced, and private good in personal nostalgia, i.e. longing for the personally experienced past, contexts, while ones with an independent self-construal show no change in preference between these two nostalgic conditions (Chang and Feng, 2016). This supports that those with an interdependent self-construal are more likely to be affected by social influence while individuals with independent self-construal are relatively stable across social and personal conditions (Chang and Feng, 2016; Markus and Kitayama, 1991).

Malleability of Self-Construal

Culture can enhance a predisposition for a particular self-concept and make one type of self-concept more chronically accessible than the other, through frequently encouraging it (Agrawal and Maheswaran, 2005). While independent self-construal is linked with Western cultures (e.g., America), Eastern cultures (e.g., Japan) encourage an interdependent self-construal fostering distinct norms (Markus and Kitayama, 1991). For example, in Japan there is an emphasis on social harmony and alignment, whereas in America significance is placed on differentiation and uniqueness (Markus and Kitayama, 1991). Thus, while having a unique and irregular preference is favorable in an American culture, it might be seen as an undesirable act of deviance and a threat to social harmony in an East Asian culture (Kim and Markus, 1999). Aligned with this, while East Asians have a positive outlook towards conformity, European Americans prefer to be non-conformists and differentiate (Kim and Markus, 1999).

Nevertheless, independent and interdependent self-construal are not mutually exclusive concepts which represent two opposing ends of a single scale (Singelis, 1994), rather they can co-exist within an individual (Singelis, 1994; Trafimow, Triandis and Goto, 1991; Triandis, 1989). Both types of self-construal are stored in memory and one of them can be more accessible depending on situational factors (e.g., Briley, Morris and Simonson, 2000) and primes (e.g., Hong et al., 2000). For instance, primed with a certain self-concept an individual can show an enhanced ability to retrieve the respective self-concept and the traits associated with it (Trafimow, Triandis and Goto, 1991). This is corroborated by studies indicating that primed individuals tend to be more aligned with the temporarily activated self-construal rather than their chronically accessible one (e.g., Gardner, Gabriel and Lee, 1999). In this regard, the malleability of self-construal enables the temporary activation of a particular self-concept. In turn, the activated self-concept may influence individual motivations and cognitions and thereby shape social behavior (see Cross, Hardin and Gercek-Swing, 2011, for a review). For instance, Torelli (2006) suggests that priming an interdependent self-construal can induce conformity, whereas priming an independent self-construal may facilitate non-conformity and an attention towards one's own beliefs. These effects hold true irrespective of cultural differences (Torelli, 2006).

Nostalgia and Self-Construal

Memory, Nostalgia and the Self

Nostalgia is an emotion intimately tied to the self. It triggers positive self-attributes (Vess et al., 2012), boosts self-esteem (Hepper et al., 2012; Wildschut et al., 2006) and fosters a favorable outlook towards one's future (Cheung et al., 2013; Kersten, Cox and Van Enkevort, 2016). Furthermore, nostalgia can serve as a gateway to the intrinsic self which represents the authentic traits of an individual (Baldwin, Biernat and Landau, 2015). Supporting this, previous research shows that during nostalgic reverie compared to non-nostalgic reflection, individuals perceive an enhanced connection to their authentic selves (Stephan, Sedikides and Wildschut, 2012). Reciprocally, memories that individuals feel more aligned with their true selves are regarded as more nostalgic than those perceived to be less connected to their genuine selves (Lenton et al., 2013).

Nostalgia extends beyond mere recollection (Batcho, 1995; Davis, 1979) by its vivid, affective, and personally significant nature (Yang et al., 2022). However, memories are a core feature of nostalgia which is a past-oriented emotion (see Yang et al., 2022, for a review). As Batcho (2007) states “*one can remember without being nostalgic but one cannot be nostalgic without remembering*” (p. 362). Hence, nostalgic reverie can be regarded as a form of autobiographical memory (Sedikides et al., 2015b; Wildschut and Sedikides, 2020). Despite nostalgia differs from autobiographical memories (i.e., brooding, reflection), with its more significant impact on boosting self-esteem, social connectedness, and self-continuity (Jiang et al., 2021), it would be beneficial to look into the association between autobiographical memory and the self for a deeper understanding of nostalgia and its relation with self-construal. This becomes particularly significant due to the relatively limited exploration of the relationship between nostalgic memory and self-construal, juxtaposed with a substantial body of research on memory and its association with the self.

A Bidirectional Relationship Between the Self and Memory

Autobiographical memories and the concept of self are closely intertwined, to the extent that some consider them to be “intrinsically related” (Conway and Pleydell-Pearce, 2000, p. 264). Emphasizing this connection, Tessler and Nelson (1994) suggest that “*self and memory organize, construct and give meaning to each other in a way so intimate that we can truly say that we are what we remember and that our memories are ourselves*” (p. 321).

This reciprocal link where memory shapes the self, and the self determines retrieved memories, has been underscored by various research. For instance, Albert (1977) suggests that, driven by a desire for a consistent self-identity, individuals may become prone to recall memories aligned with their current self-concepts. Extending on this, Wilson and Ross (2003) argue that memories, specifically what is remembered and how it is remembered, shape an individual’s current view of the self. As an example, Wilson and Ross (2003), referring to a previous study (Wilson and Ross, 1998) show that students who relocated to attend college, felt more distant from their pre-college selves when they were encouraged to remember the moving process. Further, Libby and Eibach (2002) suggest that the utilization of a third-person perspective in recollection may function as a distancing mechanism from the present self.

The bidirectional relationship between the self and memory is also supported by the “self-memory system”, a framework consisting of the components of autobiographical knowledge and the working self (Conway and Pleydell-Pearce, 2000; Conway, 2005). This framework suggests that the “working self” – a dynamic entity involved in the formation and organization of autobiographical memories – activates memories that will support itself (Conway, 2005). Basing on Conway and Pleydell-Pearce’s (2000) self-memory system framework, Charlesworth et al. (2016) claim that autobiographical memory retrieval increases access to the self-concepts. The researchers show that individuals who were prompted to write about a nostalgic memory generated more self-defining statements than those who wrote a factual description of the solar system, which is unlikely to trigger memories relevant to the self.

Memory and Self-Construal

Much like the link between the self and memory, there exists an interconnection between self-construal and memories, where each exerts influence on the other (Wang and Conway, 2004). Research that uncovered this connection focused on the variations in memory tendencies among cultures encouraging distinct self-construals, independent or interdependent. These self-construals are suggested to be relatively stable within a culture despite some individual differences (Markus, Mullally and Kitayama, 1997). Wang and Conway (2004) argue that the cultural inclination towards a particular self-construal at the macro cultural level impacts autobiographical memory and the self in the micro individual level. This cultural influence operates reciprocally between the self and autobiographical memory, through a dynamic interplay between the two. To be more specific, while individuals in cultures linked with an independent self-construal might tend to store and recall information that is related to themselves, those in cultures associated with an interdependent self-construal can demonstrate a greater inclination to focus on and remember details about others, which foster a sense of group harmony (Wang, 2014). For instance, Chinese (interdependent self-construal) adults tend to emphasize social events and the involvement of others in their memories, whereas Americans (independent self-construal) are inclined to recall personal experiences centered on their own feelings and roles (Wang and Conway, 2004). While self-construal shapes memory patterns, these memories in turn, further enhance a certain self-concept, either interdependent or independent. Chinese individuals, guided by their memory inclinations, may reaffirm their interdependent self-construal, perceiving the self as interconnected with others. Conversely, Americans, influenced by their memory patterns, can further enhance a self-concept that emphasizes individual distinctiveness (Wang and Conway, 2004).

Nevertheless, while these studies provide support for the relationship between self-construal and memory, the focus is on the chronically accessible self-construal fostered by culture. However, as previously mentioned, an individual's self-concept is malleable in the way that it is context-dependent and can be triggered by individual or social-oriented themes (Trafimow, Triandis and Goto, 1991). Basing on this, various research has uncovered effects of self-construal priming on memory (e.g., Sui, Zhu and Chiu, 2007; Wang, 2008). Wang (2008) demonstrated that Asian American individuals primed with an Asian (interdependent) self, recalled more memories focused on others compared to those primed with an American (independent) self. This underscores the self-coherence facilitated by memory, wherein the accessibility of memories relies on their ability to ground individual's beliefs about the self (Conway, Meares and Standart, 2004). Zhou, Ye and Ye (2021) further supported this by suggesting that the retrieval of past social relationships from memory may not be of the same magnitude for individuals primed with an independent and interdependent self-construal. For instance, the emphasis given to differentiation by individuals with independent self-construal may hinder the perception of social support through impeding the accessibility of relational past experiences. Consequently, the impact of nostalgia can vary across individuals. For example, while nostalgia's positive impact on product adoption mediated by social support is pronounced for individuals primed with an interdependent self-construal, the mediation effect is inhibited for individuals primed with an independent self-construal (Zhou, Ye and Ye, 2021).

Hence, while self-construal, through a distinct focus on autonomy or sociality, may play a pivotal role in influencing the types of accessed memories, autobiographical remembering may reciprocally enhance a certain self-construal, fostering self-continuity which is characterized as a sense of alignment between the past and the present self (Parfit, 1971; Vignoles, 2011). This relationship can manifest itself between the chronic self-construal fostered by the culture and memory (Wang and Conway, 2004); but also, between a temporarily accessible self-construal and memory (Wang, 2008) (see Figure 1).

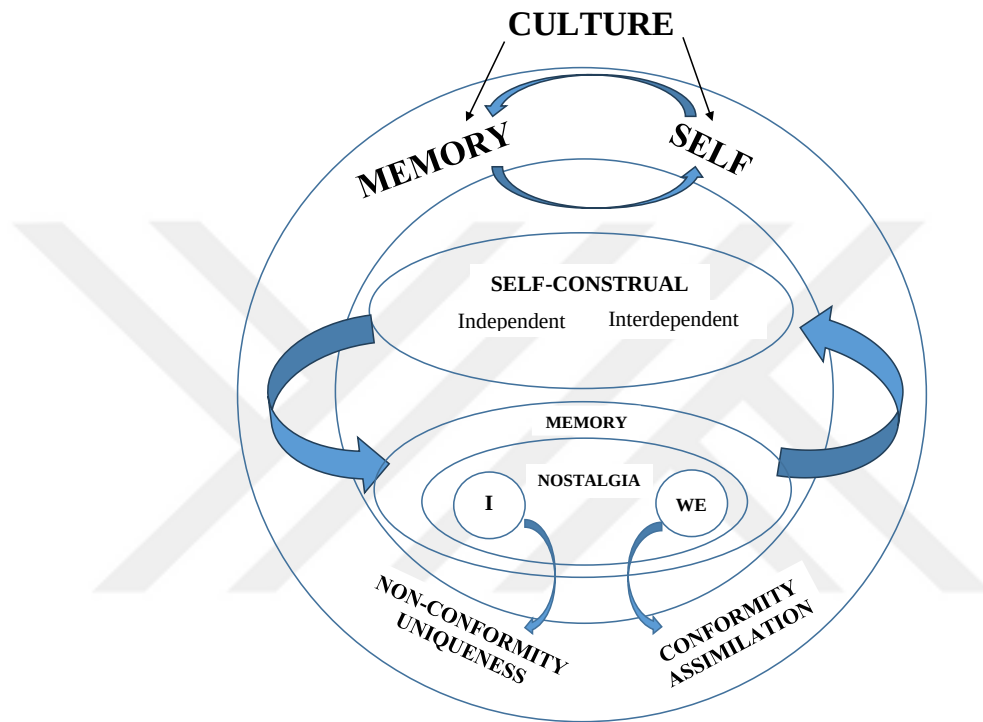


Figure 1: Self-Memory Relationship: Relationship between culture, memory, and the self in the outer sphere (Wang and Conway, 2004), and the relationship between temporarily accessible self-construal and memory in the inner sphere (Wang, 2008).

The focus of the present research is the inner sphere where a certain self-construal is temporarily activated for an individual. Hence, self-memory relationship at the micro-individual level is examined, without considering cultural influences at the macro level.

Nostalgia, Self-Construal and Conformity

Previous research suggests a reciprocal connection between self-construal and memory. The inclination towards a particular self-construal, either chronic or temporary, may increase access to relevant memories which can further reinforce that self-construal (see Figure 1). In turn, the emerging self-construal could lead to conformity behavior consistent with its nature.

Against this backdrop, it is expected that distinct nostalgic memories – nostalgic-alone vs. nostalgic-related – can have diverse influences on self-construal. Nostalgic memories of group

events, such as time spent with family members or friends, can facilitate an interdependent self-construal by emphasizing connection to others. On the other hand, nostalgic memories of past solitary events such as playing a video game or watching a TV show may enhance an independent self-construal by increasing the salience of the self, distinct from others. Considering self-construal's impact on conformity, the present research anticipates that individuals in nostalgic-alone condition will be more prone to choose a minority-endorsed product option through the temporary activation of the independent self-construal while those in nostalgic-related condition will have a higher preference towards the majority-endorsed option through an enhancement of interdependent-self construal.

Accordingly, the following hypotheses are formulated (see Figure 2):

H1: Different types of nostalgia will distinctly affect consumer preferences for conformity. Nostalgic-alone (vs. related) memories will increase purchase preference for the minority (vs. majority) endorsed product option.

H2: Self-construal will mediate the impact from nostalgia type to consumer preferences for conformity. Nostalgic-alone (vs. related) memories will enhance an independent (vs. interdependent) self-construal. Those with an independent (vs. interdependent) self-construal will show a higher purchase preference for the minority (vs. majority) endorsed product option.

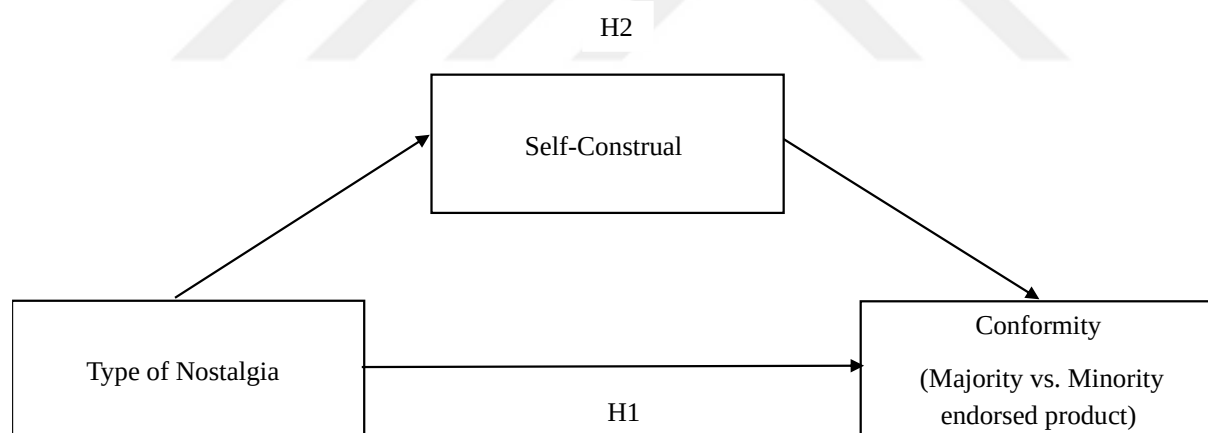


Figure 2: Conceptual framework for the effect of nostalgia type on consumer preferences for conformity

Methodology

Research Approach

To test the hypotheses (see Figure 2) and reveal the causal relationship between nostalgia and conformity a between-group experiment (nostalgic-alone/related) was carried out. An experiment enables to find the causal relationship between variables through a manipulation of the independent variables (Field and Hole, 2003). This is crucial for the research because it

hinges on a theoretical cause-and-effect connection, from nostalgic memory to self-construal, and from temporarily activated self-construal to conformity, that cannot be revealed through alternative research methods like a correlational study. Hence, an experiment was chosen as the suitable research method for this research aiming to reveal how different modes of nostalgia impact preference for majority vs. minority-endorsed products through an effect on self-construal. While nostalgia, either alone or related, was the independent variable, purchase intention for a product (majority/minority endorsed) was chosen as the dependent variable revealing participants' preferences for conformity and the mediator in this relationship was hypothesized to be self-construal (independent/interdependent).

An experimental method uncovers causality through assigning different levels of the independent variable to at least two groups, while controlling for the confounding factors (Field and Hole, 2003). Aligned with this, two treatment groups were constructed: nostalgic-alone and nostalgic-related. Participants were randomly assigned to these groups receiving either a nostalgic-alone or nostalgic-related treatment. Later, participants answered questions utilized to examine different types of nostalgia's effect on the dependent and mediating variable namely, consumer preferences for conformity and self-construal, respectively.

Although an experimental methodology can have several limitations, these limitations were mitigated by the present study. An experiment might induce demand effects that may harm the validity of the findings (Orne, 1962). Demand effects might occur as the experimenter may bias answers through their interaction with participants (Field and Hole, 2003). To mitigate such biases the present study utilized a "double-blind" technique (Field and Hole, 2003, p.61). This technique necessitates both the experimenters and the participants to be unaware of the aim and the hypotheses of the study. Accordingly, online surveys were filled out in the presence of experimenters who were not briefed about the survey. Further, the presence of an experimenter enabled control over the survey process (i.e., preventing multi-tasking participants) and thus enhanced the internal validity of the findings (Geuens and De Pelsmacker, 2017). Careless responding is another limitation that can be faced when doing online experiments which can hamper the validity of the results (Geuens and De Pelsmacker, 2017). To reduce concerns regarding internal validity, a quality check question was utilized, and survey response times were examined (Geuens and De Pelsmacker, 2017). Indeed, the complete research process, encompassing aspects such as sample selection, survey administration, and experimental manipulations, was executed with a focus on ensuring reliability and validity (Field and Hole, 2003). Detailed explanations of these considerations will be provided in the subsequent sections.

Pre-tests

While recall tasks are pervasively used to manipulate nostalgia (Huang, Huang and Wyer, 2016; Lasaleta, Sedikides and Vohs, 2014; Zhou et al., 2012) solely relying on it was deemed insufficient for this study due to potential variations in the accessibility of nostalgic-related and nostalgic-alone memories, which might result in participants having less capability to remember nostalgic experiences where they were alone (Routledge et al., 2013). Hence, two augmenting ways of manipulating nostalgia were pretested before the main experiment. This was to ensure an effective manipulation and a proper comprehension of questions. Both pre-

tests were conducted through surveys prepared on Qualtrics and were analyzed through SPSS 25.0. The initial pre-test employed a vignette to manipulate different types of nostalgia, while the subsequent pre-test utilized nostalgic stories for the same purpose. The pre-test results revealed nostalgic stories to be more successful than vignettes in manipulating the independent variable. Specifically, the stories resulted in a significant sociality difference in memories between those in the nostalgic-alone and nostalgic-related group, as well as an above mid-scale nostalgic feeling for both groups. As a result, nostalgic stories were selected as the manipulation to be paired with a recall task in the experiment. Elaborate descriptions of both pre-tests are provided in the paragraphs that follow.

Pre-test 1: Nostalgic Vignettes

The first pre-test involved 36 individuals from Turkey who were randomly assigned to two nostalgic conditions. To induce different types of nostalgia (i.e., nostalgic-alone, nostalgic-related), vignettes encouraging nostalgic reverie were utilized. The vignettes prompted individuals to recall a nostalgic event (alone vs. related) and featured examples of nostalgic activities (i.e., “spending time alone in nature”, “exchange of gifts”) as well as AI-generated images depicting them (generated using Microsoft Copilot). The examples of nostalgic instances were a selection of significantly experienced events in childhood (Batcho, Nave and DaRin, 2011). Following exposure to the vignettes, participants were asked to write down a similar nostalgic event they recalled, either experienced alone or with family/friends. To test the success of manipulation two manipulation check questions were utilized: (1) The story brought up memories of an event where I was alone (1= completely agree 7= completely disagree), (2) The story brought up memories of an event where I was with my family/friends (1= completely agree 7= completely disagree). The score of the first question was deducted from the second to assess the relational nature of the evoked memories.

The findings from the pre-test revealed that vignettes were successful in manipulating distinct types of nostalgia. Nevertheless, although participants in the nostalgic-alone group ($M = 0.11$, $SD = 2.35$) indicated recalling less social events compared to the other group ($M = 1.78$, $SD = 2.46$, $F(1, 34) = 4.32$, $p < .05$), the significance level ($p = .045$) was considered too close to the 0.05 threshold. Further, the nostalgia induced by two conditions differed significantly ($F(1, 34) = 4.96$, $p < .05$), with the nostalgic-alone group scoring below the midpoint of the nostalgia scale ($M = 3.63$, $SD = 1.74$). This sparked concerns regarding the effectiveness of the manipulation, especially for the nostalgic-alone group. Post-survey feedback from the participants indicated that different examples of nostalgic instances in the vignettes hindered the in depth recall of a specific memory since they made the participants shuffle between distinct nostalgic events. Additionally, AI-generated images were thought to be insufficient in eliciting nostalgia.

Pre-test 2: Nostalgic Stories

Stemming from the outcomes of the first pre-test, a new manipulation was created. Instead of mentioning multiple nostalgic events within a vignette, a single nostalgic experience representing either nostalgic-alone or nostalgic-related condition was written as a story to increase the vividness of a nostalgic experience. To craft the stories, a netnography and

literature review was conducted to identify specific elements that trigger feelings of nostalgia. Subsequently, the elements that were integrated into the nostalgic narratives drew inspiration from Batcho, Nave and DaRin (2011) and blogs regarding “2000’s nostalgia”. The nostalgic-related story depicted preparing for New Year’s with family while the nostalgic-alone story illustrated a day of solitude at home. Both stories included renowned nostalgic brands (e.g., Harry Potter, LimeWire, iPod Nano) and were similar in terms of sensory language, sentiment, word count and overall flow (see Appendix). AI-generated images were not used because of their limited ability to evoke nostalgia. However, the brands incorporated in stories were thought to enrich the narratives sufficiently to compensate for the absence of images. Different from the first pre-test, a single question was utilized to measure the relational tendency of the memories in a bipolar Likert scale: The story brought up memories of an event where I was (1= completely alone 7= completely with family/friends).

The second pre-test was conducted with 89 Turkish university students. Six of these students were eliminated failing to pass the quality check or because of missing answers. The final sample comprised 83 individuals, including 54 males and 29 females. The participants were instructed to read the nostalgic story and similar to the first pre-test, were asked to write down a similar nostalgic event they recalled. Results from this pretest indicated that the narratives successfully elicited feelings of nostalgia, surpassing the effectiveness of the vignettes. Those who were in the nostalgic-alone condition ($M = 4.02$, $SD = 2.04$) remembered significantly less social events compared to the nostalgic-related group ($M = 5.74$, $SD = 1.45$, $F(1, 81) = 19.19$, $p < .001$). Further, both nostalgic-alone ($M = 4.77$, $SD = 1.59$) and nostalgic-related ($M = 5.15$, $SD = 1.23$) group experienced nostalgia levels higher than the scale midpoint. Lastly, as expected the difference in nostalgia was not statistically significant ($p = .233$) between two conditions ($F(1, 81) = 1.45$, $p > .05$).

Therefore, the chosen method to manipulate different types of nostalgia has been distinct stories coupled with a recall task.

Experiment

Sampling

The experiment utilized a convenience sample comprising students of a Turkish university in Istanbul. University students were not chosen solely based on their convenience and cost-effectiveness, as indicated by Geuens and De Pelsmacker (2017). Since nostalgia is common among all ages (Sedikides, Wildschut and Baden, 2004), they were considered a relevant sample for the study. Moreover, they provided a homogeneous sample, promoting subsample equivalence and thereby enhancing the experiment's validity (Geuens and De Pelsmacker, 2017).

A total of 192 undergraduate students participated in the experiment and rated their self-construal and purchase intentions for a minority/majority endorsed product subsequent to being randomly subjected to nostalgic-alone ($N = 93$) or nostalgic-related ($N = 99$) conditions. Through randomly assigning participants to groups, the research aimed to isolate the causal factors and control for the confounding variables (Field and Hole, 2003). The survey was conducted in Turkish to ease comprehension.

Measurement

All constructs utilized in the experiment were formed based on reliable items utilized in previous studies. To assess these constructs, all scales were adapted into a 7-point Likert Scale which is suggested as an effective measurement format for individuals with high cognitive aptitude (i.e., students) (Weijters, Cabooter and Schillewaert, 2010). Nostalgia was measured by averaging three questions previously used by Wildschut et al. (2006) and Cheung et al. (2013). In assessing self-construal, two distinct scales were utilized to measure different constituents of it. This was to scrutinize self-construal in two different models. One of these scales was adapted from Aaker and Lee (2001) which utilized three question per self-construal type. To form an index, the three questions corresponding to each type of self-construal were averaged. Later, the score for independent self-construal was subtracted from that of interdependent self-construal. Another set of items to assess self-construal was taken from White and Argo (2011), and the average of these items was used to measure self-construal. Lastly, mood was measured with two items from Jun, Park and Kim (2022). These items were averaged to form a mood index. The results from the experiment revealed all constructs to be highly reliable, with each Cronbach's alpha surpassing the 0.7 threshold (see Table 2) (Hair et al., 2014a).

Table 2: Constructs and measurement items

Construct	Sources	Measurement Item	Cronbach's Alpha
Nostalgia	Cheung et al. (2013) Wildschut et al. (2006)	Right now, I am feeling quite nostalgic. Right now, I am having nostalgic feelings. I feel nostalgic at the moment.	.95
Self-Construal		Take a moment to think back about the nostalgic event you remembered after reading the story. While remembering the event, please describe the extent to which:	

Independent Self-Construal	Aaker and Lee (2001)	You thought just about yourself. Your thoughts about the memory were focused on just yourself. Your thoughts were focused on just you.	.92
		You thought about you and your family/friends. Your thoughts about the memory were focused on you and your family/ friends. Your thoughts were focused on you and your family/friends.	
Interdependent Self-Construal			
Self-Construal	White and Argo (2011)	To what degree do you feel like a unique individual? To what degree do you feel distinct from others? To what degree do you feel different from others?	.81
Mood	Jun, Park and Kim (2022)	Right now, I feel happy. Right now, I feel in a good mood.	.91

Design and Procedure

The aim of the experiment has been to delve into two types of nostalgic memories, nostalgic-alone and nostalgic-related, and reveal their impact on self-construal and consumers' purchase intention for majority vs minority endorsed products. Nostalgic-related memories encompass social autobiographical memories involving others (i.e., family, friends), while nostalgic-alone memories encapsulate solitary autobiographical memories in which the individual is alone (Batcho, 2007). Accordingly, after being shown a story that guided them through a nostalgic event (inducing related vs. alone nostalgic memories), participants indicated their purchase

preferences between two mugs – one majority endorsed and the other minority endorsed (adapted from Huang et al., 2014). Subsequently, they rated questions assessing their self-construal (see Table 3).

A survey link was distributed to student emails via Qualtrics over two consecutive days: 17 and 18 April 2024. The survey was administered during lecture hours, with emails sent approximately 10 minutes prior to the start of each lecture, in which the survey would be administered. The survey was designed to be comprehensible yet concise (Zikmund et al., 2013) to avoid a decrease in reliability because of careless responding (Trost, 2012). Therefore, the survey had an estimated 5 minutes of completion time.

At the start of the survey informed consent was taken from all participants and anonymity was assured. The participants were informed that they can leave the survey any time they want and before commencing, they were briefed about the survey without disclosing the actual purpose to prevent any demand effects (Geuens and De Pelsmacker, 2017).

The study utilized a one-factor (nostalgic-alone vs. nostalgic-related) between-subject design experiment manipulating nostalgia (nostalgic-related vs. nostalgic-alone), in which a total of 192 participants were randomly assigned to the two conditions - nostalgic-related and nostalgic-alone. In each condition participants viewed a story narrating nostalgic experiences corresponding to the respective condition (i.e., a day alone at home for nostalgic-alone; New Year's celebration for nostalgic-related). Subsequently, participants were prompted to write down a similar memory evoked by the story– either alone or with family/friends.

After this manipulation, participants underwent a manipulation check, intending to verify the success of the manipulations in inducing nostalgic-related/nostalgic-alone memories. While some scholars recommend conducting a manipulation check near the end of the survey (Geuens and De Pelsmacker, 2017), a great body of literature suggests otherwise. Specifically, studies that manipulate nostalgia commonly employ the manipulation check immediately after the manipulation (e.g., Cheung et al., 2013; Stephan, Sedikides and Wildschut, 2012). Accordingly, following the manipulation, participants rated the statement “The story brought up memories of an event where I was” (1= completely alone 7= completely with family/friends) in a bipolar Likert scale to gauge the relational tendency of the recalled nostalgic event. A bipolar scale was preferred over two distinct scales measuring the (1) solitary and (2) social aspect of the recalled event, to obtain a clearer understanding of the event's characteristics.

Following this, participants answered three questions measuring their levels of nostalgia: “Right now, I am feeling quite nostalgic”, “Right now, I am having nostalgic thoughts”, and “I feel nostalgic at the moment” (Wildschut et al., 2006) using a 7-point Likert scale (1= completely agree 7= completely disagree). This was to verify that both conditions evoked similar levels of nostalgia (Jun, Park and Kim, 2022), while also ensuring that nostalgia levels are higher than the scale midpoint of 4, for both conditions.

Subsequently, participants were instructed to imagine one majority endorsed and one minority endorsed coffee mug (Huang et al., 2014) and then indicate their purchase preference on a bipolar 7-point Likert scale (1 = definitely choose Mug A, 7 = definitely choose Mug B). At this stage, participants were asked to envision that Mug A is preferred by a majority of their

peers in the university, while Mug B is owned by a minority. It was also stated that one option is a popular choice while the other is a unique one to emphasize the majority and minority endorsement conditions, respectively. Both mugs were stated to be identical in terms of price, quality and brand. Following this, participants were prompted to answer an instructional question (i.e., “Please select the option “2” for this question.”) to ensure quality (Geuens and De Pelsmacker, 2017). Those who have failed to give the correct answer were excluded from the study (Geuens and De Pelsmacker, 2017).

Afterwards, participants completed questions measuring their self-construals (see Table 3). A combination of Aaker and Lee (2001) and White and Argo (2011) scales were utilized to gauge the self-construal of the participants (see Section Constructing the Self-Construal Scale). To control for the potential confounding effect of mood (e.g., Jun, Park and Kim, 2022) participants answered the questions: “Right now, I feel happy”, “Right now, I feel in a good mood”. While previous research suggests that nostalgia has a potential to create a positive mood (Hepper et al., 2012; Leunissen et al., 2018), some studies present conflicting findings, indicating instances where this positive mood is not observed (Cheung et al., 2013; Stephan et al., 2014). Hence, nostalgia may have varying effects on mood. In line with this perspective, the two experimental conditions could potentially generate distinct moods, thereby influencing conformity (Tong et al., 2008).

As the last step, participants answered demographic questions regarding factors such as age, gender, country of nationality and education level (Oppenheimer, Meyvis and Davidenko, 2009). To maintain research ethics, at the end of the survey participants were debriefed about the manipulations and the aim of the research (Field and Hole, 2003; Geuens and De Pelsmacker, 2017).

Constructing the Self-Construal Scale

Various scales are used to measure self-construal. One frequently employed scale is the 24 and 30-item self-construal scale developed by Singelis (1994), which is typically used to measure chronic self-construal. Another scale is the Levels of Self-Concept Scale (LSCS) by Selenta and Lord (2005) which is used by Johnson and Lord (2010) in a study where the temporary self-construal is assessed as a mediator. However, this scale was used to measure chronic self-construal in another research by Johnson, Selenta and Lord (2006). In turn, the discrepancy in the utilization of the Selenta and Lord (2005) scale as well as the chronic tendency of the Singelis (1994) scale, prompted further investigation into the previous studies where the temporarily activated self-construal is assessed, in order to ensure alignment between measurement and present research goals. These studies manipulated self-construal and employed manipulation check questions to ensure that the intended self-construal was activated. Even though the present research does not manipulate self-construal per se, it hypothesizes an effect from nostalgia to self-construal. Hence, the questions utilized as manipulation checks of self-construal in prior research were deemed appropriate to assess the temporary activation of self-construal in the present research.

The self-construal scale used in the present research, consisted of a combination of the scales used by Aaker and Lee (2001) and White and Argo (2011) (see Table 3). The reason for this

was to capture the shift in self-construal in a more nuanced manner. According to Singelis and Sharkey (1995) self-construal is an aggregation of “thoughts, feelings and actions” (p.624) regarding an individual’s self in relation to others. In accordance with this assertion, White and Argo (2011) scale was used to assess self-construal in a “feeling” oriented manner (i.e., feeling unique). On the other hand, Aaker and Lee (2001) scale was utilized to measure self-construal in a “thought” oriented manner (i.e., having self vs. others-oriented thoughts). The employment of distinct scales is crucial because it enables a comprehensive understanding of self-construal. Specifically, neither a shift in thought, either self-focused or others-focused thinking, might directly transfer to a shift in feeling nor a shift in feeling might align with a change in thought. Consequently, in examining the effect from the nostalgic memory to self-construal and from self-construal to conformity it is important to assess which aspect of self-construal is impacted and responsible for the change in behavior.

Table 3: Self-construal scale

Aaker and Lee (2001)	White and Argo (2011)
Take a moment to think back about the nostalgic event you remembered after reading the story. While remembering the event, please describe the extent to which: <u>Self Thoughts Index – Independent self-construal (Cronbach’s alpha = .90)</u> (1) “you thought just about yourself” (2) “your thoughts about the message were focused on just yourself” (3) “your thoughts were focused on just you” <u>Others Thoughts Index – Interdependent self-construal (Cronbach’s alpha = .92)</u> (4) “you thought about you and your family” (5) “your thoughts about the message were focused on you and your family” (6) “your thoughts were focused on you and your family”	<u>Distinctiveness Activation Index – Self-construal (Cronbach’s alpha = .90)</u> (1) “To what degree do you feel like a unique individual?” (2) “To what degree do you feel distinct from others?” (3) “To what degree do you feel different from others?”

While one might assert similarities between Aaker and Lee (2001) scale and the manipulation check utilized in the present research, it is vital to recognize the distinction. Herein, the manipulation check is utilized to assess the social characteristics of the recalled experience,

whereas the Aaker and Lee (2001) scale is utilized to measure the social content of the thoughts induced by the recalled experience. Hence the manipulation check item does not necessitate a parallel measurement in the self-construal scale. To put it in a more straightforward way with an example, one might recall a solitary experience (e.g., drinking milk alone in bed) yet simultaneously have thoughts directed towards family members (e.g., reminiscing about a parent providing milk before bedtime).

Data Processing and Analysis

Upon finalizing the data collection, the data was transferred from the Qualtrics platform to IBM SPSS Statistics 25.0. To ensure quality, those with missing answers or wrong answers to the instructional question were eliminated from the data set (see also Section Results and Analysis). The results were analyzed through one-way analysis of variance (ANOVA), regression analysis, and PROCESS SPSS macro (Hayes, 2012).

To commence the analysis, the independent variable, nostalgia type, was coded into a dummy variable representing categorical data. The nostalgic-related group was coded as “1” while the nostalgic-alone group as “0”. Further, as abovementioned (see Section Measurement), indexes were created to assess nostalgia, self-construal and mood. To measure nostalgia, three questions constructing the nostalgia scale were averaged. Similarly, mood was assessed by taking the average of its two measurement items. Two different assessments of self-construal were utilized in the present study. For the first assessment the White and Argo (2011) scale was averaged. For the second, items corresponding to each self-construal in the Aaker and Lee (2011) scale were averaged. Then, the score for interdependent self-construal was deducted from the score of independent self-construal. Further, the dependent variable, which is consumer preferences for conformity, represented in this study by the preference for the majority vs. minority endorsed product option, was coded. In the survey, the product choice was assessed through a 7-point Likert scale indicating: 1 = definitely choose Mug A, 7 = definitely choose Mug B, where Mug A represented the majority endorsed option while Mug B represented the minority endorsed option. Hence, higher scores represented a consumer preference for non-conformity while the lower scores indicated a preference for conformity.

After coding the variables, a one-way ANOVA was employed to check the success of the manipulation as well as to observe the differences in mean values for other variables such as mood and feelings of nostalgia, between experimental groups. A one-way ANOVA was suitable for this aim since it is used to compare means between groups and assess the statistical significance of the differences (Hair et al., 2014a). To assess H1, namely the direct effect from the independent variable, nostalgia type to the dependent variable, consumer preference for conformity a regression analysis was performed. A regression analysis enables to explore the relationship between the dependent and independent variables, as well as to assess the predictive accuracy of the model (Hair et al., 2014a). Lastly, to test H2, namely, the mediation of self-construal, Model 4 in Hayes’ PROCESS SPSS macro (2012) was utilized. A more detailed discussion of data analysis can be found in the following section.

Results and Analysis

To examine the experiment results, SPSS 25.0. was employed. The survey was distributed to a total of 838 students and was responded to by 338 of them. Following the elimination of participants with wrong answers to the quality check question and missing answers, the sample size was reduced to 272 individuals. To further increase the quality of answers, survey response time was taken as a criterion. Too slow (Heerwegh, 2003; Huckfeldt and Sprague, 2000) or too fast (Callegaro et al., 2009; Kaminska, McCutcheon and Billiet, 2010) responses are both problematic and are usually handled by researchers by being excluded from the sample (Heerwegh, 2003; Ratcliff, 1993). Accordingly, those who spent less or more than one standard deviation from the mean response time (Malhotra, 2008) measured in seconds ($M = 349.38$), were excluded from the sample. This resulted in the exclusion of 38 individuals with response times considered too fast ($M = 199.474$) and 42 individuals with response times deemed too slow ($M = 536.69$). Consequently, the final sample included 192 participants, predominantly Turkish individuals within the ages of 18-24 (see Table 4).

Table 4: Sample demographics

Measure	Item	Frequency	Percentage
Gender	Male	97	50.5%
	Female	88	45.8%
	Non-binary/Third gender	2	1%
	Does not want to disclose	5	2.6%
Nationality	Turkish	188	98%
	African	1	0.5%
	Serbian	1	0.5%
	Greek/Turkish	1	0.5%
	American	1	0.5%
Age	18-24	188	97.9%
	25-34	4	2.1%

Reliability of Scales

As mentioned in the methodology section, scales used in the survey showed high reliability, each Cronbach's alpha surpassing the acceptable value of 0.7 (see Table 5) (Hair et al., 2014a).

Table 5: Reliability of scales

Measure	Item Number	Mean	Standard Deviation	Cronbach's Alpha
Nostalgia	3	14.27	4.481	.945
Self-Construal (Aaker and Lee, 2001)				
Independent self-construal	3	11.39	4.688	.919
Interdependent self-construal	3	11.89	4.994	.946
Self-Construal (White and Argo, 2011)				
	3	14.64	3.228	.806
Mood	2	8.79	3.180	.913

Levene's Test

Prior to the analysis a Levene's test was conducted to ensure homogeneity of variances (Hair et al., 2014a). The present study utilized two different assessments of self-construal as the mediator, and hence, scrutinized the results in two models, namely Model 1 and Model 2, which will be elaborated in the subsequent sections. Thus, Levene's test was carried out for both models. The results indicated homogeneity of variances across all dependent and independent variables, each p value exceeding 0.05.

Multicollinearity

Multicollinearity can pose serious problems such as singularity and incorrect regression results (Hair et al., 2014a). To assess multicollinearity Tolerance and Variance Inflation Factor (VIF) were examined for Model 1 and Model 2. The results revealed a VIF of 1.027 and a Tolerance of 0.974 for Model 1, while for Model 2, the VIF and Tolerance were 1.379 and 0.725, respectively. These values fell within acceptable ranges, with VIF below 5 and Tolerance above the 0.2 threshold (Hair et al., 2014b). Hence, the results indicated no concern for multicollinearity.

Manipulating Nostalgia Type and Eliminating Mood as a Potential Confound

A one-way ANOVA was employed to assess the success of the manipulation and to address potential confounding variables.

The results revealed a successful manipulation of different types of nostalgia ($F(1,190) = 219.44, p < .001$). Events recalled by the nostalgic-alone group were significantly less social than those remembered by the nostalgic-related group (see Table 6).

Table 6: Manipulation Check

Group	Manipulation Check (Mean)	N	Standard Deviation	p
Nostalgic-Alone	2.74	93	1.905	< .001
Nostalgic-Related	6.14	99	1.221	

Further, both experimental groups showed nostalgia levels higher than the scale midpoint indicating a successful manipulation of nostalgic feelings (see Table 7). Nostalgia induced by two experimental conditions showed no significant difference ($F(1,190) = 0.36, p > .05$), and hence enabled to eliminate nostalgia level as a potential confounding factor.

Table 7: Feelings of nostalgia between experimental groups

Group	Nostalgia (Mean)	N	Standard Deviation	p
Nostalgic-Alone	4.69	93	1.560	.548
Nostalgic-Related	4.82	99	1.434	

Moreover, mood was eliminated from further analysis as a potential confound since it did not show a significant difference between two experimental groups ($F(1,190) = 0.37, p > .05$, also see Table 8).

Table 8: Mood between experimental groups

Group	Mood (Mean)	N	Standard Deviation	p
Nostalgic-Alone	4.47	93	1.516	.545
Nostalgic-Related	4.33	99	1.662	

Direct Effect of Nostalgia Type on Purchase Preference for Majority vs. Minority Endorsed Products

A linear regression revealed a significant direct effect of nostalgia type on product preferences ($R^2 = 0.020$, $F(1, 190) = 3.94$, $p < .05$). Participants in the nostalgic-alone condition preferred the minority endorsed product significantly more than those in the nostalgic-related experimental group (see Table 9). In the analysis the nostalgic-alone group was coded as 0, whereas the nostalgic-related group was coded as 1. Additionally, mug choice was coded, with lower scores indicating a preference for the majority-endorsed mug, while higher scores representing a preference for the minority-endorsed one. Hence, the results indicated that as the group number lowered to zero, individuals showed a higher preference to buy the minority endorsed option ($\beta = -0.47$, $t = -1.99$, $p < .05$). This reveals that nostalgia type significantly influences consumer preferences for conformity in a way that those who remember solitary (vs. social) nostalgic events demonstrate a higher preference for the minority-endorsed product option and supports H1.

Table 9: Effect of nostalgia type on product preferences

Group	Product Choice (Mean) 1-Majority Endorsed 7-Minority Endorsed	N	Standard Deviation	p
Nostalgic-Alone	5.45	93	1.598	.049
Nostalgic-Related	4.98	99	1.690	

Mediation of Self-construal

A bootstrapping analysis based on 5,000 samples was conducted to test the mediation of self-construal by using the PROCESS SPSS macro (Hayes, 2012; Model 4). This analysis was performed for two self-construal models. While the first model utilized the scale proposed by White and Argo (2011), the second model examined whether similar results were observed with the scale proposed by Aaker and Lee (2001).

Model 1

As expected, participants in the nostalgic-alone condition felt more unique ($M = 5.06$, $SD = 1.02$) and hence expressed a stronger independent self-construal than those in the nostalgic-related ($M = 4.71$, $SD = 1.10$, $F(1, 190) = 5.09$, $p < .05$) condition.

The results of the bootstrapping analysis revealed that the coefficient of total effect of nostalgia type on purchase preference for minority vs. majority endorsed product option is -0.47 ($p < .05$). Hence, preferences of those who were in the nostalgic-alone (vs. nostalgic-related) group were significantly higher for the minority-endorsed (vs. majority-endorsed) product option, signifying an inclination for non-conformity. Upon the inclusion of self-construal in the model as a mediator, the effect size of type of nostalgia on product choice decreased from -0.47 ($p <$

.05) to -0.38 ($p = .111$) and the effect lost its significance. On the other hand, the model fit improved from $R^2 = 0.020$, $F(1, 190) = 3.94$, $p = .049$ to $R^2 = 0.048$, $F(2, 189) = 4.80$, $p = .01$. Further, the 95% confidence interval for mediation excluded zero ($b = -0.09$, $SE = 0.06$, 95% CI $[-0.2285 \sim -0.0017]$). Hence, the results suggest that self-construal fully mediates the effect of nostalgia type on consumer preferences for conformity (see Figure 3). Those who are in the nostalgic-alone (vs. related) group show a heightened independent (vs. interdependent) self-construal and thereby have increased preferences for the minority (vs. majority)-endorsed product, leading to the validation of H2.

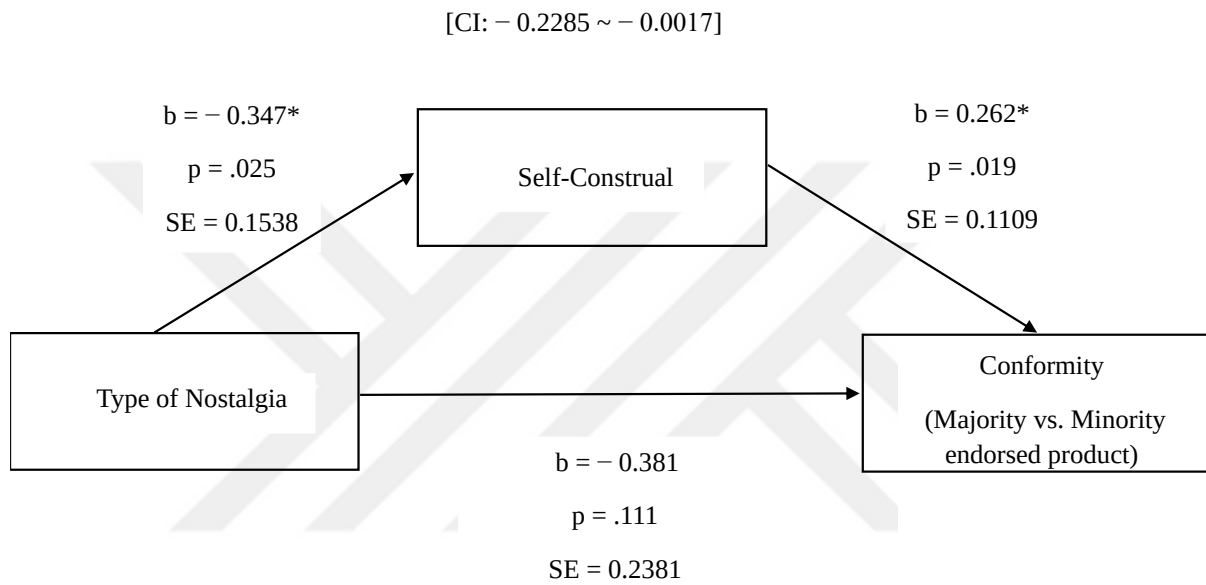


Figure 3: Mediation of self-construal for Model 1 (Notes: $*p < .05$, $***p < .001$)

Model 2

When self-construal was evaluated using the Aaker and Lee (2001) scale, the impact of nostalgia type on self-construal yielded a similar result to that of Model 1 and showed significance. Those who were in nostalgic-alone group showed a significantly higher tendency to have thoughts that were directed on themselves (vs. others) ($M = 1.36$, $SD = 2.65$) compared to those in the nostalgic-related group ($M = -1.60$, $SD = 2.18$, $F(1, 190) = 71.95$, $p < .001$) and thus had higher levels of independent self-construal. Yet, self-construal showed no significant impact on consumer preferences for conformity (preference for majority vs. minority endorsed products).

Moreover, when self-construal was included in the model as a mediator, the effect size of type of nostalgia on conformity increased from -0.47 ($p < .05$) to -0.58 ($p < .05$) (see Figure 4). The significance of the effect also increased, signified by the decrease in p value from 0.049 to 0.040. The model fit results demonstrated a change from $R^2 = 0.020$, $F(1, 190) = 3.94$, $p = .049$ to $R^2 = 0.023$, $F(2, 189) = 4.80$, $p = .11$. Additionally, the 95% confidence interval for the mediation included zero, indicating insignificance ($b = 0.11$, $SE = 0.13$, 95% CI $[-0.1563 \sim$

0.3576]). The results for Model 2 suggested that self-construal does not mediate the impact from nostalgia type to consumer preference for conformity, leading to the rejection of H2.

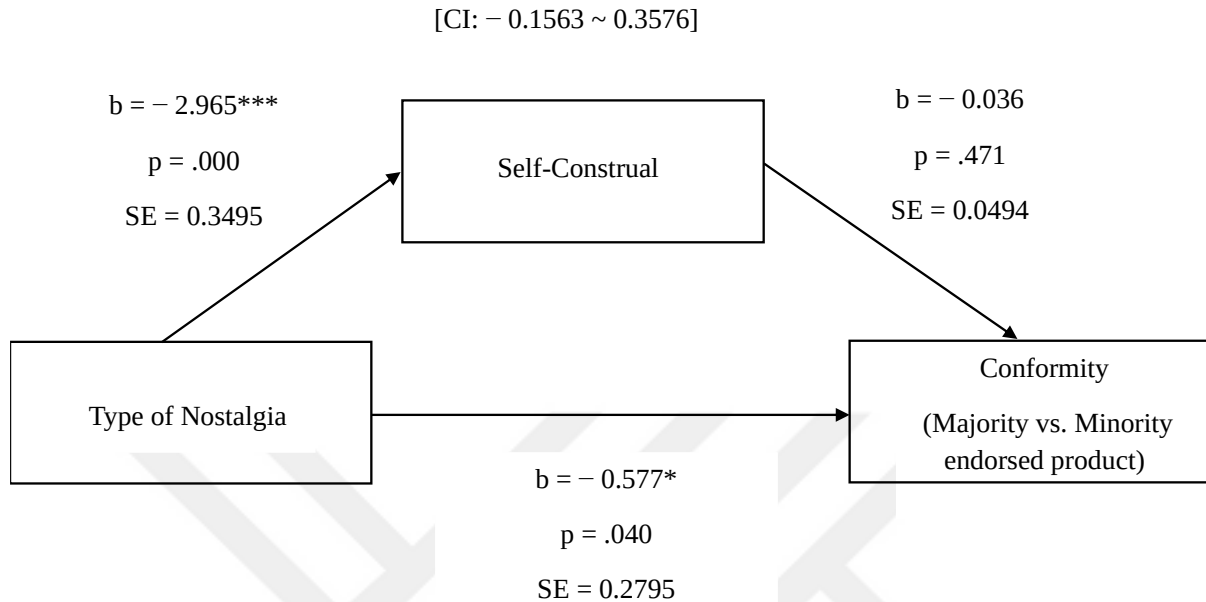


Figure 4: Mediation of self-construal for Model 2 (Notes: * $p < .05$, *** $p < .001$)

Summary of Results

In summary, for both models H1 was accepted. Overall, there is a significant impact from nostalgia type to preference for minority vs. majority endorsed product options. Those who remembered a solitary nostalgic memory showed a heightened preference for the minority endorsed product while those who recalled nostalgic memories including friends/family opted for the majority endorsed option.

Furthermore, nostalgia type significantly influenced self-construal both in Model 1 and Model 2. Those who are in the nostalgic-alone group exhibited significantly higher levels of independent self-construal than those in the nostalgic-related group. Self-construal had a significant impact on product choice in Model 1, and hence independent self-construal heightened the preference for the minority endorsed option while interdependent self-construal increased preference for the majority endorsed product. Yet, this effect was insignificant for Model 2.

Mediation analysis revealed that, self-construal fully mediates the relationship between nostalgia type and product preference for Model 1, supporting H2. However, in Model 2, this mediation effect was not supported, causing the rejection of H2 (for a summary of results see Table 10).

Table 10: Summary of results

Hypotheses		Results	
		Model 1	Model 2
H1	Different types of nostalgia will distinctly affect consumer preferences for conformity. Nostalgic-alone (vs. related) memories will increase purchase preference for the minority (vs. majority) endorsed product option.	Accept	Accept
H2	Self-construal will mediate the impact from nostalgia type to consumer preferences for conformity. Nostalgic-alone (vs. related) memories will enhance an independent (vs. interdependent) self-construal. Those with an independent (vs. interdependent) self-construal will show a higher purchase preference for the minority (vs. majority) endorsed product option.	Accept	Reject

Discussion

This research reveals that through an impact on self-construal different types of nostalgia distinctly affect consumer preferences for conformity. Specifically, research results show that individuals who remember solitary nostalgic memories (i.e., nostalgic-alone memories), show a higher purchase preference for the minority-endorsed product, and those who remember social nostalgic memories (i.e., nostalgic-related memories) opt for the majority-endorsed product option. This relationship is mediated by an individual's self-construal. Nostalgic memories of different social contexts (related vs. alone) trigger different self-concepts. While remembering a solitary nostalgic event such as playing computer games or watching TV enhances an independent self-construal, nostalgic memories of past experiences with family members/friends encourage an interdependent self-construal. In turn the activated self-construal leads to conformity behavior aligned with the goals of the respective self-construal type.

Social and Solitary Nostalgic Memories: Impact on Mood and Ability to Induce Nostalgic Feelings

Fan, Jiang and Hu (2020) argue that nostalgia encourages purchase intention for majority endorsed products. The result of the present research extends on this by revealing that nostalgic memories varying in sociality distinctly influence preferences for majority vs. minority endorsed product options. Moreover, the present research adds on to the literature primarily emphasizing the social aspect of nostalgia. Routledge et al. (2013) argue that nostalgic memories are predominantly social. Supporting this, various other researchers regard nostalgia as a social emotion and hence deem sociality as an integral part of it (Sedikides and Wildschut, 2019; Zhou et al., 2012). Nevertheless, the present research shows that sociality is not necessarily a key component of nostalgia. Indeed, the feeling of nostalgia showed no significant difference between those who remembered a nostalgic-alone and nostalgic-related event. Participants experienced similar levels of nostalgia regardless of whether they reminisced about solitary or social nostalgic events. These findings corroborate Batcho's (2007) research, suggesting that solitary and social past conditions evoke similar magnitudes of nostalgia.

This similarity in evoking nostalgic feelings also persists for triggering positive mood. Nostalgia has been shown to enhance emotional state (Wildschut et al., 2006). When looking at the impact of solitary and social events on promoting positive feelings regarding childhood, Batcho, Nave and DaRin, (2011) reveal that social (vs. solitary) events encourage childhood happiness to a greater extent. Accordingly, a happy childhood was shown to be more closely related to social events compared to solitary ones. The present study utilizes childhood events to induce nostalgia. Drawing on Batcho, Nave and DaRin (2011), one might have expected that the retrospective evaluation of happiness during nostalgic memory retrieval could lead to distinct current moods. However, the present study reveals that different nostalgic memories (alone vs. related) do not yield distinct impacts on mood. This may be because while favorable social events correlate to a greater extent with positive feelings compared to solitary events, adverse social events also show a higher correlation with negative feelings than solitary events of the same kind (Batcho, Nave and DaRin, 2011). Hence, in the present research the negative and positive affect evoked by the nostalgic-related memories may have balanced each other, resulting in a mood similar to that induced by the nostalgic-alone memories.

We Are What We Remember: Nostalgia Shifts Self-Construal

Clearly, solitary nostalgic memories are as important as the social ones, as they yield comparable levels of nostalgia and mood. Most importantly, the findings suggest that both types of nostalgic memories can distinctly affect consumer choice through their impact on self-construal. Specifically, those who remember a nostalgic event they experienced with friends and/or family lean towards an interdependent self-construal whereas those who remember solitary nostalgic events reveal higher levels of independent self-construal. This impact of nostalgia on self-construal manifests itself through lower scores on the others-thoughts and higher scores on the self-thoughts index (Aaker and Lee, 2001), as well as an increased level of perceived uniqueness (White and Argo, 2011) expressed by those who recall nostalgic-alone (vs. nostalgic-related) memories. Specifically, individuals who remembered solitary (vs. social) nostalgic memories expressed that they feel more unique and distinct compared to

others and also showed higher levels of self-directed and lower levels of others-focused thoughts. These findings not only support the malleability of self-construal (Gardner, Gabriel, and Lee, 1999; Torelli, 2006; Trafimow, Triandis and Goto, 1991) by showing that self-construal can shift in response to situational cues but also underscore the relationship between memory and the self, as suggested by previous research discussed below.

Nostalgia and the Self

The elicitation of distinct self-concepts in response to different types of nostalgia fits well with previous literature arguing for the impact from memory to the self. Wilson and Ross (2003) show that prompting individuals to recall certain memories can affect their self-views. For example, the researchers show, when individuals recalled their moving process to college, they felt less close to their pre-college selves. The findings of the present study are in alignment: what is remembered has a significant impact on the self. Consequently, due to contextual variations in sociality, diverse nostalgic memories evoke distinct self-concepts. This link from memory to self is further supported by the self-memory system proposed by Conway and Pleydell-Pearce (2000) which argues for the two-way interaction of the memory and the self. In this framework, memories are suggested to play a role of reinforcing the self (Conway, 2005). This reinforcement was also illuminated by Charlesworth et al. (2016), who revealed that nostalgia increases the number of self-statements an individual can generate. The present research supports nostalgia's ability to increase access to self-concepts. It also extends on Charlesworth et al. (2016) who suggest that memory acts as catalyst for self-concepts yet do not explore the alignment between the generated self-concepts and the context of the nostalgic memories that encourage their accessibility. In this regard, the research herein shows that the context of memories and the facilitated self-construal are in alignment as a lack of sociality in nostalgia reinforces an independent self while the presence of others enhances an interdependent self.

Nostalgic Memory and Self-Construal

This alignment of self-construal and memory is also implied by previous research, suggesting a reciprocal relationship between these concepts. These studies reveal an impact extending from self-construal to memory and argue that self-construal, either chronic or temporary, can impact the accessibility of the memories of an individual (e.g., Wang and Conway, 2004; Wang, 2008). For example, while those with an interdependent self-construal may have a greater ability to remember events experienced with others, those who have an independent self-construal may have a tendency to recall self-centered experiences (Wang and Conway, 2004; Wang, 2008). In turn, the recalled memories are expected to further enhance the current self-concept of the individual (Wang and Conway, 2004). The findings of the present study support this claim by revealing the link from nostalgic memory to self as a departure from previous research. The results suggest that self-construal can not only affect memory but also be affected by it.

Alone but Not Lonely: "I" and "We" Representations in Memory

The revealed impact of different types of nostalgia on self-construal suggest that nostalgic-alone and nostalgic-related memories work similarly as self-construal priming techniques used

in previous research. For instance, pronoun circling task is pervasively used to activate a certain self-construal. The task presents a script either including independent (e.g., I) or interdependent (e.g., we) pronouns and prompts participants to circle them to activate the respective self-concept (Gardner, Gabriel and Lee, 1999). This task enables an access to personal (differentiation focused) and social (integration focused) selves through an emphasis on “I” and “We”, respectively (Stapel and Koomen, 2001). Present research suggests that, nostalgic-alone and nostalgic-related memories trigger a similar mechanism and activate personal and social selves through their ability to evoke the “I” and “We” representations in memory.

This similarity suggests crucial insights regarding nostalgia’s interaction with loneliness. Nostalgic recollections relate to a past version of oneself, possibly with a more complex impact on the current self, than that of priming techniques. This complexity may stem from the restorative aspect of nostalgia (Zhou et al., 2008). Zhou and colleagues (2008) argue that nostalgia can counteract feelings of loneliness. Hence, individuals that feel lonely can show a higher tendency to involve in nostalgic reverie. In turn these individuals can enhance their sense of social support as a result of the increased accessibility of past social connections in memory (Kumashiro and Sedikides, 2005; Sedikides and Skowronski, 1991). Consequently, they can suppress their feelings of loneliness (Zhou et al., 2008). This study extends on these findings suggesting that sociality of nostalgia diminishes feelings of loneliness. While social nostalgic memories may decrease perceived loneliness, the findings imply that low sociality in nostalgia does not necessarily increase loneliness. If nostalgic-alone condition had indeed evoked feelings of loneliness, when prompted to remember a solitary nostalgic event, individuals might have automatically remembered a nostalgic-related one right after recalling a nostalgic-alone memory. This sequence of events could have resulted in an interdependent self-construal similar to those who were prompted to recall a nostalgic-related memory.

Navigating Consumer Choice: Self-Differentiating Feelings or Thoughts

The present research reveals that self-construal mediates the relationship between nostalgia type and consumer choice. Specifically, those who remember a solitary nostalgic memory show higher preference for the minority-endorsed product through the mediation of an independent self-construal and the ones who remember a nostalgic-related memory choose the majority-endorsed option by the mediation of an interdependent self-construal. Nevertheless, the mediation impact of self-construal is only relevant when it is assessed based on the perceived uniqueness of the individual. While the study shows that different types of nostalgic memories affect both components contributing to the formation of self-construal: (1) feelings and (2) thoughts concerning the self in relation to others (Singelis and Sharkey, 1995), these components show discrepancies in affecting consumer choice. Specifically, feeling distinct and unique compared to others (i.e., independent self-construal) mediates the impact from different types of nostalgia to conformity in product preferences. Hence, those who feel more unique opt for the minority endorsed product while those who feel more similar to others (i.e., interdependent self-construal) choose the majority endorsed option. This is in line with studies that argue for the assimilation proneness of interdependents and differentiation preference of independents (Markus and Kitayama, 1991).

Yet, the thought aspect of self-construal suggests different outcomes. Having a higher self-thoughts index (i.e., independent self-construal) or a higher others-thoughts index (i.e., interdependent self-construal) does not show an impact on the product preferences. This may stem from the close relationship between uniqueness motives and conformity and the inability of the thought aspect of self-construal in representing feelings of distinctiveness. Specifically, while feelings and thoughts are both analyzed to assess the same construct – self-construal – the orientation of thoughts towards the self vs. others may not necessarily elicit a corresponding degree of differentiation in feelings. Consequently, the thought orientation of individuals may not show an impact on their consumption preferences as it does not fully represent a fundamental underlying construct impacting conformity: uniqueness. Individuals with higher uniqueness needs are revealed to prefer differentiated in-group options (Chan, Berger and Van Boven, 2012). Along similar lines, participants who perceived themselves more unique in the present study preferred the minority endorsed option within their in-group (i.e., peers in the university). In line with this, the research herein indicates that, people who perceive themselves more unique may also show a greater need for uniqueness and aim to differentiate themselves from the group in the subsequent product choice.

Theoretical Contributions

This research illuminates how different types of nostalgia influence self-construal and consumer choice and offer several contributions to the existing literature.

First, the present research extends on the limited literature regarding nostalgia and its connection with conformity in product preferences. While Fan, Jiang and Hu (2020) has revealed that nostalgia can induce a preference for a majority endorsed product, they have compared nostalgic vs. non-nostalgic conditions, failing to elucidate the nuanced differences between various nostalgic memories and their impacts on consumer choice. By examining different types of nostalgia, the present study also adds on to previous literature which has predominantly focused on the social aspect of nostalgia while neglecting the solitary moments that can evoke nostalgia. Herein, it is worth noting that these studies utilized recall tasks prompting individuals to reflect on any nostalgic memory they possess. However, in real-world marketing contexts, stimuli are not typically so open-ended. Instead of simply prompting consumers to recall any nostalgic event, marketing stimuli often incorporate specific cues that influence the content of the recalled experiences. Through examining solitary and social nostalgic memories, the present research reveals that not every type of nostalgia leads to similar conformity behavior. Specifically, social context variations between nostalgic memories result in different consumer choice outcomes.

Second, the research sheds light on the impact of nostalgia on self-construal. While the connection between memory and the self has been previously studied, the scope has generally been limited to the temporarily activated or chronic self-construal's impact on the retrieved memories. Yet, the reciprocal impact from memory to self has not received the same attention. The research herein, adds insights into the relationship between memory and the self, revealing that different types of nostalgic memories (i.e., social vs. solitary) can activate distinct self-construals. While the results suggest an impact from nostalgic memory to self, they also reveal

memory and self-perception alignment, in which the context of the memories and the facilitated self are in concordance.

Third, the results provide insight into self-construal and its impacts on consumer choice. The study shows that feelings of distinctiveness shape consumer preferences for conformity while thoughts – either self or other directed – do not. This suggests that, when self-construal is examined as a combination of thoughts and feelings (Singelis and Sharkey, 1995), each constituent can vary in their impacts on behavior. Specifically, feelings might have a stronger influence on consumer choice than thoughts.

Finally, insights from this research expands beyond consumer choice literature and offer contributions to psychology and identity studies. The concepts of memory, self-construal and conformity have been widely studied in psychology and social identity research. By revealing a link from nostalgia to self-construal and conformity, insights from the present research offer a multi-disciplinary perspective that can be utilized to both understand and influence behavioral scenarios beyond consumption. These scenarios may encapsulate all instances where memory, conformity and self-construal is at play (e.g., political mobilization).

Practical Implications

The research provides multiple marketing implications. While previous literature reveals that conformity can be induced by nostalgia (vs. no-nostalgia), it leaves no choice for brands to utilize a non-nostalgic marketing stimulus to promote their non-conformist product options. Similarly, previous research suggests that nostalgic advertisements may not be suitable for brands that seek to promote unique product options (Fan, Jiang and Hu, 2020). Consequently, the advantages of nostalgia marketing, such as improved brand evaluations (Muehling, Sprott and Sultan, 2014), are forfeited, for non-conformist products and brands. The present research challenges this notion. This research reveals that nostalgia can be strategically used to both promote conformity and non-conformity. Hence, in their marketing endeavors, brands can utilize different kinds of nostalgic memories to endorse both minority and majority endorsed options. For example, a single brand can utilize different advertisements tailored for its minority and majority endorsed options. It can depict a nostalgic family Christmas to promote sales for a best-selling item, while showcasing a solitary nostalgic activity (e.g., having fun at home alone) to enhance preference for a niche product option. Along the same lines, brands advocating for a non-conformist attitude (e.g., Diesel, Vans) can evoke nostalgic memories of solitary events in their campaigns and advertisements to activate an independent self-construal and further induce an ethos of non-conformity.

The insights of the present research can also be utilized in political sphere for impacting behavior beyond consumer choice. The connection between different types of nostalgia and conformity can be leveraged by politicians and activists seeking to cultivate either a conformist or a non-conformist identity. Governments can utilize nostalgia of a social past to preserve status-quo, while opposition parties, third party political movements and political activists often advocating for non-conformist behavior can utilize nostalgia relating to an individual's solitary past experiences. This strategic use of nostalgia remains relevant for other activist endeavors challenging the status quo, such as environmental activism.

Lastly, the revealed link from different types of nostalgia to self-construal provides numerous opportunities for brands, political parties, environmental organizations that target self-construal related outcomes. Self-construal has a significant impact on not only conformity but also various other behaviors, including pro-environmental action (Wang et al., 2023) and word-of-mouth communication (Akpınar, Verlegh and Smidts, 2018). Leveraging different forms of nostalgia can facilitate these actions through evoking a targeted self-construal.

Limitations and Future Research

The present research has several limitations which warrant further investigation.

Firstly, the research is limited to a single culture. Turkey is considered a collectivistic culture (Suh et al., 1998) which tends to promote interdependency (Markus and Kitayama, 1991). However, there exist nations, such as China with higher levels of collectivism (Suh et al., 1998). Previous research converges on the high accessibility of social nostalgic memories; however, the same accessibility has not been revealed for solitary memories. Also considering the link between chronic self-construal and individual memory patterns, the accessibility of solitary memories across cultures poses a significant concern. While the present study indicates that Turkish individuals have an ability to access solitary nostalgic memories, individuals in more collectivistic countries like China may not show the same ability either recalling a solitary memory or feeling nostalgia upon recollection. This variance may stem from their memory patterns which show an increased propensity to recall memories involving other individuals such as family members (Wang and Conway, 2004). This prompts a question: Will the same results be obtained in more collectivist cultures (i.e., China) with individuals who possibly possess less readily available memories of solitary nostalgic events? A cross-cultural examination can provide insights into this question by investigating the memory patterns encouraged in a macro-cultural level and the ability to recall certain memories in the individual level.

Second, this study reveals different impacts by distinct nostalgic memories and offers critical insights to brands that want to promote unique products while obtaining nostalgia marketing related benefits. Specifically, these brands can utilize solitary memories rather than social ones to increase purchase intention for their minority-endorsed product options. However, to enhance the understanding regarding the potency of solitary nostalgic memories, future studies can contrast it with a non-nostalgic condition to determine whether the nostalgic condition evokes a higher level of independent self-construal and non-conformity even when juxtaposed with no-nostalgia. This can provide critical insights for brands that are in between utilizing nostalgic vs. non-nostalgic advertisements to promote their distinctive product options.

Third, the research utilizes a recall task in combination with a nostalgic story to experimentally manipulate different types of nostalgia. While a recall task is a validated method pervasively used by previous research (Huang, Huang and Wyer, 2016; Lasaleta, Sedikides and Vohs, 2014; Zhou et al., 2012), to increase external validity, future studies can use different manipulation methods. For example, utilizing advertisements and commercials to induce different nostalgic memories can enhance the robustness of the insights and their applicability to a real-world marketing context.

Lastly, while the research suggests a significant impact of different types of nostalgia on consumer choice, it is important to approach this significance with caution. Although a p value of 0.049 is commonly considered statistically significant (Walsh et al., 2014), its proximity to the threshold warrants further investigation into the topic (Lieberman and Cunningham, 2009). In this regard, future research can explore this relationship further and verify the replicability of the findings.

Conclusion

The present study investigates how different types of nostalgic memories - nostalgic-related and nostalgic-alone – affect consumer preferences for conformity (purchase intention for products endorsed by the majority vs. minority), and how this influence is mediated by self-construal. The results show that, those who remembered a solitary (vs. social) nostalgic memory, had a heightened preference for non-conformity (i.e., minority-endorsed product option). This relationship was mediated by an individual's temporarily activated self-construal. Remembering nostalgic instances of solitary (vs. social) events (i.e., playing computer games alone), enhanced individuals' independent self-construal and thereby increased preference for a minority endorsed product option. On the other hand, recalling social (vs. solitary) nostalgic events (i.e., celebrating New Year's with family), triggered an interdependent self-construal and lead to a higher preference for the majority endorsed product. These results offer critical theoretical and practical implications for marketing theory and practice while providing insights which extend beyond consumer choice.

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Appendix

Manipulation of nostalgia type

Nostalgic-Related	Nostalgic-Alone
Please read the story below and recall your memories! It's the end of a long day at school. You feel tired yet you are happy to turn back home. It's three days to New Year's and you plan to go on New Year shopping with your mom. You love exploring the stores and admiring the New Year decorations. While heading home, you hear a fantastic song on the radio that you consider downloading from LimeWire. Arriving home, you see your father watching TV, and you join him while your mother unpacks the shopping. You can't help but wonder what gifts you'll receive this year. You hope to have a Gameboy or an Ipod Nano. You look forward for the New Year's party. You think of the tasty food and the fun you'll have. Your favorite aunt will be at the party, and you are sure she will make everyone laugh. Your thoughts are interrupted as your father switches to a weather channel. They announce that it will snow tomorrow. You feel excited. You can't wait to slide in the snow and play snowball with your friends and watch The Polar Express or Harry Potter with your family when you get back home. In those moments spent with your loved ones, you find happiness in the echoes of laughter, the delicious smell of food, and the joyful conversations. You think to yourself, how much you enjoy the moments spent with your family and friends.	Please read the story below and recall your memories! It's the end of a long day at school. You feel tired yet you are happy to turn back home. You sit in the bus and put on your headphones to listen to your favorite song on your iPod Nano. You love this precious moment of solitude, allowing you to gaze out of the window and daydream. You look at the clouds, they hint at rain, sparking thoughts of cozy evenings wrapped in blankets, indulging in your favorite comfort show - Harry Potter or the Lord of the Rings. Arriving home, you toss your bag to the floor and put on comfortable clothes. You settle into the couch with a remote in your hand, you navigate through the channels to find a good show. You start watching your favorite TV show while eating some snacks. You love watching cartoons and the shows in Disney Channel. You are alone at home so you can watch anything you like! After watching the show, you plan to get on your computer and play computer games. You also want to discover some new songs on LimeWire. You find it exciting to watch each song download. In those solitary moments, you find happiness in the clicking of the mouse, the gentle hum of the computer and the glow of the TV screen. You think to yourself, how much you enjoy the moments spent in solitude.