Nostalgia: The Marketer's Elusive Dream

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Abstract

With the increasing trend of nostalgia-driven movies and media (graph 3), this study aimed to help marketers make rational decisions by investigating whether there is a relationship between nostalgia and consumer decision-making regarding physical products. Past research has concluded that rising stress levels can decrease purchase intent (Pappas et al., 2017). There have also been studies that found that experiencing nostalgia can increase a sense of safety (Kusumi et al., 2019), which may lower stress levels. The effects of nostalgia depend on current life satisfaction (Ju et al., 2017). This study aimed to determine whether experiencing nostalgia before a purchase decision led to higher levels of purchase intent by lowering stress. The researchers hypothesized that higher nostalgia would lead to lower stress and that lower stress would lead to higher purchase intent based on previous research. The researchers conducted a survey, and 39 participants were recruited from a convenience sample. Stress was operationalized using the Perceived Stress Test, which has strong validity measures (Kechter et al., 2019) (Lee, 2012). Nostalgia was measured using a modified version of a previously used Likert scale (Ju et al., 2017). Purchase intent was also measured through a previously used Likert scale (Evans et al., 1983). Results indicated a significant correlation (P=0.03) between nostalgia and purchase intent, with higher levels of nostalgia leading to lower levels of purchase intent. Stress did not moderate this relationship (P=0.25). These findings suggest that marketers should be cautious when leveraging nostalgia in their branding and advertising strategies, as it may not always lead to positive outcomes. This insight may also lead agencies to more evidence-based budgeting in their campaigns. The results also show that another variable besides stress may affect the relationship.

The study had several limitations, mainly a small and skewed sample; most participants were categorized as high in stress (M = 31.08), which may have altered the moderation analysis. The survey was completed mainly by members of a single generation yet was designed for multiple generations. Finally, the study lacked temporal precedence and validated nostalgia and purchase intent measures.

Nostalgia: The Marketer's Elusive Dream

Childhood memories can often evoke strong emotions that affect your mood. For example, when you see something that you remember from your childhood it may automatically give you a sense of comfort or joy. Nostalgia can be found in our everyday lives. But what effect does this have on consumerism. There has been much research conducted on the effects of brand trust on mood and purchase intent. In one study, researchers investigated the motivational effect of nostalgia induced by aversive and threatening situations (e.g., COVID-19) on new product purchase intentions (Xia, Feng, & Santana, 2021). The main hypothesis the researchers proposed was that nostalgia acts as the central mechanism that bridges consumer perceptions of the COVID crisis and new product purchase intentions. After their study, they found that perceived COVID severity induces feelings of nostalgia and that heightened nostalgia boosts purchase intentions for new products. This article shows the linking the correlation between nostalgia and purchase intent. This article also points out an interesting point through the addition of threating situations such as COVID-19. Stress is a possible variable that we will consider when formulating our hypothesis and conducting our research.

Similarly, in a study conducted by Özhan and Talih (2020) they sought to study the research question of "Does nostalgia proneness influence ad-evoked nostalgia, attitude and purchase intention as well as evaluating it regarding the purchase decision making process of the consumer?" The researchers hypothesized that sensations of nostalgia have a strong effect on ad-evoked nostalgia, attitude, and purchase intention. The findings of the study pointed out to the marketers that nostalgic signs in advertisements may have positive effects on the brand attitude and the purchase intention of the targeted groups. This study is interesting because the

researchers' addition of the element of advertisement. This can also be a contributing factor to the study and help address how to seek the relationship of nostalgia and purchase intent.

Lastly, a study conducted by Banjeree and Shaikh (2022) explored the question of "Does brand nostalgia, self-brand connections, and parent brand trust impact purchase intention?" The researchers hypothesized that brand attachment moderates the relationship between brand nostalgia and intention to purchase brand extensions. They also hypothesized that brand attachment moderates the relationship between self-brand connections and intention to purchase brand extensions. In their conclusion, they found that although brand nostalgia and self-brand linkages exerted a favorable impact on intention to purchase brand extensions, this effect was not significant when it came to brand trust. They also found that brand attachment acted as a moderator between brand nostalgia and the intention to purchase brand extensions. Additionally, brand attachment acted as a moderator between self-brand connections and the intention to purchase brand extensions. This study helps give background information as to the relationship between nostalgia and purchase intent. It also establishes some context by showing that there is a correlation between brand nostalgia and purchase intent.

Looking at the previous research conducted on the topic of nostalgia and purchase intent there are two main questions that have come to our attention. In our study, we seek to answer the question of "Does nostalgia affects purchase intent?" Pushing this relationship further, we also seek to investigate the question of "Does stress moderate the relationship between nostalgia and purchase intent?" Based on the previous research and conclusion talked about, we hypothesize that there is a correlation between nostalgia and purchase intent such that if a consumer is presented with nostalgia, their purchase intent is more likely to be higher. We then hypothesize

that this relationship will be moderated by stress such that if the participant is in stressful state, they are less likely to purchase items.

Method

Participants

The researchers recruited 40 participants between April 5 and April 20, 2023, through social media platforms such as Discord, as well as word-of-mouth. This study sampled participants by distributing a link to the study's primary survey through group chats and digital communities. It was also sent via private message to family members and friends. One participant was discarded due to an incomplete survey. All outliers were included in the analysis because the sample size is small, and reducing it further could distort results. Participants were incentivized to participate with the promise of an Amazon gift card raffle. The final sample consisted of 18 females and 18 males (three participants chose not to respond). There was an age range of 18 to 40 years ($M = 23$, $SD = 7.36$). Most participants were suspected to be University of Southern California (USC) students; however, the exact percentage is unknown because no demographics question was asked for university. Participants also included family members and friends of the researchers.

Design

This correlational non-experimental study aimed to evaluate what effect nostalgia (predictor variable) and stress (moderator variable) can have on purchase intent (outcome variable). Nostalgia is theoretically defined by the APA dictionary as "a longing to return to an earlier period or condition of life recalled as being better than the present in some way." Stress is defined as "the physiological or psychological response to [upsetting] internal or external […] events, forces, or conditions. […] Stress involves changes affecting nearly every system of the

body, influencing how people feel and behave." (APA, 2022). The way the present study defined stress relied on Perceived Helplessness and Perceived Self-Efficacy. Purchase intent is defined as "a measure of each shopper's propensity to buy a product or service" (Peterson, 2021).

Participants were asked to fill out a questionnaire with three different tests: 10 questions belonged to the PSS 10 (perceived stress test), seven questions evaluated the evocation of nostalgia, and seven questions asked about purchase intent. Researchers evaluated stress first in a single section. Nostalgia and purchase intent were mixed and evaluated together. Questions designed to evaluate nostalgia were based on a previous study where the researchers measured nostalgia using a 10-item scale with seven-point scales ranging from "Strongly disagree" to "Strongly agree." The items included phrases such as "Reminds me of the past" and "Makes me feel nostalgic" (Ju et al., 2017). Questions designed to evaluate Purchase intent were based on a previous study where the researchers measured participants' intention to purchase by asking them to rate their likelihood of buying each product on a scale (Evans et al., 1983).

For the survey used in this research, the questions for nostalgia and purchase intent were slightly modified by adding images of products; each question for nostalgia contained a product that is iconic to a different generation. For example, one question could include silly bands (a product known to be iconic to GenZ.) Below this image would be a Likert scale asking, "How nostalgic is this item to you?" with five items ranging from "Not nostalgic at all" to "Very nostalgic." The next question would be from the purchase intent section. This way, researchers could measure evoked nostalgia and immediately measure purchase intent. The questions for purchase intent contained an image of a neutral un-gendered, and non-essential product, for example, a grey water bottle. This image would be followed by a Likert scale asking, "If

reasonably priced, how likely are you to buy this product?" with five items ranging from "Extremely unlikely" to "Extremely likely." The researchers included "if reasonably priced" at the start of this type of question to eliminate the price variable, as it was not being evaluated in this research.

Materials

To measure the effect of the predictor variables, the researchers used a survey made in Qualtrics. Within this survey, they used the PSS-10 questionnaire to measure perceived stress with internal consistency "in both adults and university student populations [...] Test-retest reliability was found to be adequate in adults over a 2-week and 4-week period" Lee (2012). For construct validity, the test evaluates stress by evaluating Perceived Helplessness and Perceived Self-Efficacy (Lee, 2012). The PSS shows "adequate internal consistency reliability ($\alpha = .78$); moderate concurrent criterion validity with the amount of stress experienced during an average week ($r = .39, p < .001$) and the frequency of stressful life events within the past year ($r = .32, p < .001$); adequate convergent validity as evidenced by expected negative associations with perceived health status ($r = -.22, p < .001$) (Psychol, 2019). The nostalgia and purchase intent questions were based on previous research but not taken from a pre-validated questionnaire.

Data Collection and Analysis

Participants received a link to a Qualtrics survey. Within this survey, they were presented with a standard demographics questionnaire asking for biological sex and age. Then the PSS-10, and finally, a section with sequential questions on evoked nostalgia and purchase intent.

Once the data was gathered, correlation analyses were conducted to examine the relationship between nostalgia and purchase intent. A moderation analysis using regression was

conducted to test the hypothesis that stress would moderate the relationship between nostalgia and purchase intent. All analyses were conducted using R-Studio.

Results

The researchers hypothesized that higher nostalgia would lead to lower stress and that lower stress would lead to higher purchase intent. Contrary to the researchers' hypothesis, the results showed that higher nostalgia could lead to worse purchase intention outcomes. To analyze the data, the researchers used a standard Pearson's product-moment correlation to analyze if there was a significant correlation between the key variables (nostalgia and purchase intent). The test resulted in $P < .05$ significance with 38 degrees of freedom and a p-value of .004. The 95 percent confidence intervals were 0.15 and 0.66. The final correlation result was 0.44. The present study provides evidence that nostalgia can have a negative impact on purchasing decisions in marketing. According to these statistics and Graph 1, The results demonstrate that the original hypothesis was backward and that higher nostalgia can lead to lower purchase intent.

The researchers used a simple regression test to analyze stress as a moderator. The regression analysis revealed that the intercept between nostalgia and stress significantly affected purchase intent ($b = 25.49$, $p = 0.03$). However, total nostalgia ($b = -0.334$, $p = 0.6$) and stress ($b = -0.476$, $p = 0.18$) alone did not significantly affect purchase intent. These findings suggest that the interaction between nostalgia and stress may influence purchase intent, highlighting the importance of considering both factors in marketing strategies. However, stress did not moderate the interaction. Stress and nostalgia alone did not have significance over purchase intent. These results may indicate that there was a different variable moderating the relationship, which was not considered. The multiple R-squared value for the model was 0.2393, indicating that the variables included in the model explained 23.93% of the variance in purchase intent with a

significant p-value of 0.01. The F-statistic for the model was 3.775 with 3 and 36 degrees of freedom. These results suggest that the model fits the data reasonably well. It should be noted that this model is more capable of predicting purchase intent at higher levels of nostalgia because most participants in the study experienced high nostalgia, according to the survey.

Discussion

Based on the results of the study, there was a negative correlation between the relationship of nostalgia and purchase such that results showed higher nostalgia led to lower purchase intent. There was also no significance show to support stress as a moderator between nostalgia and purchase intent. These results partially support the hypothesis that there is correlation between nostalgia and purchase intent; however, this relation is negative contrary to what was previous talked about. The hypothesis that stress acts as a moderator between the two variable was also not supported. Possible explanations for this outcome could lie in previous research which shows the outcome that nostalgia can have effects on a consumer's attitude towards products they are viewing (Özhan & Talih, 2020). This affect could have been shown in our study design by making the nostalgic items more appealing in contrast to the lesser appealing everyday objects. By showing the consumer an appealing object with nostalgia associated with it and then presenting an everyday object, this could have made the consumer less likely to want the everyday object. This would provide a plausible explanation for the negative relationship between nostalgia and purchase intent. As for the results regarding stress not supported as being a moderator, this could have simply been an issue regarding sample size. The final sample size for the study was only about 36 participants with most of the participants being condensed in one stress level. Simply put there was not enough variety in our study to make any conclusions regarding stress.

Expanding on the issues and limitations with the research study there was also the issue of validated measures. For our study we used a 5-point Likert scale to measure the answers of each participant; however, this is not a proven accurate way to measure the validity of nostalgia and purchase intent. With this conclusion there is nothing intrinsically leading to the temporal precedence, meaning that the study does not accurately address which variable is the predictor and which is the outcome. In reference to our sample size there was also the issue of a skewness towards highly stressed 23-year-old females. This age group is "Gen-Z" meaning that many of the items presented in the study may not been nostalgic to this age group. Lastly, there was also a limitation in the study design by presenting each participant with items that could be presented in everyday life. Since most of the participants surveyed were of the age 23 and in college, items such as a water bottle and backpack may have been already owned by these individuals. The item presented were necessities that most people would already have access to, which removes the need for purchasing such items.

Looking ahead that are many possibilities for future research in this field. The most obvious future research would be fixing the limitations presented by increasing sample size, taking participants from different age groups, and using items that are more universal. Besides fixing the limitations there are also ways to take the research even further. For example, one possibility could be to examine brain function of participants when show items that are nostalgic. This would be interesting in showing the exact brain mechanisms of nostalgia. By observing this, researchers could then examine the effects of negative vs positive nostalgia on participants. There is also the possibility of testing how nostalgia affects decision making. Another possibility can be to observe the mood of participants when presented with an item that has positive memories associated with it. The implications of this field are endless. Despite the limitations

observed in the research study conducted there are still implications that can be observed from

the conclusion. These include fields such as marketing and budgeting. Businesses use this type of

research in their advertisement and marketing strategies. This could give information on how to

reach consumers on a deeper level and drawn in purchases. However, there are also personal

advantages, such as budgeting. Everyone in their personal lives can gain from the knowledge of

budgeting and learning how to distinguish between products that are a necessity or not. This

would lead to better spending habits, which is a very useful implication as a consumer. Through

this research, much light was able to be shed on the field of marketing and what relationships

import for its growth.

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Appendix

Table 1

Purchase intent – Nostalgia and Purchase intent - Stress regression

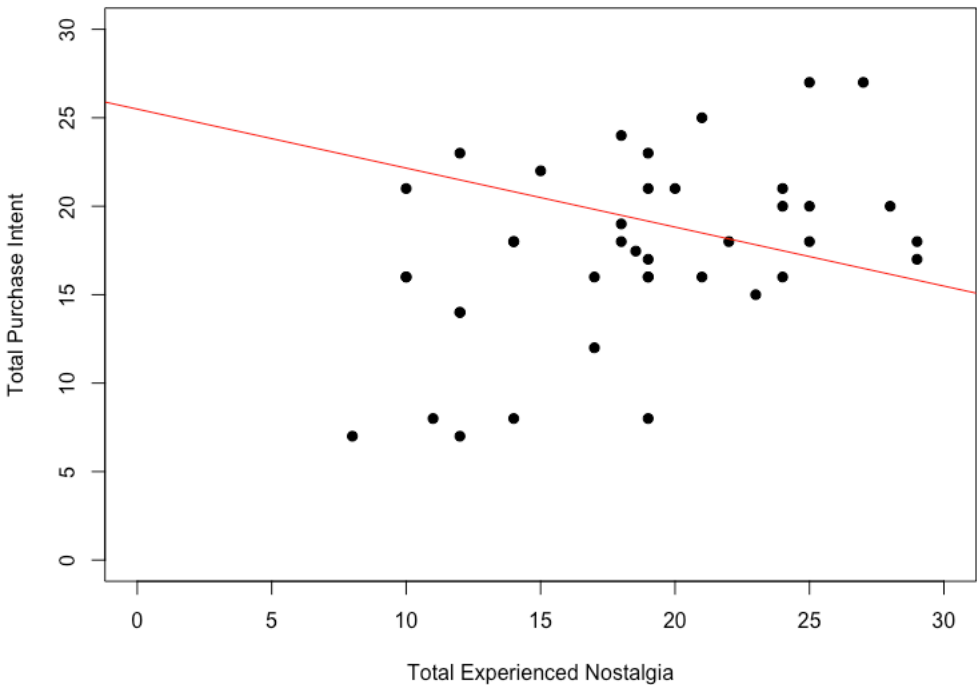| Coefficients	Estimate	Std. Error	T value	Pr(>|t|)	
(Intercept)	25.48913	11.76211	2.167	0.0369	*
Total Nostalgia	-0.33371	0.64221	-0.520	0.6065	
Stress	-0.47644	0.35442	-1.344	0.1873	
Nostalgia:Stress	0.02239	0.01919	1.167	0.2509	

Residual standard error: 4.596 on 36 degrees of freedom
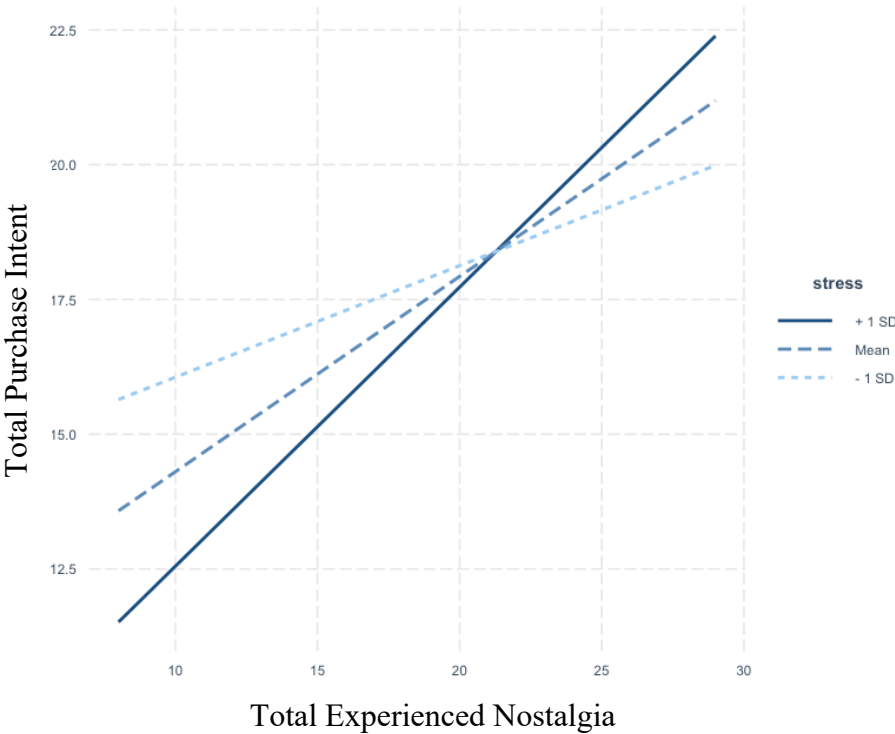Multiple R-squared: 0.2393, Adjusted R-squared: 0.1759
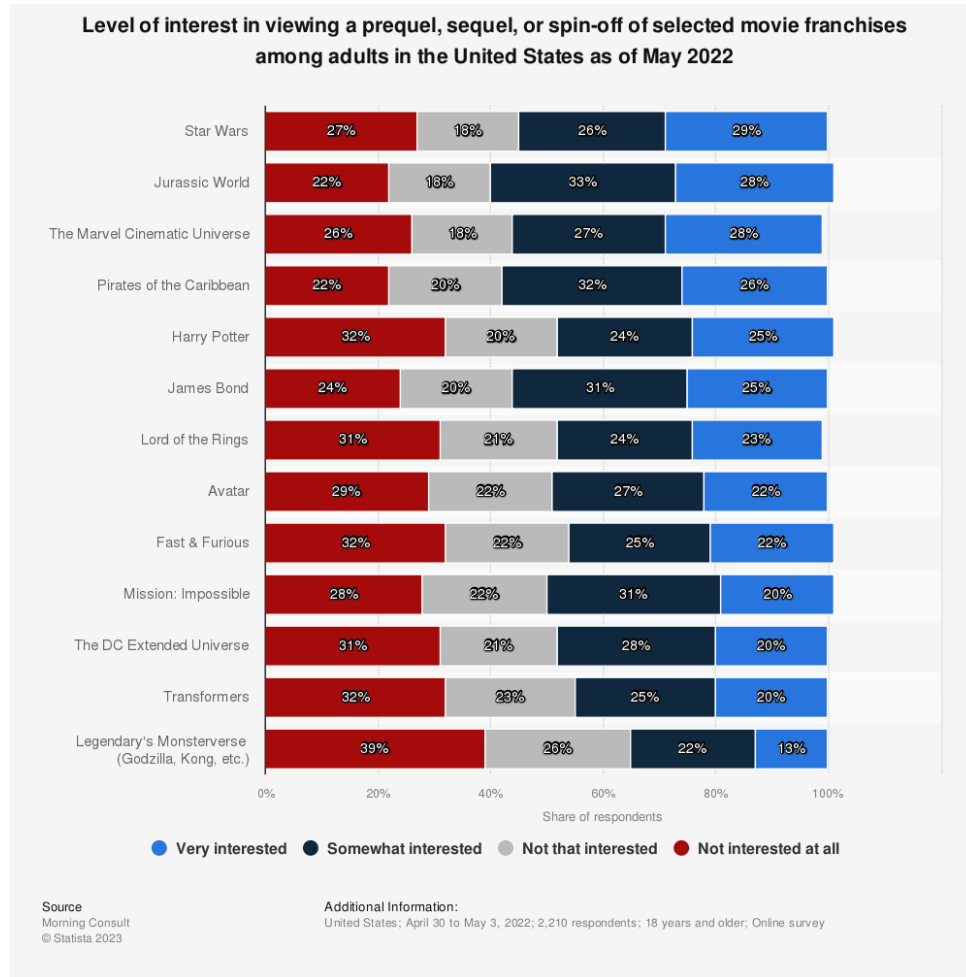F-statistic: 3.775 on 3 and 36 DF, p-value: 0.01874

Graph 1

Graph 2

Graph 3

Level of interest in viewing a prequel, sequel, or spin-off of selected movie franchises among adults in the United States as of May 2022

Franchise	Not interested at all	Not that interested	Somewhat interested	Very interested
Star Wars	27%	18%	26%	29%
Jurassic World	22%	18%	33%	28%
The Marvel Cinematic Universe	26%	18%	27%	28%
Pirates of the Caribbean	22%	20%	32%	26%
Harry Potter	32%	20%	24%	25%
James Bond	24%	20%	31%	25%
Lord of the Rings	31%	21%	24%	23%
Avatar	29%	22%	27%	22%
Fast & Furious	32%	22%	25%	22%
Mission: Impossible	28%	22%	31%	20%
The DC Extended Universe	31%	21%	28%	20%
Transformers	32%	23%	25%	20%
Legendary's Monsterverse (Godzilla, Kong, etc.)	39%	26%	22%	13%

Share of respondents

● Very interested   ● Somewhat interested   ● Not that interested   ● Not interested at all

Source
Morning Consult
© Statista 2023

Additional Information:
United States; April 30 to May 3, 2022; 2,210 respondents; 18 years and older; Online survey

(Statista, 2022)

This graph shows the American interest in nostalgia-inducing franchises. Many of the franchises evaluated by Statista are decades in the making. However, when adding the total percentages for all the franchises, we find that the audiences evaluated are nearly 50-50, split between very interested/somewhat interested, and not that interested/not interested at all. Yet, the number of blockbuster sequels released between 2021 and 2022 increased by 16 movies. (30 in 2021 and 46 in 2022) (movieinsider, 2023). Each of these movies costs millions (if not billions) to make.