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TikTok Made Me Buy it: Emotional Carryover of Doomscrolling on Purchasing Decisions

Maria Gerges

Claremont McKenna College

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Professor Alison Harris

by
Maria Gerges

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Maria M. Gerges

Department of Psychological Science

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Dr. Alison Harris

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Abstract

"Doomscrolling," defined as excessively poring through negative content on social media, has become increasingly prevalent over the past several years. Although recent research suggests that doomscrolling reduces positive emotions, even over relatively short exposure (< 5 min) times, the effect of doomscrolling on other behaviors remains unexplored. This question is especially relevant because exposure to sad movie clips has previously been shown to increase willingness-to-pay (WTP) for unrelated purchases, due to the desire to change one's circumstances by seeking out higher rewards. In this experiment, we examined the effect of doomscrolling on purchasing decisions via exposure to video content from a popular social media platform (TikTok). Participants (N = 91) viewed 8-10 minutes of TikTok videos before choosing whether to purchase an unrelated consumer product (Apple AirPods). Participants were randomly assigned to view either content to induce sadness (thematically related to climate change) or neutral content (thematically related to nature appreciation). Relative to participants in the Nature Appreciation condition, participants in the Climate Change condition reported significantly higher levels of sadness, confirming that the emotion induction was successful. In addition, participants in the Climate Change condition had higher WTP for the AirPods. However, the results from the WTP analysis were not statistically significant, perhaps reflecting limited power due to the small sample size of this study. While methodological issues constrain the interpretation of these results, the successful replication of these findings could have practical implications for how consumers and technology companies structure decisions following extended exposure to negative content on social media.

Keywords: Doomscrolling, Willingness to Pay, Purchasing Decisions, Consumer Products

Introduction

From remote work to virtual gatherings, the COVID-19 pandemic fundamentally changed many aspects of daily life over the past few years. One domain which has been particularly affected is the use of social media platforms. For instance, in India 87% of people reported an increase in social media usage during the pandemic, with 75% spending increased amounts of time on Facebook, Twitter, and WhatsApp (Jaiswal, 2020). Although some of this increase could be explained by the need for connection during periods of social isolation, another emerging trend was the use of social media as a source of news. For example, about half of U.S. adults (53%) say they get news from social media "often" or "sometimes," and this use is spread out across a number of different sites (Atske, 2022). Recent research has shown that not only adults but also younger individuals have increasingly turned to social media as a source of news. According to a survey conducted by Liedke and Gottfried (2022), the share of adults under 30 who expressed at least some trust in news from social media was at its highest level right after the pandemic, while the share with trust in national news was at its lowest level. Essentially, the pandemic created a need for adults and younger individuals to receive reliable and up-to-date information, which social media platforms provided in real-time. However, the immediate availability of informational content on social media at all hours motivated social media users to compulsively consume negative news and information—a behavior colloquially referred to as "doomscrolling" (Ytre-Arne & Moe, 2021).

Although relatively little research has been conducted on this novel behavior, recent findings have linked doomscrolling to a range of negative psychological and emotional effects on well-being and mental health. Studies conducted in the United States have found that doomscrolling during the COVID-19 pandemic was associated with higher levels of anxiety,

depression, and post-traumatic stress disorder (PTSD), as well as poor self-control (Price et al., 2022; Sharma et al., 2022). Similarly, doomscrolling was significantly negatively correlated with measures of life satisfaction and mental well-being both in cross-sectional international samples (Satici et al., 2022; Shabahang et al., 2022) and across longitudinal data in an American sample (Dyar et al., 2022). Thus, doomscrolling appears to be a robust behavior across different populations and cultures, with negative impacts on mental health and well-being. These effects may emerge even with relatively short exposures: for example, a recent study found that 2-4 minutes of social media content (Twitter, YouTube) relating to COVID-19 had measurable negative effects on participants' emotional state (Buchanan et al., 2021).

Beyond the direct effects of doomscrolling on mood and psychological well-being, another question is whether this behavior affects decision making, particularly in terms of the valuation and consumption of goods. Anecdotally, the early months of the COVID-19 pandemic were marked by increases in spending on consumer goods. Reports showed that 75% of US consumers tried a new shopping behavior during the pandemic (Charm et al., 2020). In a study that compared consumer behavior before and after the COVID-19 pandemic, results showed that 81% of respondents have purchased online since the start of the COVID-19 pandemic. In addition, most of the respondents in the same survey (69.1%) bought goods online once a month (Aryani et al., 2021). Although these statistics are confounded by other factors such as lockdowns and closures that prevented spending on services, as well as increased governmental assistance for some families, these increases in spending behavior are consistent with what is known about the effects of negative emotions on consumption. For example, research shows that making shopping choices helps to restore a sense of personal control over one's environment, and thus helps to alleviate feelings of sadness (Rick et al., 2014). Another study showed that

individuals who were experiencing guilt were more likely to purchase products that were associated with environmentally-responsible consumption, such as LED lights (Moghavvemi et al., 2020).

Although it makes sense that negative emotions would affect purchasing behavior when the product is directly related to the experienced emotion, other research has suggested that negative emotions affect purchasing decisions even for unrelated products. This phenomenon is known as *incidental carryover of affect* (Han et al., 2007). In a classic demonstration of this effect, Lerner and colleagues (2004) conducted a series of experiments in which participants were exposed to either negative or neutral emotional content before making economic decisions. Specifically, participants were explicitly instructed that they were participating in two different studies, one in psychology and another in economics. For the "psychology" portion, participants viewed a 12-minute film clip that was independently rated as producing sadness (a boy witnessing the death of his father in *The Champ*), disgust (a man's interaction with a filthy toilet in *Trainspotting*) or no strong affective state (a clip from a nature documentary about Australia's Great Barrier Reef). Following the clip, participants either wrote a reflection piece on how they would feel in the situation shown in the clip (sadness and disgust conditions) or described their daily activities (neutral condition). After completing this portion of the experiment, participants were then told that they would be participating in a separate "economics" experiment on pricing for a highlighter set, which was randomly endowed to half of the participants.

Extensive previous research has documented an "endowment effect," in which individuals who are given an item at the start of the experiment will demand a higher selling price than what buyers want to spend—what economists refer to as willingness-to-pay (WTP) (Kahneman et al., 1991). However, Lerner and colleagues (2004) demonstrated that prior

exposure to a disgusting film clip negated this endowment effect, whereas sadness actually reversed it. In other words, sadness made sellers more willing to part with a good and buyers willing to pay more to acquire it. These results are consistent with Appraisal Tendency Theory (ATT), which suggests that emotions influence decision-making by shaping individuals' evaluations of the desirability or feasibility of a particular option (Lerner & Keltner, 2000). In particular, sadness is thought to induce a goal of changing one's circumstances, either by enhancing the value assigned to a purchase or increasing consumption of a hedonic good: the so-called "misery-is-not-miserly" effect (Garg & Lerner, 2012; Garg et al., 2018). Other studies have replicated the association between sadness and higher valuation for other consumer goods, such as water bottles (Cryder et al., 2008). Notably, the effects of sadness on purchasing behavior are distinct from those of other negative emotions: for example, disgust reduces both selling and buying prices (Lerner et al., 2004), whereas anxiety biases behavior towards low-risk, low-reward options (Raghunathan & Pham, 1999).

These results suggest that doomscrolling could influence individuals' behavior beyond its direct impact on mood and psychological well-being. Specifically, building on the "misery-is-not-miserly" effect, we predict that prior exposure to negative social media content will increase participants' WTP for an unrelated product via incidental carryover of affect. To test this hypothesis, we exposed participants to content from a major social media platform (TikTok) that was either associated with a sad theme (*Climate Change*) or a neutral theme (*Nature Appreciation*) and then measured their WTP for an unrelated product (Apple AirPods). In particular, we chose climate change because it is an ongoing issue with no obvious solutions and high uncertainty. Recent survey data from young adults around the world (ages 16-25) found

that a majority of respondents were moderately or extremely worried about this issue, reporting feelings of sadness, anxiety, and helplessness (Hickman et al., 2021).

Although previous studies have induced negative emotions using narrative clips from movies, the delivery of negative content in doomscrolling is likely to differ from movie excerpts in certain ways (Cabral et al., 2017). Many of the most popular social media platforms (e.g., TikTok, Instagram, YouTube) prioritize short video clips with minimal plot or characterization, lasting a minute or less. In addition, videos are presented according to an algorithm based on previously-viewed content. Thus, one important question addressed by this research is whether cumulative exposure to unconnected short videos reproduces the negative affective states seen in previous emotion induction techniques.

In addition, whereas previous studies of the "misery-is-not-miserly" effect (Cryder et al., 2008; Garg et al., 2018; Lerner et al., 2004) have typically examined WTP for inexpensive consumer goods (e.g., water bottles, highlighter sets), we tested how incidental emotional carryover influences purchasing decisions for a different, higher-value product from the category of consumer electronics: Apple AirPods. We predicted that participants exposed to the experimental simulation of doomscrolling (via TikTok videos related to climate change) would show a higher WTP for AirPods relative to participants in the non-doomscrolling condition (via TikTok videos related to nature appreciation).

Method

Participants

For this study, 137 undergraduate students were recruited from the local college community. Participants were enrolled in a lower-division psychology course at the time of testing and received partial course credit for their participation. Because the experiment was

administered online, participants were required to have access to a laptop or desktop computer. While 137 students participated in the experiment, only 121 students (90 females) finished the survey, resulting in an attenuation rate of 11.6%. Included participants were between the ages of 18 and 25, with an average age of 20.3 years. Before conducting the analysis, we excluded 30 participants because they had either guessed the real purpose of the study or accurately identified the connection between the psychology experiment and the economics experiment. Thus, analyses throughout the paper include only the 91 participants (Nature Appreciation: n = 45, Climate Change: n = 46) who finished the study and didn't correctly guess its purpose or the connection between the two experiments.

To confirm that the stimuli elicited the intended affective state, we also conducted a pilot study with 15 participants from the local community, ranging from 18 years old to 30 years old. In this stimulus validation part of the study, we used the same experimental stimuli and emotion-manipulation check measure described in detail below (Appendix A) (Garg et al., 2018; Lerner et al., 2004).

Design

This is an experimental study design with one independent variable (video content) that has two levels, which are Climate Change (experimental group) and Nature Appreciation (control group). The main dependent variable is the participants' subsequent WTP, measured by a choice-elicitation method. This is a between-subjects design in which each participant was randomly assigned to only one of the two conditions for the entire experiment.

Stimuli

Participants were exposed to a series of TikTok videos in one of two conditions, Climate Change or Nature Appreciation. For both groups, videos were chosen to include a mix of people

and places, to be informative, and to have at least 10K likes to ensure that people on TikTok engage with this content. The total duration of videos to which each group was exposed was 8-10 minutes. This duration was chosen based on previous research, which found that viewing negative content on Twitter and YouTube for 2-5 minutes affected the participants' emotional state (Buchanan et al., 2021).

Participants in the Nature Appreciation condition were shown 22 Tiktok videos on general nature themes. These videos included natural wonders that not a lot of people know about or hidden nature sites around the world. These videos were chosen to roughly match the visual content of the Climate Change condition, but without the negative emotional elements. However, videos with explicitly calming music or visuals were excluded to lessen disparities in physiological arousal between the two conditions. The average length of the videos in this condition was 23.3 s, with videos ranging from 7 s to 42 s.

Participants in the Climate Change condition were shown 16 TikTok Videos. These videos displayed content thematically related to climate change, including: people expressing their worry about the consequences of climate change; drastic effects of climate change on natural habitats; and, commentators urging people to take action to address this huge issue. These videos were chosen to elicit feelings of worry and concern about the climate change issue without providing any solutions or hopes for the future. The average length of the climate change videos was 35.8 s, with videos ranging from 9 s to 1 min 12 s in length.

Procedure

Measuring Baseline Emotional State

Each participant received a Qualtrics link to access the survey and was randomly assigned to one of the two groups (Climate Change vs. Nature Appreciation). At the beginning of

the study, participants were told that they would participate in two different experiments, one in psychology and the other in economics. They were also told that the first experiment was about how people learn information from social media, and the second experiment was related to consumer electronics pricing. Lastly, they were asked to put their phones away and avoid any distractions during the experiment.

Following the initial instructions, each participant was asked to complete the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) to obtain a measure of baseline emotional state (Garg et al., 2018; Lerner et al., 2004). Specifically, to measure baseline levels of sadness, we combined the ratings for two items from the PANAS, "upset" and "distressed." To reduce participant awareness of the experiment's purpose, the PANAS was followed by several other brief questionnaires: the Big Five Inventory (BFI-10; Rammstedt & John, 2007), the Barrett Impulsiveness Scale-Brief (BIS-Brief; Steinberg et al., 2013), and Need for Cognition Scale (NCS-6; Lins de Holanda Coelho et al., 2018).

Emotion Induction

After completing the initial questionnaires, each participant was shown either the TikTok videos associated with climate change (Climate Change group) or nature (Nature Appreciation group). Both groups were asked to pay close attention to the contents of the videos because afterward they would be asked to write an elaborative response. The participants viewed each video sequentially by scrolling through a web page in Qualtrics; all videos were embedded in the same Qualtrics survey page. To ensure that participants viewed the videos, they could not advance the Qualtrics survey until the total duration of the videos had elapsed. After advancing the survey, participants were instructed to describe one or more things they learned from the videos, as self-reflective writing has previously been shown to aid in eliciting target emotions

(Lerner & Keltner, 2001). Upon completing the self-reflective writing, participants were also asked to indicate how much time they spend on TikTok, and what types of content they typically interact with. They were then thanked for participating in the "psychology" experiment and asked to proceed to the different "economics" experiment.

Price Elicitation

In this part of the study, participants were presented with an image of a product (2nd generation Apple AirPods wireless headphones, 2019) and a description of the product. Underneath the product description, the price elicitation was shown as a series of choices between the AirPods and a specified amount of money, starting from $50 and reaching a maximum of $170. Each row of the price elicitation increased by $10. At the beginning of this section, they were told that there would be a random drawing and that one of the participants' choices would be implemented, and they would get the money or the pair of AirPods, depending on their choice. There was no deception in this information; the random drawing was planned for 1-2 months after data collection was completed. This random drawing was added to ensure that participants indicated their true WTP, rather than a hypothetical number. Before indicating their WTP, participants were also asked not to check the actual price of the AirPods during the experiment. Following the price elicitation, participants were asked whether they already owned a pair of AirPods, their interest in acquiring a new pair (0 = "No, not really", 1 = "Neutral", 2 = "Yes, very much!"), and how favorable they view AirPods as a product (on a scale of 0-10, where 0 = "I don't really like/use Apple AirPods" and 10 = "Apple AirPods are one of my favorite tech products"). They were then thanked for their participation in the "economics" experiment.

Emotion Manipulation Check

After completing both portions of the study, participants were asked to complete a measure indicating their feelings during the video portion (Appendix A). This measure included three items of interest ("sad," "gloomy," and "downhearted") along with a number of filler items for unrelated affective states (e.g., "elated," "contented," "disgusted"). In addition, because previous research has found that appraisal tendencies differ for anxiety and sadness (Raghunathan & Pham, 1999), we also included three items reflecting anxiety ("anxious," "agitated," and "nervous"). Based on previous work (Garg et al., 2018; Lerner et al., 2004), participants were asked to use a 9-point response scale ranging from 0 (*did not experience the emotion at all*) to 8 (*experienced the emotion more strongly than ever before*). Participants also answered a series of questions to assess whether they understood the purpose of the experiment, including whether they thought there was a connection between the two "different experiments." These questions were used to exclude participants later in the analysis.

At the end of the survey, each participant was thanked for their participation and asked not to discuss the study with any of their friends. Finally, they were invited to click on a separate link to enter their information to be included in the random drawing to obtain the AirPods.

Results

Stimulus Validation Survey

To ensure that the selected TikTok videos were effective in eliciting the intended emotion of sadness, we first conducted a validation survey in which participants rated their emotional states before and after viewing the videos. Participants recruited from the local college community were randomly assigned to one of two groups, either Climate Change (n = 7) or

Nature Appreciation (n = 8). As shown in Figure 1, the Climate Change group experienced significantly higher levels of sadness after viewing the TikTok videos (M = 4.57, SD = 1.95) compared to the Nature Appreciation group (M = 1.46, SD = 1.56). To confirm these results, we entered the post-experiment sadness ratings into an analysis of covariance (ANCOVA) with condition (Climate Change/Nature Appreciation) as a between-subjects variable and baseline sadness from the PANAS as a covariate of no interest. We found a significant difference in emotional affect following exposure to social media based on video content, $F(1,14) = 15.13$, $p = 0.002$, $\eta_p^2 = .558$, controlling for baseline sadness, despite no significant effect of baseline sadness. Thus, as anticipated, exposure to negative TikTok content in the Climate Change group significantly increased participants' reported sadness.

Main Experiment

For the main experiment, we analyzed data from a total of 91 participants in the Climate Change (n = 46) and Nature Appreciation (n = 45) groups. First, we performed an emotion manipulation check to confirm that exposure to social media content in the Climate Change condition significantly increased self-reported sadness in our participants, relative to the Nature Appreciation group. Second, we analyzed WTP for the Apple AirPods as a function of exposure to social media content (Climate Change vs. Nature Appreciation). Finally, because the topic of climate change may also elicit increased anxiety, which has been linked to reduced reward seeking (Raghunathan & Pham, 1999), we further tested the effects of social media content on WTP while controlling for self-reported anxiety levels after viewing the videos.

Emotion Manipulation Check

As in the stimulus validation survey, we gauged the effect of exposure to negative TikTok content on emotional state by measuring self-reported sadness following the exposure. We

employed a post-experiment affective manipulation check (Appendix A) based on previously reported studies (Garg et al., 2018; Lerner et al., 2004), while using the PANAS (Watson et al., 1988) to measure baseline sadness levels. Consistent with the results of the stimulus validation survey, participants experienced significantly higher negative affect in the Climate Change condition ($M = 4.42$, $SD = 2.09$) than in the Nature Appreciation condition ($M = 1.20$, $SD = 1.60$), as shown in Figure 2. To confirm this pattern, we entered post-exposure sadness levels into an ANCOVA with baseline sadness as a covariate of no interest. In addition, because the impact of the videos may vary as a function of routine exposure to content on TikTok, we included each participant's reported amount of time spent on TikTok as an additional covariate of no interest. The ANCOVA results showed a significant difference in the emotional affect based on the type of videos each group watched, $F(1,89) = 58.9$, $p < 0.001$, $\eta_p^2 = .403$. With respect to the covariates, there was a borderline effect of baseline sadness, $F(1,89) = 3.02$, $p = 0.086$, $\eta_p^2 = .034$. However, the amount of time spent on TikTok covariate was non-significant, $F < 1$.

WTP Analysis

We also conducted an ANCOVA to measure the effect of the elicited emotion from the TikTok videos on willingness to pay (WTP). For each participant, WTP was measured as the point in which participants switched from choosing the AirPods to choosing the cash amount, using the choice-elicitation method (Lerner et al., 2004). In this analysis, we included AirPods ownership, AirPods favorability, and emotional baseline as covariates. As shown in Figure 3, the results illustrated that the Climate Change group had a higher WTP ($M = \$100$, $SD = \$29.4$) compared to the Nature Appreciation group ($M = \$89.6$, $SD = \$32$). However, the results were only borderline significant, $F(1, 89) = 3.04$, $p = 0.085$, $\eta_p^2 = .034$, and all covariates were non-significant, Fs < 1. In this case, the failure to achieve significance may partially reflect the

fact that our final sample was underpowered to detect an effect, given that a large number of our participants had to be excluded for correctly guessing the purpose of the study (n = 30), and that previous studies had typically had more than 100 participants while we only had 91 participants. Consistent with this idea, a *post hoc* power analysis using the G*Power software (Faul et al., 2007; Faul et al., 2009) indicated that with a sample size of N = 91 and an effect size of Cohen's $f = 0.19$ (derived from the observed η_p^2), an ANCOVA with 2 groups and 3 covariates would have a power of 0.42. Using the effect size from a previous meta-analysis of the "misery-is-not-miserly" effect (Garg et al., 2018), which reported an average Cohen's *d* of 0.43, we obtained similar results for N = 91, finding a power of 0.51. Thus, the unplanned exclusion of such a large number of participants appears to have seriously impacted our ability to detect an effect.

Another factor that could have reduced our ability to detect the "misery-is-not-miserly" effect relates to the different types of emotions evoked by viewing videos about climate change. We specifically hypothesized that viewing videos about climate change would induce feelings of sadness and loss, triggering an appraisal tendency to change one's circumstances. However, because climate change is an issue without clear and easy solutions, participants in the Climate Change condition could have also experienced anxiety and uncertainty while viewing these videos. Previous research suggests that anxiety and sadness may have opposing effects on economic behavior, with anxiety producing a bias towards low-risk, low-reward outcomes and sadness shifting behavior towards high-risk, high-reward options (Raghunathan & Pham, 1999). Therefore, controlling for differences in self-reported anxiety levels during video viewing may remove confounding effects of anxiety on WTP. We conducted another WTP analysis including anxiety level as a covariate along with baseline sadness, AirPods ownership, AirPods

favorability, and emotional baseline. In line with countervailing effects of sadness and anxiety on economic purchase decisions, the results came closer to approaching significance ($F(1, 89) = 3.82$, $p = 0.054$, $\eta_p^2 = .042$).

Discussion

Over the past few years, growing evidence has accumulated that incessant exposure to negative social media content (doomscrolling) can reduce psychological well-being and increase feelings of depression and anxiety (Price et al., 2022; Satici et al., 2022; Shabahang et al., 2022 Sharma et al., 2022). Prior research has also linked sadness to higher purchase prices for consumer goods (Garg et al., 2018; Lerner et al., 2004). However, the effects of doomscrolling on economic purchasing decisions are still unclear. In this study, we explicitly tested the effect of incidental emotions triggered by watching negative social media content (doomscrolling) on subsequent purchasing decisions, by measuring WTP for a high-end consumer electronic product, Apple AirPods.

We found that participants who viewed TikTok videos on the topic of climate change (the experimental group) reported higher levels of sadness compared to a control group that watched nature appreciation content. These results show that even a relatively short exposure of 8-10 minutes was sufficient to increase sadness, consistent with previous research on the emotional effects of social media (Buchanan et al., 2021). These effects occurred despite a lack of plot, characterization, and other elements that are present in movie clips typically used for emotion induction in previous studies (Lerner et al., 2004). This result suggests that doomscrolling may have profound effects on the emotional state of social media consumers. In addition, these effects may be even stronger in real-life doomscrolling due to a larger selection of content, longer

periods of exposure, and algorithms that shape user experience by automatically offering thematically-related content.

Our main question was whether sadness elicited by exposure to social media content would affect purchasing decisions for an unrelated consumer good. Based on previous descriptions of the "misery-is-not-miserly" effect (Garg et al., 2018), we predicted that participants in the Climate Change condition would show higher WTP for an unrelated product, Apple AirPods. However, though the observed effect went in the predicted direction, the results did not achieve statistical significance. An analysis controlling for anxiety, which is thought to produce an opposing bias towards low-risk, low-reward options, improved the results slightly but remained over the threshold commonly used to achieve statistical significance. Although these results are disappointing, one possible factor may be the relatively low power of our study due to the smaller-than-planned number of participants (roughly 45 per group, rather than the 60 per group originally planned). Consistent with this idea, a power analysis showed that for a moderate effect size, our sample size would not be adequate to detect a significant effect.

In particular, an exceptionally high number of participants (n = 30) had to be excluded due to correctly guessing the purpose of the study and/or the connection between the "psychology" and "economics" experiments. The higher number of excluded participants, relative to previous studies, may have been due to the online nature of this study–as opposed to an in-person laboratory experiment–which may have made it harder to execute the deception of separate "psychology" and "economics" experiments in a convincing manner. Unfortunately, the demands of collecting a large amount of data over a relatively short period of time necessitated online data collection for this project. However, future work should replicate this experimental

design in an in-person setting to reduce the likelihood of participants linking the two "separate" experiments on psychology and economics.

Another issue with our sample was that it was a convenience sample that included only college students, who are not representative of the larger population. This is particularly problematic for an issue like climate change, where there is strong polarization between different demographics. For example, a recent study showed differences in brain activity and behavioral responses to a divisive issue (immigration policy) between conservative and liberal participants (Leong et al., 2020), even though all participants were exposed to the same content. Therefore, different emotions may be induced in samples with different political beliefs, such as lower levels of sadness or higher levels of other negative emotions (anger, disgust). Given survey data indicating that a majority of young adult respondents view climate change as a major cause for concern (Hickman et al, 2021), our sample choice may have increased the likelihood of finding an effect using the specific topic of climate change. Therefore, future research should replicate the study using less divisive topics for emotional induction (e.g., terminal illness or death) and more diverse samples (e.g., older adults, broader political views).

Additionally, the choice of product may have also affected participants' purchasing decisions. Most of the previous research has focused on low-value products, such as water bottles or highlighter sets (Garg et al., 2018; Lerner et al., 2004). However, in this study, we were interested in examining if the effects from previous studies would replicate even when participants are making a more expensive purchase in a different category of goods (consumer electronics). The product we chose was also associated with a specific brand, Apple Inc., which is one of the world's most recognizable and popular technology brands. For example, in a recent survey, 53% of respondents said that Apple "plays a pioneering role in this day and age" (Kunst,

2022). In general, brands are considered valuable because they build consumers' trust in a product, increasing their purchase intentions (DAM, 2020). Brand loyalty can also independently create positive emotions, known as brand affect, increasing relative price (Chaudhuri & Holbrook, 2001). Brand loyalty and brand affect may have affected our results, such that people in both groups showed high WTP just because of the brand affiliation or the high value of the item.

Another issue with the choice of AirPods for the purchase decision was that, as a tech product, AirPods are not very environmentally-friendly or associated with sustainable manufacturing. Therefore, even though more desirable than other goods, the choice of AirPods could have created more internal conflict for individuals in both conditions. This was not accounted for in our original design; we only realized this issue after we read through the participants' responses regarding the purpose of the study. Many participants in both groups mentioned how technology opposes the environment and thought that this study was about the contradiction in the underlying meaning/values between the videos and the tech industry. While this was a good distraction from guessing the real purpose of the study, it may have also been a factor that affected their WTP for the AirPods. People in both groups may have had a lower WTP than expected, if primed with goals of protecting the environment. We suggest that future research replicate this study with goods from different categories and price ranges without negative environmental and sustainability associations.

Despite the above limitations, the results of this experiment suggest several theoretical and practical implications. By investigating the effects of exposure to negative social media content on purchasing decisions, this study sheds light on the role of emotions in consumer decision-making and highlights the importance of managing emotional responses to marketing

stimuli. The findings have particular relevance for those operating in highly competitive markets in which the value proposition of a product is heavily reliant on brand image and emotional appeal. Specifically, one marketing strategy for technology companies based on our findings would be to track consumption of negative social media to increase sales or pay social media platforms to pair advertising for more expensive products with more negative content. However, the implications of doomscrolling also highlight the need for marketers and advertisers to acknowledge their responsibility to promote messages that contribute positively to society and to avoid contributing to negative emotions that can harm individuals' mental health and well-being and influence their decision-making.

From a consumer perspective, the study's implications extend beyond the realms of advertising and marketing to broader societal issues. Given the carryover of emotions elicited by negative social media content, consumers should limit their access to online shopping after doomscrolling in order to protect their mental well-being and prevent paying unnecessarily high prices. The implications are particularly concerning due to the increasing prevalence of social media in our daily lives and the widespread access to negative content, which can exacerbate feelings of sadness and anxiety. Individuals need to be mindful of their social media usage and develop coping mechanisms to mitigate the negative effects of doomscrolling. This includes strategies such as limiting social media usage, taking breaks from social media, and engaging in mindfulness practices to manage sadness and anxiety.

In conclusion, this study explored how induced negative emotions from social media consumption could influence purchase decisions. We found increased feelings of sadness and a trend toward higher WTP after 8-10 min of exposure to negative social media content. This research can be seen as a first step towards a novel integration of multiple lines of research such

as emotional states, purchasing decisions, and social media usage. Although the generalizability of the current results must be established by future research, the present study sheds light on the importance of incorporating higher-value products, more controversial issues, and more social media platforms as factors affecting incidental carryover of affect.

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Appendix A

The Manipulation-Check Measure

This scale consists of several words describing different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to which extent you felt this while you were watching the videos. Use the following scale to record your answers.

0 = did not experience the emotion at all

8 = experienced the emotion more strongly than ever before

____ irritable

____ surprised

____ guilty

____ happy

____ nervous

____ angry

____ scared

____ downhearted

____ elated

____ agitated

____ hostile

____ jittery

____ disappointed

____ afraid

____ contented

____ proud

____ anxious

____ alert

____ distressed

____ fearful

____ excited

____ ashamed

____ sad

____ disgusted

____ gloomy

____ joyful

____ repulsed

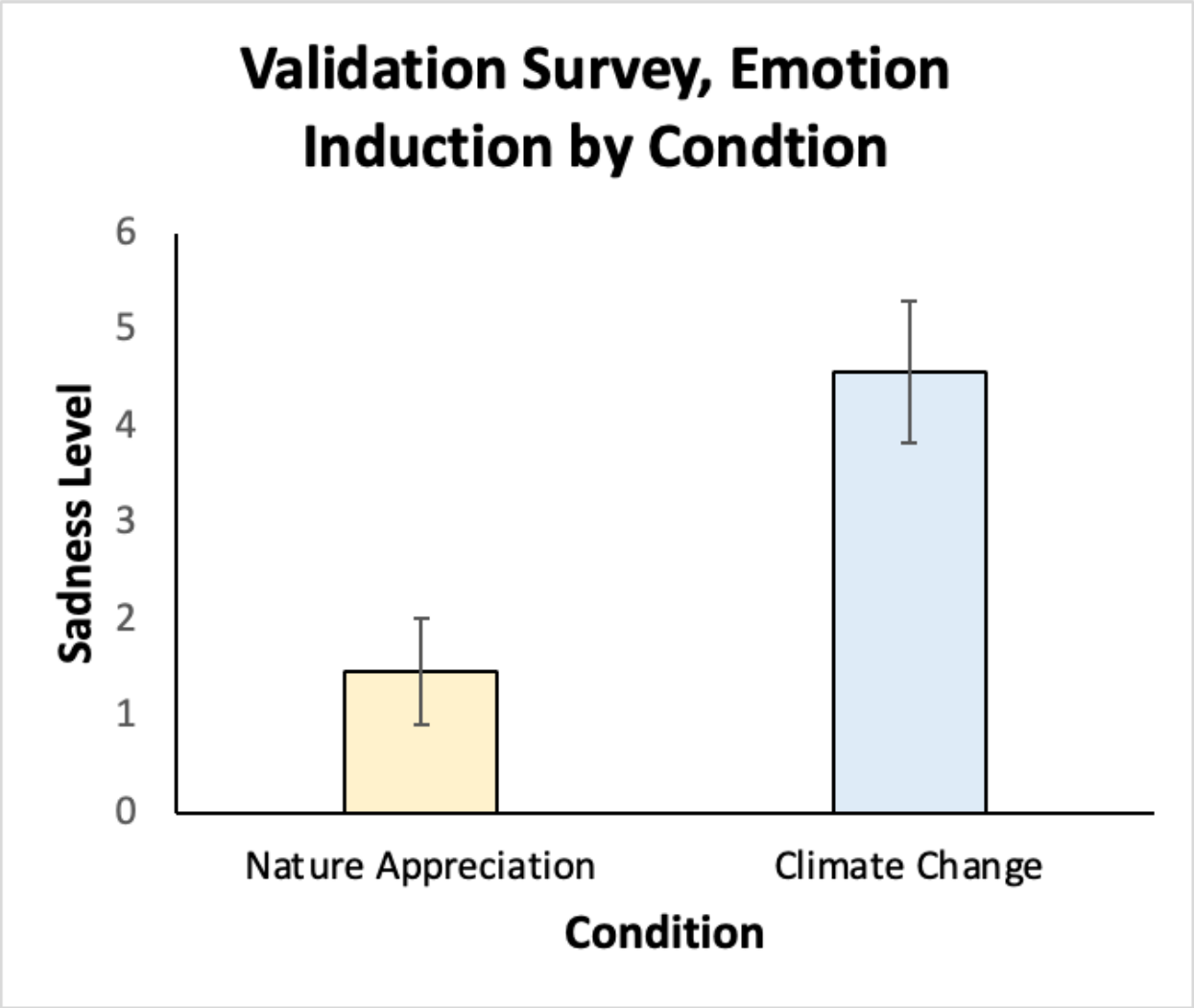

Figure 1. Stimulus validation results. Error bars represent standard error of the mean.

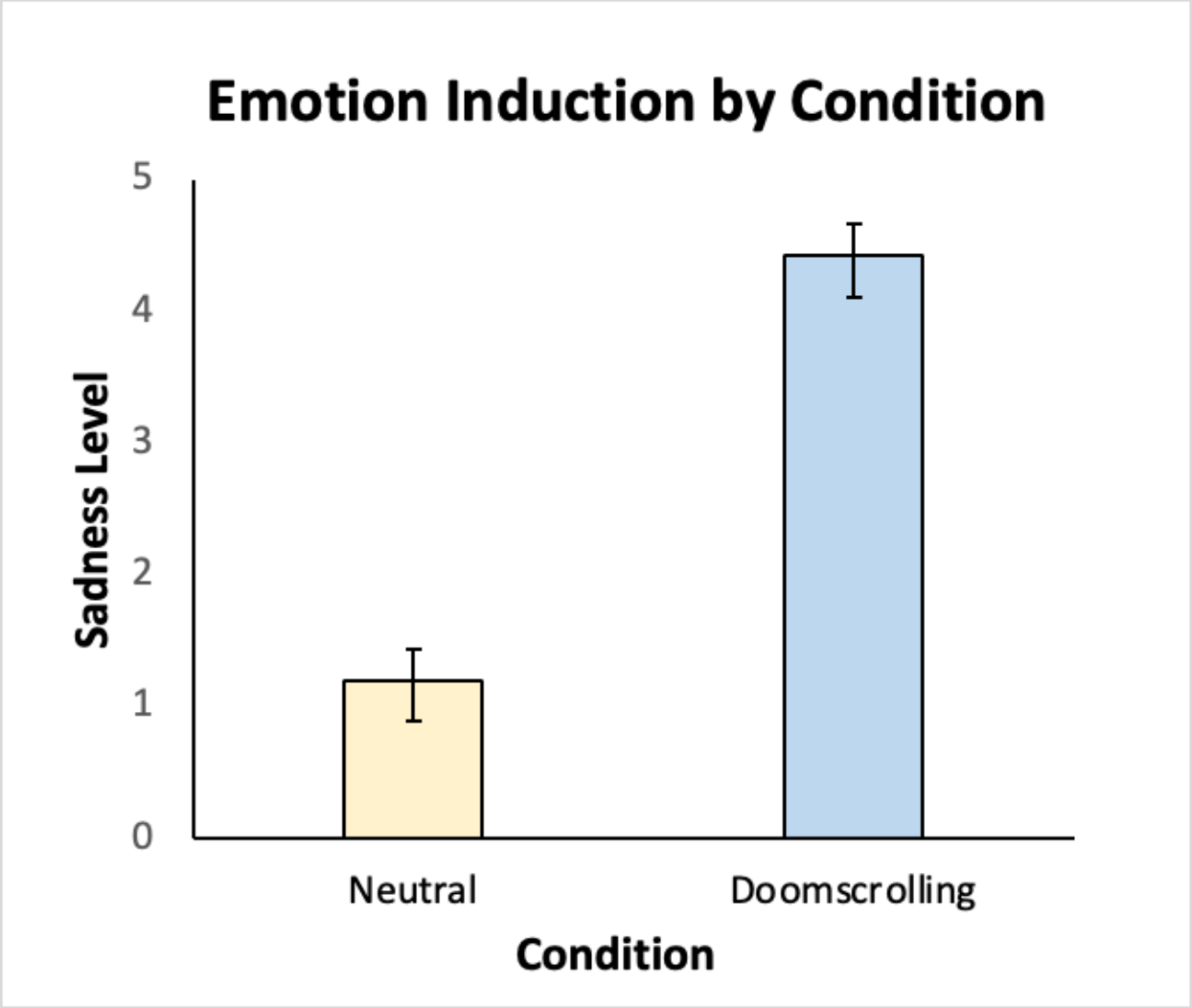

Figure 2. Main experiment, post-experiment emotion manipulation check. Error bars represent standard error of the mean.

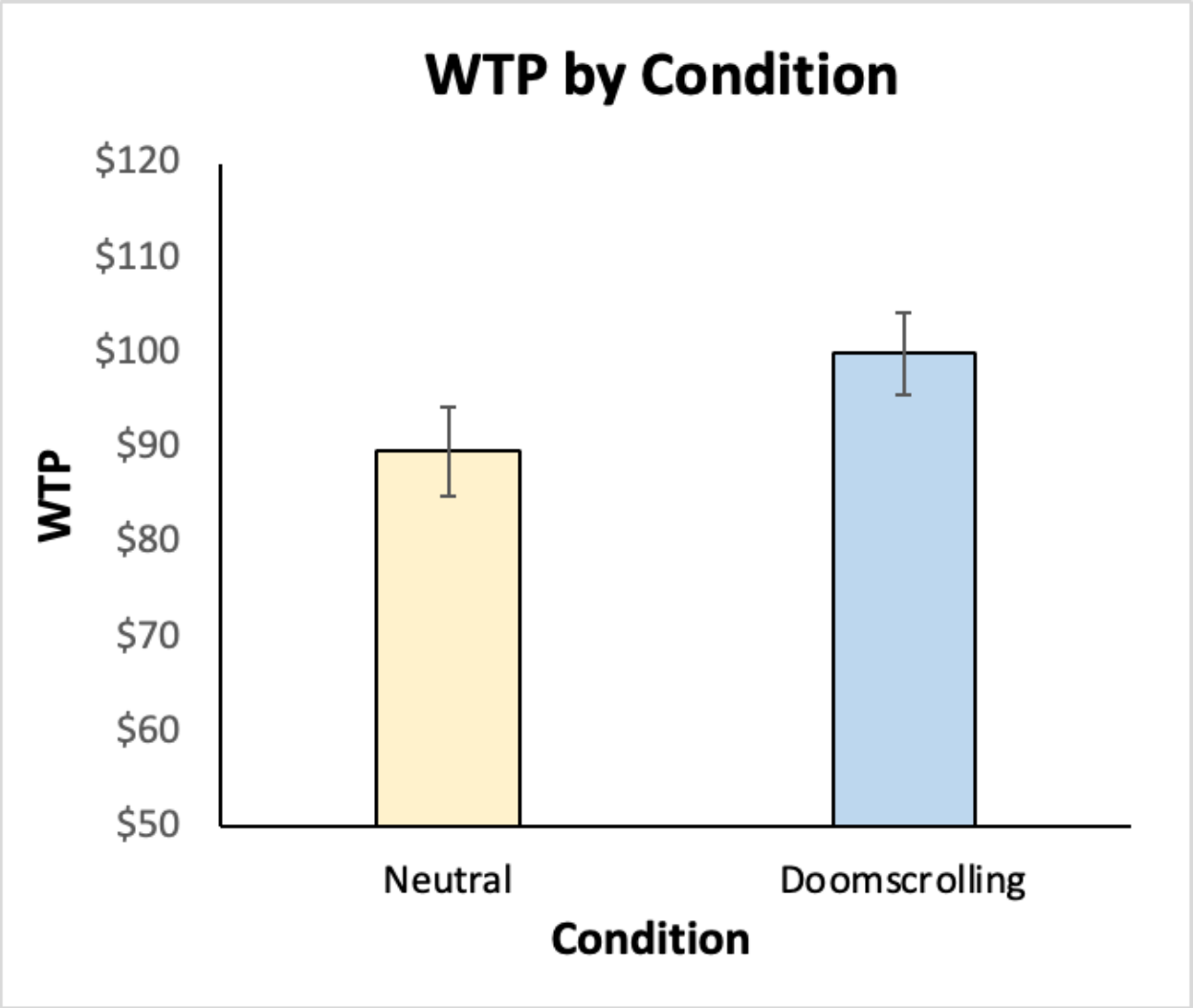

Figure 3. WTP as a function of experimental condition. Error bars represent standard error of the mean.