MICHIGAN ROSS

The Instagram Reels Effect:

How the viewing order and valence of emotions impact willingness-to-pay and perception of advertisements

By:

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A thesis submitted in fulfillment of the requirements of the
Michigan Ross Senior Thesis Seminar (BA 480), April 22nd, 2022.

Abstract

Social media has changed the way consumers make purchasing decisions. More specifically, it has engaged consumers through short-form videos or easily scrollable photos or text. The literature has already established that induced emotions are highly influential on subsequent decisions (Choi, Rangan, & Singh, 2016; Gardner, 1985; Janis, Kaye, & Kirschner, 1965). However, the literature to date focuses on how a singular emotional state, such as happiness, influences consumer behavior. In contrast, as a person scrolls through different videos on social media, they are exposed to a random variety of emotional valences in a short period of time. Thus, this research explores how the order and valence of emotions in videos impact consumers' willingness-to-pay (WTP) and perceptions of advertisements. Results indicate a significant increase in WTP and perception of product innovativeness when positive videos, as opposed to negative videos, are watched prior to the ad.

Contents

Introduction

Social media has changed the way consumers make purchasing decisions (Abel, Machin, & Brownlow, 2020; Lieberman & Schroeder, 2020). With 3.6 billion users in 2020 and a projected 4.41 billion by 2025, social media will soon reach and connect over half of the world's population (Statista, 2020). Recognizing this opportunity, in 2020 advertisers spent over $40 billion in the US alone on social media ads (eMarketer, 2020), and consumers have reciprocated in purchases, depicted by hashtags such as #TikTokMadeMeBuyIt which has amassed 9.6 billion views as of March 2022, up from 6.9 billion views in December 2021.

Much of the consumer experience on social media involves scrolling through short-form videos, photos, or text. For instance, Snapchat stories, Instagram reels, and TikTok videos have all been capped at 60 seconds, and scrolling through Facebook, Instagram, or Reddit posts can arguably take even less time. This means that in the average 145 minutes per day people spent on social media in 2020 ("We are Social", 2021), they are engaging with a large volume of posts. Further, the content viewed is not always controlled by the consumer. Platforms like TikTok, Instagram, and Facebook rely on algorithms to inform the order and type of content that appears. The result is a social media experience that involves a variety of content sources, length, and emotional valence.

This research explores how the varying order and valence of emotions on social media impact consumers' WTP and perceptions of advertisements. The literature has already established that induced emotions are highly influential to subsequent decisions (Gardner, 1985; Janis et al., 1965). For example, images of cold objects lead to feelings of physical coldness which increases perceptions of loneliness and lowers donations to charities (Choi, Rangan, and

Singh 2016). This research on singular emotional states and their impact on behavior, however, does not translate directly to social media in our modern age. Consumers of TikTok or Instagram Reels will typically repeat the cycle of watching a handful of videos, each under a minute long, followed by an ad. The emotions conveyed by the videos span from all positive, all negative, or a mix of both, with varying levels of valences throughout. Although we have a good understanding of how ad effectiveness is impacted by singular emotions, we do not yet understand how the combination and direction of emotions within a set of short-form videos impacts ad effectiveness.

My findings indicate a significant difference for WTP and innovativeness. However, none of the other variables showed a strong difference between conditions. With further research, our findings could have implications for marketing managers trying to optimize ad spend as well as better understanding the algorithmic environment of social media.

Literature Review

Hedonic Adaptation

Hedonic adaptation is the "reduction in affective intensity of favorable and unfavorable circumstances" (Frederick & Loewenstein, 1999), and it impacts everything from eating habits to romantic relationships (Jacobs, Bao & Lyubomirsky, 2013; Rolls, Rowe, & Rolls, 1982). This further explains the "hedonic treadmill" where people pursue more and more pleasurable activities because we continue to return to a baseline level afterward. This is especially relevant to social media where companies benefit from consumers staying on their apps for longer. In order to prevent multi-homing and boredom, algorithms are carefully designed to mitigate hedonic adaptation.

Supporting this idea, research suggests that a varied amount of content and the order in which the content appears impacts consumption experiences. For instance, individuals choose to switch to less-preferred options despite lower enjoyment to avoid repeating a more-preferred option (Ratner, Kahn, & Kahneman, 1999). In a similar vein, a variety of stimuli is preferred to a better-liked single stimulus when consumption is continuous and processing is holistic as opposed to analytical (Galak, Kruger, & Loewenstein, 2011; Hoch, Bradlow, & Wansink, 1999). The use of social media is characterized by a lack of critical engagement; people often mindlessly open apps and begin scrolling. This evidence then suggests that having varying valences of videos would be preferred to a single valence because it prevents hedonic adaptation. If true, this may have downstream effects on advertisement WTP and perception when the order and valence of video content varies.

Emotional Valence and Behavior

The literature has already indicated a causal relationship between incidental emotions (i.e., emotions that have nothing to do with the decision or judgment being made) and consequent behavior (Gardner, 1985). While emotions are defined primarily across two axes of valence and arousal, this paper will be homing in on the former. As defined by the American Psychological Association, emotional valence is the "value associated with a stimulus as expressed on a continuum from pleasant to unpleasant or from attractive to aversive" (American Psychological Association, n.d.). Incidental emotions have been found to impact everything from product evaluations to risk preferences (Kim, Park, & Schwartz, 2010; Yang et al., 2020). For the former, an emotion-congruency effect was found such that when the incidental emotion matched the emotional claims of the product, people viewed the product more favorably. Given

that singular emotions can impact perceptions and judgments, what occurs when consumers are exposed to a variety of positive and negative valences?

Emotional valence has also been studied in specific contexts, such as product reviews. Results have shown pleasant online customer reviews, compared to unpleasant ones, lead to a higher purchase likelihood (Chintaguna, Gopinath, & Venkataraman, 2010). Similarly, positive valence of online word-of-mouth has a significant and positive impact on box office earnings (Guo, Wang, & Wu, 2020). Moreover, positive expressed emotion in product reviews manifies quality judgments, WTP, and product choice, and participants are more sensitive to increasing levels of negative emotions than positive (O'Leary & Sussman, 2021). In sum, emotions conveyed in text, especially in the context of product reviews, can be highly influential in the way consumers make judgments about products.

Beyond text, past literature has explored ad effectiveness on television. When a television program induces a singular, positive feeling, experiments have found improvements in consumers' mood, perceived commercial effectiveness, and ad recall, which is moderated by the extent to which consumers liked the program (Goldberg & Gorn, 1987; Murry, Lastovicka, & Singh, 1992). Moreover, the context in which an advertisement is viewed is also important; happy commercials viewed in a happy program are evaluated more favorably than the happy commercial in a sad program, and vice versa (Kamins, Marks, & Skinner, 1991).

Clearly, emotional valence can change the way consumers behave. Moreover, positive and negative valences are not weighted equally; negative emotions seem to weigh more heavily on consequent perceptions. That said, the literature has primarily covered singular emotional valence states prior to inducing or measuring a behavior, which leaves the question of how a changing sequence of emotional valences can impact consumer judgment and decision-making.

Theory Building Hypotheses

H1: Valence Levels

> If the order of emotions is consistently positively (negatively) valenced before the ad, the WTP and perception of the ad will be significantly higher (lower) than if the emotions were all negatively (positively) valenced.

Replicating previous findings in a social media environment, I expect that positively valenced videos will lead to a higher WTP value and perception of an ad, as opposed to negatively valenced videos. Perception of the product in the advertisement will be measured across several variables including quality, enjoyment, trust, interest in learning more, and innovativeness.

H2: Valence Changes

> The WTP and perception of ads for the condition moving from negative to positive and positive to negative valence will be significantly higher than the condition of all positive or negative valence.

Because changing valences prevent hedonic adaptation and consumers prefer variety in holistic processing environments, consumers may more positively view videos with changing valences than ones that feature the same valences. If true, this may have a positive impact on WTP and perception of the following advertisement. I further expect that the condition moving from negative to positive will have a better WTP and perception of the advertisement than the positive to negative condition due to the recency effect. Viewing a negative video just prior to the advertisement may have a more negative impact overall because the negative valence is most salient to the consumer while viewing the advertisement.

Pre-Test: Identifying Valence of Videos

Method

20 videos were selected from TikTok, ten hypothesized to be positively valenced, and 10 negatively valenced. Each video was or was edited to be between 20 and 40 seconds long to prevent length from being a confounding factor. 200 participants were recruited on Prolific (49% female, mean age = 38). Each participant viewed five randomly selected videos, all from the same hypothesized valence. In other words, participants watched five videos which were all hypothesized to be positive or negative. Participants were allowed to watch the videos as many times as they liked to simulate the environment of TikTok or Instagram Reels.

After watching each video, participants answered a series of questions to measure the valence and arousal of the video. To capture valence, an edited version of the Positive and Negative Affect Scale (PANAS-GEN) was utilized (Watson, Clark & Tellegen, 1988). This scale featured ten emotions: five negative (distressed, upset, sad, anxious, and scared) and five positive (happy, enthusiastic, inspired, attentive, and excited). After watching each video, participants rated the extent to which they felt each emotion, on average, on a one to five scale (not at all to extremely). In order to calculate an overall PANAS score for each video, the five negative emotions were reverse scored and then all ten scores were averaged. In this way, the higher a video's PANAS score is, the more positive its valence is. In a similar manner, arousal was measured across five bipolar questions from a one to five scale (stimulated-relaxed, excited-calm, frenzied-sluggish, jittery-dull, and wide-awake-sleepy) after each video.

Figure 1: PANAS Score Results
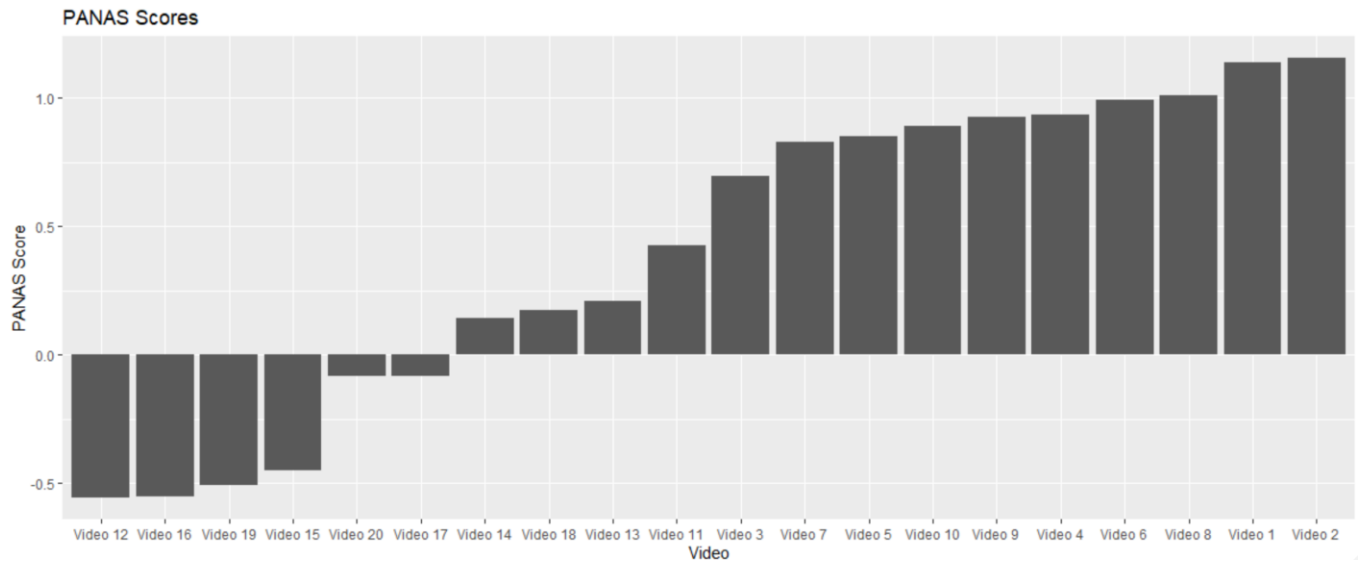
PANAS score results, sorted by most negatively to most positively valenced. Video numbers are on the X-axis and the score is on the Y-axis.

Results

PANAS Score

PANAS score results, ordered by most negatively to positively valenced, are shown in Figure 1. Scores, overall, skewed more positively, and the top three most positive videos were Videos 2, 1, and 8, and the most negative were Videos 12, 16, and 19.

We first conducted a one-way ANOVA to compare whether the positive video PANAS scores were significantly different from the negative video scores. The results revealed a statistically significant difference between at least two videos ($F(5, 2712) = 55.93, p < .001$). We then conducted a t-test and found that all three positive videos were significantly different from all three negative videos, but within each valence, videos were not significantly different from one another (Figure 2).

Figure 2: Top Three Positive and Negative Video t-Test Results
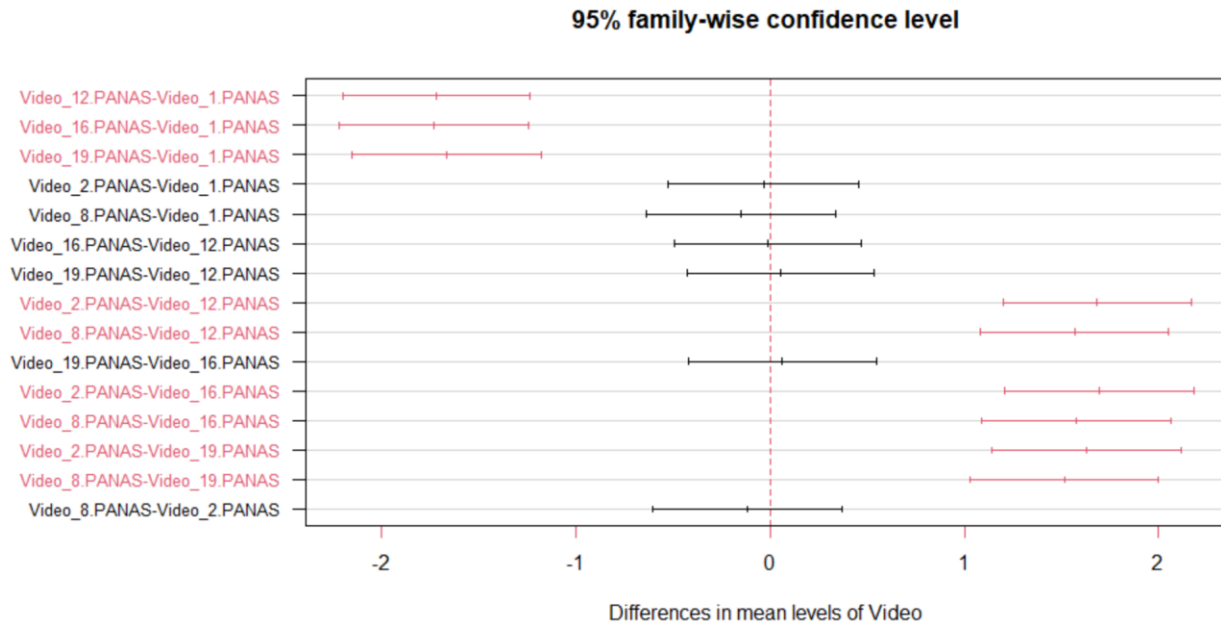
The top three positive videos were Videos 2, 1, and 8 and the top three negative videos were Videos 12, 16, and 19. The comparisons highlighted in red indicate a significant difference between PANAS scores for the two videos.

In order to validate the top three selections for Study 1, we analyzed order effects of the videos. Because participants watched five videos at a time, it may be the case that a specific video played first may impact the scores given to later videos. To test this, we wanted to see if the average PANAS scores across all five videos shifts if a video is played first as opposed to when it is not first. For example, if Video 1 is played first, does the overall PANAS score across all five videos watched differ from when Video 1 is not played first? The order effects analysis can be found in Table 1 for the top six videos. For the negative videos, there was not a stark contrast between scores when each video was played first versus when it was not first. However, the positive videos did feature some differences. Video 2 had a positive order effect such that when it was played first, the overall mean score of all five videos watched increased by .36. We reasoned this is a good indication of keeping this video for Study 1; Video 2 has a pervasive

12

Table 1: Order Effect Results

Video	Mean when order is 1	Mean when order is not 1	Difference
Video 2 (positive)	1.306	0.945	0.361
Video 1 (positive)	0.612	1.014	-0.402
Video 8 (positive)	0.934	1.000	-0.066
Video 12 (negative)	-0.178	-0.187	0.009
Video 16 (negative)	-0.125	-0.226	0.101
Video 19 (negative)	-0.244	-0.130	-0.114

positive impact on viewing experiences which can, for instance, make the contrast between switching valences more stark. In contrast, Video 1 had a negative order effect wherein the mean score across all five videos dropped by .40 when it was played first versus when it was not first. Video 8 only had a slight negative (-.06) order effect when played first.

Arousal

The arousal results were averaged across the five arousal questions to an overall mean arousal score per video between one and five (one = high arousal, five = low arousal). Taking these scores, we compared them against the valence of each video to see if there was a relationship between arousal and valence. As Figure 3 shows, there is little to moderate correlation between the two dimensions with a Pearson correlation of .40.

Figure 3: Valence vs Arousal Scores

Valence vs Arousal
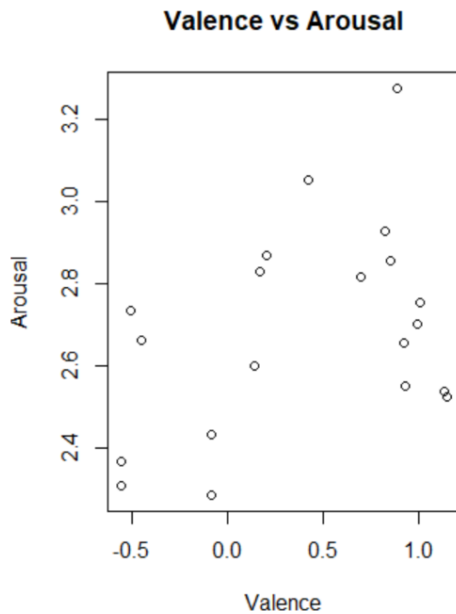
Discussion

The PANAS score results revealed the top three positive videos were Videos 2, 1, and 8, and the most negative were Videos 12, 16, and 19. For the positive videos, order effects revealed that Video 1 had a dampening effect on overall PANAS scores but Video 8 had a bimodal distribution such that participants did not consistently rate it positively. Given this information, we decided to move forward with Videos 2 and 1 for Study 1. Video 1's negative order effect has about the same magnitude as Video 2 in an opposite direction (.40 vs .36, respectively) which can balance the impact of the order effect at large when video order is randomized. For the negative videos, order effects were not problematic for all three videos, but Video 16 had the highest negative response in terms of score distribution. Because Videos 12 and 19 were similar in score distribution, we decided to select Video 12 for the next study because of its greater negative PANAS score.

As Figure 4 shows, we found very little relation between arousal and valence (*corr* = .40). In other words, it is not necessarily the case that the more positive or negative a video is, the higher the arousal score would be. While we did not explore this further in our paper, this could be content to explore in future research.

Study 1

Method

In this study, our objective was to observe any differences between WTP and perception of a video advertisement depending on the order and valence of emotions directly prior to the ad. To accomplish this, we recruited 796 participants on Prolific (mean age = 36.7, 50% female), 768 of which were eligible after an attention check.

Participants were instructed to watch two videos, each between 20 to 40 seconds, directly followed by a 16-second video advertisement for a notebook named Studia. There were four randomly assigned conditions reflecting varying level of changing valence for the first two videos: (1) positive-positive, (2) negative-negative, (3) positive-negative, and (4) negative-negative. The videos in each condition were selected from the pre-test (e.g., if participants were assigned to the negative-negative condition, they would watch negative video 1 and negative video 2 in a random order followed by the advertisement. See Appendix 1 for the stimuli.).

After watching all three videos, participants indicated their maximum (willingness-to-pay) for Studia, six multiple-choice questions about perception of the advertisement, and four multiple-choice questions about recall of the advertisement. In detail, we asked participants to rate their perception of the quality, trustworthiness, and innovativeness of the product, whether

15

Figures 4 & 5: WTP Results by Condition and between Conditions
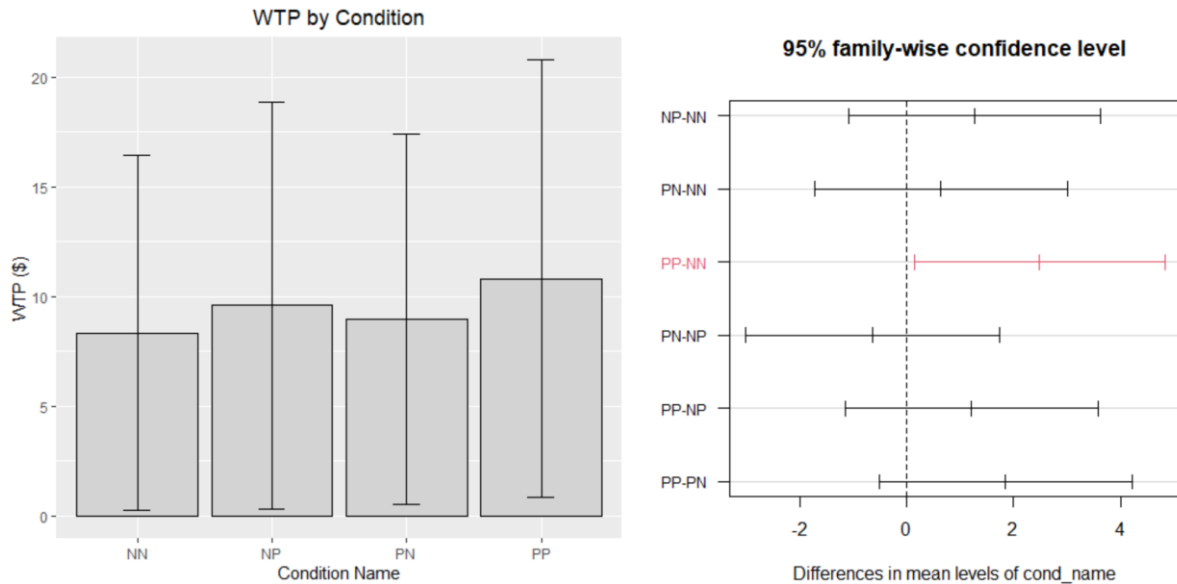
The first figure shows the means and SDs of each condition for WTP. The second figure shows the results of t-tests across conditions, and the only significant difference is between the positive-positive and negative-negative conditions.

they would be interested in learning more about the product, and how much they enjoyed the advertisement. These perception variables were not sourced from an established list, but rather were selected based on previous valence and perception literature (Choi et al., 2016; Goldberg & Gorn, 1987; Guo et al., 2020). This was followed by a question asking if participants would like to be redirected to the product webpage at the end of the survey. All perception items, except the binary question asking whether participants wanted to visit the product website, were measured from 1=not at all to 7=extremely. For recall, we asked four multiple-choice questions covering how many colors and sizes the notebook is available in, what percent recyclable materials it is made of, and to pinpoint the website the product is sold at. All answers were written in text in the advertisement. This study was preregistered, more details of which can be found here: https://aspredicted.org/blind.php?x=7L1_XDP.

Results

WTP

As Figure 4 shows, the positive-positive condition ($M = 9.97$, $SD = 10.8$) had the highest WTP, followed by negative-positive ($M = 9.6$, $SD = 9.28$), positive-negative ($M = 8.97$, $SD = 8.43$), then negative-negative ($M = 8.32$, $SD = 8.10$). A one-way ANOVA showed a statistically significant difference between at least two conditions ($F(3, 764) = 2.706$, $p < .05$). As Figure 5 shows, the difference was significant between the positive-positive and negative-negative conditions ($t(370) = -2.7$, $p = .007$). More generally, the pattern of results followed that any condition with a negative video had a smaller WTP than the positive-positive condition, but not all significantly so.

Perception Measures

A Kaiser-Meyer-Olkin factor adequacy test of the five perception variables (with the exception of the binary variable) revealed a score of .79 suggesting that factor analysis is appropriate. Consequently, a principle axis factor analysis with varimax rotation was applied. The perception items loaded onto two factors (loadings > .60). One included the variables learn, enjoy, and innovative ($\alpha = .81$), and the other included quality and trust ($\alpha = .78$). More generally, the first factor can be conceptualized under the title 'Conversions', as how much one enjoys the advertisement and is interested in learning more may impact future purchasing behavior. The second factor is related to 'Features' of the product including its quality and trustworthiness. The average of the variables was used to calculate the two new factor values which were then used for further analysis, in accordance with our pre-registration. The four

recall questions were aggregated by accuracy (i.e., if a participant got 2 of the 4 questions correct, their recall score is a 2).

The first factor was composed of the variables learn, enjoy, and innovative ($F(3, 764) = 2.503$, $p = .058$), and the second included quality and trust ($F(3, 764) = 1.614$, $p = .185$). For the first factor, the positive-positive condition had the highest mean ($M = 3.49$, $SD = 1.37$) followed by negative-positive ($M = 3.25$, $SD = 1.43$), positive-negative ($M = 3.17$, $SD = 1.31$), and negative-negative ($M = 3.14$, $SD = 1.38$). For the second factor, the positive-positive condition had the highest mean ($M = 4.16$, $SD = 0.81$) followed by negative-negative ($M = 4.01$, $SD = 0.88$), positive-negative ($M = 3.99$, $SD = 0.91$), and negative-positive ($M = 3.98$, $SD = 0.98$). Neither factor turned out to be significant via a one-way ANOVA test.

Individual Perception Variables

In order to observe what might be driving the effects of the factor analysis, especially the first factor that was close to being significant, individual variables were also observed. A one-way ANOVA test of each variable revealed that innovativeness was the only significant perception variable ($F(3, 764) = 3.736$, $p < .05$). This difference, calculated via a t-test, was between the positive-positive and negative-negative conditions ($t(385) = -2.94$, $p = .003$) and the positive-positive and positive-negative conditions ($t(380) = -2.55$, $p = .011$).

Recall

Recall questions were aggregated for each participant and ranged from zero to four correct answers. A one-way ANOVA test showed that recall was not significant ($F(3, 764) = .828$, $p = .479$). Interestingly, the negative-negative condition had the highest mean recall score

($M = 1.93$, $SD = 1.09$), followed by positive-positive ($M = 1.91$, $SD = 1.17$), positive-negative ($M = 1.86$, $SD = 1.15$), and negative-positive ($M = 1.76$, $SD = 1.16$). This follows a different pattern from WTP and innovativeness both in which negative-negative condition performed the worst.

Discussion

Overall, the significant results for innovative and WTP confirmed H1 that if the order of emotions is consistently positively valenced before the ad, the WTP and perception of the ad will be significantly higher than if the ads were all negatively valenced. However, H2 was not confirmed. We had predicted that changes in emotional valence would lead to higher WTP and perception of advertisements, but the positive-positive condition consistently outperformed the other conditions, with the exception of recall. That said, generally, the negative-positive condition was at least as good as, if not higher scoring, than the positive-negative condition for all perception variables. This suggests that varying valence order of emotions does make an impact, just not significantly better than the single-valence positive-positive condition. Put differently, including a negatively valenced video of any kind decreases WTP and perception of innovativeness.

For recall, the results indicating that the negative-negative condition had the highest score did not align with past literature indicating that happier moods increase recall (Goldberg & Gorn, 1987). However, there are many underlying mechanisms beyond valence that impact recall, one of which is arousal, that may be worth exploring in the future (Pavelchak, Antil, & Munch, 1988).

General Discussion

The goal of this research was to observe whether WTP and perception of advertisements change based on the valence and order of emotions directly prior to the advertisement. To accomplish this, a pre-test was first conducted to identify positive and negatively valenced videos. Using a modified version of the PANAS-GEN scale, we successfully identified two positive and negative videos that were significantly different between valences but not within. In this same pre-test, was also collected data on arousal of videos which came back inconclusive.

Next, we ran a study with four conditions featuring two short videos with varying valences: positive-positive, negative-positive, positive-negative, and negative-negative. Directly following the two videos, a video advertisement for a notebook was shown. We collected data on WTP, perception of the advertisement (quality, enjoyment, trust, interest in learning more, and innovativeness), and recall (how many colors and sizes the notebook is available in, what percent recyclable materials it is made of, and pinpointing the website the product is sold at). Results indicated a significant difference between the positive-positive condition and negative-negative condition for WTP and innovativeness, with the latter also being significant between the positive-positive and positive-negative conditions. However, none of the other variables showed a strong difference between conditions.

Managerial Implications

Social media advertising is growing in popularity and is steadily increasing in spend year-over-year (Digital, 2022; Schomer, 2022). The interest from marketing managers is matched by the platforms themselves; TikTok stated its mission to triple its ad revenue in 2022 (Hsu, 2021). Given the large market cap and a professional incentive to perform well, it is in

managers' best interest to know where and when their ads will perform the best in a given

environment. TikTok alone has grown to over one billion monthly active users which signals an

importance in understanding and optimizing. While past research has extensively explored

advertisements placed between television programs, the new social media landscape offers a new

environment to study with potentially different implications.

In line with the new environment and recognizing advertisers' desires to optimize their ad

spend, platforms are beginning to provide more autonomy to managers. For instance, Hulu is

offering options for users to select an ad experience they would like to engage with out of two or

three options (Ad selector, 2022). In this model, managers can push a certain advertisement

based on the show being watched, or even run their own field experiments to see which

advertisement performs the best in a given show. Since the field is changing so rapidly, it is

important for managers to understand how their content performs on growing platforms like

TikTok and Instagram Reels to optimize their spend.

Limitations

One of the limitations of this paper is higher attrition rates for certain conditions.

Stemming from the nature of the experimental design, we noticed that of the 8% of people who

dropped the survey without finishing, 33% were in the negative-negative condition, 8% above an

even distribution between all four conditions. It appears that participants that had a strong

aversive reaction to the negative videos did not want to continue with the study. Indeed, the

lowest attrition rate was attributed to the positive-positive condition at 20%. As a direct

consequence, results may be slightly biased toward the positive-positive condition, as individuals

who continued on through the negative-negative condition may have thought less of the videos than those who dropped. This somewhat impacts the random assignment of the study.

It is also important to acknowledge that we only tested four videos and one advertisement and need to test more going forward. There is a chance that the results we noticed were spurious, and replicating the results with different, pre-tested videos and ads is critical. Additionally, the videos we tested were all 20 to 40 seconds long and sourced from TikTok. There is somewhat of a selection bias based on the quirks of the platform and the content able to be captured in the aforementioned time frame. Thus, future work can focus on choosing content from a diverse range of platforms, and perhaps a larger array of video lengths.

Finally, this study was conducted fully in a survey and lab environment in an effort to isolate the effects of emotional valence and order and remove as much external noise as possible. That said, social media, the environment that we draw inspiration from, is dynamic, and user experience can differ from that of a lab. Moreover, few social media users just watch two videos and an advertisement; usually the advertising experience is embedded within a longer experience. This could be means for future research, whether that be in the lab or in the field.

Future Direction

In the first study, we have primarily replicated existing results that positive states outperform negative ones, just in a social media environment. One of the important leads from this study is that including a negative video of any kind lessens WTP and perception of advertisements, though not significantly. Leaning into this and looking more holistically, there are a few future directions we could move with this research.

First, we could continue to refine the study design to see if changes occur with order and valence of emotion. In the study, we left an optional comment box for participants to leave thoughts. A comment that was mentioned repeatedly was that people felt distracted by the first two videos which prevented them from paying attention to the ad, especially when the negative video appeared last. This is an interesting note given that the negative-negative and positive-negative conditions scored slightly, although not significantly, higher in recall. With this, we may want to introduce a more engaging advertisement that may capture the attention of the viewer even after watching a negative video. Alternatively, we can introduce more neutral videos into the mix to see if this would decrease the level of distraction experienced. To this point, we may want to set up a paradigm that lowers attrition rates in the negative conditions but still induces a feeling of going back and forth between emotions.

Second, it was curious that innovativeness was the only perception dependent variable that came back significant. The advertisement shown was for a notebook with no special features which is not particularly revolutionary on the surface level. We also found it odd that people found the notebook innovative but were not particularly interested in learning more about it. Perhaps people think the product is innovative for the market or for others, but not for themselves, hence why they do not feel the need to seek out more information. To this point, we could ask questions like "to what extent do you think this product would improve your life?" to get a more personal take on the innovativeness and see what is driving it.

Appendix

Appendix 1: Selected Videos for Study 1

Condition	Links
Positive-Positive	1. https://youtu.be/n0zjOWEunsM 2. https://youtu.be/zhDhrGZnuqU
Positive-Negative	1. https://youtu.be/NC6nce36_zY 2. https://youtu.be/MVu7F1PXTZg 3. https://youtu.be/3KgkgAPwhmg 4. https://youtu.be/1kaVuYjeAdo
Negative-Positive	1. https://youtu.be/0mawZKl_JhY 2. https://youtu.be/ssPjs5SiToU 3. https://youtu.be/R2L0UPxoKQc 4. https://youtu.be/ZVCfYvD7bM8
Negative-Negative	1. https://youtu.be/cL3gfL5raNI 2. https://youtu.be/7eC3TzdQT3M

Participants were randomly assigned to one of the conditions and to a video.

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