Vote or ADstain: The Effect of Repetitive Exposure and Type of Advertisement on the Inclination to Vote for a Presidential Candidate

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KEYWORDS

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ABSTRACT

During election campaigns, candidates use rampant political advertising as their means to gain the approval of voters. With this, it would be interesting to investigate how voters are affected by these advertisements. This study explores how repetitive exposure to two different types of advertisements—emotional or factual—induce the mere exposure effect, the psychological phenomenon by which people develop a preference for familiar ideas. The inclination to vote is studied as well. Participants are asked to play a decision-making game, wherein a political advertisement and a product placement advertisement are shown for a certain time interval. Afterwards, they are asked to accomplish a PsychoPy experiment to record their sentiments about the advertised candidate and the product through a continuous Likert scale. Moreover, the experiment also recorded the participants' reaction time per statement. The conditions of this experiment satisfy a two-by-two factorial design; furthermore, a two-way analysis of variance (ANOVA) and an independent samples t-test are used for the Likert scale and reaction times, respectively.

INTRODUCTION

Past research has shown that exposure to political advertising influences the outcome of elections. The mere exposure effect, or the increased preference for the familiar, is significant during campaign season, both in ensuring a candidate's positive image and in shedding light on how advertising content influences the voter's inclination to vote. The mere exposure effect has been widely studied using neutral stimuli, but studies using emotional-laden stimuli remain inadequate.

This study seeks to examine how repetitive exposures to two types of advertisements, factual and emotional, produce the mere exposure effect, as well as which type is more likely to sway individual voting behavior.

Electoral Politics in the Philippines

While the current Philippine electoral system is grounded on the 1987 Constitution, local elections have taken place as early as the American colonial period (Teehankee 2002, 149-202). Elections served as one of the many colonial footholds of the American regime, with electoral campaigns mainly serving the interests of political personalities and landowning elites. With colonialism being the backbone of Philippine democracy, the call for electoral system redesign is necessary and justified. Philippine electoral politics being extremely candidate-centric and founded upon a fractured party list system continues to be a factor in the lack of attention toward important policies and programs (Lanuza 2019, 684-87).

A significant percentage of Philippine electoral campaign budgets go to advertising (Perron 2009, 625-40). Several candidates spend more than their net worth on campaign advertisements alone (Rivas 2019). Moreover, candidates will take advantage of advertisements in all forms: from television and print to billboards and posters. The power of these advertisements is undeniable. These advertisements may be a major influence—or even absolute determinant—of a person's vote (Castro and Paris 2019).

The Mere Exposure Effect

Zajonc (1968, 1-27) theorized that repeated exposure to a stimulus may result in a higher likelihood of object recognition, thereby contributing to attitude-formation on said stimulus. The mere exposure effect states that with frequent exposure to a certain stimulus, the more positive the attitude change would be in response and can take place "without conscious cognition" (Zajonc 1968, 1-27). However, most of the previous literature feature only "neutral" or "meaningless" stimuli (Aimers 2015), and only a few studies explore positive and negative stimuli.

Newer explanations state that repeated exposure increases processing fluency simultaneously at the decision-making point of consumers. As processing becomes more rehearsed, the individual processes the stimulus more, thereby making the individual "fluent." This causes the individual to think positively about the stimulus, thereby giving way to misattribution. As such, individuals tend to act based on the former, possibly explaining positive valency to the repeatedly exposed stimulus.

Following Zajonc's primary study, more researchers have conducted studies to test the generalizability of this phenomenon, including the concept of familiarity, which factors into the production of the mere exposure effect. Harmon-Jones (2004, 889-98) found that participants rated familiar stimuli as "more likeable." However, the researchers pointed out that the positive reaction was more of a reflex rather than something intentional.

Attention and Product Placement

Other studies have incorporated other factors aside from familiarity and repetitive exposure to test the likelihood of the mere exposure effect. Yagi and Inoue (2018, 1635) and De Zilva and Vu (2013) found that the mere exposure effect was significant only when participants were requested to provide their full attention toward an advertisement, thereby increasing positive feedback and recognition. These findings suggest that repetitive exposure may not always be a certain cause for the mere

exposure effect. However, Weinberger (2014) argued that decreased familiarity strengthens the mere exposure effect, and Bornstein (1989, 545-52) pointed out its effectiveness in product placement. Moreover, product placement can directly affect self-identification, or the process of associating oneself with an object, character, or a consumer brand (Zimmerman 2013). This implies high likelihood for consumers to favor a product after seeing it "subtly" placed on television shows or films. Interestingly, consumers have expressed positive reactions to emotional over rational advertisements (Grigaliunaite 2016, 391-414); however, such feedback has not guaranteed the customer's purchasing intention.

To answer Weinberger's (2014) argument, consider that the incorporation of other cognitive factors may contribute to the success of the mere exposure effect. In terms of the Philippine political context, these factors work to maintain prospective voters' attention toward a prospective election candidate. This may explain the similar patterns that are evident among these political advertisements. In terms of the advertisement designs, the deliberate choices of color and spacing can influence a prospective voter's attention and perception. For instance, most, if not all, advertisement posters tend to choose vibrant colors. Vibrant colors are usually successful in alerting the brain; thus, posters with vibrant colors are more effective in capturing attention (Goldstein 2018).

Another cognitive factor that may contribute to the success of the mere exposure effect would be the phonological loop (Goldstein 2018). This is primarily incorporated in advertisements that make use of songs or even jingles. These jingles are common in Filipino product advertisements and are broadcasted through the radio, television, or social media platforms. Electoral campaigns make use of these jingles as well. The phonological loop allows prospective voters to remember the song's subject—the political candidate—even during situations in which they are not directly exposed to the stimuli.

Hot and Cold Cognition

Cold cognition is a "form of information processing" that does not involve emotions, nor does it have "a direct impact on emotions"; whereas hot cognition "is responsible for processing emotionally relevant stimuli" (David 2017, 1-4). Through a series of experiments, Brader (2006) found that in the context of political campaigning, politically informed citizens were more easily influenced by emotional or "hot cognition" advertisements compared with those who are politically unaware, thereby proposing that hot cognition advertisements were more effective than factual or "cold cognition" advertisements. Moreover, advertisements invoking enthusiasm were found to be more effective than those that invoked fear, and those that "used sadness as an execution approach" were more effective than advertisements with a warm approach (Roozen 2013, 198-214). Although with a tendency to fade more quickly, negative information is more impactful when presented recently. Other findings contrast this, where positive information was found as impactful only when presented first (Goggin 2018).

The Mere Exposure Effect Factors in Political Advertisements

Candidates are more likely to win elections if they achieve a sense of "familiarity" with the voters through advertisements or press coverage (Gaissmaier and Marewski 2011, 73-88); the mere act of knowing a candidate's name can influence their inclination to vote. Recognition, despite knowing little information, aids voters in discerning between candidates.

In a study by Becker and Doolittle (1973) on the mere exposure effect in political advertisements, the results showed that candidates who utilized "mass media advertisements" for "name recognition" were more likely to achieve political victory. In studying a subject's ignorance toward certain "key issues" in the campaign itself, the researchers coined the term "conventional wisdom" in political advertising. This is the "belief that simple exposure of the electorate to elementary information about a candidate" will generate favorable success (i.e., political advantage) to one's campaign through the usage of "broadcast, print, and outdoor advertising."

Crisp et al. (2009, 133-49) stated that the manifestation of the mere exposure effect weakens over time. Prolonged exposure leads to a "decrease in liking" and reverses the effect. Stimulus saturation occurs, wherein overexposure can lead to boredom, which then decreases positive affect towards the stimulus itself (Montoya et al. 2017, 459-98). Stang and O'Connell (as cited in Bornstein 1989) observed a "plateau" effect after several exposures, of which the optimal duration for a positive mere exposure effect was 2 or 10 seconds, confirming Zajonc's study (1968, 1-27), with the longer time frame being less effective. Moreover, moderate effects were found when presented in a "heterogenous presentation sequence," where the mere exposure effect increased when "interspersed" with other conditions (e.g., with other advertisements or television programs) rather than presented in a homogenous sequence. Furthermore, complexity of stimuli may influence the saliency of the mere exposure effect (Bornstein 1989, 545-52).

The Two-factor Model

Berlyne and Stang (as cited in Bornstein 1989, 545-52) explained such exposure effects through the two-factor model, focusing on stimulus habituation and stimulus familiarization in the mere exposure effect. Stimulus habituation is where the stimulus is met with "enhanced affect" due to the increase in familiarity and the decrease in its novel yet possibly threatening nature. Stimulus familiarization is similar to the learning curve, in which the stimulus is met with positive affect as it becomes more familiar to the subject, until stimulus saturation is achieved. This explains the "inverted-U function" between frequency and affect.

Newer modifications to the model consider "implicit, unconscious" learning and how such cognitive processes may occur through "subliminal stimulus exposures" despite the lack of conscious awareness and "higher level cognitive processing," which was previously focused on in earlier versions of the model. According to Kihlstrom (as cited in Bornstein 1989, 545-52), these "subliminal stimulus exposures" may cause a greater change in affect than readily recognized stimuli because the former lacks "conscious countercontrol processes" that the latter has. These processes may "restrict and counteract" these stimuli and perhaps even introduce defensive strategies, such as "rationalization, denial" and "attributional biases." Subliminal and supraliminal stimuli may manifest the mere exposure effect, but the latter may go against these counterproductive processes that hinder the optimal manifestation of the phenomenon.

Another factor is the evolutionary aspect of adults preferring familiar over newer, unfamiliar stimuli. There is an "evolutionary advantage" to choosing familiarity over taking a risk with unfamiliarity. However, adults also mention that others go through unfamiliar stimuli in hopes of finding an "unnoticed but potentially useful object" should a time arise wherein this is adaptive. Nevertheless, it is explained that only after repetitive exposure to a stimulus without negative reinforcement (related to the stimuli) will the subject deem these stimuli as "non-threatening."

On the Usage of Positive Stimuli and the Importance of Context

Most studies on the mere exposure effect widely use neutral stimuli; nevertheless, the general theories regarding this phenomenon still hold when positive stimuli are used (Aimers 2015). This can be attributed to "associative learning," wherein stimuli are not "merely exposed"; rather, through "affect transference," the stimuli will "assume affective valence" from its association in the context of the situation or environment in which the stimuli is exposed (regardless of valency). With repeated exposure, affect transference strengthens, thereby leading to the assessment being influenced by such circumstances and other outside factors.

Hypotheses

Two independent variables are present for this study; thus, the researchers will test two hypotheses for independent effects, as well as for an interaction effect. Hence, the hypotheses for the study are the following:

If the participant is repeatedly exposed to a political advertisement featuring a candidate

they are initially unfamiliar with, then they will likely approve of said candidate.

If the participant is shown an emotionally appealing advertisement about a political candidate, then they are more likely to approve of said candidate.

Null Hypothesis: There is no interaction effect between the frequency of exposure and the type of advertisements.

Alternative Hypothesis: There is an interaction effect between the frequency of exposure and the type of advertisement.

METHODS

Sample

The researchers conducted the study on undergraduate students aged 18 and above from the University of the Philippines Diliman. No restrictions were applied on other demographic characteristics. Participants were selected through simple random sampling and were randomly assigned to the different treatment conditions. In the experiment, four participants participated simultaneously and accomplished consent forms prior to the study proper. The consent form (Appendix A) reiterates that they may opt out of the experiment at any time and does not explicitly state the study's purpose until the debriefing session afterward to avoid any form of participant bias. During the debriefing, the participants were informed that they may also choose to omit their data if they decide to do so in the future.

The sample size of 280 participants was determined using G*Power, with 70 participants in each treatment, an effect size of 2, and a power value of 0.8. The study conducted had a two-by-two factorial design involving two independent variables, which included the type of political advertisement and the number of exposures. Because of time constraints, the researchers were only able to conduct the study on 186 participants, three treatments with 46 participants, and one with 48 participants.

Measures

VARIABLES

The effects of two independent variables, Number of Exposures and Type of Political Advertisement, on the Mere Exposure Effect, was studied. These variables had two levels, thereby making for a two-by-two factorial design that was processed through a two-way analysis of variance (ANOVA).

Number of Exposures refers to the number of times the subject will view the political advertisement and includes two levels: viewing the advertisement once or five times. Type of Political Advertisement refers to its content, and this variable also has two levels: Emotional (advertisement appeals to the emotions of the subject) and Factual (advertisement appeals to the logic of the subject).

INSTRUMENTS

Emotional Political Advertisement

An emotional political advertisement contains material about the fictional political candidate that was created to appeal more to a subject's emotions ("He saved my life," "He gave me money when I needed it the most," etc.). In this advertisement, an emotionally driven testimonial by a constituent will be presented, integrated into an overall campaign statement.

Factual Political Advertisement

A factual political advertisement contains material about the fictional political candidate that was created to appeal more to a subject's logic ("He studied at the University of the Philippines, Diliman," "He implemented several projects in his organizations," etc.). In this advertisement, facts about the candidate are presented, and all these facts point to supposed selling points.

Product Placement Advertisement

An advertisement on a product without any associated political content was shown to the participants as well. This facilitated a level of deception that prevented the participants from completely figuring out the true nature of the study.

Decision-making Game: Microsoft PowerPoint Presentation

The participants' exposure to the advertisements were done using a Microsoft PowerPoint presentation that flashed the advertisements at certain points for a specific time interval; the exposure was formatted as a decision-making game that narrated a regular day in the life of a regular student. During the game proper, an advertisement was presented and interrupted their game for five seconds before proceeding with the game. The type of political advertisement and number of exposures were dependent on the treatment a participant was in. Held constant across all treatment conditions was the presence of a product placement advertisements. The four experimental conditions were aptly assigned to four variations of the game through PowerPoint presentations on four different laptops; moreover, game mechanics were provided in the game itself.

PsychoPy Experiment

The experimental instrument was built on PsychoPy, an open-source software package with a builder version that is frequently utilized in similar psychological studies. The application is used for behavioral science experiments due to its precise spatial control and apt timing of stimuli being especially helpful (Peirce et al. 2019), it was thus deemed acceptable for this experiment.

Each statement and question were shown in an interactive format, and this setup was constructed to give students the ability to move along each stage by pressing a specified key. The first half of the experiment focused on measuring the participants' proficiency in recalling the content of the decision-making game, with only little emphasis on the advertisements. In the second half of the experiment, the participants were asked to rank using a Likert scale their agreement or disagreement with statements, on the events in the decision-making game, advertised candidate, and product.

Data gathered from this PsychoPy experiment was mainly from every participant's input for five statements on the political candidate. Moreover, reaction times for each statement were recorded. Statements about the product placement mainly served the purpose of deception and were not analyzed (Appendix F).

Methods for Enhancing Measures

In creating the PsychoPy Likert scale, previously created scales that were deemed relevant to this study were examined and referenced (Becker and Doolittle 1973; Yagi and Inoue 2018). Because the Likert Scale is typically used to measure how much a subject agrees or disagrees with statements, the statements were worded to elicit agreeableness or disagreeableness from the subjects regarding the fictional political candidate.

Independent Variables (IV)	IV 2: Type of Political Advertisement	
IV 1: Number of Exposures	1 Exposure x Emotional Political Advertisement	1 Exposure x Factual Political Advertisement
	5 Exposures x Emotional Political Advertisement	5 Exposures x Factual Political Advertisement

FIGURE 1. TWO-BY-TWO FACTORIAL DESIGN OF THE TWO INDEPENDENT VARIABLES.

Subjects were randomly assigned to one of the four treatment conditions, all of which were manipulated according to the levels of the two independent variables (Figure 1). This study was conducted as a between-subjects design. There were two levels for the first independent variable: Type of Political Advertisement - Emotional and Factual Political Advertisement; whereas there were two levels for the second independent variable: Number of Exposures - 1 Repetition, and 5 Exposures.

PROCEDURE

The experiment was conducted with four participants per session. After providing their informed consent, participants proceeded with the experiment proper.

The participants were provided with a laptop to play an interactive game created on Microsoft PowerPoint. The game required the participants' inputs and involved them choosing their own paths by selecting which action to do or say. The storyline of the decision-making game, which was about a regular day in the life of a student, was unrelated to the actual study. The items of interest in the PowerPoint presentations were the political advertisements flashed at random points in the story for five seconds. The advertisements only disappeared once the participants had chosen an option to move forward within the game. The advertisements presented in the experiment were created by the researchers and were purely fictional; additionally, the identities, credentials, and testimonials were created by the researchers. In determining the visual aspects of the advertisement, the researchers considered comments from the pilot test regarding which features classify a credible and trustworthy candidate. The number of questions in between the advertisements were determined if they were randomly assigned to the control group (one exposure) or the manipulated group (five exposures), as well as on the type of advertisement shown (emotional or factual).

Upon completing the game, the experimenter in the room directed each of the participants to the PsychoPy experiment, which required inputs from the participants. The first half of the experiment comprised multiple-choice questions and were all about the decision-making game, whereas the second half comprised statements that the participants were asked to rank using sliders. At the end of the experiment, the participants were asked to provide their nominal data (sex, year level, age, and college).

RESULTS

Eleven participants in this study were undergraduate students from the University of the Philippines Diliman for A.Y. 2018-2019. There were 46 participants in all factual treatment conditions and the one exposure-emotional group, whereas the five exposure-emotional treatment had 48, with a total of 186 participants. All answered the questionnaire through PsychoPy to measure their inclination to vote for the candidate. A set of data following the stated demographic and number of participants was generated. The following tables and graphs show the results in SPSS for the two-factor ANOVA.

TABLE 1. RELIABILITY STATISTICS FOR THE STATEMENT ABOUT THE CANDIDATE.

Cronbach's Alpha	Cronbach's Alpha based on standardized items	N of Items
.627	.623	.5

The questionnaire measuring the subject's inclination to vote for the candidate consisted of 5 items (α = .627).

TABLE 2. RELIABILITY STATISTICS FOR THE STATEMENT ABOUT THE CANDIDATE.

Type	Exposure	Mean	Standard Deviation	N
Emotional	One Exposure	3.1826	0.93981	46
	Five Exposures	3.3542	1.02417	48
	Total	3.2702	0.98230	94
Factual	One Exposure	3.4217	0.89067	46
	Five Exposure	3.8913	1.18187	46
	Total	3.6565	1.06712	92
Total	One Exposure	3.3022	0.91843	92
	Five Exposures	3.6170	1.13086	94
	Total	3.4613	1.04053	186

Those exposed to the Emotional, One Exposure condition (E1) were found to be less likely to vote for the candidate (M = 3.18, SD = 0.94); whereas those exposed to the Factual, Five Exposures condition (F5) were the most likely to vote for the candidate (M = 3.89, SD = 1.18) (Table 2). Nevertheless, the Factual, One Exposure group (F1) was more likely to vote (M = 3.42, SD = 0.89) than the Emotional, Five Exposure cluster (E5) (M = 3.35, SD = 1.02); this, however, does not show much of a significant difference. The ratings of E1 and F5 vastly contrasted.

TABLE 3. LEVENE STATISTICS FOR THE STATEMENT RESPONSE MEAN.

		Levene Statistic	df1	df2	sig.
Statement Response Mean	Based on Mean	3.1826	3	182	0.523
	Based on Median	3.3542	3	182	0.604
	Based on Median with adjusted df	3.2702	3	159.423	0.604
	Based on trimmed Mean	3.4217	3	182	0.504

TABLE 4. TESTS OF BETWEEN-SUBJECT EFFECTS FOR THE STATEMENT RESPONSE MEAN.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	12.701a	3	4.234	4.107	0.008	0.063	12.322	0.842
Intercept	2229.121	1	2229.121	2162.580	0.000	0.922	2162.580	1.000
Type	7.003	1	7.003	6.794	0.010	0.036	6.794	0.737
Exposure	4.777	1	4.777	4.634	0.033	0.025	4.634	0.572
Type*Exposure	1.032	1	1.032	1.001	0.318	0.005	1.001	0.169
Error	187.600	182	1.031					
Total	2428.680	186						
Corrected Total	200.301	185						

A. R SQUARED = 0.063 (ADJUSTED R SQUARED = 0.048)

B. COMPUTED USING ALPHA = 0.05

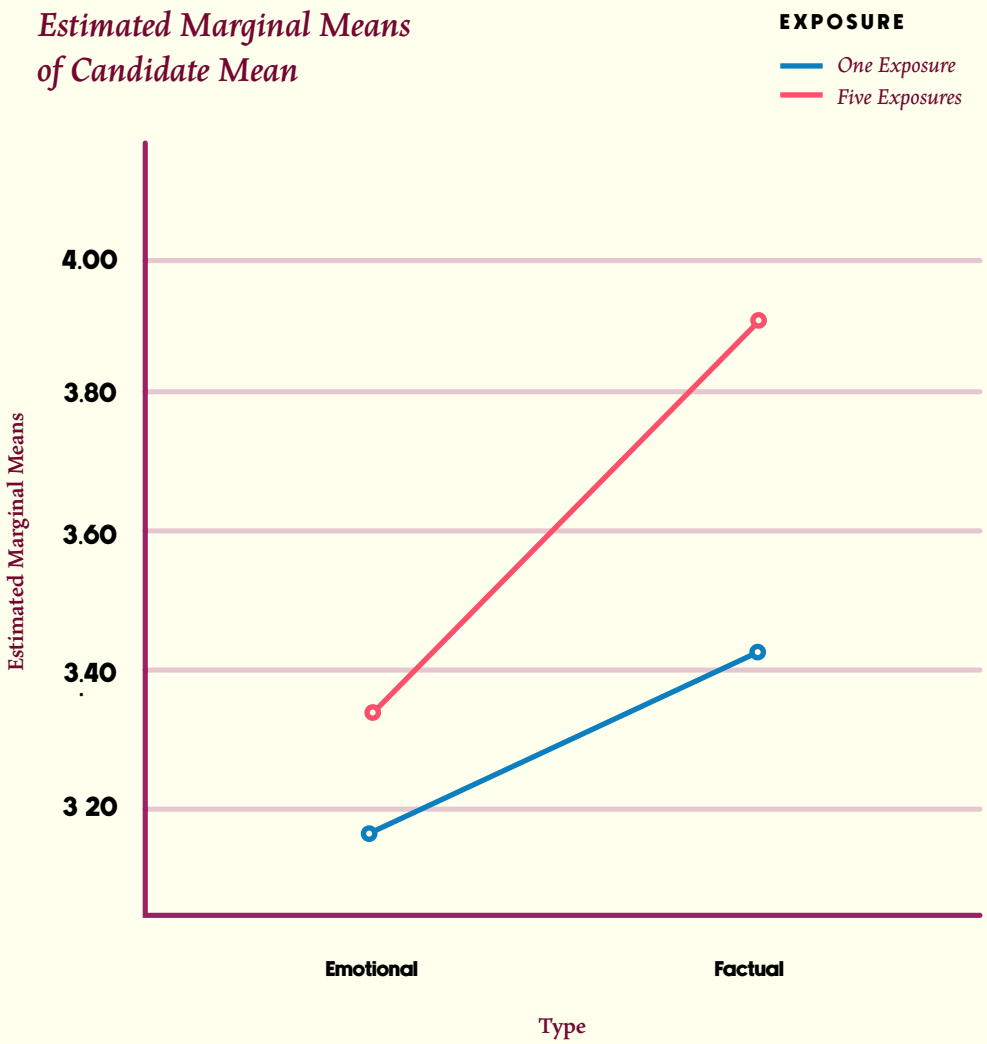


FIGURE 1.PLOT OF EXPOSURE AND TYPE OF ADVERTISEMENT ON THE MERE EXPOSURE EFFECT.

The means and standard deviations of the statement responses for each treatment condition are shown in Table 2. The two-factor ANOVA showed a significant main effect for type of advertisement, $F(1, 182) = 6.794$, $p = 0.010$, $\eta 2 = 0.036$, a significant main effect for number of exposures, $F(1, 182) = 4.634$, $p = 0.33$, $\eta 2 = 0.025$; however, no significant interaction effect was seen between the type of advertisement and number of exposures, $F(1, 182) = 1.001$, $p = 0.318$, $\eta 2 = 0.005$.

The observed power for the type of advertisement variable was 0.737, whereas the number of exposures variable was 0.572. The interaction between these two factors' observed power was 0.169.

TABLE 5. TESTS OF BETWEEN-SUBJECT EFFECTS FOR THE STATEMENT RESPONSE MEAN.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[b]
Corrected Model	13.573[a]	3	4.524	1.365	0.255	0.022	4.095	0.359
Intercept	6904.564	1	6904.564	2083.252	0.000	0.920	2.585	1.000
Type	8.567	1	8.567	2.585	0.110	0.014	2.585	0.359
Exposure	5.138	1	5.138	1.550	0.215	0.008	1.550	0.236
Type*Exposure	0.007	1	0.007	0.002	0.963	0.000	0.002	0.050
Error	603.206	182	3.314					
Total	7522.661	186						
Corrected Total	616.779	185						

A. R SQUARED = 0.022 (ADJUSTED R SQUARED = 0.006)

B. COMPUTED USING ALPHA = 0.05

TABLE 6. DESCRIPTIVE STATISTICS OF THE REACTION TIME MEAN FOR EACH TREATMENT.

Type	Exposure	Mean	Std. Deviation	N
Emotional	One Exposure	5.7066	1.53387	46
	Five Exposures	6.0516	1.55333	48
	Total	5.8828	1.54528	94
Factual	One Exposure	6.1485	2.12138	46
	Five Exposure	6.4684	2.00786	46
	Total	6.3084	2.06031	92
Total	One Exposure	5.9275	1.85424	92
	Five Exposures	6.2556	1.79276	94
	Total	6.0933	1.82591	186

TABLE 7. LEVENE STATISTICS FOR THE REACTION TIME MEAN.

		Levene Statistic	df1	df2	sig.
Statement Response Mean	Based on Mean	1.987	3	182	0.118
	Based on Median	1.902	3	182	0.131
	Based on Median with adjusted df	1.902	3	158.929	0.131
	Based on trimmed Mean	1.949	3	182	0.131

FIGURE 2. PLOT OF EXPOSURE AND TYPE OF ADVERTISEMENT ON THE LENGTH OF RESPONSE (IN SECONDS).

The means and standard deviations of the reaction times for each treatment condition are shown in Table 2. The two-factor ANOVA showed no significant main effect for either type of advertisement, $F(1, 182) = 2.585$, $p = 0.110$, $\eta 2 = 0.014$, or for number of exposures, $F(1, 182) = 1.550$, $p = 0.215$, $\eta 2 = 0.008$. Moreover, no significant interaction effect was found between the independent variables, $F(1, 182) = 0.002$, $p = 0.963$, $\eta 2 = 0.000$.

DISCUSSION

Evidently, type of advertisement and number of exposures significantly affect one's inclination to vote for the advertised candidate. This finding affirms previous studies about the mere exposure effect, wherein subjects have greater positive feedback the more they are exposed to the stimulus. Moreover, this supports related findings on familiarity and repetitive exposure, wherein the inclination to vote can be motivated by mere name recognition after a series of exposures from mass media advertisements (Becker and Doolittle 1973). Other participants attributed their choice for voting for the candidate to name recognition; participants stated that they felt enabled to put this candidate above others if given a list, due to their "sense of familiarity" with the name. Using Bornstein's modified Two-Factor model, this familiarity can bring about an "increased liking" to the stimulus through explicit and implicit processing. Furthermore, Bornstein suggested that the phenomenon is manifested strongly through adults who, over time, develop a sense of autonomy in choosing such "familiar" preferences over novel stimuli. In this case, they are more likely to accept and vote for candidates that they are familiar with.

Our results coincide with previous research that emphasizes how the mere exposure effect is strengthened when the subject is not "aware" of the intention of their environment. Given that the exposures were momentary in nature, less overt attention to the political advertisement was preferred, to be able to eliminate suspicions and preconceived notions that may influence their ratings later. The heterogeneous presentation sequence used related to incidental exposure, where the secondary information (target stimulus) received less "resources" for processing, given a primary task with the addition of such stimuli. This was in relation with Zajonc's (1968) conclusion and Bornstein's (1989) meta-analysis that the phenomenon is still fortified when the stimuli is processed without conscious cognition, and that the mere exposure effect is stronger with less stimulus recognition. Conscious "counter-control processes," such as "defensive strategies," may take place if such stimuli are distinctly "recognized" (Aimers 2015). In the experiment, the true nature of the study was initially unknown to the subjects so that no misattribution should occur. This, however, does not imply that the subject was unaware of the properties of the stimuli (as cited in Bornstein and D'Agostino 1992); rather, it emphasizes that the subject's lack of awareness of the relationship of the advertisement and consequent questions may have facilitated the effect to take place.

Furthermore, based on previous literature, emotional advertisements appeal more to consumers compared to those of the rational or factual kind (Grigaliunaite 2016). Emotionally appealing advertisements utilize hot cognition, which is hypothesized to largely influence someone's inclination to vote for a candidate. One explanation for this hypothesis is the Filipino's fondness for emotional content, as manifested in the vast vocabulary of indigenous and borrowed words to describe personality traits and emotions (Church et al. 1996). The results showed otherwise, as factual or rational advertisements caused participants to be more likely to vote for the candidate. A possible explanation for this is that some participants may have perceived the emotional stimuli as unpleasant, especially if they interpret the usage of such testimonies in the advertisement (and the lack of factual information) as unreliable, thus casting doubt on the candidate. The emotionally laden advertisement may have been unappealing in the context of presidential elections for other subjects, especially those that commented on how they perceive such stimuli as a stereotype of a "traditional politician." Furthermore, subjects may have placed varying levels of societal importance on the information in the emotional political advertisement, and this was highlighted by the candidate paying for another man's education.

Furthermore, the Figure 1 illustrates that there is no interaction effect between the two independent factors. Thus, the "inclination to vote" ratings of subjects exposed to either an emotional or factual advertisement were not dependent on the number of exposures, or vice versa. Although the five exposures group had higher means (3.35, 3.89) for the emotional and factual groups, respectively, these results were not highly different from those in the one exposure group (3.18, 3.42). The subjects'

"inclination to vote" ratings only varied between 3-4 in a range of 1-7. Even though the subjects that were exposed to the advertisements five times had a higher average, their mean was smaller and had similar differences in both types of advertisements compared with the one exposure group. A significant effect was seen for both factors; however, this was trivial. However, the graph implies that a larger sample size may show a significant interaction effect and perhaps a larger effect size.

The Importance of Political Atmosphere

This study was held after the 2019 University Student Council Elections and before the 2019 Philippine Senatorial Elections; these two events caused the political climate within the campus interesting to consider. Interestingly, heightened political awareness among students might have affected the study outcome. The experiment's proximity and relatedness to these events may explain the subjects' strong criticism and skepticism toward voting, as well as their reasons for voting or not voting.

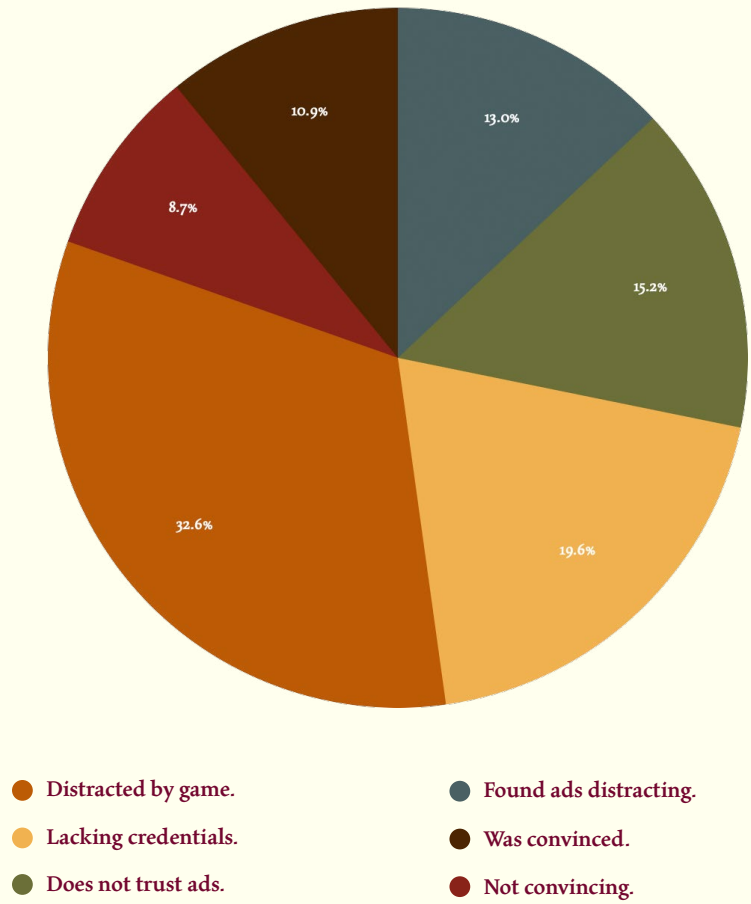
What this recalls is Sales and Burgess II's study (1971), wherein ratings of neutral stimuli are influenced by particular contexts through "associative learning" between the environment and stimulus. Given the context of the aforementioned elections, students may have had either positive or negative associations with the prior events, and these associations may have influenced their ratings. However, the increasing ratings for inclination to vote between the one exposure and five exposure treatments follow Perlman and Oskamp's (1971) study, which suggests that although stimuli are presented in a "negative" context, the mere exposure effect is still manifested (i.e., has a 'positive influence.')

Over the years, people have grown accustomed to mass media in different forms and have developed cognitive skills for effective information processing. Thus, in an environment that stimulates and encourages political discourse (e.g., the University of the Philippines), most students choose to do their own research about candidates rather than merely accepting and believing what they are exposed to, and this may explain the near-neutral ratings. Moreover, given the circulating events during the study's timeline, the participants' affective evaluations of the circumstances could have been associated with the stimuli, and with repeated exposure, the "affect transference" (Aimers 2015) strengthened. The way the participants felt toward their circumstances (e.g., to their environment, events surrounding them) influenced their ratings positively or negatively and this was strengthened by the mere exposure effect. Furthermore, participants may have previously experienced political advertisements, thus their attitudes toward media with political agenda (be it positive, negative, or neutral) could have affected the ratings they gave.

On the Subjective Inputs of the Participants

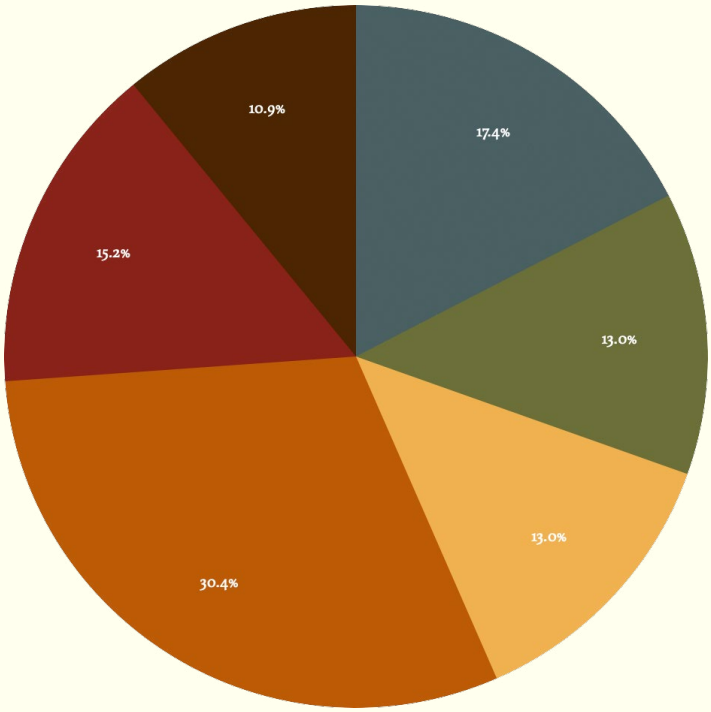
Two potential extraneous factors that could have affected the participants' answers were their views of political contexts and the possibly increased political sensitivity due to the upcoming Philippine Senatorial elections. To explain the latter, the experiment was conducted within three weeks before the elections; hence, the intensified political sensitivity may have been present. The researchers then collected the participants' subjective inputs to see what other factors, aside from the treatment each participant was given and the context of the status quo, might have influenced their answers. Part of the participants' debriefing was an informal interview where they were asked if they agreed, disagreed, or remained neutral in voting for the political candidate in the experiment. Moreover, they were asked for a brief reason as to what influenced their decisions. All answers were compiled and tallied based on similar responses. The following graphs show the summary of inputs by the participants. Additionally, the varying reasons fell under three main categories: Yes, No, and Neutral.

FIGURE 3. PARTICIPANTS' INPUTS UNDER ONE EXPOSURE-FACTUAL TYPE



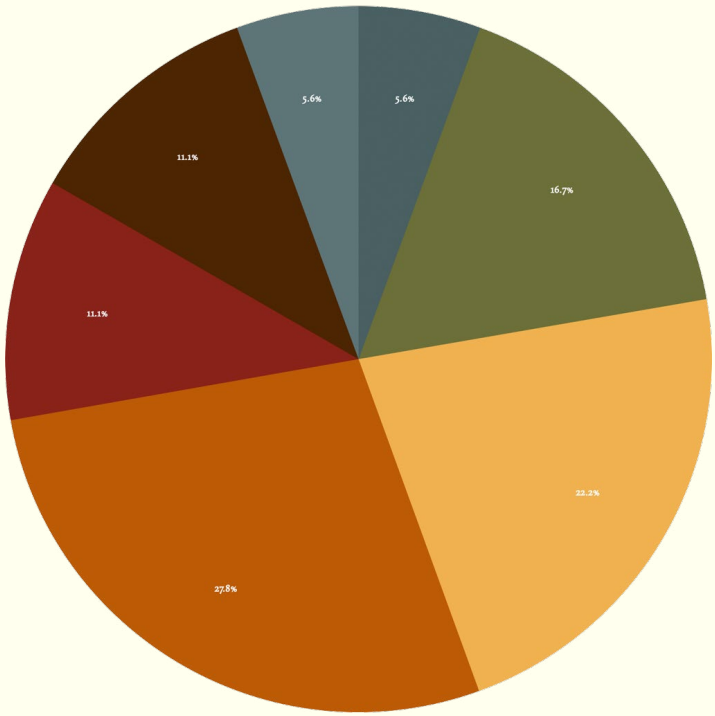
The graph above shows the participants' inputs in the one exposure-factual set-up, wherein each participant was shown a "cold cognition" or factual political advertisement once. For this treatment, majority of the participants opted to not vote for the candidate. A portion mentioned not knowing enough of the candidate's credentials to be convinced, another group found the advertisement distracting, and the other significant group expressed personal bias, as they do not usually trust advertisements. Following this, a large percentage was neutral about whether to vote for the candidate in the advertisement. The primary reason for this was that they were unable to focus on the advertisement's contents.

FIGURE 4. PARTICIPANTS' INPUTS UNDER FIVE-EXPOSURES FACTUAL TYPE



The difference between the participants in the five exposures-factual set-up and those in the previous set-up is that the participants in the five exposures-factual set-up were shown the same factual political advertisement but four more times, for a total of five exposures. According to the participants who felt inclined to vote for the candidate, they were convinced by the candidate's credentials; moreover, others felt familiarized with the portrayed candidate. On the other hand, those who voted "No" shared that they remained unconvinced by the candidate's credentials, were skeptical of the candidate's wealth to be able to afford many advertisements, or were simply annoyed by how many times the ad showed up throughout the gameplay.

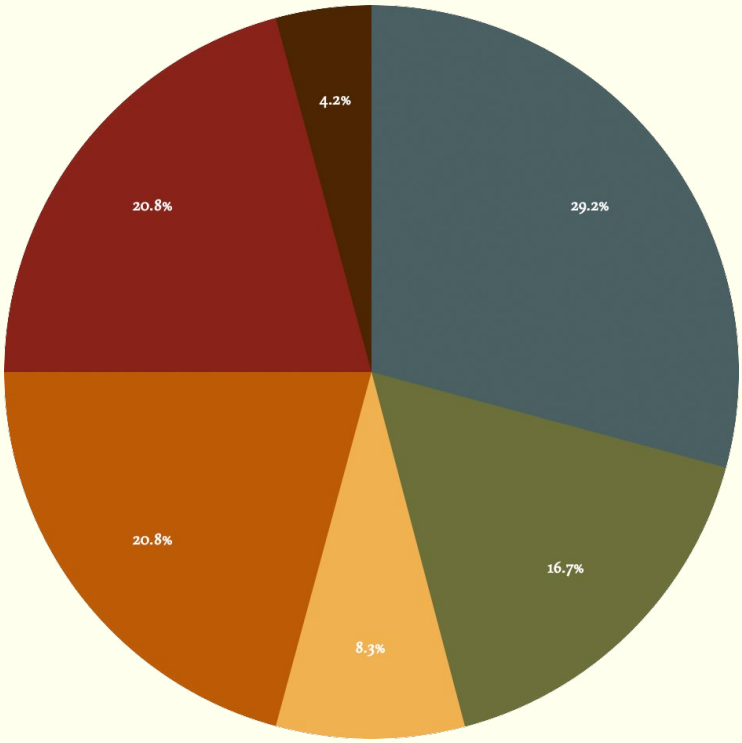
FIGURE 5. PARTICIPANTS' INPUTS UNDER ONE EXPOSURE-EMOTIONAL TYPE



- No. Does not trust ads.
- No. Not enough credentials.
- Neutral. Does not trust ads and not enough info shown.
- No. Did not pay attention to ads.
- Neutral. Did not get to properly observe content.
- Agree. Found him trustworthy.
- Neutral. Abstain on political dialogue.

Participants under the one exposure-emotional set-up were shown an emotional or "hot cognition" political advertisement once. Most of the participants in this set-up did not want to vote for the candidate. Majority of those who stated "No" expressed that they did not usually trust advertisements. Moreover, many felt that they needed to see credentials before even considering voting a candidate. The third group (of those who voted 'No') were unable to retain the content of the advertisement. Furthermore, the majority of those who voted "Neutral" shared the same reason with a certain group who voted "No"; they felt that they needed to see more credentials to make a concrete decision to vote.

FIGURE 6. PARTICIPANTS' INPUTS UNDER FIVE EXPOSURES-EMOTIONAL TYPE



Lastly, those under the five exposures emotional set-up were shown an emotional political advertisement five times. For this graph, majority of the participants did not feel inclined to vote for the candidate in the advertisement. A larger percentage was repelled by the notion that the candidate was too wealthy because the candidate was able to afford multiple ads. Others found the frequent "pop up" of advertisements bothersome, whereas another group felt that explicit credentials about the candidate would be helpful in their decision making. The latter group that voted "Neutral" said they remained unconvinced by the advertisement campaign and thus would not be able to vote.

Evidently, common answers and accompanying reasons were present from each treatment group, such as voting "No" or "Neutral" due to lack of conviction from the advertisement. Moreover, the informal interview managed to show that despite having the same reason, some participants may have had different inclinations. A primary example of this would be between those who voted "No" and "Neutral"; clearly, both parties had different decisions, but their reasons were the same, which was being distracted by the advertisements.

Collectively, all participants admitted no suspicion regarding the real purpose of the experiment. This feedback was significantly different from the feedback from the pilot testing. The addition of the product placement prevented participants from considering that the experiment was suggestive toward the political advertisements being shown.

Based on the participants' feedback, imposed attention did not prove to be as consistently effective; this contrasted with Yagi and Inoue's (2018) study, which emphasizes that to achieve positive feedback, attention is more important than increasing the number of exposures. The five exposure-factual treatment managed to yield positive feedback because the participants became familiar with the candidate through advertisement. Among the treatments with five exposures, some participants similarly expressed annoyance with how often the ads appeared in the middle of gameplay. This can be explained by Crisp et al.'s (2009) study wherein multiple exposures may yield either positive feedback or stimulus saturation.

Notable observations were found on the participants' inputs regarding the type of advertisement. Evidently, factual or "cold cognition" treatments yielded more "Yes" votes compared with emotional or "hot cognition" treatments. This finding contrasts the findings of both Grigaliunaite's (2016) and Becker and Doolittle's (1973) studies; in these studies, participants preferred the factual stimuli over the emotional stimuli even if the emotional advertisement was of a simpler form.

On Participants' Reaction Times

An analysis of the latencies for the advertisements flashed during the decision-making game showed no significant main effects from any of the independent variables, as well as no significant interaction effect between the two. This can be explained by the possibility that the advertisements were not properly received by most of the participants, thereby prompting them to respond with little to no consideration for the contents of the advertisements; instead, they based on their own political beliefs instead. The advertisements' effectiveness can also be a factor, as the formatting may not have been interesting enough and the participants did not pay attention. Furthermore, the airtime for each advertisement may have been short, because five seconds was insufficient for the ads to be memorable for the participants.

Despite the lack of influence from the independent variables, the plot of the reaction time showed a highly similar pattern to the plot of the statement response means. The five exposure-factual treatment, on average, received the most positive and lengthy response. This can imply that a factual political advertisement that is shown more than once will be taken seriously.

CONCLUSION

Effective campaign strategies lead to higher probabilities of electoral success. As such, effective advertisements are vital in ensuring that candidates and their platforms are well-known by their electorates. Among the four treatment conditions, the five exposures-factual set-up was the most optimal treatment condition, thereby debunking the initial hypothesis that the emotional, five exposures treatment would be the most optimal. The five exposures-factual condition contained credentials, such as the candidate's educational and political background. This may imply that the selected sample of voters, although limited to a specific context, values factual than emotional information to a greater extent. Another implication may be that elections are significantly affected by certain contexts. The results suggested that the participants investigated rational and factual information before voting; however, this would not translate

to national elections. One can attribute this to the manner by which the youth participates in elections being lacking compared to that of their older counterparts.

As mentioned, all participants were undergraduate students from the University of the Philippines Diliman. The University's current political climate may have been a unique factor in the subjects' assessment of the shown conditions. This suggests that the local civic culture surrounding political participation, such as in voting, within this institution highlights a certain psychological orientation regarding the processing of the contents of electoral materials with more scrutiny.

RECOMMENDATIONS

Several considerations can be made for replications of this study. The advertisements shown can be in other formats, such as video, which can provide a more active view of the candidate. Seeing as this study involved stimuli with positive content, future studies can consider stimuli that contain negative content. Moreover, future studies can prepare participants by providing information relevant to the candidate prior to the experiment proper (e.g., tackling graft and political dynasties with the candidate). Exposures to such pieces of information may provide a new perspective to voting behavior.

The buffer time between completing the decision-making game and starting the PsychoPy experiment was possibly a confounding variable. To address this problem, the two aspects of the procedure can be combined into one continuous program so that the experimenter's assistance is no longer needed. This will ensure a fluid transition from the storyline to the PsychoPy program, and this can shorten participant interaction.

Demographics, such as age, educational attainment, and socio-economic statuses, can highlight possible generational differences regarding internet-use proficiency and may provide further insight into the advertising approach that can yield the best results for specific groups. Moreover, the gender of the participants may be noted, especially in the cases of political advertisements using approaches that cater to a specific gender category. Additionally, the subject's history on voting history can be studied (e.g., first-time voter, eligible citizens who had not participated in voting), as well as their attitude formation regarding political participation. As this study primarily focused on subjects within one university, future studies should consider "election hotspots" together with the aforementioned factors to account for varying political cultures, which possibly play a role in affect and behavior regarding political advertising.

In investigating the interplay of these factors in voting behavior, we will be able to look deeper into the utilization of contemporary strategies, covert or overt, in modern-day democracy in the Philippines. Local studies on political participation provide insight to influences on our inclination to vote, as well as awareness of civic virtue. With awareness of these approaches present in advertising, citizens may be able to counteract these present social influences, thereby positively contributing to their discernment in politics. Further exploring their application on voting behavior can enlighten the existing political culture surrounding Philippine society. Its evolving literature may propose various courses of action that could determine our future as a nation, and ultimately, those who the citizens choose to lead it.

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