

Beyond Virality: A Study of Indonesia's Viral Video Ads

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Abstract. *Customers' and companies' strong interest in dynamic advertisements makes brands focus on creating video advertisements that will be viewed and shared by many consumers. However, being "viral" is not the complete picture of a brand's objective. Brands need to find a more valuable virality that focuses not only on the number of shares but also on brand evaluation and sales. Using collections of Indonesia's most popular ads from YouTube Indonesia, the study aims to understand how emotional combinations in ads can affect valuable virality. Results indicate two emotional combinations in the ads, one that focuses strongly on the emotions of joy and surprise (positive ads) and another with the more complex and contrasting emotions of sadness and joy (mixed ads). An experiment showing different types of ads to two groups of a single population further demonstrates how different types of ads can create different effects on valuable virality. Mixed ads outperform positive ads in brand-related outcomes. No difference is found between the effects of positive and mixed ads on sharing intention. The findings shed light on Indonesia's viral ads and how companies can create emotional combinations in video ads to maximize their objectives.*

Keywords: *Viral marketing, advertising, online content, social transmission, video sharing*

Abstrak. *Minat besar pelanggan dan perusahaan terhadap iklan yang dinamis membuat bisnis kini berfokus pada pembuatan iklan video yang akan dilihat oleh banyak konsumen dan dibagikan secara cepat. Namun, menjadi "viral" bukanlah gambaran penuh dari objektif suatu brand. Mereka harus menemukan "valuable virality" yang tidak hanya berfokus pada viralitas, tetapi juga terhadap "brand evaluation" dan penjualan. Dengan menggunakan iklan terpopuler di Indonesia yang dikurasi oleh YouTube Indonesia, penelitian ini dapat menilai bagaimana kombinasi emosional dalam iklan dapat mempengaruhi "valuable virality". Hasil penelitian menunjukkan bahwa terdapat dua kombinasi emosional di antara iklan tersebut, yaitu yang terfokus pada emosi senang dan terkejut (iklan positif) dan yang memiliki emosi kesedihan serta kegembiraan yang lebih kompleks dan kontras (iklan campuran). Eksperimen yang dilakukan dengan memberikan berbagai jenis iklan ke dalam dua kelompok berbeda dalam satu populasi menunjukkan perbedaan efek terhadap viralitas dari jenis iklan yang berbeda. Iklan campuran dengan emosi yang lebih kompleks mengungguli iklan positif dalam "brand evaluation" dan niat membeli. Tidak ada perbedaan antara apa yang dapat dilakukan oleh iklan positif dan iklan campuran dalam niat berbagi. Temuan ini menjelaskan lanskap iklan video viral di Indonesia saat ini dan bagaimana perusahaan dapat membuat kombinasi emosional dalam iklan video mereka yang memaksimalkan tujuan perusahaan.*

Kata kunci: *Pemasaran viral, periklanan, konten online, transmisi sosial, berbagi video*

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Introduction

The ways that companies utilize and optimize ads to reach their objectives have changed drastically and become more complex as social media, one of the current mainstream advertising media, expands in terms of the number of users. For example, Facebook has 2.4 billion users, and even the trending social media, TikTok, has reached more than 800 million users (We Are Social, 2020). Thus, advertising must consider numerous combinations of media, platform, placement, and format, to name just a few factors. One combination might create a desirable result, while another might fail. One notable form of advertisement that is deemed interesting from both marketers' and consumers' points of view is video ads or video campaigns, which are primarily used in social media campaigns.

Consumers have a strong preference for video advertising; 54% of consumers prefer video content from the brands they support (An, 2017). Especially for younger generations, static images can be seen as oversaturated and tend to become less surprising, creating the need for more dynamic and fresh media types (Fractl, 2019). The move towards video advertising is further strengthened by the fact that people are twice as likely to share video content than any other type of content, and that after watching a brand's video, 84% of consumers have been convinced to buy the product or service; similarly, since 2016, businesses are keener to use video by 41% because video marketing, according to 87% of video marketers, brings a good return on investment (Wyzowl, 2021). Based on both perspectives, video ads can help companies achieve virality, which is an exponential trend of contagiously sharing a brand's message, by creating engaging content on social media that allows consumers to be included in the advertising process (Sheehan & Morrison, 2009; Teixeira, 2012).

Additionally, viral ads can reduce marketing expenses when considering how much audience the content or ad can reach compared

to the result of using traditional media with a similar budget (Allsop et al., 2007; Nelson-Field et al., 2013). Therefore, video ads can be considered as one of the strategies of viral marketing that has characteristics of being contagious (widely spreading), quick (shown effects in a short duration), and consumer-friendly (Akpinar & Berger, 2017; Dasari & Anandakrishnan, 2010; Kotler et al., 2009).

Valuable Virality

With all its benefits, virality becomes a sort of North Star metric for digital marketing (Akpinar & Berger, 2017; Teixeira, 2012). However, focusing only on virality as the sole objective might harm the brand and business in the long run. Virality or the number of shares a post gets does not always have a positive or even exponential correlation with the number of sales; at a certain point, the number of shares will result in diminishing and even decreasing returns of ad persuasiveness by an average of 10% if further continued (Tucker, 2015). Moreover, when solely pursuing virality, which supposedly results in strong brand awareness, companies can have an extreme tradeoff, such as significantly lowering brand presence, which can result in loss of brand identity (Teixeira, 2012).

Therefore, Akpinar and Berger (2017) created a metric that combines virality and brand-related outcomes (brand evaluation and purchase intention) called "valuable virality," so that the impact of any type of content can be measured effectively. The metric was used to test which types of ads result in valuable virality so companies can better decide how to create their ads to achieve the end goal of product sales. Brand evaluation, often labeled "brand attitude" or "attitude towards the brand," refers to an affective overall evaluation of the brand or of the product sold, and is measured on bipolar dimensions of valence (Ajzen, 2001; Graeff, 1997; Keller, 1993). It can be inferred that brand evaluation is shown by the consumers' overall attitude toward the brand itself; therefore, brand evaluation is a very important outcome to measure. Purchase intention refers to buying actions that might be done by consumers after exposure to stimuli,

such as the emergence of a need for a product, product introduction, and information evaluation from viral marketing messages (Robbins et al., 2016; Schiffman & Kanuk, 2007). Video ads with certain characteristics thus might affect consumers' purchase intention. With two additional variables that act as brand-related outcomes, companies can reach a more valuable virality without sacrificing overlooked aspects that can be harmful in the long term.

Furthermore, in Akpınar and Berger's (2017) first study, it was found that emotional ads with high brand integrality have high sharing, brand evaluation, and purchase intention due to their emotional appeals, which are considered to be the source of virality. At the same time, the ads maintained brand integrality, meaning they displayed less manipulative intent and provided enough information for consumers to understand the brand. Following the recommendation for future research, this study investigates which emotions in emotional ads can create a strong valuable virality. To better understand the relationship between emotional ads and valuable virality, the study also uncovers the characteristics of the emotions in a video ad, such as arousal and valence level (Berger & Milkman, 2012; Nelson-Field et al., 2013).

Emotional Combinations in Ads

In general, there are six types of advertising campaigns that are based on the presence of primary emotions: surprise, joy, sadness, anger, fear, and disgust (Dobele et al., 2007). Based on the observation of global and successful campaigns, Dobele et al. (2007) found that surprise always exists in all observed campaigns, followed in frequency by joy and sadness, which are each present 44% of the time. The usage frequency of certain emotions is different according to the organization (e.g., negative emotions are used by NGOs for awareness of different issues). In several studies, surprise is considered a "cognitive state" rather than an emotion, similar to "interesting," and is thus considered an emotional amplifier (Knossenburg et al., 2016; Power, 2006).

Each of the basic emotions has distinct characteristics. The pleasure, arousal, and dominance (PAD) model, as one of the major schemes of emotion representation using dimensional models, can be used to characterize each emotion (Bălan et al., 2019; Buechel & Hahn, 2016; Guerini & Staiano, 2015). To be precise, the PAD model maps each emotion by valence (how pleasant or unpleasant the emotion is), arousal (the level of excitement of an emotion), and dominance (the feeling of being in or lacking control) (Russell & Mehrabian, 1977). With each emotion having different characteristics, there are a variety of possible combinations that create different variations of valence, arousal, and dominance, resulting in different effects for the viewers.

Referring again to the observation of Dobele et al. (2007), there are several apparent combinations of PAD scales among ads taken as samples. Setting aside the surprise emotion that is present in all samples, 66.7% of the viral ads contain at least one emotion that has high arousal and high dominance attributes, such as joy and anger, whereas the rest is mixed among high dominance–low arousal (disgust), low dominance–high arousal (fear), and low dominance–low arousal (sadness); all the scales are based on Russell and Mehrabian (1977). However, if the surprise emotion is included, all ads have an emotion that has a high arousal attribute. It can be very important to include surprise in ads that only have an emotion with low arousal, such as sadness, so that the high arousal attribute is present. With all combinations having levels of valence and dominance scales that vary, arousal can be assumed to have more impact on virality compared to valence and dominance. Still, arousal only accounts for virality as a variable that measures the success of a video advertisement (Teixeira, 2012). Other brand-related outcomes also need to be accounted for to create a valuable virality, which can possibly show the importance of arousal and dominance (Akpınar & Berger, 2017).

Furthermore, previous studies related to virality either focus on the effects of emotional combinations by using the PAD model or other emotional models towards virality or focus on valuable virality with no deeper involvement of existing emotional combinations (Akpinar & Berger, 2017; Berger & Milkman, 2012; Nelson-Field et al., 2013; Sharma & Kaur, 2018). With that in mind, this study can contribute to a better understanding of valuable virality in terms of the existing emotional combinations in video ads and thus help companies or brands to design more effective ads.

More specifically, this study focuses on the landscape of Indonesia's viral ads to contribute to the gap in research concerning valuable virality. Indonesia is a high-context culture, which means that there is more context and meaning in a given action or situation, creating a possibility that international ads might not have a similar appeal to Indonesian consumers, especially depending on the language (Saputri & Saraswati, 2017). As one example, several ads incorporate certain contexts that are much more relatable when watched by Indonesian consumers, such as the sentimental value of “mudik” during Ramadan or “plesetan” jokes that are popular among Indonesian consumers.

Therefore, this study aims to understand the current landscape of Indonesia's viral ads regarding the emotional combinations evoked, the characteristics of each combination, and the effect of different combinations on valuable virality. The hypotheses are as follows:

H1: There is a significant difference in sharing intention between different emotional combinations in ads.

H2: There is a significant difference in brand evaluation between different emotional combinations in ads.

H3: There is a significant difference in purchase intention between different emotional combinations in ads.

Research Methodology

The study used a quantitative approach that mainly involved collecting and synthesizing numerical data, in this case, primary data, from a certain population using statistical techniques to test the hypotheses. To represent the details of the research methodology, Figure 1 depicts all the major steps taken in this study. The data were taken from a population of men and women between 18 and 24 years old (Gen Z) who live in major cities in Java, as they have the longest time spent on social media, are already able to purchase products and services from a brand, and live in a location with a high internet penetration (APJII, 2020; European Travel Commission, 2020; GlobalWebIndex, 2020).

Before proceeding with testing the hypotheses, the data collection and analysis process took an additional step, which is the stimuli development that is crucial to creating different treatments of emotional combinations. Cluster analysis was used to examine the existing combinations of six basic emotions in Indonesia's viral video ads. To address the lack of knowledge from past research regarding clusters of Indonesian viral ads based on six basic emotions, the study used a combination approach by first using hierarchical clustering to find the most appropriate number of clusters within the right scope, then clustered the ads using k-means clustering to allow a more accurate cluster membership (Hair et al., 2010). The analysis used a squared Euclidean distance measure and average linkage clustering algorithm, due to a stronger effect of the distance and the stability of the algorithm.

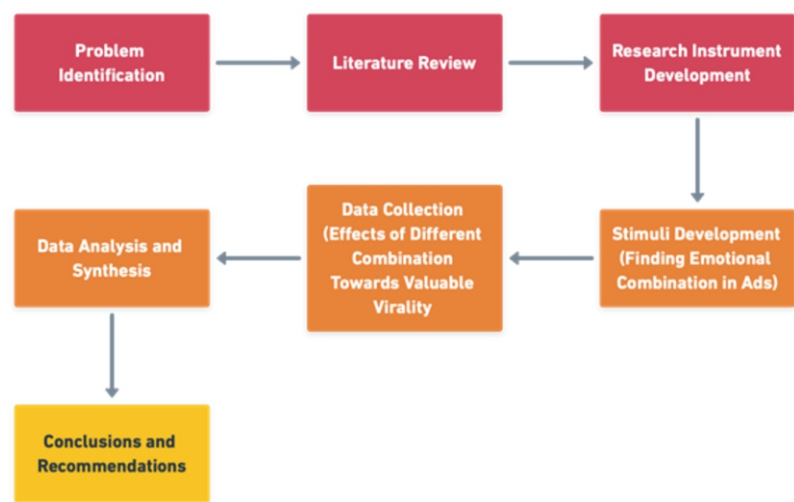


Figure 1.
Research Design

To provide the value of emotional presence in Indonesia's viral video ads, the study had to rely on human coders to rate how certain ads evoke different combinations of the six basic emotions so that the groups of emotions created can represent the state of viral video ads as well as its consumers in Indonesia. This is similar to how Berger and Milkman (2012) and Sharma and Kaur (2018) compensated for the lack of information regarding this topic. Dobelet al. (2007) also asked each respondent to evaluate the degree of each emotion experienced during the campaigns; agreement among raters is the main criteria to test whether there is a presence of certain emotions or not. One of the reasons for this method is that automatic sentiment analysis only focuses on calculating the valence and overall emotionality of certain texts or articles, not the specific emotion itself in a video format (Berger & Milkman, 2012). This study tried to use other means to collect better data regarding the level of certain emotions that were evoked in an ad, one of which was using ML/DL programs that can detect six basic emotions via webcam, such as Morph Cast Studio and other self-made programs from Github (for an example, visit this link: MorphCast emotional AI). However, the program needed to be properly installed in every rater's device, as the pandemic did not allow a direct encounter with raters, and mild expressions cannot be detected, which makes it more difficult to properly capture a wide range of the level of emotions certain ads evoke.

Moreover, the extent to which people express themselves might differ, especially depending on the culture. Therefore, this study used the method that was used in past research, namely manual coding using human coders or raters. Considering the time constraints of the research, as well as the complicated tasks, 15 raters (median = 21 years old) taken from the desired population using convenience sampling were assigned two emotions randomly with a small chance of similarity among raters to create an equal amount of 5 items and raters per emotion. The rating of each emotion on each ad used a six-point Likert scale to better discriminate the presence of certain emotions while simultaneously providing enough range to rate intensity (Taherdoost, 2019). To make the data as robust as possible, several measures were taken. Built on Berger and Milkman's (2012) coding instructions, this study's detailed coding instructions were given to raters with additional information about basic emotions from Dobelet al. (2007), as well as spreadsheets filled with the title of the ads, the corresponding brand, and the link to the video. The raters were blind to the hypotheses and not exposed to the dependent variables. Additionally, each rater was followed up with after the instructions had been read to check whether they had a similar understanding regarding the emotions to which they were assigned.

Regarding the samples of Indonesia's viral ads, the study was only able to take samples from online public platforms. Therefore, YouTube was chosen, as no other platform has a larger library of video ads available to the public. YouTube also allows advertisers to have fewer restrictions on the video settings and to post more varied and customizable ads; therefore, brands usually post the full version of their video ads from certain campaigns on YouTube. Moreover, YouTube Indonesia is the only legitimate source that publicly identifies the top-performing campaigns based on their data. Based on that fact, the sample of Indonesia's viral ads is secondary data taken from the years 2017–2020, which was been published semesterly by YouTube Indonesia regarding the most popular ads in Indonesia. This sample thus maintains relevance with the current landscape (see example: 10 iklan YouTube terpopuler untuk periode Juli-Desember 2020). With a limited sample of Indonesia's viral video ads available to the public, the study decided not to use industry as a filter for the sample. A sample of 30 viral ads that were made by companies in Indonesia and that are not new product releases, bumpers, web series, or short movies was chosen to be rated and clustered to maintain strong relevance among each ad and decrease the chance of encountering low brand integratness or informational ads.

After the clusters were determined, MANOVA was used as the main technique to test whether there was a difference among different groups regarding valuable virality (Hair et al., 2010). With the limited time and funding for the study, the sampling method used was convenience sampling, as it allowed researchers to collect data from respondents that are reachable in terms of accessibility, geographical proximity, time availability, and willingness to participate (Etikan, 2016).

Convenience sampling is especially useful for a broad population where using probability sampling would be difficult. As for the sample size, this study used G*Power software which can calculate the needed sample size.

With a confidence level of 0.95, medium effect size ($f^2 = 0.0625$), an approximate 2 groups, and 3 response variables, the total sample size needed was 280, or 140 samples for each group.

The data were collected using online questionnaires in which respondents answered several questions about their opinions regarding the valuable virality of an ad, which represents certain combinations of emotions. The platform used for the online questionnaires was Google Forms with FormLimiter to restrict the maximum number of responses, as each group of the independent variable needs a certain number of samples based on the G*Power calculation. With the focus on Indonesian consumers, each item of the online questionnaires used the national language of Bahasa Indonesia to avoid any misunderstandings that could lower the validity and reliability of the results.

This study's questionnaires had similar structures and question items to Akpınar and Berger's (2017) "Study 1" and "Study 2," which are two of the main references of this study. The questionnaire first asked respondents to assess the brand evaluation of a specific brand using four seven-point scales ("bad–good", "negative–positive", "unfavorable–favorable", "not interesting–interesting", and "undesirable–desirable"). After doing so, the brand's viral video ad, as a representative of a cluster, was shown to respondents. Respondents were then asked about their sharing likelihood (1 = "not at all"; 7 = "extremely"), brand evaluation using identical scales, and change in purchase or usage likelihood after watching the brand's ad (1 = "not at all"; 7 = "extremely"). This was done to analyze the degree of change in the construct created by the stimuli. The questionnaire itself had a few versions that differed in the combination of emotions given based on how many clusters were created from the prior analysis. After obtaining the minimum sample size, the data were analyzed using MANOVA.

Results and Discussion

Existing Emotional Combinations in Indonesia's Viral Video Ads

Before proceeding into cluster analysis, an inter-rater reliability test using Cronbach's alpha was conducted to assess which of the six basic emotions had identical outcomes with a minimal bias between raters to ensure that all variables that went through the process of clustering had good reliability (DeVellis, 2005). The reliability test was conducted six times with each emotion, with five raters that acted as multi-items. A Cronbach's alpha value greater or equal to 0.70 is required to be considered reliable (Hair et al., 2010). Considering the requirement, five out of the six emotions are reliable, with anger as the only emotion that did not have identical reports among raters of the viral video ads. This might be because there are a lot of triggers of anger that differ for each rater, creating strong biases in the rating given. The sample's representativeness was ensured by directly taking samples from the top viral ads list based on Youtube Indonesia. Additionally, the video ads used in the cluster analysis were from the most recent years, 2017–2020, to maintain relevance with current company strategies; therefore, the sample of top viral video ads was not large. Based on this reasoning, using 30 ads from the list can properly represent Indonesia's top viral ads. The multicollinearity was also controlled during the research design by choosing six basic emotions that are significantly different in the PAD value as the variables.

The agglomeration schedule shows the process of hierarchical clustering, from each case having its own cluster to combining every case into one single cluster. With each stage, the increase in heterogeneity when certain clusters are combined is shown by the agglomeration coefficient. A drastic change in the coefficient compared to the value of the next stage means that two dissimilar clusters were combined, showing that the agglomeration process should stop there and that the number of clusters created is based on that stage of agglomeration.

This process helps determine the best value of k in the k-means clustering. The graph that better shows the increase in heterogeneity compared to the number of clusters is shown in Figure 2. The highest increase in heterogeneity, 203.81%, occurs when the stage is at two clusters, indicating that a two-cluster solution is preferred to represent the state of Indonesia's viral video ads. A three-cluster solution is plausible with an increase of 16.03%, which is the second-highest increase, as going from two to one cluster normally has a drastic increase in heterogeneity. Since it is unclear which number of clusters is more meaningful in the context of emotional combinations in viral video ads, both solutions were tested in the k-means clustering.

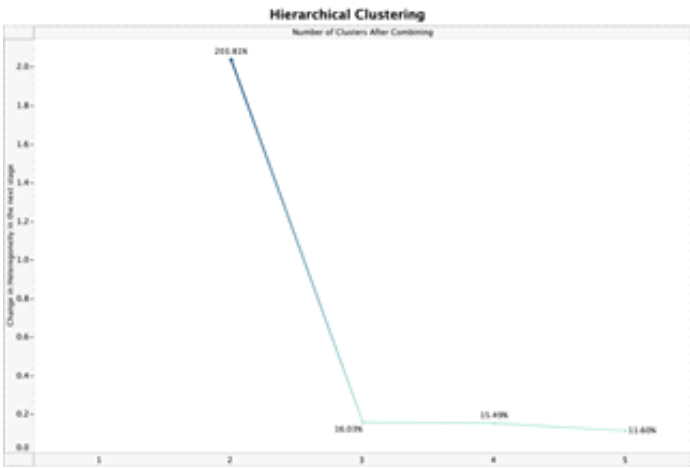


Figure 2. Percent Change in Heterogeneity from Agglomeration Schedule

In k-means clustering, the most important step is selecting a cluster seed that is the most meaningful and representative of the population, as there needs to be one single solution before proceeding into the analysis, in contrast to hierarchical clustering. Several methods can be used to find the best cluster seed possible, one of which is using hierarchical clustering from the previous step when no related information from past research is available. As mentioned previously, the clustering was done twice, with two-cluster and three-cluster solutions.

The results of the three-cluster and two-cluster solutions are summarized in Figure 3. When compared, there is a strong resemblance between the membership of the two-cluster and three-cluster solutions. Cluster 1 in the two-cluster solution is possibly the combination of both Cluster 2 and Cluster 3 from the three-cluster solution, with 14 and 11 cases, respectively, whereas Cluster 2 from the two-cluster solution has exactly the same cases as Cluster 1 from the three-cluster solution. The patterns persist in terms of the emotional combinations, which are shown by the final cluster centers of each emotion. Cluster 2 of the two-cluster solution has the exact cluster center and distribution of emotions,

with sadness and joy being the two strongest (30.75% and 25.57%, respectively) when compared to Cluster 1 from the three-cluster solution, indicating that they have exactly the same members as the previous solution. However, although the distribution of emotions in Cluster 1 of the two-cluster solution is similar compared to the combination of Cluster 2 and 3 of the three-cluster solution, with joy and surprise being the strongest emotions (35.56% and 29.22%, respectively), the degree of emotionality decreased as the higher and lower emotionality combined in a cluster. The cluster centers also shift lower for a similar reason. To check significant differences between the two clusters, an ANOVA test was conducted, and it was found that three emotions create the difference between the two clusters. Two emotions, fear and sadness, are significant at two levels of alpha (.05 and .01), whereas one emotion, surprise, is significant at one level of alpha (.05). Although the emotion of joy has a difference between clusters when looking at the figure, it is not significant enough at both levels (.05 and .01), indicating that both clusters have a strong emotional presence of joy. Based on several considerations mentioned previously, it is better to use the two-cluster solution as it can better represent the state of emotional combinations of Indonesia's viral video ads.

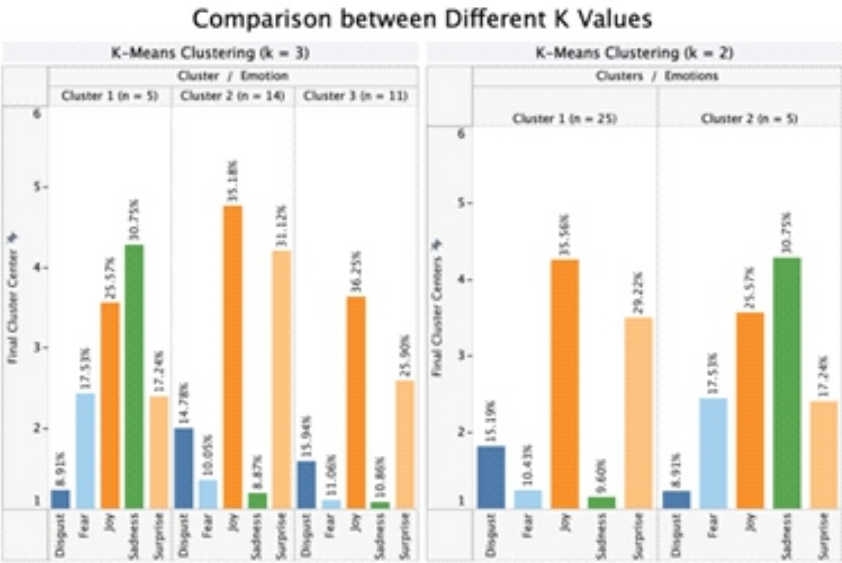


Figure 3.
Comparison of Results Between k = 3 and k = 2 in K-Means Clustering

To provide a better and deeper understanding of each cluster, a simple PAD model visualization (Figure 4) was created by giving weights for each emotion in a cluster based on the presence of the emotion and the overall emotionality and aggregating the PAD value from Russell and Mehrabian's (1977) work which is simplified by Buechel and Hahn (2016). The first cluster has a combination of emotions that strongly lean towards joy (35.56% with a center of 4.26) and surprise (29.22% with a center of 3.50). With a positive emotion and the element of surprise, the result is a high-arousal and high-dominance ad. The combination of feeling in control and high excitement might be one of the factors that can create virality. Several cases that are in the first cluster include ads such as Pocari Sweat's “#BintangSMA2020 Sweat for dream!” and Traveloka's “#XperienceMore with Traveloka Xperience,” which either focus on amusement or humor.

The second cluster is more focused on the combination of a positive emotion, joy (25.57% with a center of 3.56), and negative emotions, sadness (30.75% with a center of 4.28) and fear (17.53% with a center of 2.44), and some elements of surprise (17.24% with a center of 2.40). The complex emotions in Cluster 2 result in a rather unique PAD value of high arousal and low dominance. Although the valence is primarily negative, the arousal level is kept high, indicating that high arousal is an important factor for virality, similar to the finding from Berger and Milkman (2012). Additionally, emotional complexity in an ad might be another factor that can affect virality. JD.ID's “#DijaminOri” and IM3 Ooredoo's “2020 membuat kita lebih kuat. Temukan 2021-mu” are examples in the second cluster that strongly seek empathy or inspiration from the viewers. In terms of similarity, there is always an emotion of joy and surprise, although sometimes the presence is not strong.

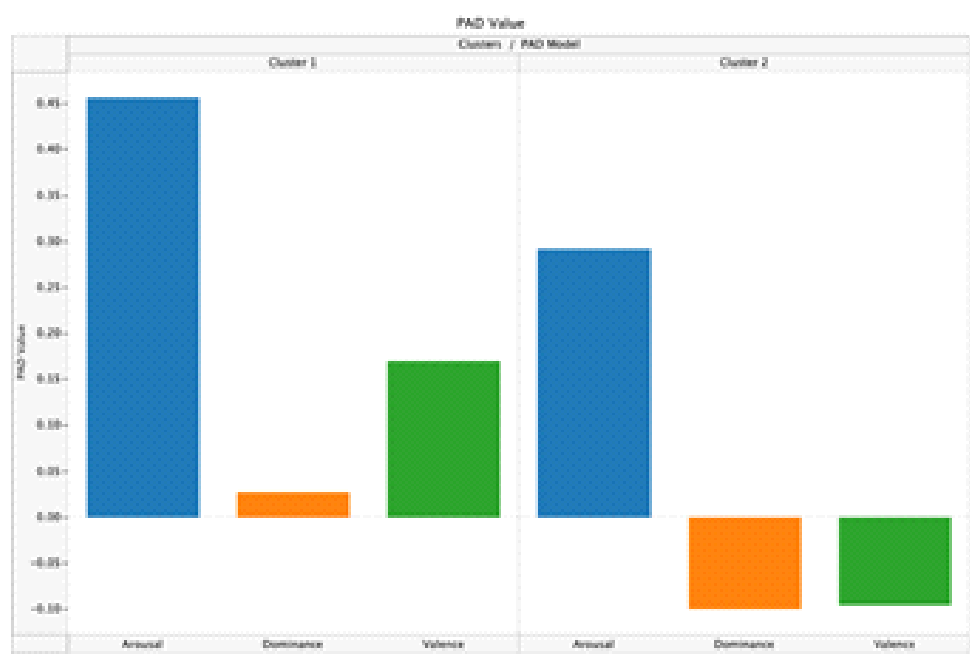


Figure 4.
PAD Value from the Distribution of Emotions per Cluster

To further test how each combination affects consumers in terms of valuable virality, the two clusters were brought into a single treatment as the independent variable for the MANOVA test. For the sake of simplicity, Cluster 1 will be called “positive ads” and Cluster 2 will be called “mixed ads” hereafter. To conduct the MANOVA test, there must be a representative for each cluster so that respondents can properly assess a certain type of emotional combination while not spending too much time watching multiple ads, which could lower the reliability as the time needed to complete the questionnaire increases. Two ads from the company Gojek were chosen as the representatives for each cluster, namely “Go-Jek Versi Kamu: Gozali” for positive ads and “Para Penjaga Amanah” for mixed ads, as Gojek is the only company that has ads in both clusters. This choice further helps to control and minimize other hidden variables such that they have no significant effect on the two clusters.

Additionally, the distance from the cluster center is minimized to prevent an ad that is performing far better or worse compared to others in the respective cluster, creating a different effect from the rest of the group.

“Go-Jek Versi Kamu: Gozali” has a distance of 0.6 from an average of 1.4, and “Para Penjaga Amanah” has a distance of 1.98 from an average of 1.57. Considering the time and other resources of this study, this is the optimized solution to create stimuli that are as robust as possible.

The Difference in Effects of Valuable Virality

Prior to using the MANOVA, the dependent variables were checked, especially brand evaluation as the only variable having multi-items and thus using construct validity. As brand evaluation questions were asked twice, before and after watching, the validity and reliability tests were also conducted twice to check whether the stimuli had any effect on the validity and reliability of brand evaluation. With the requirement of $r > 0.7$ for convergent validity and Cronbach's $\alpha > 0.7$ for reliability, every item tested is valid ($r > 0.88$) and the construct is still reliable ($\alpha > 0.9$) even after stimulus was given (Carlson & Herdman, 2010; Hair et al., 2010; Sekaran & Bougie, 2010). Considering the results, every item can proceed to be further tested for assumptions and significance tests after all assumptions for MANOVA are met.

Table 1.
Multivariate Tests

Effect	Value	F	Sig.
Pillai's Trace	0.124	13.039	0.000
Wilks' Lambda	0.876	13.039	0.000
Hotelling's Trace	0.142	13.039	0.000
Roy's Largest Root	0.142	13.039	0.000

Regarding the assumptions that must be met, independence of observation was controlled in the research design. The questionnaires were created separately for each stimulus, and the respondents were only allowed to fill one of the questionnaires without opening the other one, thus controlling the independence of respondents. Box's M test, which collectively assesses all three dependent variables to

determine whether there is a significant difference in variances and covariances between groups, was also conducted to test the assumption of homoscedasticity. Homoscedasticity is one of the most important assumptions because it can affect which significance tests should be focused on and whether changes need to be made by using one of the variance-stabilizing

transformations or adjusting the alpha level based on variances and group sizes (Hair et al., 2010). The result is that there is no significant difference between groups on the three dependent variables collectively (sig. = 0.098). Another assumption is whether the dependent variables are significantly correlated with each other. To test this, the common practice is to use Bartlett's test of sphericity as it collectively assesses the correlations among dependent variables to test whether intercorrelation exists (Hair et al., 2010). Based on Bartlett's test result (sig. = .000), there is a significant degree of intercorrelation that exists among dependent variables. However, multicollinearity might arise when there is a significant correlation among variables, creating an unnecessary variable that can actually be combined. When testing the correlations among dependent variables, the values are not strong enough to create multicollinearity ($r < 0.5$).

After all assumptions were tested, the main process of testing positive and mixed ads was conducted to determine whether there was a significant difference in means both collectively and individually. The first statistical test was the multivariate test, which assesses the difference in means between groups of three dependent variables collectively. The results of several multivariate tests, including Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root, are shown in Table 1. Based on Table 1, Pillai's Trace test and three other tests are all significant (sig. = .000), showing that even if there was a violation of homoscedasticity found previously, the group differences are confirmed to be significant.

Table 2.
Tests of Between-Subjects Effects

Source	Mean Square	F	Sig.
Sharing Intention	0.289	0.131	0.717
Change in Brand Evaluation	7.640	31.464	0.000
Purchase Intention	9.657	9.137	0.003

Although the difference was already proven to be significant by the multivariate test, knowing which dependent variables create the differences is important, especially for the interpretation. To accommodate the information, the result of multiple univariate tests or tests of between-subject effects is shown in Table 2. Two out of three dependent variables, brand evaluation and purchase intention, have significant differences between the positive and mixed ads (significance of .000 and .003, respectively). Sharing intention has a significance value of 0.717, indicating that the sharing intention between positive and mixed ads is somewhat similar. With the findings from both multivariate tests and tests of between-subjects effects or univariate tests in

Table 1 and Table 2, it can be determined whether the hypotheses are supported. The result of the hypotheses test analysis is summarized in Table 3 along with the significance values. With a significance value less than or equal to 0.05, H2 and H3 are supported, whereas H1 is not supported. The difference in the three dependent variables between positive and mixed ads comes from brand evaluation and purchase intention, not sharing intention. The post hoc tests are not needed to test between-group effects, as there are only two groups in a single treatment. Although the fact that mixed ads scored significantly differently than positive ads due to brand evaluation and purchase intention is already explained clearly, how the differences separate both types of ads as well as which type

of ads creates a better effect in certain brand-related outcomes must be addressed. The summary of the effects is shown in Figure 5. The graph shows that ads using complex emotions scored significantly higher than those using mainly positive emotions. Based on the cluster means for each dependent variable,

viewers who watched mixed ads are more likely to have better attitudes towards the corresponding brand and are more likely to purchase or use the corresponding product or service after watching the ad than viewers who watched positive ads.

Table 3.
Hypotheses Test Analysis Result

Hypothesis	F	Sig.	Result
H1 = There is a significant difference in <u>sharing intention</u> between different emotional combinations in ads	0.131	0.717	Not supported
H2 = There is a significant difference in <u>brand evaluation</u> between different emotional combinations in ads	31.363	0.000	Supported
H3 = There is a significant difference in <u>purchase intention</u> between different emotional combinations in ads	9.137	0.003	Supported

Discussions

Although the hypotheses are already answered, the meaning and possible reasons for the difference between types of ads, as well as their implications, are still left for discussion. The core aspect of valuable virality, which is the virality or sharing intention itself, can be created by both positive and mixed ads. The fact that both types of ads are similar in terms of the level of arousal resembles what was found in the study conducted by Berger and Milkman (2012), which found that high levels of arousal are the key to shareable content, not valence, as contents with identical valence can have different sharing intention depending on the arousal level. Additionally, the emotional combinations found by Dobeles et al. (2007) show that ads with a primarily low-arousal and low-dominance emotion, such as sadness, always have at least one complementary emotion which has a high arousal value, such as surprise, joy, or even another negative emotion such as anger. Therefore, it is no surprise that both types of ads with emotional combinations that create high arousal values

(see Figure 4) have a high score on the seven-point scale of sharing intention. The differences between the types of ads become relevant when brand-related outcomes are compared, one of which is brand evaluation. Mixed ads marginally outperform positive ads in terms of brand evaluation. This might be the case due to the ability of mixed ads to elicit different kinds of emotions in a single video during a short period of time. Referring to Dobeles et al. (2007), ads with complex emotions, with negative emotions as the core, are usually used by NGOs or businesses that want to elicit empathy and raise awareness about certain topics. In this case, Gojek, in the mixed ads, brought out social issues regarding the hard work of what Gojek partners have done to serve customers. This might be the reason why mixed ads can create a significantly better brand evaluation from viewers compared to positive ads. This point is strengthened by the fact that Gen Z, the population used in this analysis, is highly influenced by companies that highlight social issues (WP Engine, 2020).

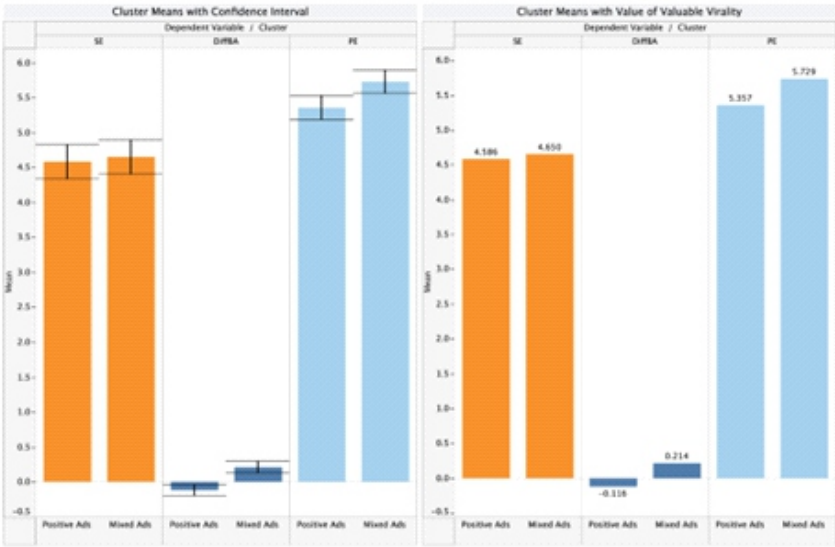


Figure 5.
Cluster Means for Valuable Virality Between Positive and Mixed Ads

However, when looking at the numerical difference in brand evaluation between the two types of ads, the difference is only 0.33 points on a seven-point scale. Since there are four items for scoring brand evaluation, the difference between both types is only one point across the four items of “good–bad”, “positive–negative”, “desirable–not desirable”, and “favorable–not favorable” scales. In terms of practical significance, the difference may not be significant enough to change the brand's advertising strategy, especially if the cost of doing so far outweighs the benefit. The small change in brand evaluation after watching the viral ad might be due to the brand already having a good brand evaluation from viewers. Still, if the ad has a strong performance that creates a better emotional combination than the rest, the difference might be practically significant enough that the benefit can outweigh the cost of creating mixed ads. Nevertheless, there is a difference that favors mixed ads concerning brand evaluation. Another brand-related outcome that is differently affected by positive and mixed ads is purchase intention. Mixed ads can better increase the desire of viewers to buy or use the product or service of the corresponding brand than positive ads can.

This is probably because complex emotions are usually used to initiate a movement, and thus have a strong probability to ignite a certain action (Dobele et al., 2007). Moreover, Gen Z's preferences for social issues have a significant effect on purchase decisions (WP Engine, 2020). The difference can also be due to the possibility of brand evaluation having a certain amount of correlation with purchase intention, as shown by a significant correlation in Bartlett's test. This is strengthened by the finding of Sharma and Kaur (2018) that brand attitude can significantly influence the purchase intention of a certain product. Additionally, according to Kudeshia and Kumar (2017), brand attitude can partially mediate the effect of social eWOM on purchase intention. However, on a seven-point scale, both types of ads perform well, with both types scoring above five points, showing that both can increase the likelihood of purchase compared to before watching the ad. However, the difference is minuscule ($5.729 - 5.357 = 0.372$) when considering the practical significance. The difference is likely to become much more distinct and apparent if the ad has a strong performance in the intended emotional combination.

Overall, the results of this study support the finding of a high arousal level being one of the keys to viral ads (Berger & Milkman, 2012; Nelson-Field et al., 2013). It supports and builds on the finding from Fractl (2019) that more emotionally complex ads lead not only to virality but also to better brand-related outcomes. The results might further support the finding from Akpınar and Berger (2017) that more emotionally complex ads might result in better positive inference about the persuasion attempts of ads, thus resulting in better brand-related outcomes.

Limitations and Recommendations

Despite all optimizations made in this study, there are still some limitations to what this study can achieve. The range of emotions using six basic emotions is very limited when considering the PAD model. In the PAD model, six basic emotions do not cover all the possible combinations of the PAD value (Buechel & Hahn, 2016). Moreover, of the six basic emotions, only one emotion is truly positive compared to the four negative emotions. A broader range of emotions that cover the spectrum in the PAD model can be used in future research. This study is also limited regarding the usage of existing ads as the representative of the cluster, which can create a bias and difference in the degree of emotionality between groups, especially if there is a phenomenon that impacts the image of the corresponding brand. This study tries to control this effect by choosing ads from the same brand for both positive and mixed ads so that any bias or unintended effect created by choosing different brands for the stimuli can be avoided. To better control unintended variables that might affect the result, future research can use the method from Akpınar and Berger (2017) by creating dummy ads for different emotional combinations that can be further tested if there is any unintended effect, such as brand presence, brand integrality, or difference in emotionality between stimuli. Furthermore, future research can examine international viral video ads to consider other emotional combinations that otherwise cannot be detected using Indonesia's viral video ads.

By using dummy ads, future research can recreate the emotional combination and test whether it works for Indonesian consumers. Additionally, regarding the research methodology, this study is limited by how the degree of certain emotional presence was rated using manual coders. Future research might further test the viability of different ML/DL programs that allow a more robust method to rate emotional presence in certain video ads.

Contributions and Implications

The results of this study make several contributions, both theoretical and practical. This work can combine the study of an emotional model (PAD) with valuable virality to shed light on the common PAD value combinations and their effects on valuable virality. This, in turn, continues the work of Akpınar and Berger (2017) and deepens the understanding of valuable virality by focusing on the structure of emotional ads as one of the ad types that can generate valuable virality. Additionally, it explores Indonesia's viral ads landscape and finds mainstream or commonly used emotional combinations that work for Indonesian consumers, specifically Gen Z.

From the perspective of the marketing field, the results show how to design more effective ads by creating different emotional combinations according to the objective of a certain campaign. It can lead to brands using different gimmicks that are unique to their own industry and market to elicit a certain emotional combination, creating much more unique and varied ads. Companies in Indonesia can also start using more complex ads to create new combinations of emotions, as the combination used in Indonesia's viral video ads is mostly one-dimensional in the positive ads (87%), contrasting with U.S. ads that have much more diverse combinations in their global and successful campaigns (Dobele et al., 2007).

Conclusion

The objectives of this study are to understand the current landscape of Indonesia's viral ads regarding the emotional combinations evoked, the characteristics of each combination, and the effects that different combinations can have on valuable virality, which includes sharing intention, brand evaluation, and purchase intention. The study will help companies better decide which types of ads can serve the purpose of achieving valuable virality and better understand the underlying construct of emotions from the chosen type of ads.

From the cluster analysis, the two-cluster solution is the most representative solution based on hierarchical clustering, which results in positive and mixed ads. In terms of the emotional combination, positive ads focus solely on joy with surprise as the emotional amplifier, whereas mixed ads focus on contrasting emotions which are sadness, fear, and joy, with some surprising effects. The emotional combination from each cluster creates a unique value of pleasure/valence, arousal, and dominance. Positive ads have high values on all three scales. With mixed emotions, mixed ads have a high-arousal, low-dominance, and negative-valence value. Looking at the similarities between the two clusters, both have a high level of arousal that is important in creating virality or high sharing intention. Both positive and mixed ads were brought into the MANOVA to test the difference regarding valuable virality.

The MANOVA result shows that there is a significant difference between positive and mixed ads based on the three dependent variables of valuable virality collectively. More precisely, the multiple univariate tests show that the significant differences come from brand-related outcomes, which are brand evaluation and purchase intention. To conclude, the mixed ads, which have contrasting emotions of sadness and joy, outperform positive ads in valuable virality, especially in brand evaluation and purchase intention.

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