

LOGIC VS AESTHETIC: THE EFFECT OF ENVIRONMENTAL CLAIM AND VISUAL DESIGN IN GREEN ADVERTISING

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Abstract

The surge in demand for green products leads to rampant practice of “greenwashing”, in which marketers deceitfully try to position their brand as more eco-friendly than it actually is. Past studies on green advertisements have indicated that visual cues in the advertisements can also play a part in affecting consumers’ evaluation of the product and its eco-friendly feature. This study was conducted to examine the effect of two essential elements in a green advertisement, which are the overall visual aesthetic quality of the advertisement and verbal environmental claim. The study was conducted using an experimental vignette method. Two hundred seventy-six respondents participated in this study. Through MANOVA statistical analysis, it was found that both aesthetic quality and environmental claim type used significantly affect green brand associations, as well as the attitude respondents, have towards the brand. However, this significant effect of ads visual aesthetic quality can be concerning since it might hinder consumers to objectively evaluate the environmental claim of the product.

Keywords: green advertisement; aesthetic quality; environmental claim; green brand associations.

Abstrak

Adanya peningkatan permintaan produk ramah lingkungan akhir-akhir ini berakibat pula pada maraknya praktik “greenwashing”, dimana pelaku usaha sengaja melebih-lebihkan kualitas ramah lingkungan dari produk yang mereka miliki. Penelitian terdahulu mengenai iklan produk ramah lingkungan menyatakan bahwa elemen visual pada iklan dapat mempengaruhi evaluasi konsumen terhadap produk dan kesan ramah lingkungan yang dimiliki produk tersebut. Penelitian ini dilakukan untuk menguji efek dari dua elemen esensial iklan ramah lingkungan, yaitu estetika dari iklan dan klaim ramah lingkungan. Penelitian ini dilakukan menggunakan metode vignette eksperimental. Dua ratus tujuh puluh enam responden berpartisipasi dalam penelitian ini. Analisis statistik MANOVA menunjukkan bahwa estetika dan jenis klaim ramah lingkungan secara signifikan mempengaruhi seberapa jauh responden memberikan kesan ramah lingkungan dan sikap responden terhadap merek produk tersebut. Namun begitu, efek signifikan dari estetika iklan bisa jadi mengkhawatirkan karena hal ini dapat menghambat konsumen untuk memberikan evaluasi yang objektif terhadap klaim ramah lingkungan dari produk tersebut.

Kata kunci: iklan produk ramah lingkungan; estetika; klaim ramah lingkungan; green brand associations.

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INTRODUCTION

Over the past decades, the environmental crisis that happens globally has enforced the importance of more responsible consumer behavior. Indonesia, as the most populous country in Southeast Asia that currently faces waste management issues (Dethier, 2017; Wasserbauer & Herák, 2016), is no exception. A survey conducted by World Wide Fund for Nature (WWF) (2018) Indonesia and Nielsen company showed that 63% of urban-middle-up Indonesian consumers are willing to pay more for greener products—meaning all products produced in a certain way to ensure the conservation and harm minimization of the natural environment, energy, and resources (Ottman, 2006). This growing demand for green products is indeed a good thing, yet in reality, there are no products that can be considered as truly green since any products will inevitably affect the environment negatively (Pickett-Baker & Ozaki, 2006). Unfortunately, a lot of companies took advantage of this situation by exaggerating the “greenness” of their products to target consumers with environmental concerns (Baum 2012, Bhatia & Jain, 2013). This deceitful advertising practice is known as “greenwashing”.

Tricks that often used by companies to greenwash their products including using vague claims, claims that cannot be proven or using false proof, fake eco-labels, and omitting relevant information (TerraChoice, 2010). Consumers, seemingly, are aware of these tricks and a lot of research findings have highlighted that respondents showed skepticism when they were exposed with unconvincing environmental claims (Schmuck, Matthes, & Naderer, 2018; Chan & Lau, 2004; Alniacik & Yilmaz, 2012). Despite that, studies regarding greenwashing ads indicated that using green nature imagery, green color, and other green attributes (Schmuck, Matthes, & Naderer, 2018; Hartmann & Apaolaza-Ibáñez, 2009), Fei

& Xue, 2014) could significantly and positively affect consumers attitude towards the ads, and consequently, their intention to purchase the product. One study even found that the usage of nature imagery in green advertisements, although combined with false or vague claims, (Schmuck, Matthes, & Naderer, 2018) evoked virtual nature experience that could neutralize the negative effect of consumers’ perceived greenwashing on attitude towards the ad. The findings stated above imply that visual cues of the green advertisements can also play a part in deceiving consumers. Unfortunately, not many studies have yet explored other visual characteristics found in green advertisements.

Although the content of environmental claim written on green advertisements is still vital for communication, gestalt theory states that consumer usually fixates their attention to the advertisement as a whole visual product and not solely on isolated fragments (Wagemans, Elder, Kubovy, Palmer, Peterson, Singh & von der Heydt, 2012). Therefore, the whole design of the advertisement is also important because our perception regarding the advertisement is made preconsciously when we look at the whole design even before we examine each fragment in the advertisement or reading the texts. For example, when a media such as advertisements is designed in a highly aesthetic manner, we might get the impression that the advertisement was made by a professional organization and therefore more trustworthy. Previous research confirmed this by stating that two same messages will be judged differently when put on different visual designs with clearly distinct degree of aesthetic quality (Robins & Holmes, 2008). In this case, message written in media that has higher aesthetic quality is perceived as more credible compared to the message written in media with lesser aesthetic quality. This study was used to explore how two common elements in green advertisements:

environmental claim and visual design affect respondents' evaluation of the brand through experimental study.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Although evaluating the aesthetic quality of a design can be subjective at times, there are two basic principles that have been linked to aesthetic quality of design; complexity and order (Deng & Poole, 2012). Complexity reflects the ornateness, colorfulness, diversity, creativity, visual effects, and other related aspects of a design. Meanwhile, order refers to the clean, well-organized, orderly, and symmetrical impression of a design. Previous study has shown that audiences perceived a visual design as more complex when there were more words, graphics, and other elements that were used in the design. On the other hand, visual design was perceived to be more orderly when there was a certain logic or pattern used in grouping similar elements and differentiate unrelated elements. The order aspects of visual design were also considered as more consistent in predicting respondents' preference.

Aside from increasing perceived credibility of the message written in the advertisement, prior studies revealed that more visually appealing advertisement was proven to be more effective in increasing consumers' attention (Pieters, Wedel, & Batra, 2010). When an advertisement has succeeded in gaining consumers' attention and giving the impression of credibility through its overall visual design, the content of the message written will then play a role in shaping consumers' perception towards the brand. In the context of green advertisements, environmental claims used are generally divided into four categories (Carlson, Grove, and Kangun, 1993). The first category includes advertisements with product orientation which mainly states

attributes of the product that can be considered as eco-friendly (e.g. "our packaging is biodegradable"). The second type of advertisement focuses more on the green production process (e.g. "we've processed our industrial waste to make sure that it's going to be as harmless as possible to the environment"). The third type is image orientation that focuses on associating the company with an environmental cause (e.g. "our company has high concern for environmental issues"). The last type focuses on stating environmental facts such as "do you know that Indonesia is the world's second-biggest ocean plastic polluter?". Process and product-oriented advertisements will then be categorized as substantive claims since it presents more information about the company's concrete actions that have been taken to ensure environmental harm minimization. As for the rest, these two would then fall under the associative claims category since they don't directly inform consumers about the company's concrete action and therefore, vaguer.

Although substantive claims are generally proven to have gained more positive responses from the consumers compared to associative claims (Hu, 2012; Chan & Lau, 2004; Chan, Leung, & Wong, 2006), a study conducted by Chan & Lau (2004) indicated that substantive claim effectiveness was reduced when a new independent variable, in this case source country disposition, was introduced. In other words, the substantive claim effect might be less superior when there are other information or characteristic of the products that give off a bad impression. A study conducted by Schmuck, Matthes, & Naderer (2018) showed similar but reversed pattern, specifically when false and vague environment claims were combined with another independent variable, in this case natural imagery, the attitude towards the brand increased instead of decreased. All of this evidence suggested that it might be beneficial to test and manipulate features of advertisement

together instead of testing only one feature at a time (Matthes, 2019). In this study, two advertisement features; aesthetic quality (high or low) and environmental claim (substantive or associative) were combined, systematically manipulated, and tested together. Testing these two advertisement features together was considered beneficial since most print green advertisements had these two features.

Two separate dependent variables were used in the study to test the types of advertisement effectiveness. The first dependent variable, green brand associations can be defined as consumers' perceived reputation regarding the brand's effort in preserving the environment (Xue, 2014). A higher score in green brand associations means the advertisement has the capability to make consumers perceive that the product is indeed green. Since green brand associations should be largely affected by the environmental claim used, we hypothesized that:

H1: Participants will have higher green brand associations towards advertisements with environmental claims, whether it's substantive claims or associative claims.

H2: Participants will have higher green brand associations score towards advertisements with substantive claims compared to advertisement with associative claims.

Measuring green brand association is also useful to identify whether aesthetic quality may affect consumer's perception regarding the greenness of the brand. A second variable, attitude towards the brand refers to an individual's evaluative stance within a continuum of adjective scales (good-bad, favorable-unfavorable, etc.) related to the brand (Fishbein & Ajzen, 2011). Higher score in attitude towards the brand has been proven as antecedent of purchase intention (Fishbein & Ajzen,

2011; Wei, Chiang, Kou, & Lee, 2017). This measure is also beneficial for the research in the context of Indonesian society since it was revealed that Indonesian consumers will only buy green products if they have positive evaluations of the brand (The National Agency for Food and Drugs of Indonesia, 2011). In this regard, previous study has indicated that using certain visual cues might increase attitude towards the brand as well as perceive credibility of the claims written in the advertisement (Xue, 2014). On the other side, there were not many studies that explore the effect of aesthetic quality on Indonesian consumers' attitudes. However, a qualitative study conducted in Indonesia has found that products with more attractive packaging are generally judged more positively (Natadjaja, Cahyono, & Yuwono, 2009). With that being said, we proposed that:

H3: Higher aesthetic quality in green advertisements leads to a more positive evaluation towards the advertisements (defined by the linear combination of attitude and green brand associations).

H4: Higher aesthetic quality in green advertisements leads to higher attitude.

H5: Higher aesthetic quality in green advertisements leads to higher green brand associations.

RESEARCH METHODS

Design and Data Collection Procedures

To incorporate the types of advertisement stated above, vignettes were used as a stimulus (see Appendix). A vignette can be defined as texts, pictures, videos, or other media that are thoroughly constructed so they are able to describe an object or situation with certain characteristics (Atzmüller & Steiner, 2010). Therefore, vignettes would help researchers to present more realistic, but at the same time, controlled scenario to respondents. In this study, vignettes in the

form of pictures and text were used to describe advertisements of a fictional product. To be specific, we employed 2 (aesthetic quality: high and low) x 3 (type of claims: substantive, associative, non-environmental) advertisements. Two advertisements with non-environmental claims act as control condition in this research.

Advertisement of fictitious paper towels was used in the study because consumers usually don't put a lot of cognitive effort in evaluating the risks and product attributes of paper towels other than what's stated in the advertisement and product labels. Besides, vignettes of fictitious paper towels had been used before by numerous researchers to study green product advertisements (Chan & Lau, 2004; Tucker, Rifon, Lee, & Reece, 2012). For this research, we used a fictitious brand instead of real brand, to ensure that respondents' responses weren't affected by their prior knowledge of the brand. Elements used in all of the advertisements were also controlled. Every advertisement only contained one logo of the brand, one picture of the product, one non-environmental claim (same for all ads), and the environmental claim (except for the control group ads). Country origin or other information that might affect respondents' evaluation was also omitted.

Vignettes with high aesthetic quality were then designed with the help of a professional graphic designer that had been briefed about the goal of the study. On the other hand, vignettes with low aesthetic quality were made by the researcher and then checked by the same professional graphic designer. The color scheme used by both designs was controlled to prevent confounding effect. Moreover, none of the advertisements used nature imagery. To test whether the vignettes used to represent advertisement with higher aesthetic value were considered significantly more attractive than the counterparts, we added one more measure that is perceived

attractiveness which was measured by 3 items: (1) *Overall, I find that the advertisement looks attractive*, (2) *The layout of the advertisement is attractive*, and (3) *The colors that are used on the advertisement are attractive* (Van der Heijden, 2003). The score of perceived attractiveness between these two types of vignette then compared statistically using the Mann-Whitney U Test (since the data isn't normally distributed). Results showed that respondents perceived vignettes with the supposedly attractive type of design to have significantly higher aesthetic value compared to the vignettes with supposedly unattractive type of design ($U=3477$, $p=0.00$)

One out of six vignettes was shown randomly to each respondent and thus, aesthetic quality and claim types act as between-subjects variables. Each vignette was shown for exactly 20 seconds to each respondent. After the vignette was shown, respondents were asked to fill in one qualitative question that was used to ensure respondents' attention and understanding of the information delivered in the ad. Next, questionnaires to measure their attitude and green brand associations were given. These sets of questionnaires and vignettes were presented through an online platform.

Measures

All items used in the study were adapted and translated (using the back-translation technique) from pre-existing scales. Attitude toward the brand was assessed using semantic differential with 7-point-scales (Fishbein & Ajzen, 2011) in which respondents were asked to evaluate their position in 3 bipolar evaluative adjective scales (*Bad-good*, *not likable – likable*, *not recommendable – recommendable*). Green brand associations were measured by 3 5-point-scales items, which were: (1) *The brand helps protect the environment*, (2) *The brand makes me feel closer to nature*, and (3) *The brand*

respects the environment (Xue, 2014). Lastly, two attention check questions were put randomly among the items to ensure that respondents really put their attention to every question on the survey and thus, ensure the validity of the measurements (Kung, Kwok, & Brown, 2018).

Sample

The sample of this study was obtained from the population of middle-up consumers from some of the urban areas in Indonesia (Jabodetabek, Surabaya, Bandung, Medan, Semarang). These criteria were chosen because such respondents might have greater exposure to various green products. Their experience of being exposed to green products might also guide them to find differences among the advertisements shown in the study. Non-probability sampling method was considered best suited for this research design because the population with these criteria is impossible to be estimated accurately. Moreover, convenience sampling using an online questionnaire was felt to be beneficial in partially

ensuring respondents' economic and information accessibility to green products.

Convenience sampling technique was used to recruit 276 respondents (46 respondents in each group). These respondents consisted of 56,2% females and 43,8% males; age ranging from 18 – 64 years old ($M=27.78$, $SD=12.13$); with 39,9% of respondents came from Jabodetabek, 23,6% Bandung, 19,9% Surabaya, 9,8% Medan, and 6,9% Semarang.

Method of Analysis

First, the reliability of each measure was tested using the Cronbach Alpha technique and was expected to surpass the threshold of 0.70 (Nunnally, 1978). For these three measures, all the coefficients were above 0.70 and thus had satisfactory internal consistency (see table 1). The validity of each item on the measure was also tested using corrected item-to-total correlation. Since all correlations exceeded 0.50, we could accept the validity of these items (Hair, Anderson, Babin, & Black, 2010).

Table 1. Validity and Reliability Test Result

No.	Research Variables	Corrected Item-Total Correlation	Status	Cronbach Alpha	Status
1.	Attitude				
	• Bad – good	0.846	Valid	0.930	Reliable
	• Not likable – likable	0.876	Valid		
	• Not recommendable – recommendable	0.861	Valid		
2.	Green Brand Associations				
	• The brand helps protect the environment.	0.690	Valid	0.828	Reliable
	• The brand makes me feel closer to nature.	0.640	Valid		
	• The brand respects the environment.	0.732	Valid		
3.	Perceived Attractiveness				
	• Overall, I find that the advertisement looks attractive.	0.797	Valid	0.890	Reliable
	• The layout of the advertisement is attractive.	0.822	Valid		
	• The colors that are used on the advertisement are attractive.	0.744	Valid		

To test the hypotheses, Factorial MANOVA, followed by Univariate ANOVA, will be used to compare the mean values of each dependent variable across control and experimental groups (Field, 2009).

RESULT AND DISCUSSION

MANOVA assumption testing showed that homogeneity of covariance (Box's test, $p > 0.05$) and variance assumptions have been met ($p > 0.05$). Yet, univariate and consequently multivariate normality assumptions for the dependent variables were violated. In that case, we used Pillai-Bartlett trace test who is considered robust to non-normality or any other assumption violations (Finch, 2005; Olson, 1974). For the post-hoc procedure, we used REGWQ procedure that is considered good enough to control Type 1 error rate as long as the sample size for every group is equal (Field, 2009).

To test the first (H1) and second (H2) hypotheses, we ran Univariate ANOVA to test the type of claims effect as independent variable on each separate dependent variable. However, to control Type I error, we adjusted the critical value for this interpretation using Bonferroni correction (Field, 2009) which is 0.025 (alpha 0.05 divided by the number of dependent variables). Through this testing, it was revealed that type of claims significantly affect both attitude ($F(2,270)=57.13$, $p < .025$; partial $\eta^2 = 0.032$) and green brand associations ($F(2,270)=53.12$, $p < .01$; partial $\eta^2 = 0.082$). In terms of effect size, this predictor responsible for explaining 3,2% of attitude's total variance (which is considered as a rather small effect) and

8,2% of green brand associations (which is considered as medium effect). This result was then followed by post-hoc test to compare dependent variables' mean difference across all three types of claims. The result revealed that on average, respondents who were given advertisements with substantive claims ($M=2.28$) have significantly higher green brand associations compared to respondents who were given advertisements with non-environmental ($M=1.98$) or associative claim ($M=2.06$). This result also rejected our first hypothesis (H1) since it was revealed that the usage of associative claims didn't give much difference in affecting respondents' belief on how green a product is compared to non-environmental claims. However, we could accept the second hypothesis (H2) since it was proven that there were significant mean differences in green brand associations score given by respondents who got advertisements with substantive claims compared to respondents who got advertisements that used associative claims. Slightly different results were shown when the post-hoc test was used to test the difference in attitude across all three types of claims. It was revealed that a significant mean difference was only found when we compared attitude of respondents who saw advertisements with substantive claims ($M=2.24$) and respondents who saw advertisements with non-environmental claims ($M=2.02$). This also means that on average, attitude score given towards advertisements that used associative claims ($M=2.13$), was not considered significantly different compared to either advertisement that used substantive claims or non-environmental claims.

Table 2. Descriptive Statistics for Each Group

Variables	Groups		N	Mean	Std. Deviation
	Aesthetic Quality	Type of claim			
Attitude	High	Non-environmental	46	2.30	0.49
		Substantive	46	2.48	0.50
		Associative	46	2.28	0.35
	Low	Non-environmental	46	1.73	0.61
		Substantive	46	2.01	0.53
		Associative	46	1.98	0.55
Green Brand Associations	High	Non-environmental	46	2.13	0.47
		Substantive	46	2.37	0.38
		Associative	46	2.09	0.46
	Low	Non-environmental	46	1.84	0.39
		Substantive	46	2.19	0.40
		Associative	46	2.04	0.42

For the third hypothesis, MANOVA testing using Pillai's trace shows that both the aesthetic quality of advertisements ($V(s) = 0.162$, $F(2,269)=26.06$, $p<.01$; partial $\eta^2 = 0.162$) and type of claim ($V(s) = 0.086$, $F(4,540)=6.08$, $p<.01$; partial $\eta^2 = 0.043$) significantly affect participants' evaluation towards the advertisements (defined by the linear combination of attitude and green brand associations). This finding supported the third hypothesis (H3) which means that well-designed green advertisements would be evaluated more positively by audiences. The effect size or the proportion of combined dependent variables' variance explained by solely this predictor is 16.2% which is considered a large effect (Cohen, 1988). Besides that, this finding also shows that certain type of claims was evaluated as significantly more positive compared to the others. The type of claim as a predictor is responsible for explaining 4.3% proportion of dependent variables' total variance. This effect size is considered small. However, interaction effect between these two independent variables was not significant ($V(s) = 0.02$, $F(4,540)=1.17$, $p>.05$). This indicates that the improvement of evaluation due to aesthetically pleasing advertisements is not affected by the type of claim used in the advertisement and vice versa.

To test the fourth (H4) and fifth (H5) hypotheses, Univariate ANOVA was also done to test the aesthetic quality effect on each dependent variable. Corrected critical value of 0.025 was again used for the interpretation. The test revealed that aesthetic quality of advertisements had significant effect towards attitude ($F(1,270)=52.31$, $p<.01$; partial $\eta^2 = 0.162$) and green brand associations ($F(1,270)=48.75$, $p<.01$; partial $\eta^2 = 0.039$). On average, respondents who saw advertisements with higher aesthetic quality (despite the type of claims used in the advertisements) had attitude total score of $M=2.35$ and green brand associations total score of $M=2.19$. Meanwhile, respondents who saw advertisements with lower aesthetic quality had an average attitude score of $M=1.91$ and an average green brand association score of $M=2.02$. Moreover, the effect of aesthetic quality as a predictor was larger towards attitude, which explained 16.2% proportion of attitude, compared to green brand associations which were only affected by 3.9% small effect size (Cohen, 1988). These findings confirm our fourth (H4) and fifth hypothesis (H5).

Discussion

This research examined the effect of aesthetic quality of an advertisement and types of environmental claims used in the

advertisement towards respondents' perception of the brand's eco-friendliness and attitude towards the brand. The method used in this study was experimental vignette conducted to 276 respondents. MANOVA was then used to examine the effect of these independent variables. Through this study, we could learn that respondents were more likely to associate a product as truly green when it was advertised with substantive environmental claim, which is clearer in describing the company's real action to minimize harmful effect of the production's process. When a green product was advertised using environmental claim that was vague in describing the company's action, consumers didn't put significantly higher trust in the greenness of the product compared to the brand who didn't even put any environmental claim on the advertisement. In other words, respondents were able to critically evaluate which company shows more seriousness in their green initiative through their claim. These findings also add further information to the past research which has confirmed that the usage of environmental claims would increase green brand associations (Xue, 2014) but hadn't explored whether a different type of environmental claim would give this same effect. However, although the respondents perceived the greenness of a brand differently depends on whether it was advertised using substantive or associative claims, this study also found out that there was no significant attitude difference between the two. To be more specific, respondents tended to give higher attitude scores towards advertisements that used environmental claims, no matter what kind of claim was made.

The results of the study also underlined how aesthetic quality of green advertisement was able to significantly affect green brand associations, attitude towards the brand, and the overall combination of both dependent variables. The significant effect of advertisement's

aesthetic towards respondents' eco-friendliness perception is in alignment with research findings conducted by Hartmann, Ibáñez, & Sainz (2005) which found out that green brand association was evaluated not only through cognitive perception but also through emotional perception. Through our research, we can also find an indication that overall aesthetic quality in green advertisement can also evoke this emotional perception and thus manipulate consumers' belief on the eco-friendliness of the brand. As for its effect on attitude, our finding supports past research by Xue (2014) which had found that the visual elements in green advertisements had a stronger impact on respondents' attitudes compared to the verbal environmental claim.

Lastly, it is also worth highlighting that interaction effects of both independent variables were not significant for both dependent variables and the overall combination of both dependent variables. In other words, the more visually pleasing an advertisement is, the better the evaluation given by respondents no matter what type of environmental claim is used. Conversely, a clearer environmental claim will consequently result in better evaluation despite the visual quality of the advertisement.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the statistical analysis, we can conclude that both verbal environmental claims and visual aesthetic quality of green advertisements significantly affect consumers' evaluation of how green a brand is and overall attitude towards the brand. In general, brands that advertised themselves using verbal environmental claims will get a more positive attitude from the consumers. However, verbal environmental claim that's more substantive in explaining the brand's environ-

mentally friendly feature will especially more likely to be associated as a green brand. Moreover, advertisements of a brand that are perceived as more visually pleasing will be more likely to be associated as a greener brand and gain a more positive attitude from consumers. The significant effect of aesthetic quality, of course, can be concerning since it might hinder consumers to objectively evaluate the green quality of the products.

The findings of this research have provided us with some insight on how Indonesian consumers evaluating green brand advertisements. Understanding consumer behavior can be considered as an essential and initial step in planning a marketing strategy to increase green product demand. From the findings stated above, we know that it is safer for green marketers to state their company's environmental stance as substantive as possible since a clearer environmental claim is still proven effective in making consumers associate the brand as eco-friendly. However, selling a green product by only emphasizing the environmental claim is, unfortunately, might not be enough.

Prior study stated that Indonesian consumers tended to buy green products only if they have a good evaluation of the brand (The National Agency for Food and Drugs of Indonesia, 2011). Although increasing consumers' green brand association is also important, it is the consumers' attitude towards the brand that is considered better in predicting purchase intention (Fishbein & Ajzen, 2011; Wei, Chiang, Kou, & Lee, 2017). It is also worth highlighting that the aesthetic quality of the advertisement had noticeably larger effect compared to the type of claims (16.2% vs 4.3%). This means Indonesian consumers might end up buying products from less eco-friendly brands with better design rather than

buying eco-friendly products with standard design. In this case, green product marketers should start paying attention to the visual aspect of their product advertisements. Another alternative solution that can be done to promote green product demands is by taking the initiative to educate consumers on what production practices that are more environmentally responsible. This practice is essential to expand the green products market in Indonesia as well as equip consumers to be more critical in evaluating green advertisements.

Future Research Recommendations

Past studies had explored the effect of certain visual cues in green advertisements and their effect on consumers' evaluation. However, none of those researches had yet explored how the level of aesthetic quality in green advertisements affected consumers' overall attitude towards the brand and their evaluation regarding the greenness of the brand. This study can be essential since every green advertisement is indeed a creative design product and aesthetic quality is one element that will always be present. The audience will then subconsciously evaluate the attractiveness of the green advertisement which then will affect how the audience sees the brand.

Further research into this topic can contribute by replicating this research into a non-experimental setting to further confirm the external validity of these findings. Future research could also examine the 'halo effect' of aesthetic visual on other advertising media such as online advertisements or video advertisements. Furthermore, it is also suggested to explore more variables that might affect consumers' evaluation of the brand such as the copywriting style in advertisements, usage of eco-label and other symbolic properties, or consumer characteristics.

REFERENCES

- Atzmüller, C., & Steiner, P. M. (2010). Experimental vignette studies in survey research. *Methodology*.
- Baum, L.M. (2012). It's not easy to be green... or is it? A content analysis of environmental claims in magazine advertisements from the United States and the United Kingdom. *Environmental Communication* 6(4): 423–440.
- Bhatia, M., & Jain, A. (2013). Green marketing: A study of consumer perception and preferences in India. *Electronic Green Journal*, 1(36).
- Carlson, L., Grove, S. J., & Kangun, N. (1993). A content analysis of environmental advertising claims: A matrix method approach. *Journal of advertising*, 22(3), 27-39.
- Chan, R. Y., & Lau, L. B. (2004). The effectiveness of environmental claims among Chinese consumers: influences of claim type, country disposition, and ecocentric orientation. *Journal of Marketing Management*, 20(3-4), 273-319.
- Chan, R. Y., Leung, T. K. P., & Wong, Y. H. (2006). The effectiveness of environmental claims for services advertising. *Journal of Services Marketing*, 20(4), 233-250.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Deng, L., & Poole, M. S. (2012). Aesthetic design of e-commerce web pages—Webpage Complexity, Order and preference. *Electronic Commerce Research and Applications*, 11(4), 420-440.
- Dethier, J. J. (2017). Trash, cities, and politics: urban environmental problems in Indonesia. *Indonesia*, (103), 73-90.
- Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.
- Finch, H. (2005). Comparison of the performance of nonparametric and parametric MANOVA test statistics when assumptions are violated. *Methodology*, 1(1), 27-38.
- Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7).
- Hartmann, P., Ibáñez, V. A., & Sainz, F. J. F. (2005). Green branding effects on attitude: functional versus emotional positioning strategies. *Marketing Intelligence & Planning*.
- Hu, H. H. S. (2012). The effectiveness of environmental advertising in the hotel industry. *Cornell Hospitality Quarterly*, 53(2), 154-164.
- Kung, F. Y., Kwok, N., & Brown, D. J. (2018). Are attention check questions a threat to scale validity?. *Applied Psychology*, 67(2), 264-283.
- Hartmann, P., & Apaolaza-Ibáñez, V. (2009). Green advertising revisited: Conditioning virtual nature experiences. *International Journal of Advertising*, 28(4), 715-739.
- Matthes, J. (2019). Uncharted Territory in Research on Environmental Advertising: Toward an Organizing Framework. *Journal of Advertising*, 48(1), 91-101.
- Natadjaja, L., Cahyono, Y. B., & Yuwono, E. C. (2009). Kondisi desain kemasan produk makanan ringan dan minuman instant pada industri kecil skala rumah tangga (micro industry) di Kabupaten Kediri. *Nirmana*, 11(2), 93-105.

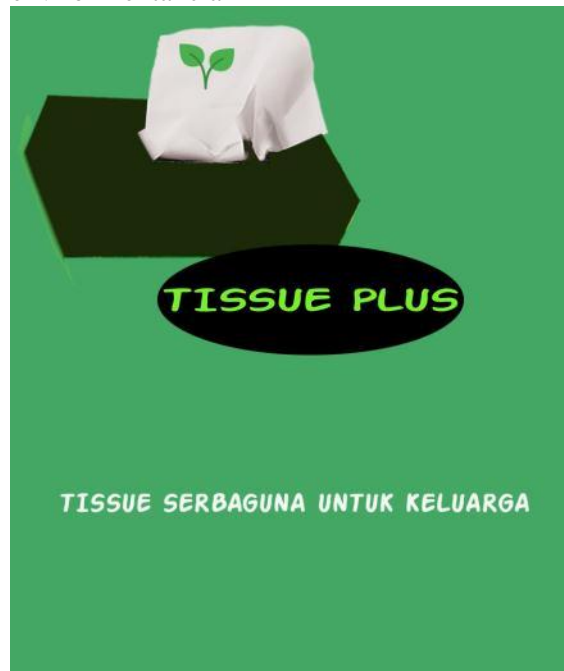
- Nunnally, J. C. (1978), *Psychometric Theory*, New York, McGraw-Hill.
- Olson, C. L. (1974). Comparative robustness of six tests in multivariate analysis of variance. *Journal of the American Statistical Association*, 69(348), 894-908.
- Ottman, J. A., E. R. Stafford & C. L. Hartman. (2006). 'Green Marketing Myopia', *Environment* 48(5), 22–36.
- Pieters, R., Wedel, M., & Batra, R. (2010). The stopping power of advertising: measures and effects of visual complexity. *Journal of Marketing*, 74(5), 48e60.
- Pickett-Baker J, Ozaki R. 2008. Pro-environmental products: marketing influence on consumer purchase decision. *Journal of Consumer Marketing* 25(5): 281–293
- Robins, D., & Holmes, J. (2008). Aesthetics and credibility in web site design. *Information Processing & Management*, 44(1), 386-399.
- Schmuck, D., Matthes, J., & Naderer, B. (2018). Misleading consumers with green advertising? An affect–reason–involvement account of greenwashing effects in environmental advertising. *Journal of Advertising*, 47(2), 127-145
- TerraChoice. (2010). *The Sins of Greenwashing: home and family edition*. TerraChoice Group, Inc. Ottawa, Ontario, Canada.
- The National Agency for Food and Drugs of Indonesia.(2011). *Konsumsi Berkelanjutan: Gerakan Gaya Hidup Hijau, “Menuju Ekonomi Hijau: Pembelajaran pada Tahap Transisi”*. Bappenas.
- Tucker, E. M., Rifon, N. J., Lee, E. M., & Reece, B. B. (2012). Consumer receptivity to green ads: A test of green claim types and the role of individual consumer characteristics for green ad response. *Journal of Advertising*, 41(4), 9-23.
- Xue, F. (2014). It looks green: Effects of green visuals in advertising on Chinese consumers' brand perception. *Journal of International Consumer Marketing*, 26(1), 75-86.
- Van der Heijden, H. (2003). Factors influencing the usage of websites: the case of a generic portal in The Netherlands. *Information & management*, 40(6), 541-549.
- Wagemans, J., Elder, J. H., Kubovy, M., Palmer, S. E., Peterson, M. A., Singh, M., & von der Heydt, R. (2012). A century of Gestalt psychology in visual perception: I. Perceptual grouping and figure–ground organization. *Psychological bulletin*, 138(6), 1172.
- Wasserbauer, M., & Herák, D. (2016). A review of Municipal Solid Waste Management in Indonesia. In *6th International Conference on Trends in Agricultural Engineering* (pp. 708-713).
- Wei, C. F., Chiang, C. T., Kou, T. C., & Lee, B. C. (2017). Toward sustainable livelihoods: investigating the drivers of purchase behavior for green products. *Business strategy and the environment*, 26(5), 626-639.
- WWF. (2018, October 24). Acceptance of environmentally friendly products in Indonesia. WWF-SCP. Retrieved March 14, 2019, from <https://www.wwf-scp.org/acceptance-environmentally-friendly-products-indonesia/>

APPENDIX

High aesthetic quality advertisement with no environmental claim



Low aesthetic quality advertisement with no environmental claim



High aesthetic quality advertisement with substantive environmental claim



Low aesthetic quality advertisement with substantive environmental claim



High aesthetic quality advertisement with associative environmental claim

Low aesthetic quality advertisement with associative environmental claim

