

Design Matters: Examining the Role of Aesthetics for a Smoke-Free Philippines

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Abstract: This study explores the role of visual design and aesthetics in the effectiveness of communicating Executive Order No. 26: Providing for the Establishment of Smoke-free Environments in Public and Enclosed Places. In a recent study, the World Health Organization (WHO) has noted that cigarettes, from cultivation to consumption, have been proven to have detrimental effects on the environment. Given that the Executive Order No. 26 was established in support of the Philippine Clean Air Act of 1999, it is crucial that people are aware of and are motivated to comply with its requirements, specifically on observing the nationwide smoking ban in enclosed public places including public vehicles and other means of transport and other enclosed areas. The Department of Health (DOH) released a public advisory in the form of a digital infographic poster which aims to inform the public on the effectivity of the nationwide smoking ban and its provisions. Given how essential it is to properly convey the information of the executive order in order for the public to comply, which will potentially lead to a decrease of the negative effects of cigarette smoke on the environment, it is important to assess the effectiveness and credibility of the poster based on aesthetics and visual design. A visual analysis was conducted to determine the effectiveness of the DOH advisory poster in the context of the aesthetics theory for information design. The theory focuses on aesthetic proportions, beauty, color theories, and harmony in developing information materials and uses a combination of visual elements to communicate information in a creative manner, as is the case of the DOH advisory poster. Employees and students from De La Salle University and De La Salle-College of Saint Benilde were surveyed in order to gauge their awareness about the Executive Order and initial impressions about the DOH advisory poster utilizing the same theoretical factors. Results show that the poster's design contributes to a perceived lack of credibility, motivation to comply, and awareness about the specifications of the smoking ban. This study offers recommendations to create a more effective communication tool utilizing the aesthetics theory for information design, not only for Executive Order No. 26, but also for other environmental and health awareness initiatives.

Key Words: graphic design; environmental awareness; clean air act; smoking ban; aesthetics theory

1. INTRODUCTION

1.1 Executive Order No. 26 & The Philippine Smoking Epidemic

According to the 2015 Global Adult Tobacco Survey (GATS), the most recent study on tobacco habits in the country, 22.5% of the population of the Philippines smokes cigarettes (World Health Organization, 2016). Though the numbers have decreased as compared to previous years, it is still an epidemic due to its harmful effects. Smoking has become a nationwide issue in the Philippines, affecting not just citizens but also the environment



due to air pollution; as such, numerous initiatives through the years have been implemented to curb the problem.

In a recent study, the World Health Organization (WHO) (2017) reports that tobacco remains a constant threat to the Earth's environmental resources, with effects expanding beyond smoke emitted from consuming tobacco products. The industry's long term harmful effects include deforestation, climate change, and waste products—all of which are not given considerable attention and studies (World Health Organization, 2017). Figure 1 further illustrates how the life cycle of a tobacco, from cultivation to post-consumption, negatively impacts the environment:

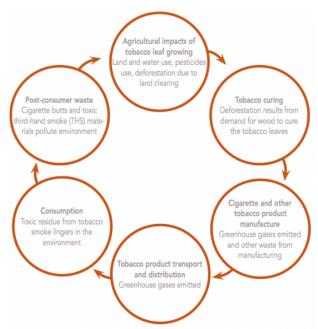


Figure 1: Life cycle of tobacco – from cultivation to consumer waste (World Health Organization, 2017)

The World Health Organization (2017) further states that in order to mitigate the tobacco industry's harmful consequences to the environment, countries across the world should employ strategies to make the tobacco industry accountable for its responsibilities. It enumerates tactics such as stronger surveillance, better data reporting, and greater legal and political support (World Health Organization, 2017).

In the Philippines, the Philippine Clean Air Act of 1999 (Republic Act No. 8479) was written to

improve the habitat and ecology of the country by focusing on the right of people to have clean air (Republic of the Philippines, 1999). Not only did it address air pollution from vehicles on the road as well as other air pollutant sources such as factories, but it also specified regulations on tobacco or cigarette smoking in public; specifically, smoking in enclosed public spaces or buildings.

The Tobacco Regulation Act of 2003 (Republic Act No. 9211), on the other hand, shows a more extensive law that was written specifically to regulate smoking of tobaccos or cigarettes (Republic of the Philippines, 2003). It not only emphasized the need to regulate public smoking, but it focused on banning the promotion or advertisement of cigarette paraphernalia in different mediums.

In 2017, building upon the aforementioned Republic Acts 8479 and 9211, the government passed Executive Order No. 26: Providing for the Establishment of Smoke-free Environments in Public and Enclosed Places, which focuses on the establishment of smoke-free environments in enclosed public places including public vehicles and other means of transport and other enclosed areas (Republic of the Philippines, 2017). Not only does this executive order focus on public smoking, it also emphasizes the need to devalue the concept of smoking especially to minors. As is elaborated in the executive order, designated smoking areas are to be assigned with associated "designated smoking area" signage to be visible in said areas. Hefty fines and penalties are to be given to said violators, including individuals and business establishments.

1.2 Communicating Executive Order No. 26

In order to disseminate the recently penned executive order to the public, the Department of Health (DOH), through their social media accounts, released a digital advisory infographic poster (See Figure 2). The poster is being utilized by local government units and government offices to inform the public about the smoking ban through visual design elements. Dunlap and Lowenthal (2016) note that messages delivered in a visual manner have more potential to be recognized and recalled as visuals are powerful learning tools for efficient, precise, and clear communication. They further note that infographics are an effective approach to communicate new and complex information, where visual elements are primarily used as opposed to text to deliver content (Dunlap and Lowenthal,



2016).

With the researcher's background and expertise in graphic design, much could be said and analyzed about the effectivity of the poster from an information design point-of-view, as knowledge on information design could be crucial in rendering effective visual communication collateral. The poster, as a communication tool for a nation-wide executive order, also enables the study of the application of visual design elements in relation to perceived effectiveness on awareness and credibility for the target audience's understanding and compliance.

Graphic design as a visual communication tool is the embodiment of both form and function (Rand, 2014). These two concepts work hand-in-hand in the sense that not only should graphic design—in this case, information design, output look good or aesthetically-sound, but it should work as well to address certain design problems. Crowe, as cited in Kelly (2015), also notes that the public responds to the aesthetic qualities of a visual form of communication in the process of interpreting its contents.

As such, the purpose of this study is to find out if effective information design, specifically from an aesthetics point of view, plays a part in the proper and effective communication of Executive Order No. 26. The effectivity of the existing online poster by the DOH will be analyzed in two ways: 1) a visual audit that will be conducted by the researcher using the Aesthetics Theory for Information Design as a framework, and 2) a survey on perceptions of smokers regarding the aforementioned poster.

Given how crucial it is to properly convey the information of the executive order in order for the public to comply, which will potentially lead to a decrease of the negative effects of cigarette smoke on the environment, it is important to assess the effectiveness and credibility of the poster based on aesthetics and visual design.

The study will focus on the role of aesthetics in information design, and if it links to a communication material's effectivity. Based on the results of the study, the researcher will recommend design options as needed.



Figure 2: Department of Health Advisory on Nationwide Smoking Ban (DOH, 2017)

2. MAIN CLAIMS

2.1 Information design

Information Design is a multi-disciplinary field which focuses on communicating messages or information to an intended audience (Wildbur & Burke, 1999). It uses a combination of different visual elements (text, images, design elements, color, etc.) to communicate information in a creative manner; to be specific, to tell a story (Emerson, 2008). In the case of the DOH poster, this paper will focus on information design as a branch of graphic design as it deals with visual communication.

Messages, in this case, visual messages, should be clear, concise, and accurate in order to be correctly interpreted by the intended audience (Pettersson, 2002). It is elaborated that through the use of visual elements to communicate information, not only should it be of utmost quality but should also go well together and complement the message



that they are trying to communicate. High quality aesthetic treatments also increase the communication tool's level of credibility (Robins & Holmes, 2007).

These same elements should be legible in different mediums in order for it to be understood, obviously, to avoid misinterpretation (Pettersson, 2010). In the context of environmental and health communication, specifically in this case, communicating Executive Order information design could play a part by making information—in the order it is presented, visible; thus, educating the public on the subject matter, or persuading them on the new proper smoking etiquette in the country (e.g. where to smoke, for starters) (Emerson, 2008). The researcher now asks, is the poster effective as an information design communication material?

2.2 Aesthetics Theory for Information Design

In relation to information design, aesthetic principles could be utilized as a means to gauge a communication's effectivity as it is known that well-designed collateral create more efficient visual messages. Specifically, the Aesthetics Theory for Information Design is one such framework (Pettersson, 2014). The Aesthetics Theory is composed of aesthetic principles in art and design such as: 1) aesthetic proportion, 2) beauty, 3) color theories, and 4) harmony—all correlating to create effective information design collateral.

To elaborate, Pettersson (2014) states that aesthetic designs are easier to use, in this case, to understand, as opposed to less-aesthetic ones. When design is right, people do not notice errors—sometimes not even noticing how good it is; but when people see something wrong, they will have something to say about it (Knaflic, 2015).

Aesthetics Proportions. This refers to a highly subjective matter of pleasing relationships between elements in graphic design collateral as a whole (Pettersson, 2014). The Golden Section, known as the Divine Proportion, is one such example of partitioning and proportioning a design collateral in art and design in general. It has been famously used by Leonardo da Vinci and other Renaissance artists; however, it is not always the case when designing information design. The term scale, or the relationships of the sizes of the different visual elements in design, also relates to the collateral being considered as proportional

(Farkas and Farkas, 2002). The elements should "feel right" in the way it is sized compared to the others—not too large, not too small.

Typographical hierarchy, the way text is organized for emphasis, is crucial to the way an audience reads text as it involves relationships between different bodies of text (Lupton. 2010). Some text are emphasized for different reasons, either via size, weight or color, and the relationships of various text bodies in the collateral is crucial in the sense that they are proportional and go well together. The easier it is to differentiate text makes it easier and faster for the audience to read the design collateral.

Beauty. Beautiful graphic design, or as is formally known as aesthetically-pleasing design, is crucial for information design collateral to be noticed—as it grabs the attention of its audience (Pettersson, 2014). It is elaborated by Pettersson (2014) that if it is then noticed, it will be used in a better way as opposed to something that is not well-thought of and designed. As mentioned earlier in the introduction, not only should design be useful, but it should be beautiful as well to be more effective.

Though the concept of beauty is of a subjective matter, objective factors such as appropriation contributes to a design's overall beauty and effectiveness. For starters, materials used in the design or visual elements according to Pettersson (2014) should be appropriate for different situations—both encompassing beauty and function. Typography-wise, aside from it readability, picking the right typeface or font to match the project is crucial as fonts themselves have their own characteristics and histories (Lupton, 2013).

In information visualization, numerous types of data visualization tools (e.g. charts, tables, graphics, etc.) could be used, but some are more appropriate to other situations as opposed to others (Knaflic, 2015). Knaflic goes on to elaborate that not all data should be present when visualizing information, but just the necessary ones in order to say what needs to be said—in her words, to tell a story with data.

In iconography (design of icons) on the other hand, symbols play a big part in communicating concepts, usually falling under two categories that are shown to be effective: 1) iconic or 2) narrative type of symbols (Fontaine, Fernández, & Middleton, 2009). Iconic symbols



depict simple renditions of procedures, whilst narrative symbols are a little more complex, depicting visual story-telling using multiple elements. For both to be effective, not only should they look professionally-done, but context is of utmost importance, as well as it being clear to the audience to avoid misinterpretation.

Color Theories. Color enhances information design due to its communication capabilities such as enhancing messages visually as well as getting the attention of its audience (Pettersson, 2014). They are a form of expression with attached meanings that evoke emotions, thus picking the right color for a certain project and purpose is essential to the overall project (Wheeler, 2013). Contrast and clarity is of utmost importance when combining elements of different colors for readability, and using a limited number or only what is necessary is crucial to information design projects (Emerson, 2008).

Though not always the case, depending on context and intention, having a lighter background such as white with contrasting elements is said to be preferred as the data is more focused (Knaflic, 2015). In the contrasting design option (dark background), people tend to focus more on the colored background as opposed to the data itself. Again, this is not a rule; but, is often-times preferred.

Harmony. This pertains to the effect of the consistent and orderly combination of design elements—in human terms, they go well together (Pettersson, 2014). These combinations are intentional; thus, picking the different parts to go together is crucial. Pettersson (2010) adds that having a balanced layout, as well consistent use of design elements (typography, color, styles, logos, etc.) has been found to increase the way people learn about certain concepts. Failing to make design collateral harmonious causes it to be distracting—the exact opposite of what information design aims to do (Pettersson, 2010).

Consistency of visual coherence of design elements improves a design's reputation especially if an organization is behind it; thus, the reputation of the organization is affected as well (Annette, van den Bosch, de Jong, & Elving, 2005). Logos and various design elements of an organization should be present. Often times, organizations draft brand or visual identity manuals to ensure that this consistency of messaging occurs.

Information design layout should also be

balanced to have harmony; thus, the use of grid systems could be utilized (Samara, 2002). Samara (2002) further elaborates by saying that grid structures are unique to each project, but it creates order in the way things are laid out given how it allocates areas where to put elements instead of simply randomly placing them. Grids are not visual rules that are set in stone; but are merely guides to ensure elements of a design collateral go together amidst the sometimes-abundant amount of information (Lupton, 2013). Grids in a way deal with proportion, thus correlating the relationship of aesthetic principles of Harmony and Aesthetic Proportions.

3. METHODOLOGY

Data gathering on the poster's effectivity was based on two perspectives; 1) the researcher's own (visual audit), and 2) the audience of the poster. Date gathered from these two perspectives are to be synthesized in order to determine if the poster is an effective visual communication tool or not.

3.1 Visual Audit

A visual audit, a thorough analysis of the aesthetics and design in general of the existing poster by the Department of Health, was conducted. The overall visuals were analyzed and critiqued based on the aesthetics theory of information design—1) its aesthetic proportions, 2) overall beauty and aesthetics, 3) use of color, and 4) its overall harmony. The results of the audit, together with the other method of gathering data via survey, were used as basis to determine if improvements are needed or not.

3.2 Survey on Smokers

In order to test the effectiveness of the DOH Advisory communication material, the researcher conducted a survey on smokers around Taft avenue, particularly in the areas of De La Salle University (DLSU) and De La Salle-College of Saint Benilde (DLS-CSB). Smokers were chosen for the survey due to the fact that although this is a general public announcement, smokers are the intended public of the smoking ban. To determine respondents for the survey, snowball sampling was conducted in order to get responses from existing smokers.

A purposive sampling was done to determine whether these active smokers are aware



of the advisory and to get their perception about the material. Snowball sampling was done by disseminating an online survey instrument through email and Facebook, and asking acquaintances to answer and forward the survey to their smoker friends from the said locations.

4. FINDINGS & DISCUSSION

4.1 Results of Visual Audit

Aesthetic Proportions. There is no definite hierarchy—both visually and typographically. It is not immediately clear at a first glance on what the important parts are. For example, given that the texts "DOH Advisory" and "Nationwide Smoking Ban" are of similar size, it is not clear on what should be the focal point of the poster. In relation to color usage, which will be elaborated later on, the yellow rectangle on the top of poster containing "Nationwide Smoking Ban" text and its description, as well as at the bottom ("Report violations") are grabbing for attention which could confuse the reader as well.

Some text, on the other hand, are too small to read given that this was disseminated online. The audience of this poster will not only view this in their desktop or laptop screens, but they will view it in their mobile devices such as smart phones and tablets. Given this, the image of the poster will be smaller thus having the need to zoom-in manually instead of it being easily readable at first glance.

Overall, the poster utilizes too much information that it looks cluttered. Elements of design are all over the place that the audience could be confused on how the flow of reading should actually be. Making it easy to read should be of utmost importance of any design collateral, failing to do so could make the experience of reading it such a chore.

Beauty. In relation to the previous section of it being too cluttered and hard to read due to too much design elements, it leads to the overall aesthetic diminishing in quality. This correlation works hand in hand in the sense that if proportions are improved, the overall aesthetic of the poster could improve as well. For example, the use of too much icons could have contributed to this. Instead of just selecting some generalized icons, a plethora of specific examples were included to make it really hard to absorb as information at first glance. Things are too cramped that there is a lack of white

space which could have made the overall design easier to digest.

Pertaining to the quality of the icons, it looks as if general icons were used. By general it means that it is not appropriate because the figures could have been representations of actual places or vehicles that could be found in the Philippines. The train figure, for example, resembles a bullet train not found in the Philippines; as the country utilizes the MRT and LRT modes of transportation. Some of the icons such as "Mall" and "Restaurants" are also too ambiguous to decipher as they could be interpreted as different locations altogether.

In terms of style, the poster does not follow a cohesive illustration style as it varies in color palette, perspective, and overall style—some icons even have color backgrounds (see Stairwell). It is too complicated in detail for viewing in smaller screens; for example, the health cross that makes a hospital, a "hospital, is hardly visible.

The lack of visual signifiers such as an "X" sign or a cross sign over these icons are lacking as well to signify that these are indeed places where people should not smoke, as it could be assumed that these places are for smoking given how some people could interpret this.

In terms of typefaces, aside from textual hierarchy issues mentioned earlier, the poster uses too much fonts. Some typefaces also utilized strokes (or outlines) which diminished its quality (see the white outline of "Nationwide Smoking Ban", for example). Typeface choice could have been better-curated as the poster general defaults such as Arial instead of actually appropriating the choice altogether. Besides, the varied font choices look too much alike (no contrast) that a single font family could have been used instead.

Color Theories. Although color contrast was apparent, the use of color could have been improved. Icons for example are enclosed in yellow backgrounds— the left side utilizes a lighter shade, whilst the right uses a darker one. In design, this variation of shade is usually to connote variation in grouping; but in this case, it is not apparent on what the purpose was. The icons themselves on the other hand utilized too much colors; thus, making it, as mentioned in the previous section, being too complicated and detailed—which led to it not being as visible especially at a smaller size. The "stairwell", in fact, has its own yellow-shaded background.

Overall, though contrast is present with



the background being prominently light with darker elements, the color choice seems random and had no intended purpose. Just like the icons and the text, colors were all over the place. Even the color of text has too much variation on the choice of colors instead of sticking to a few ones.

Harmony. As mentioned in the previous three factors, the overall design is inconsistent—from type choice, to overall style of icons, to the way color was used. Things are too cramped as composition and a grid system are not present in the design. There are no margins as well as guides utilized to create an orderly grid to divide the document. Colors do not go well together as color harmonies were not utilized. Even the way text is aligned is inconsistent—some are centered whilst some are left-aligned. Importantly, other parts seem to be visually unbalanced. As a result, it is hard to read. There is no clear emphasis as the visual entry point to read the poster is unclear.

The presence of the DOH logo, as well as a poster template, such as a masthead for information and logo placement, is not that evident. The logo of DOH is at such a miniscule scale in between text at the bottom that it is barely visible. When the researcher compared the poster to other materials by the DOH, a template consisting of the logo and contact information was present; but with this specific collateral, it was not. Overall, the lack of these elements lessens the legitimacy of the material as an official DOH advisory.

4.2Results of Survey

Forty-seven respondents provided their answers within the given time frame. Out of the forty-seven, forty-three or 91% are aged 18-29 years old; three or 6% belong to the 30-44 years old age group; and, one respondent belongs to the 45-59 years old age group.

17% of respondents are employees, while the remaining 83% are students. Majority of the respondents, or 74%, are either studying or working at DLSU; while the remaining 26% are from DLS-CSB.

When asked about the places where they normally smoke outside their school or office, the following answers were noted and summarized: Agno street, Castro street, sidewalk of Green Archers building, Green Court parking, bars outside school, condominium, house, street or bakery outside School of Design and Arts (SDA),

outside University Mall, and smoking area in parking lot beside CSB.

All respondents answered that they are aware of Executive Order No. 26: Providing for the Establishment of Smoke-free Environments in Public and Enclosed Spaces. Majority or 60% found out about the executive order on social media, with word of mouth and television coming in second and third, respectively, as sources of awareness. Four respondents were not aware that the executive order requires a provision for Designated Smoking Areas.

Only 70% of the respondents answered that they are aware of the existence of Designated Smoking Areas outside their school or office; when asked to identify these areas, the following locations were provided: parking area behind University Mall, Agno street, Castro street, parking area beside CSB, hidden but open places, and Starbucks. However, when asked if these areas have a "Designated Smoking Area" sign, only 66% answered yes.

Only nine or 19% of the respondents have seen the DOH's Smoking Ban Advisory sign. All forty-seven respondents were shown a copy of the DOH Advisory sign and were asked the following questions regarding the visual design and their initial impressions about the DOH advisory sign, with the responses summarized below:

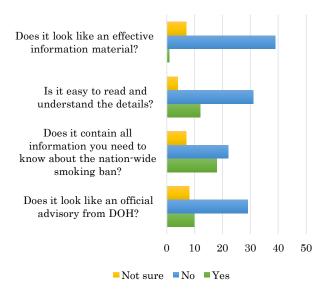


Figure 3: Initial Impressions on Visual Design of DOH Advisory on Smoking Ban



Given the data, it shows that majority of the respondents perceive that the poster is not an official advisory from DOH and feel that it is not an effective and comprehensive information material based on its graphic or visual design.

To elaborate on their answers, respondents were also then requested to provide an open-ended response on their initial impression about the said advisory sign, with the answers summarized and categorized into themes below:

Table 1: Summary of initial impressions about the DOH poster

	Comments					
Positive	 Fairly good and informative 					
	•Nice, simple, and clean but can use					
	more important content					
	•Easy to understand					
Neutral	 Looks like a typical government poster which can definitely be improved A good effort in trying to 					
	communicate smoking ban details but initially uninteresting • Effective in a way, but not sure if it					
	is legitimate •Looks like a school project addressed to the senate					
	•Illustrations are good but some colors of the typography like the DOH advisory part seem off					
Negative	•It's all over the place in terms of content and layout, it will definitely not be effective					
	 Layout is unappealing It could use improvements on use of icons, color, and logo to make it look official Font size should be more 					
	consistent. Text is too small and prone to confusion. •A very dull and boring poster,					
	prompting you to ignore it It is more distracting than helpful Too much information, too					
	cluttered, too many words and elements					
	•Does not look legitimate/official					
	•Looks amateur-made					
	•No emphasis on the important messages					

•DOH	logo	is	too	small	and	couldn't
be ide	entifi	ed				

•It's an eyesore and can be greatly improved, too many elements and unnecessary details

The themes show that majority of the respondents have the impression that the advisory is badly designed, confusing, and ineffective based on the design elements used. Overall, they found it too cluttered and found a lot of information to be excessive for such a medium. Elements were inconsistent thus leading to a negative view on the material. Some found it hard to read given the size of elements, which were inconsistent and did not prioritize what they felt were important details.

As the researcher also pointed out, respondents found the lack of visibility of the logo leads to the material being less credible. Its credibility links back to the importance of having a prominent logo as a mark to legitimize the poster as an official Department of Health collateral.

On a positive note, respondents felt it was informative, simple, and included important content. Even though most found it hard to understand due to its design, some nevertheless found it easy to understand given the available information presented.

Since this study seeks to determine if aesthetics will play a part in the effectiveness of communication materials in raising awareness and understanding, the respondents were asked to select design elements which they feel would contribute towards these goals. The visual design factors were listed and categorized based on the aesthetics and information design framework of this study (Aesthetic proportions, beauty, color theories, and harmony). Listed below are how they fit into the framework:

- Use of logo (Harmony)
- Consistency of design elements (Color theories, Harmony)
- Icons (Beauty, Harmony)
- Details of labels (Beauty)
- Text (Aesthetic proportions, Beauty)
- Overall aesthetic (All factors)
- Layout (Aesthetic proportion)



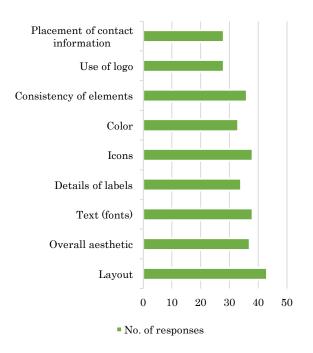


Figure 4: Design preferences for information materials

Based on the data, majority or 91% say that the overall layout or how things go together are important in designing information collateral. This would connect to how cluttered or not the poster is, as well as how things are easy to read. The use of fonts and icons are next in the order of preferences with 38 respondents or 81% citing the importance of these elements. This results to the importance of it being readable, as well as icons and being appropriate understandable communicate what is needed. Overall, not one category went below 50% of the respondents, as one way or the other, they voiced their design preferences which leads to design making an impact of the communication material. This shows they have an idea what makes a communication material easy to understand and appreciate.

5. CONCLUSION

Based on data gathered from the researcher's visual audit synthesized with survey respondents' answers, it could be concluded that the existing poster disseminated by the Department of Health was deemed to be mostly an ineffective communication material from an

aesthetic point-of-view. The researcher recommends that a redesign of the material, especially something to keep in mind for other future initiatives, could be beneficial to improve the communication aspect of relaying information of the Executive Order No. 26. For the icons specifically, general representations can be utilized instead of overly specific examples to avoid a cluttered design.

Even though it is effective in a way given that it contains a lot of information, it could be further re-designed by prioritizing or highlighting the most crucial information. In designing an effective communication material, place only what is important. A grid system could be used to divide the page into sections where to place elements together with the use of textual hierarchy to emphasize important bodies of text.

Icons should be understandable and should be simple. If there are visual cues or affordances such as textual hierarchy on how to actually read the poster properly, it will be a better overall experience to the reader and, as gathered data has proven, will avoid miscommunication.

For example, before reading the content, a few respondents—due to a lack of design cues (like "x"s) beside the icons, thought that those were the allowable places to smoke. Clearer visual design elements lead to less miscommunication because everything is meticulously designed and curated for the given project If a poster is easier to understand and experience all together, then design has done its job. After all that has been done, it should be ensured that elements are consistent in style and go well together.

Given how crucial it is for the public to be made aware of the provisions of the executive order, the communication tool will benefit from the application of the principles of aesthetic theory on information design in order to lend to its effectiveness and credibility. High level aesthetics will contribute towards the proper education and awareness of the public on the smoking ban, which in turn will help alleviate the negative impacts of the tobacco industry on the environment. Specifically, an effectively designed poster may aid towards proper understanding of and compliance with the smoking ban—which has the potential to decrease the impact of cigarette consumption, where toxic residue from tobacco smoke lingers in the environment; and, post-consumer waste, where cigarette butts and toxic third hand smoke



materials pollute the environment (World Health Organization, 2017).

In communicating information with regards to health and/or the environment, clarity of information is of utmost importance. The audience should get it at first glance, and it should make an impact to them for it to be remembered. To reiterate, good design also contributes towards the credibility of a communication material, and will encourage or motivate people to read and believe it—a factor that is crucial for something as important as the nationwide smoking ban. As seen in this research, design matters—it could make such a difference towards a smoke-free, pollution-free Philippines.

6. REFERENCES

- Annette L.M. van den, B., Menno D.T. de, J., & Wim J.L., E. (2005). How corporate visual identity supports reputation. Corporate Communications: An International Journal, 10(2), 108.
- Department of Health (2017). DOH advisory: Nationwide smoking ban. Retrieved from http://www.doh.gov.ph/node/10609
- Dunlap, J. C., & Lowenthal, P. R. (2016). Getting graphic about infographics: design lessons learned from popular infographics. *Journal Of Visual Literacy*, 35(1), 42-59. doi:10.1080/1051144X.2016.1205832
- Emerson, J. (2008). Information for advocacy: An introduction to information design. Open Society Institute Information Program.
- Farkas, D., & Farkas, J. B. (2002). *Principles of web design*. New York: Longman.
- Kelly, M. (2015). Visual Communication Design as a form of public pedagogy. *Australian Journal Of Adult Learning*, (3), 390.
- Knaflic, C. N. (2015). Storytelling with data: a data visualization guide for business professionals. Hoboken: Wiley.
- Lupton, E. (2010). Thinking with type: A critical guide for designers, writers, editors, & students. New York: Princeton Architectural Press.

- Pettersson, R. (2002). *Information design: An introduction*. Amsterdam: John Benjamins Publishing Co.
- Pettersson, R. (2010). Information design-principles and guidelines. Journal Of Visual Literacy, (2), 167.
- Pettersson, R. (2014). *Information design theories*. Journal Of Visual Literacy, 33(1), 1-94.
- Rand, P. (2014). *Thoughts on design*. San Francisco: Chronicle Books.
- Republic of the Philippines (1999). Republic act no. 8749: Philippine clean air act of 1999.
 Retrieved from http://emb.gov.ph/wp-content/uploads/2015/09/RA-8749.pdf
- Republic of the Philippines (2003). Republic act no. 9211: Tobacco regulation act of 2003. Retrieved from http://www.fda.gov.ph/attachments/article/29041/RA9211_Tobacco%20Regulation% 20Act%20of%202003.pdf
- Republic of the Philippines (2017). Executive order no. 26: Providing for the establishment of smoke-free environments in public and enclosed places. Retrieved from http://www.doh.gov.ph/sites/default/files/health_advisory/mc2017-0018.pdf
- Robins, D., & Holmes, J. (2008). Aesthetics and credibility in web site design. *Information Processing And Management*, 44(Evaluation of Interactive Information Retrieval Systems), 386-399. doi:10.1016/j.ipm.2007.02.003
- Samara, T. (2002). Making and breaking the grid: a graphic design layout workshop. Beverly, MA: Rockport.
- Wheeler, A. (2013). Designing brand identity: a complete guide to creating, building, and maintaining strong brands. Hoboken, NJ: John Wiley.
- Wildbur, P., & Burke, M. (1999). Information graphics: innovative solutions in contemporary design. London: Thames and Hudson, 1999.

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World Health Organization. (2016). Global Adult Tobacco Survey: Philippines Country Report, 2015. Retrieved from http://www.who.int/tobacco/surveillance/survey/gats/phl_country_report.pdf?ua=1

World Health Organization. (2017). Tobacco and its environmental impact: an overview. Retrieved from: http://apps.who.int/iris/bitstream/10665/255574/1/9789241512497-eng.pdf