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Campaign Design About Oxybenzone and Octinoxate-Based Sunblock Hazards for Survival of Coral Reefs in Bali

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Abstract: The condition of coral reefs in several locations in Indonesia is indeed in critical condition and the impact of damage continues to grow every year. Sunscreen, which is one of the mandatory requirements used for skin protection to prevent sunburn, has dangerous substances oxybenzone and octinoxate, causing unconscious damage. Substances in sunscreens make coral reefs lose their adaptability to climate change which also damages coral reefs and prevents the growth of coral reefs. This topic is important because coral reefs have many ecological, social and economic influences and benefits that are very useful for life. Therefore, it is necessary to design a campaign that is made with the aim that this topic can increase awareness of campaign targets and readers with information that can be accounted for so that the risks of damage to coral reefs can be reduced. This design is carried out through the process of collecting data, formulating strategies, thinking ideas, designing visuals, and applying them to campaigns.

Keywords: Coral Reef; Sunblock; Campaign; Sunscreen; Bali; Damage

1. Introduction

Indonesia as a tropical country, has a very good climate for coral reef growth. Indonesia is the place to spread the highest types of coral reefs by contributing to the total area of which reaches 73,000km2 or 1/8 part of the world's coral reefs. As one part of The Coral Triangle, Indonesia has around 569 species of coral reefs and also has 5 types of endemic coral reefs. However, many coral reefs in Indonesia have been damaged. According to data from the Indonesian Institute of Sciences, only 6.56% are left which are in very good condition with a percentage of 75-100%, 22.96% in good condition with a percentage of 51-75%, in sufficient

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condition as many as 34.4% with a percentage of 25%-50% and bad conditions at 36.18%. Every year the condition of coral reefs in Indonesia continues to decline.

70% of coral reefs in Indonesia in 2015 were in critical condition and the numbers continue to grow each year. This condition is certainly dangerous because coral reefs have many benefits for life. In and around coral reefs live various kinds of marine life, which are generally avetebrate animals (algae, turtles, small fish, sea snakes, sea stars) which means that coral reefs are habitat and food source for millions of species in the sea, so making coral reefs as the largest marine ecosystem. Secondly, coral reefs as a very high economic potential in tourism, food sources and medicines if they are in good condition. Then the next benefit is that coral reefs have an important role in protecting the coast so as to protect the surrounding ecosystem. Coral reefs also function to reduce global warming such as trees, employment sources and natural laboratory resources which are very important in supporting the education and research of various sciences. So that if a coral reef is lost from an ecosystem or there is a continuing decline in function, this will have serious consequences for the entire marine ecosystem, and which depend directly or indirectly on the coral reef.

Based on data collection that has been done by the author with questionnaires, interviews, observations that have been done before at the research section and data from scientific journals, the authors found that sunscreens that contain oxybenzone and octinoxate have a dangerous and significant impact on coral reefs. Recent research published by the Journal of the Archives of Environmental Contamination and Toxicology shows that sunscreens contribute most of the damage to coral reefs so far. A total of 6-14 thousand tons of sunscreen used by humans have been recorded killing marine ecosystems and the worst affected are coral reefs. Two types of very dangerous substances that are commonly found in sunscreen products are oxybenzone and octinoxate which slow down growth, increase stress and poison the life of coral reefs. Therefore, it raises important aspect on thinking environmental communication (Pezzullo & Cox, 2017) and risk communication presumed to work better as a two-way design process (Selamet, 2019).

Basically, sunscreen is a skin care product that helps protect the skin from the dangers of UV rays that cause various skin problems when exposed directly. Some of the consequences caused by exposure to UV rays are premature aging, black spots, the risk of skin cancer to sunburn. Based on the data obtained by the author, to avoid the various consequences above, the use of sunscreen becomes a necessity when under the sun by most people and the majority of people do not know the negative impact of using sunscreen for the sea.

Therefore, based on the data mentioned above, the authors feel this is very important to do a campaign about the dangers of sunblock based on oxybenzone and octinoxate that are detrimental to the survival of coral reefs and the lack of public understanding of coral reefs. Through this campaign, it is expected to be able to increase public awareness about the existence and importance of coral reefs for life and also so that people can wisely use sunscreen products that are friendly to coral reefs and also the sea.

2. Literature Reviews

2.1 Social Campaign

Pfau and Parrot (2015), define the campaign as a gradual and ongoing process that is done consciously to influence the intended target with specific goals and time periods. According to Simons, a successful campaign is very much determined in the design process, has a basis that can be accounted for and its technical application. The important goal to be achieved from the campaign activities according to Ostergaard is awareness that talks about raising understanding or changing one's thinking power on the issues raised. Then, attitude which means the emergence of a sense of caring about an issue discussed. Action talks about the actions that arise after going through a phase of awareness and attitude.

2.2 Campaign Strategy

According to Sugiyama and Andree (2011), there is a change in behavior when there is a boundary between brands that offer services and their target customers. This limit is called "Information barrier" which means individuals in society are currently sorting out what information they will notice or make them interested. So, there is a new approach to jumping over the "information barrier" by building interest from the start and keeping it that way. According to Kotler, to get interest talking about Increase Attraction through the value of strategies and attractive propositions with good communication. Then the second most important thing is optimizing curiosity. Curiosity will lead the target to find deeper information with personal will so that what is touched will be deeper because through what we want to know rather than what we know or already know.

According to Sugiyama and Andree (2011), the change in behavior towards the information created a new consumer model called AISAS which stands for Attention, Interest, Search, Action and Share. How AISAS works is basically a target who has an interest in something will look for information that will appear differently and when one of the information succeeded in making the target consumer approve the idea or information offered based on the thought power of each individual.

2.3 Media

According to Dietrich and Livingston (2012), there are repeated mistakes that are often made in the application of the media that is using the same delivery method on each platform even though the media has a type classification because it has different functions and objectives. Combining several types increases message delivery more effectively by absorbing information with many approaches.

According to Arora (2018), Above the Line or ATL is a sector that has a broad scope of time and is not specific. Examples are television, radio and print advertisements such as magazines and newspapers. Then BTL or Below the Line is a sector that has a clearer and more specific mass scope. Marketing activities carried out are only based on the intended target audience which refers to age, psychographic, behavioural, geographical and others. Examples are outdoor advertising and sponsorship. Finally, Through the Line is a merger

between ATL and BTL marketing. Aim to get a view with a variety of approaches. An example is an offline booth with a website

2.4 Study Area-Bali

Indonesia's location is at the epicentre of the distribution of the world's coral reefs in the region of the coral triangle and tropical climates causing Indonesia to store the highest marine biodiversity in the world. Indonesia has the highest number of coral reefs of 569 species with 83 genera. According to Wahyu, in Raja Ampat, eastern Indonesia itself has 75% of all types of coral reefs in the world and 5 of them are endemic coral reefs. Based on data from the Central Statistics Agency, the choice of destination for the number of tourist arrivals with the highest ranking from all of Indonesia in 2017-2020 is Bali. The large number of tourists who come to Bali certainly has an impact on this problem. The reason is because Bali is famous for its beautiful sea which attracts tourists from all over the world.

2.5 Study Objective

By following of Landa (2015)'s design strategy, this current design study objective is to develop an effective campaign design for sunscreen hazards in Bali.

3. Design Method

In designing this campaign, the writer uses Graphic Design Solutions book theory according to Landa, there are 5 phases in the graphic design process, which are orientation or data collection, then analysis and strategy, the third is a visual concept, then the development of the design and finally the visual implementation.

Table 1 Five Phase in The Graphic Design Process.

Phase 1	Orientation/Overview
Phase 2	Analysis and Strategy
Phase 3	Ideas
Phase 4	Design
Phase 5	Implementation

- Orientation/Overview
  In the first phase, orientation is about how the writer recognizes the phenomena, problems and solutions discussed in the design. Collecting data either quantitative or qualitative relating to sources and respondents in accordance with the topic.
- Analysis and Strategy
  After the first phase, conduct data analysis in order to obtain the right strategy to overcome the problem according to the specified target. The designer must know the right data to support the continuation of the design. From the data obtained, the designer tries to find solutions and the right media to answer the problem orientation.
- Ideas

Build efficient graphic design solutions according to visual concepts according to data obtained in the analysis and strategy process. Concepts are formed through a brainstorming process which later becomes the basis for design design.

- Design
  Make sketches for visual development and concepts which then proceed to the digitization process. In this phase visual exploration is carried out to find the most appropriate visual expression.
- Implementation Design
  The last phase of the graphic design process, the application of the design development that has been done has become the desired design output.

3.1 Research

According to Creswell (2009), mixed-method is an advantage to get data with insight so that problems in research will be clearer to understand. From this method, the writer will get 2 types of data, qualitative and quantitative. Data collection was conducted qualitatively by interview and direct observation. Whereas quantitative data collection was carried out by conducting questionnaires distributed with the aim of knowing the habits and knowledge of the target respondents about sunscreen and Indonesian coral reefs.

Observations were made on February 21-22, 2020 in Bali, Indonesia. This observation provides many new facts for the writer about the actual conditions in the field. Observations were made on several beaches (Kuta, Tanjung Benoa, Nusa Dua), shops that provided sunscreen (Circle K, Guardian, Kimia Farma, Mini Mart) and underwater conditions in Nusa Dua waters by snorkeling. The conclusion from the results of the observation that has been done is, the majority of tourists use sunscreen on the beach. 6 of the 8 sunscreen brands observed in several places in Bali contain 2 dangerous substances, oxybenzone and octinoxate. The condition of coral reefs in Nusa Dua waters is also not in a good condition.

4. Design Process

At this stage the authors brainstorm and find keywords, big ideas, tone of voice, visual concepts and visual references as a basic reference in the entire process of designing a campaign. From this process found 3 keywords as the foundation of the design of this campaign namely protect, safe and legacy. Followed by the determination of the big idea that is the big idea Don't Let Your Protection Destroy Other's. The definition of this big idea is not to allow the protection used to damage the protection of other people or living things.

Then through the thought process, the concept raised for the design of this campaign is see the unseen - comparison. After the brainstorming process, mind mapping, determination of big ideas and visual concepts, the steps are followed by determining the tone of voice or the method of delivering the message in the design of this campaign. In delivering messages, the authors determine the tone of voice with honest and direct. This is to show that the message given is clear and well conveyed.



Figure 1 Moodboard

The selection of images that are on the moodboard because it shows protection, security and inheritance that can be broken down into various definitions. Almost every image can represent the keyword protect, safe and legacy. An example of selecting a Hermes image to represent the legacy or inheritance keyword, the high price also makes people who use it pay attention to protection and security. Hermes has a very expensive bag used as an investment destination. Protection is illustrated by the selection of very shallow waves and objects that are enjoying time that can only be done while in a safe condition. Large size is also often a representative of protection.

Therefore, the authors include images of whales among all animals that exist. The color selection on the moodboard is also chosen by the author as a real or present color. Dominant blue can be represented as a sea of coral reefs. Next, the writer searches and selects references based on similar to the colors and visual styles on the moodboard.

The reason the author chose the image above as a moodboard because representing the big idea, tone of voice and the concept of the campaign that has been determined. All visuals listed on the moodboard are the basic reference of the author to enter into the next design phase. Visual colors and styles are obtained from the moodboard that provides real visuals with development according to the needs of the campaign objectives. All visuals in the mood use digital imaging techniques that represent honest and direct or factual with real conditions. The blue color dominates as a real representative of the color of the sea and symbolizes safe and protect. The colors that appear on the moodboard are also the real colors of the actual conditions.

4.1 Color

The color determination in this campaign is determined based on the dominant color found in the mood that matches the keywords and tone of voice used by the author. The dominant color chosen by the author in this visual design is as follows:



Figure 2 The Main Campaign Color

According to Marioka and Stone (2006), blue can be defined as peace, justice, and security so that it matches the keywords protect and safe. The author decides to use blue because blue is also a real representative of the color of the sea. Furthermore, there is a green color which means growth, life, harmony also in the negative meaning symbolizes greed. The author chose the green color to symbolize the campaign that will continue to grow, the growth of coral reefs, life and human selfish symbols that damage the environment, especially coral reefs. The author also chose the color orange because it is associated with health and activity. Neutral colors like black and white also have important definitions to symbolize campaign messages. Black symbolizes death and white which describes fragility. The author also includes supporting colors, namely purple and yellow. Yellow symbolizes sunlight, optimistic, cautious and wise. The color purple symbolizes imagination, beauty and arrogance. All the meanings of the colors that have been determined by the author provide an overview and the great purpose of designing this campaign.

4.2 Typography

The author continues with the process of design in accordance with the predetermined tone of voice. In accordance with the tone of voice that is direct and honest, it can be developed into typographic characters that have the firmness of the word direct but have the emotional side that is obtained from the word honest. Based on this, the writer chooses sans serif typeface because it represents these words. The author chooses sans serif also because of the reason to keep having a serious impression because the main purpose is as a delivery of information but is not heavy so as not to seem stiff and forced. After the typeface selection process, the writer gets two choices for headline needs and other copywriting needs, namely Gobold Bold and Gotham Rounded.



Figure 3 Campaign Font

4.3 Copywriting

The next stage is the design of communication that will be used in the process of making this social campaign. In this stage the determination of the communication to be conveyed as part of the design strategy so that it can be right on target and in accordance with its original purpose. Copywriting writing is determined in English because the geographical target is the island of Bali where there are many foreign tourists, of course, by way of a clear but rather relaxed delivery in accordance with the keyword tone of voice that is honest and direct. The selection of English is also adjusted to the target of the campaign included in the SES A-B category which has foreign language skills, especially more plural English. Submitting clear information also with the reason that the target has a definition of meaning that does not have many interpretations so that it will not cause various views from different points of view.

Finally the author decided to make "Your Protection Must Protect" as the main headline in this campaign. The reason is that among all the headline choices, this word best reflects the direct and honest tone of voice. The headline selection is also easier to remember because it has a relatively similar vocabulary and a short word count.

4.4 Campaign Identity

The author looks for several alternative campaign names based on the main keywords. The names of the campaigns were developed in English according to the intended target. After the writer conducted a brainstorming process for name selection, it was finally determined that the name of the design of this campaign was protect the reef. The name Protect The Reef represents the keywords and messages that the author wants to highlight in the design of this campaign and also consists of 3 words so it's easy to remember. Then the writer also designed the logo as part of the campaign's identity.



Figure 4 Campaign Logo

This logo was chosen because it represents the overall campaign design strategy. The protective part shaped like a flower is a representation of the protection or protection of coral reefs that are indeed obtained from algae zooxanthellae. And in the middle of the logo is a form of an empty coral reef that can be defined as a symbol that determines what kind of condition the coral reef is in our hands. The visual logo above is a unity that cannot be broken down. The bluish green color of the combination of green and blue chosen as an identity symbolizes that the campaign movement will continue to grow, live and can provide a sense of security to coral reefs as well as to the campaign targets. In addition to bluish green, this logo can also be applied with white which indicates the condition of bleaching on the coral reef. At the bottom of the logo also made a logotype bearing the name of the campaign "Protect the Reef".

4.5 Visual System

In the visual design process, the authors use digital imaging techniques. According to Slovia (2017), professionals usually manipulate photos which is one effective way that can make an image or photo better. Is a combination of various aspects in Photoshop, including color grading. The advertising industry, promotion and creative aspects often use photo manipulation. This is to cover up the shortcomings of photography that are deemed not fulfilling certain desires or goals.

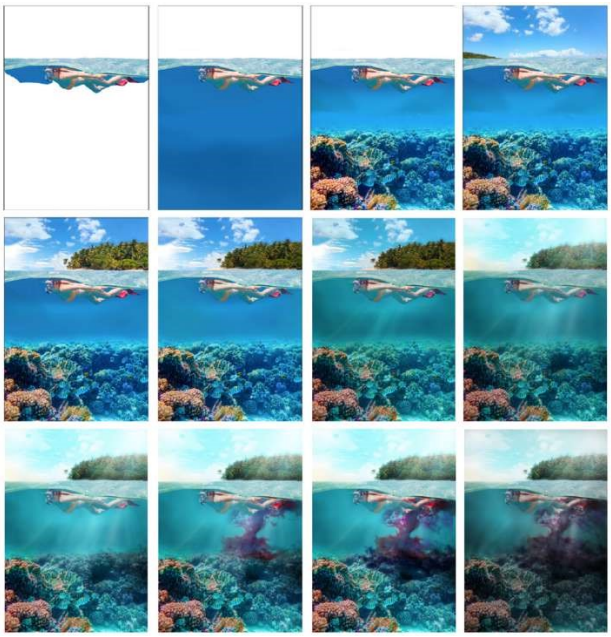

Figure 5 Digital Imaging Process

4.6 Implementation Design

Referring to the AISAS theory, this stage of media implementation is divided into several stages, namely attention, interest, search, action and share.

1. E-Poster

The design of this digital poster aims to attract attention because it is usually large and can be seen by many people depending on the location of the placement. This e-poster will be

placed in several important areas of Bali tourism such as the Ngurah Rai and Soekarno-Hatta airports, public transportation, pedestrian areas and tourist centers such as shopping centers. E-posters at Ngurah Rai Airport will be placed in areas in the arrival terminal including baggage claim areas, Ngurah Rai Airport exits, waiting points in the pickup area and airport waiting rooms. For posters placed at Soekarno-Hatta Airport specifically for the departure lane to Denpasar, Bali and the location is in the airport lounge.

In the attention phase, the writer also uses online transportation and airport as a media for poster placement. This media was chosen because it is one of the places commonly used by tourists and the public. For online transportation, the writer chooses online motorcycle taxi and online taxi as a means of advertising, while for airport vehicles, the writer chooses the bus that is responsible for picking up passengers from the plane to the terminal entrance.

The message to be conveyed is about the conditions of the real comparison between the scenery we see during the holidays and the poor condition of coral reefs that often escape the attention of tourists.



Figure 5 Protect The Reef E-Poster

2. Wobbler

This media has the function of attracting attention that will be placed on the shelves in the general mini markets in Bali such as Circle-K, Seven-eleven, Indomaret and Alfamart. Then dispensaries like Century, Guardian and Watson where the wobbler is placed on the sale of sunscreen. Copywriting on the wobbler is adjusted to its small size, "Have you choose the right sunscreen?" includes QR Qode which contains information about brands containing oxybenzone and octinoxate so that campaign targets can avoid sunscreen that is not yet safe for coral reefs.



Figure 6 Protect The Reef Wobbler

3. Instagram

The design of the Instagram post is a source of information and introduction to campaign content more to the audience. The reason for the Instagram voters is because it is one of the most popular social media targets of this campaign. The author made 9 Instagram post designs consisting of knowledge, and fun holiday tips.



Figure 7 Protect The Reef Instagram Post

4. Website

All complete and detailed information is in this media. The website consists of two pages, a landing page that contains the entire contents of the website briefly and a page for purchasing merchandise. Content on the website for complete information, vision, campaign mission, benefits of coral reefs, negative impacts of using oxybenzone-based and octinoxate-based sunscreens for coral reefs and direction for campaign targets to move on to action stages such as purchasing on page stores and donations.

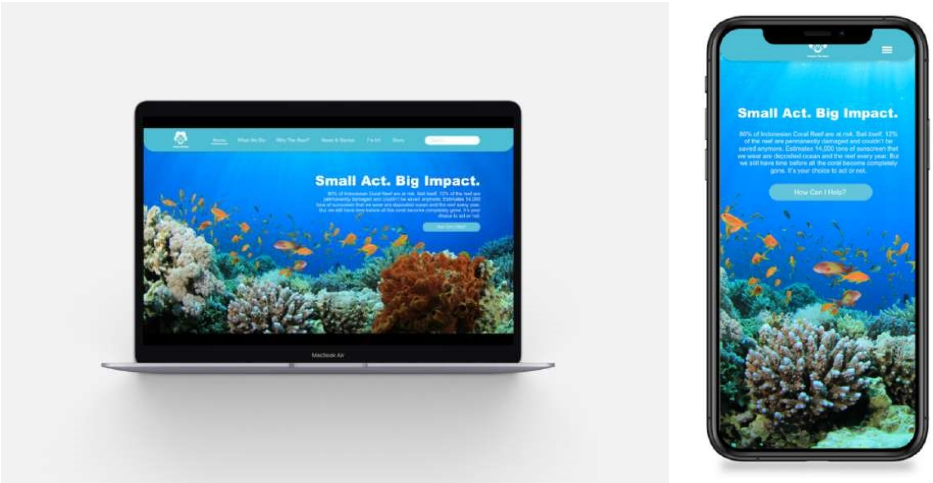

Figure 8 Protect the Reef Website

The author also designed a website with a mobile size because 98.2% of internet access is done by millennials using a smartphone that is adjusted to the desktop display.

5. Event

The design of holiday media for millennials is a public event which is a vacation facility that likes new and useful things. This media selection is based on psychographic target campaigns who like new things and prefer things that raise certain issues as a basis. The majority of millennials also travel as an investment of fun activities. This event also has a great opportunity to reach more audiences in a fun and educative way. Some of the needs of the event designed were backdrops, hanging banners and e-posters for promotional needs. The poster is made digital so that the impact is greater because it can enter various digital platforms such as campaign websites.



Figure 9 Protect The Reef Event Media

6. Merchandise

Merchandise was chosen by the author because it is one of the good awareness campaigns. Merchandise was chosen based on the psychographic target of the campaign, demographics and geography held in the coastal area. Some items chosen by the author as merchandise are T-shirts, tank tops, towels, flip-flops, drinking bottles, wristband, tote bags and hats.



Figure 9 Protect The Reef Merchandise

5. Conclusion

Many people or campaign targets are still unaware, so sunscreen continues to be a silent killer for coral reefs. This is due to the lack of information about the coral reef itself and its relationship to sunscreen which is common to use when on vacation or beach activities. Because of this, a campaign design is needed to increase the awareness of the campaign targets in order to produce a change that can reduce the impact of damage to coral reefs due to sunscreen.

The campaign was held for 3 months, namely June to August because it is an annual long vacation time in Indonesia and summer vacation abroad so the number of tourists, especially beaches, must have increased rapidly compared to other months. In producing an effective and appropriate visual design for the entire campaign the writer uses the AISAS design method to achieve the goal flow.

In the function of attracting the attention of the target campaign the author uses e-posters, wobblers and ambient media that are placed in strategic locations on the island of Bali. When the public has been introduced to the problem and want more information but not too detailed, the author uses Instagram because it is one of the most widely used social media by the target campaign. Then detailed and complete information about the campaign will be provided on the website with desktop and mobile sizes to be easily accessed anywhere. Next to the action stage, supported by the Bali Summer Camp event, which is a vacation that fits the target campaign that is packed with informative and fun. Finally, the writer chooses Instagram merchandise and filters for the share stage to build awareness campaigns that follow the character of the target campaign, next involvement of stakeholders and decision-makers and the participation of the public are necessary for

arriving at suitable decisions as it leads to better awareness of risks (Selamet, 2019) of sunscreen.

All visual designs are carried out using digital imaging techniques so that the target of the campaign can feel connected to the visuals displayed because they are in accordance with actual conditions. The target of the campaign can also be directly aware of the current condition of coral reefs so that awareness can increase and reduce the harmful effects of sunscreens that contain harmful substances oxybenzone and octinoxate for coral reefs.

6. References

Creswell, J.W. (2009). Research Design Qualitative, Quantitative and Mixed Method Approaches. United States: SAGE Publications, Inc.

Slavio, J. (2017). Photoshop for Photographers: Training for Photographers to Master Digital Photography and Photo Editing.

Dietrich, G., & Livingston, G. (2012). Marketing in the Round: How to Develop an Intergrated Marketing in the Digital Era. Indiana: Que Publishing.

Landa, R. (2011). Graphic design solutions, fourth edition. Boston: Wadsworth.

Moriarty, S., Mitchell, N., & Wells, W. (2012). Advertising & IMC: principles & practice.. New Jersey: Pearson Education Inc.

Morioka, A., & Stone, T. (2006). Color Design Workbook. Beverly ,Massachusets: Rockport Publisers.

Sugiyama, K., & Andree, T. (2011). The Dentsu Way. New York: McGraw-Hill.

Suharsono, A.B., Hafizt, M., Prayudha, B., Giyanto, & Hadi, T.A. (2018). Status Terumbu Karang Indonesia 2018. Jakarta Utara: Puslit Oseanografi – LIPI.

Venus, A. (2018). Manajemen kampanye: Panduan teoritis dan praktis dalam mengefektifkan kampanye komunikasi, edisi revisi. Bandung: Simbiosa Rekatama Media.

Yuswohady, & Gani, K.E. (2015). 8 Wajah Kelas Menengah. Jakarta: Gramedia Pustaka Utama.

Arora, N. (2018). ATL, BTL and TTL Marketing in Education Industry. International Journal of Research and Innovation in Social Science, 2(1), 13-15. Doi: http://www.ijriss.org/DigitalLibrary/Vol.2&Issue1/13-15.pdf

Metcalfe, C.D. (2015). Journal Archives of Environmental Contamination and Toxicology. 69(3).

Sjafrie, N.D.M. (2014). Coral Bleaching: Mekanisme Pertahanan Karang Terhadap Stress. Oseanografi LIPI, 39(4), 1-13. Doi: http://oseanografi.lipi.go.id/dokumen/os_xxxix_4_2014-1.pdf

Anna, L.K. (2018). Mengapa Tabir Surya Berbahaya Bagi Terumbu Karang dan Ikan. Diperoleh dari https://lifestyle.kompas.com/read/2018/06/29/130000 820/mengapa-tabir-surya-berbahaya-untuk-terumbu-karang-dan ikan?page=all

Deny, S. (2015). Menteri Susi: 70% Terumbu Karang Indonesia Rusak. Diunduh dari https://www.liputan6.com/bisnis/read/2287433/menteri-susi-70 terumbu-karang-indonesia rusak

Dirhamsyah, M.A. (2018). LIPI: Status Terkini Terumbu Karang Indonesia 2018. Diunduh dari http://lipi.go.id/siaranpress/lipi:-status--terkini-terumbu karang-indonesia-2018-/21410

Lidia. (2016). Gerakan Mahasiswa dan Perubahan Sosial. Diunduh dari http://www.jurnalasia.com/opini/gerakan-mahasiswa-dan-perubahan- sosial/

Muliarta, N.I. (2016). Coral Bleaching Meluas Rusak Terumbu Karang di Bali. Diunduh dari http://www. news.beritabali.com/read/2016/03/23/2016/ 03230002/coral-bleaching-meluas-rusak-terumbu-karang-di-bali

Setiawan, R. (2016). Mahasiswa dan Pembangunan Nasional. Diunduh dari http://www.jurnalasia.com/opini/mahasiswa-dan-pembangunan-nasional/

Selamet, J. (2019). Identifying Criteria for Designing Risk Communication System in Palu, Sulawesi, Indonesia. *Journal of Disaster Research*, *14*(9), 1346–1352.

Shecilia, T. (2018). Indonesia Surga Terumbu Karang Dunia. Diunduh dari https://www.goodnewsfromindonesia.id/2018/05/10/indonesia-surga terumbu-karang

Pezzullo, P. C., & Cox, R. (2017). Environmental Communication and the Public Sphere. SAGE Publications.

Prof.Dr.Suharsono, APU: Ahli Terumbu Karang Indonesia Yang Tidak Pernah Berhenti Berkarya. (n.d). Diperoleh pada 26 April, 2010 dari http://lipi.go.id/berita/prof.-dr.-suharsono-apu:-ahli-terumbu-karang indonesia-yang-tidak-pernah-berhenti-berkarya/3150

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