Impact of Environmental Journalism on Social Media towards Millennials' Behaviour Change

Siswantini, Marketing Communication Program, Communication Department, Faculty of Economics & Communication, Bina Nusantara University, Jakarta, Indonesia, siswantini@binus.ac.id

Lila Nathania, Communication Study Program, Communication Department, Faculty of Economics & Communication, Bina Nusantara University, Jakarta, Indonesia, lila.nathania@binus.ac.id

Virienia Puspita, Communication Department, Faculty of Economics & Communication, Bina Nusantara University, Jakarta, Indonesia, Virienia@binus.ac.id

Arsiyanti Lestari, Communication Department, Faculty of Economics & Communication, Bina Nusantara University, Jakarta, Indonesia, Arsiyanti.lestari@binus.ac.id

Mario Nugroho Willyarto, Language Center, Industrial Engineering Department, Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia, Mario.nugroho@binus.ac.id

Abdul Rahim Ridzuan*, Faculty of Business and Management, Universiti Teknologi MARA, Rahim670@staf.uitm.edu.my

Abstract- Environmental issue has gained its popularity during these past years. As our society moves towards advancement, humanity faces more and more environmental problem. Awareness of this problem raises discussion and analysis from experts, researchers, journalist, and everyone around the world. Most of the time this issue is talked about on social media. This digital era has made people, especially millennials, rely heavily on social media to look for information. Organization, government, corporation, and individuals use this platform to speak up about this issue. Regarding this new pattern of information-seeking in social media, this article explains the impact of environmental messages on social media towards millennial's behaviour change. By using explanatory sequential mixed method we will provide quantitative data from millennials in Jakarta, Malang and Malaysia. The data shows that social media is a strong platform that can be used to spread messages about climate change. Unfortunately, although the frequency of accessing environmental issue can hovering the likeliness of participation on climate change issues but it's not enough to change their behavior.

Keywords— environmental message, social media, millennials, behavioural change

I.   INTRODUCTION

Environmental journalism is more important than ever since the issue of global warming is getting much worse. In response to extreme change in our climate and environment, scientist, experts, and researchers all aroung the globe have urged everyone to take an active participation in doing green movement. One of the key factors for saving our Earth is by awakening the awareness of the younger generation.

One of the most unique generation is the millennials. Throughout history, they are the most educated and most diverse generation that we ever had [1]. Millennials, particularly those who are highly educated, are our hopes in saving the environment from futher damage. The criteria of millennials itself is those who were born between 1982 – 2005, at the moment they are the most populous generation with a total number of 80 million people [2]. According to a study in the United Kingdom, millennials are the generation who spend the most time with digital gadgets such as computer, tablet, and smart phone; 40% admitted that they cannot let go off their smart phone [3]. Millennials tend to use social media to look for entertainment and information. Thus, social media has become a very great part of younger generation's culture.

The change in this information-seeking behaviour makes all mass media, organization, corporation, and even individual speak up through their social media platform. On the other hand, millennials also look for information in this platform, environmental messages are no exception.

Environmental issue is not a new thing, in the early '90s, a senior journalist stated that we already had specialist reporters who really invested their time to conduct research and write about this topic [4]. Moreover, Senecah [4] explain that environmental journalism had developed from just reporting natural disasters to analyzing pollution, sustainability, green movement, and many more. Today, certainly

environmental journalism has developed even more. It takes a different form in social media but has the same meaning and spirit.

II. BACKGROUND AND THEORETICAL FRAMEWORK A. BACKGROUND

So many researches have proved that humans are the main cause of anthropogenic climate change [5]. However, people's awareness of this issue is still very low, particularly in developing countries all around the world. Indonesian people are not an exception. Based on a polling conducted by YouGov-Cambridge Globalism Project in 23 countries, Indonesia got the second poorest rank, as much as 18% of Indonesian are climate deniers or those who do not believe in the concept of anthropogenic climate change [6]. Although environmental journalism has developed, research result and surveys still show us that many people do not clearly understand this issue. On this digital era, many organization, activist, government representatives, and individual start to use social media to educate the public. They know that this new media is a very powerful tool when used properly.

Social media itself is a virtual place where we can connect to others; the characteristic is interactivity between users [7]. Some of the most popular social media are Instagram, YouTube, Facebook, and Twitter. These platforms are often used to look for entertainment, information, and many more. The usage of these media provides the opportunity in promoting environmental literacy that can change behavior among millennials.

Environmental Literacy and Social Media

Largely, literacy describes as the capacity of human beings to apply their knowledge and skills on specific issues. Therefore, an environmentally literate person can conduct analysis, and communicate effectively the views, solutions proposed and interpretation of health of environmental system [8]. In the other word environmental literacy is a learning process in raising knowledge of the environment

Environmental literacy is assembled of individual learning processes, which are affected by socio-cultural background and ecological circumstances. Accordingly, environmental literacy is subjective and individual although it is closely linked to a broader framework at local, national and global levels [10]

Along with the development of information technology, where the internet becomes a space that allows distance education, then there also environmental literacy activities can take place. Social media as one of online media can eco the environmental news. The environmental reporters who tweeting and posting the environmental issues to the blog can provoke their followers to spread the information to their network.

Environmental Journalism and Behaviour Change

Environmental journalism is a relatively new branch of specialism journalism. From early '90s, a senior journalist stated that environmental journalism had developed significantly because many journalists were given enough time and resources to write about this issue [11]. In many cases, environmental articles on mass media do not have big impact on direct policy-making but it certainly plays a big role in making people aware of environmental issues; it also encourages environmental movement all around the world

This showed a good sign that environmental journalism had improved and shifted.
In such digital world, social media has helped the growth of environmental journalism. There are numerous environmental messages about sustainability, green action, and waste management on social media such as Instagram, Facebook, YouTube, and Twitter. Environmental messages are meant to educate which lead to behavioural change. Based on symbolic interactionism theory, an individual is motivated to behave based on meaning which attach to person, thing, or other experience; this meaning is formed by interpersonal relation with others and self-talk within themselves [10]. In another words, behaviour change must be based on awareness and consciousness of environmental issues. If a person does not engage in deep self-talk and commitment, they would not reach the behavioural change stage. Most people just accept the information either partially or perfectly but not willing to change their habit according to that knowledge.

Climate change Message

Environmental journalism in recent decades, has focused more on how to construct news about climate change. Since the 1980s this issue has been subject to much debate, as some information about the effects of climate change has some uncertainty [12]. This condition occurs because the theory of climate change is based on the assumption of an increase in the earth's temperature or also called global warming which can affect the world's climate conditions [5].

Climate change messages raised by the media are generally focused on the effects of climate change on society. Framed in journalism in terms of problems, solutions, and levels of responsibility is of great importance in order to engage and lead toward individual and collective action [13]. Therefore, it is important for journalists to involve the audience in constructing climate change messages in the media. So far, messages on this issue are still dominated by scientists, governments, politicians and environmental activists, who have certain interests..

Following up the dynamic changes on environmental journalism and social media usage by reporters, this study aims to explore the impact of environmental journalism on social media toward millenials behavior change.

III. RESEARCH METHOD

Our study employs an explanatory sequential mixed method, which involves a two-phase project in which we collect quantitative data in the first phase, analyzes the results, and then uses the results to build on to the second qualitative phase [14]. There are two main questions of the research :

RQ1 :   What is the influence of environmental journalism on social media on millennials behavior change?

RQ2 :   How is millenials positions to the environmental message on social media?

A. Data Collection

Since this is a mix-methodology research, the data is collected with two ways. The quantitative data is collected with survey to get detailed image of background, character, and uniqueness of respondents. The survey was given to respondent through Google Form. We use Likert scale to measure opinion, perception, and bahaviour of the respondents.

For the qualitative data, we give pre-interview survey through Google Form then select some informants to be interviewed. Deep interviews conducted to know the motives, experiences, and reasons behind their decision in changing behaviour for saving the environment.

The respondents and informants are students who study in green campus. We took the sample from three universities from Indonesia and Malaysia. From Indonesia data was collected from one famous Private University ini Jakarta and popular Public university in Malang and from popular university in Malaysia. Quota sampling applied in the study, 50 respondents are gathered from each, so all of the samples are 150. Ten students are selected to participate in depth interviews which meet with the criteria as (a) in the group millennials age (born between 1982 – 2005), (b) students of selected university, (c) access social media frequently, and

(d) has knowledge of environmental conservation. Three from private university in Jakarta, five from public university in Malang and the rest is from university in Malaysia.

B. Data Analysis

The data quantitative and qualitative in this research are analyze separately. The quantitative results are uses to plan the qualitative step. The quantitative result point towards the type of question to ask participant in the second phase. Furthermore, the data from interview will be categorized as decoding and encoding as develop by Stuart Hall.[13]. The position of participant to the environmental message will follow the three characteristics, namely;

(1)   dominant-hegemonic position, the condition where the audience and media have a same ideas and concept of environmental issues.

(2)   negotiated position, where the audiences accept the message, but they still have their own opinion to be negotiated;

(3)   oppositional position, audiences has different opinion with the media, they are criticized the media,

IV.   RESULT AND DISCUSSION

The quantitative data showed that 56 percent participants is girls and the other 44 percent are boys. 65 percent's of the respondent access the information of climate change through social media less than an hour a week, 20 percent's of them access the same issue 1-2 hours a week , 10 percent's access 2-3 hours a week and the rest access the information in social media more that 3 hours.
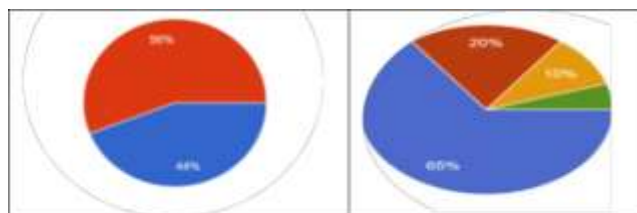

Figure 1: Respondent Gender & Social Media Access

The data also showed that the use of online media has a strong relationship with the participation of both university students on climate change issues. This can be proven by the respondents' answers to the questionnaire, most of whom agreed or even strongly agreed. As show on figure 2 that explain the answer of question of social media as primary source of climate change information:
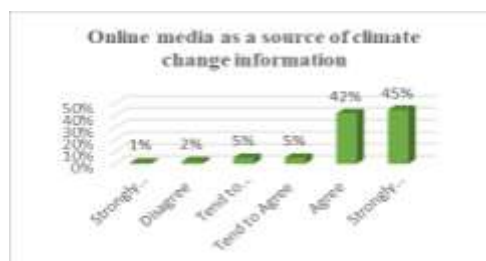
Figur 2. Social media as information source

Figure 2, represent that 45% student strongly agree and 42% agree that social media as primary source of climate change information. Environmental message, especially of climate change on Social media also has raising student intention to participate in reducing climate change effect, as showed on figure 3. The data confirmed that 50% students agree, 37% strongly agree, 7% tend to agree, means that environmental message in social media has a great contribution to their willingness to participate in climate change effect reduction.
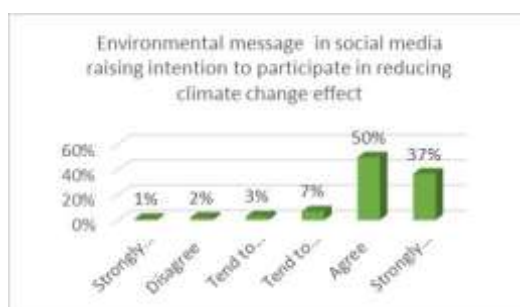

Figure 3. Relations on environmental message and intention to participate in reducing climate change effect

Furthermore, according to the results of the study based on validity and reliability tests, both X and Y variables have met the validity and reliability standards. This means that the instrument used can represent what is being studied and can be used many times in similar studies because the average Cronbach Alpha value is above 0.850.

The level of relationship between these two variables is also measured in this study, the results of the correlation test show the relationship between the variable online media use

(X) and participation on climate change issues (Y) has a positive significance relationship of 0.732, which is considered strong because the value ranges from 0 , 60 - 0.799. The results of linear regression as Y = 11.013 +

0.658X, means that every increase in the value of Online Media Use (X) will be followed by an increase in Participation on Climate Change Issues (Y).

Further the results of the t test calculation, it shows that the variable use of online media has a significance that is less than 0.05 because the significance value is 0.000. The value of t test (10.627)> t table (1.98) states that H0 is rejected and Ha is accepted, it can be concluded that there is a relationship between Online Media Use (X) and Participation on Climate Change Issues (Y).

The results of the F test show that the independent variables used in the study are feasible to test participation on climate change issues that are influenced using online media. This is shown by the F test on the X variable with Y

which is (112.945> 3.94). This value is greater than Ftable which is 3.94 and a significance level of 0.000 (less than

0.05). This confirms the results of the t test that the results of the hypothesis in the study were rejected. Because variable X has an influence with variable Y, and the coefficient of determination (determination) shows that the R square value is 0.535, which means the correlation between variable X and variable Y is 53.5%, and the rest is determined by other factors.

Result from interview confirm that students believe that climate change is real and need to get more attention from relevant stakeholders. Ten informants from both universities mostly get the information of climate change and other environmental issues form social media. However, students from three universities have a different perception of their participation on climate change issue. Five students from Public University in Malang said that although they frequently found the environmental issue message, especially of climate change but it does not directly raise their awareness to participating di reducing the effect of climate change. But students form Private University from Jakarta and Malaysia perceive the opposite.

These finding confirms that social media facilitate the follower in their environmental literacy, which represent by their willingness to participate on climate change issue. Furthermore, it is hoped that this millennial can carry out an analysis of environmental problems and become reliable communicators in promoting the importance of participation in addressing climate change. As Jurin and Robert [8] state that environmentally literate person can conduct analysis, and communicate effectively the views, solutions proposed and interpretation of health of environmental system.

A. Key Finding

Generally millennials believe that climate change is an important issue that needs to be discussed seriously. Based on data analysis from Private and Public University students, there are strong correlation between usage of online media and participation on climate change issue. The more they consume environmental information in online media, the more likely for them to participate on climate change issue. The finding supporting the fact internet-based information could become as source of environmental literacy.

This data is then accompanied by analysis from interviewed. Result showed that reception degree of social media audience varied. Some accept all the content and some only accept it partially. Therefore, frequency

of accessing environmental messages in social media does not correlate with behavioural change. To get this effect, the audience themselves should have an environmental awareness.

Both quantitative and qualitative data also showed that although there are so many environmental messages in social media, not everyone accesses them. The reason is very simple, everyone has their own preference and they only want to read, watch, or listen to the topics that catch their interest. In order to get the most effective result, social media content should be good or catchy enough so everyone will consume it. Thus, the media need to be in the dominant

– hegemonic position. They need to provide channel for audience in participating produce the content.

Audience involvement need since as Hares, Eskonheimo, Myllyntaus and Luukkanen [10] said that environmental literacy is subjective and individual. Thus, audience idea of climate change needs to be accommodated in the environmental message production.

V. CONCLUSION

Social media is a strong platform that can be used to spread message about climate change. Environmental messages on social media are very easy to be found. However, audience has full control in selecting the information that they want to consume. In order to change audience's behaviour towards green lifestyle, environmental campaigns must grab the audience's attention. Delivering the message with clarity is also very important so audience will get the whole message, not just partially.

Frequency of accessing environmental content in social media can increase the likeliness of participation on climate change issue. But this increase is not enough to change their behaviour. In order to change them, each person should have environmental consciousness and commitment to keep the nature's sustainability.

REFERENCES

[1] N. &. S. W. Howe, Millennials Rising: The Next Great Generation., United States of America: : Vintage Books., 2000.

[2] R. Cooper, "The Millenial Generation: Research Review.," National Chamber Foundation., Washington DC, 2012.

[3] Ofcom., "Adults' Media Use and Attitudes Report. Adults media use and attitudes report.," 2018.. [Online]. Available: http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/media-use-attitudes/adults-media-use-2012.pdf,. [Accessed 22 January 2020].

[4] S. L. Senecah, "The Environmental Communication Yearbook.," Lawrence Erlbaum Associates., New Jersey:, 2004.

[5] IPCC, Solomon, S, Dahe, Q, Manning M, Chen Z, Marquis M, et al., editors. , "Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment," Cambridge University Press., New York, 2007.

[6] O. Milman, "The Guardian; US is hotbed of climate change denial, major global survey finds.," 2019. [Online]. Available: https://www.theguardian.com/environment/2019/may/07/us-hotbed-climate-change-denial-international-poll, . [Accessed 20 January 2020].

[7] O. &. B. Z. .. Grljević, "Utilization of Internet Social Media Sites: Students' Perspective. Prague:," in *CBU International Conference of Innovation, Technology Transfer and Education.*, 2014.

[8] R. R. R. D. d. D. J. Jurin, Environmental Communication: Skills, and Principles for Natural Resource Managers, Scientist and Engineer, 2nd Edition,, London: Springer, 2010.

[9] M. G. Siswantini and U. Yunus, "Waste Management literacy and sustainable city in Bandung, Indonesia: a netnography research," in *International Conference on Language, Literature, Cultura and Citizenship*, Jakarta, 2018.

[10] Hares, Mina; Eskonheimo, A., Myllyntaus, T., Luukkanen, O. Environmental literacy in interpreting endangered sustainability; Case study from Thailand and Sudan, Geoforum, 128-144, 2006

[11] R. Cox, "Nature's "Crisis Disciplines": Does Environmental Communication Have an Ethical Duty?," *Environmental Communication, doi:10.1080/17524030701333948 ,* vol. 1, no. 1, pp. 5-20, 2007

[12] R. West and L. Turner, Introductiong Communication Theory: Analysis and Application, New York: McGraw Hill Education, 2004.

[13] L. Bavadam, The Green Pen: Environmental Journalism in India and South Asia. India, Sage Publication, 2008.