S-O-R Theory and the issues of environment: the role of online social media in affecting public opinion

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Abstract. This research focuses on the role of online social media in leading public opinion to care more about climate change. This paper aims to analyze the extent to which online social media is involved in reporting developments in climate change or other environmental issues. This research is useful for regional head candidates or legislative in carrying out political campaigns. This research is also useful for stakeholders in making policies related to issues environments after getting a lot of data and documents from online social media. The theory used in this study is stimulus-response organism (S-O-R) theory. This theory explains that the communication process can take place from the source or communicator through the media to the audience.

1. Introduction

Online social media has a significant role to play in raising awareness of climate change because online social media can deliver quickly without knowing time and space. Public perception of climate change also depends on online social media news. Communication and mass media define the environment as a domain and concept [1]. Social media has a role in conveying environmental problems to the public so that it becomes a global agenda. Social media leads public opinion to discuss their argument about abuse and support for environmental issues.

Climate change is one of the urgent agendas and the greatest agenda today [2]. This condition is caused by the world energy consumed by many urban communities so that it produces a lot of greenhouse gas emissions. The situation is increasingly difficult because most of the world's population resides in urban areas. This problem occurs also in Indonesia, which is the world’s fifth-largest emitter of greenhouse gases [3]. The condition is caused by the excessive use of forest and peatland so that it has social and ecological impacts. In addition, climate change has global risks in the general social, technological, environmental, geopolitical, and economic sectors. The impact of climate change specifically on the potential of pandemics and food security which will ultimately threaten social cohesion [4]. The role of social media online invites people to protect the environment is very necessary.

This paper aims to analyze the extent to which online social media is involved in reporting developments in climate change or other environmental issues. This research is useful for regional head candidates or legislative in carrying out political campaigns. This research is also useful for
stakeholders in making policies related to issues environments after getting a lot of data and documents from online social media. The theory used in this study is stimulus-response organism (S-O-R) theory. This theory explains that the communication process can take place from the source or communicator through the media to the audience. Consumer's decision-making behavior is influenced by messages from the media and therefore this theory focuses on stimulus, organism and response [5].

Jacoby explained in more detail that the stimulus referred to here is a stimulus from external factors such as prices, stores, advertisements, logos, products, packages, them, store environment, television, newspapers, and word-of-mouth communication. Organism focuses on the domain that can process stimuli that enter unconsciously. This organism focuses on attitudes, intentions, values, knowledge, individual personality, expectations, beliefs, feelings, and impressions. The response is done consciously in the form of verbal responses, nonverbal responses, and behavioral responses. Physiological and physical response (eye fixation, galvanic skin response and dilation of the pupil), smile, communicative action (word-of-mouth communications, groans, letter writing) [5].

2. Methods
The method used is a research library consisting of journals, books, documents or reports, online newspapers, and online social media. Keyword search is a way to use this method. The keywords searched are relevant to search engines, indexes, full-text journals, full-text books, and catalogs. Keyword search is useful in narrowing down the search for the title being searched for. After the keywords are found and then made a note that matches the theme being worked on. The next step is to look for subject titles that match the theme. To search for the subject title of a journal or book, the author uses specific terms that have been listed in an online index or index that has been typed by the librarian.

3. Discussion
Online social media plays a major role in reporting on the development of climate change or other environmental issues that exist in one region or in another region. Environment issues influence the political decision making of a candidate or regional head candidate in their political campaign. Environmental issues raised by legislative candidates or regional heads are related to climate change, bio-genetic developments, species that continue to be extinct, diminishing fish stocks due to the influence of oil waste spills, deforestation, and the way fishermen illegally catch fish. Regional head and legislative candidates campaign for ways to address these environmental issues through online social media.

Connie Roser-Renouf and her team provided opinions related to American public and global climate change by saying that one of the keys to effective communication that aims to involve the community in climate change movement or change people's attitudes about climate change issues is to pay attention to cultural sources or politics [6]. This research illustrates that politics can influence the community in supporting climate change or other issues environment. A candidate in conducting a campaign should make the environment issue a matter.

Ratri Kumohartono as a forest campaigner with Greenpeace Indonesia said that there were very few legislative candidates who were carrying out political campaigns in Indonesia that raised environmental protection as a campaign theme, instead they focused more on extractive industries as the main source of national income [7]. Walton further explained the condition of forests in Indonesia by saying that in 2020, Indonesia will lose one-third of the rainforest due to the damage caused by logging and oil palm plantations [7]. This condition occurs because oil palm plantations are generally established in conversion forest areas. The development of an oil palm plantation area can bring many investors to Indonesia because the Indonesian government has plans as a palm oil producer. This program made the government expand the plantation area by developing oil palm plantations in the conversion forest area.

The oil palm development program has indeed brought in many investors because they can take wood from the forests where oil palm expansion is occurring. Conditions such as requiring media
assistance invite the public and government to rethink policies that have been taken because they threaten the environment and have large environmental risks [8]. The role of the media is very important in leading public opinion to raise awareness of environmental issues. The development of information and communication technology makes the media have an influence in building the norms of life in society. Media messages that are intense in favor of environmental issues can make the persuasion process easier. SOR theory emphasizes that changes in audience behavior in the form of opinions, attitudes, behaviors, conations and affections are influenced by messages conveyed by the media.

4. Conclusion
Cooperation between the government and the media in formulating policies that favor environmental improvement is very necessary because online social media reporting will have a positive influence on audiences such as scientists, stakeholders, the general public, politicians, experts, particular groups of publics, and pressure groups.

Limitation of Study and Future Research
Research does not explain in detail the media content as a whole about the impact of environmental damage. This study also does not distinguish between online and print media in influencing public opinion about environmental issues. For future research, researchers should focus on the amount of online and print media so that there are differences in influencing the audience.

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