Role of User-Generated Content, Key Opinion Leader, Virtual Community, and Culture in Shaping Pro-Environmental Behavior: Propositions and Conceptual Framework

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ARTICLE INFORMATION

ABSTRACT

This paper aims to provide a conceptual framework of how tourists' pro-environmental behavior is shaped by examining the role of User-Generated Content (UCG), Key Opinion Leader (KOL), virtual community, and culture. This framework is required, as the current literature mainly discusses about the role of KOL that influences consumer purchasing behavior in retail and health industry. There is lack of research that focuses on role of KOL and its supporting element (UCG and virtual community) to influence tourists' pro-environmental behavior. The method of this research uses literature review. From literature review, it finds that researchers proposed several antecedent variables to predict tourists' pro-environmental behavior. This paper also outlines nine research propositions and suggest methods for further research.

Keywords: user-generated content, key opinion leader, virtual community, culture, tourists' pro-environmental behavior.

INTRODUCTION

Environmental problems brings many concerns in the last decades (Han, 2018; Kalafatis et al., 1999; Laroche et al., 2001). One of the environmental problems that becomes major concern is climate change. Globally, climate change costs about USD 100 billion annually (Dellink et al., 2009). Climate change may be one of the factors that triggers Covid-19 pandemic in which there is virus transmission from wild animal to human (Fuentes et al., 2020; Guo et al., 2020). The transmission is possible because there is a change in temperature and animals' habitat. The change in temperature will provide favorable conditions for the virus to spread in the air while the change in animal's habitat will make the wild animal to live closer with human by carrying the disease (Fuentes et al., 2020; Wu et al., 2016). Green-house gas emissions is the major cause that contributes to climate change. One of the sector that contributes to green-house gas emissions comes from tourism sector that contributes to 8% of total green-house gas emissions worldwide (Lenzen et al., 2018). Tourism sector involves many people including tourists who visit certain destinations. During visit to tourism destinations, these tourists often bring negative impacts to the environment (Han, 2018; Scott et al., 2010). Hence, their behaviors should be changed. It is important for tourists to have internal motivation to take care of the environment and adopt pro-environmental behavior to realize sustainable tourism. When the Covid-19 pandemic struck the whole world two-years ago, sustainable tourism becomes one of the hot topics that are discussed in tourism industry (Dobrescu & Mazilu, 2020; Roman et al., 2020). Hence, pro-environmental behavior is one of the requirements to implement sustainable tourism concept. However, there is a challenge to adopt pro-environmental behavior that covers three gaps: attitude-behavior gap, awareness-behavior gap, and home-travel gap (Han, 2018; Miller et al., 2017). To address these gaps, there should be certain methods to ensure tourists adopt pro-environmental behavior. One of important methods to increase tourist pro-environmental behavior is through sharing right information to the public (C. H. Chung et al., 2020; T. N. Nguyen et al., 2016). In this digital era, social media is one of the tools to share information and encourage people to adopt pro-environmental behavior (C. H. Chung et al., 2020; Ellison & Boyd, 2013; Gholamrezai et al., 2021; Ho et al., 2015; Huiping, 2016). Social media is often used as main reference for travelling because social media provides trusted and up-to-date information (Han, 2018; Luo & Zhong, 2015; Zeng & Gerritsen, 2014). Social media consists of several important aspects such as User-Generated Content (UGC), Key Opinion Leader (KOL), and virtual community that help tourists to adopt pro-environmental behavior. However, there is still lack of research that discusses about the role of KOL and its supporting elements (UGC and virtual community) that could influence tourists' pro-environmental behavior.

The paper starts with section of literature review that discusses social media User-Generated Content (UGC), Key Opinion Leader (KOL), virtual community, environmental concern, environmental attitude, culture, and pro-environmental behavior. Then, it is followed by section of research proposition that is based on facts from literature review. Finally, the paper is closed with main conclusions and recommendations for future research.

LITERATURE REVIEW

A. Social Media User-Generated Content (UGC)

In current digital era, creating content on social media has been becoming popular. It is called User-Generated Content (UGC). In the individual level, UGC helps tourists to express their opinion and enable interaction with other users in terms of collecting and sharing information (Sultan et al., 2021; Wyles et al., 2019). UGC could motivate a community to express their opinions, experiences, and perspectives (Daugherty et al., 2008; Sultan et al., 2021; Wyles et al., 2019). Social media content covers all information such as picture, text description, and location that could be shared in digital context. The contents usually reflect the environmental-related values that are adopted by users (Ryan & Spash, 2008; Sultan et al., 2021). A study explores how UGC influences positively and significantly image, attitude, and intention to visit tourist destination (Kim et al., 2017; Sultan et al., 2021; Van Riper & Kyle, 2014). Environmental-related UGC that is shared through social media aims to have persuasive communication that could affect tourist pro-environmental attitude and behavior (Langley & Broek, 2010; Sultan et al., 2021).

B. Key Opinion Leader (KOL)

Generally, there are two stakeholders that gives influence in social media. They are Key Opinion Leader (KOL) and Social Influencer. KOL is an individual that has authority in social media and is considered as expert on certain field (Alotaibi et al., 2019; Din et al., 2020; Nefiratika et al., 2020). KOL could also influence others' thinking and behavior (Xiong et al., 2021; Zhao et al., 2018). Social influencer is an individual that has interest to seek information and share idea, information, and recommendation with others (Keller & Fay, 2016; Sigala & Gretzel, 2018). Generally, they share their opinion about product and service that interest them.

These two stakeholders have major differences below.

Table 1. Major Differences Between KOL and Social Influencer

No	Factor	KOL	Social Influencer
1	Shared content	Special topic based on their knowledge and expertise (Xiong et al., 2021)	Daily activity (Xiong et al., 2021)
2	Image	Popular based on their expertise and experience within certain field (Huynh, 2020; Xiong et al., 2021)	Popular based on their personality and shared contents (Xiong et al., 2021)
3	Target Audience	More targeted and specific audience (Ehrhardt, 2018; Huynh, 2020; Iuchyk, 2018)	Wider and broader audience (Ehrhardt, 2018; Huynh, 2020; Iuchyk, 2018)
4	Social Media Focus	Increase engagement (Huynh, 2020)	Reach mass audience (Huynh, 2020)

C. Virtual Community

The word "Community" is identified as closed-system. It means that community has clear boundary, stable membership, and shows limited connection with other community (Anderson, 1999; F. Lee et al., 2003). As advancement in ICT, virtual community has been growing a lot (F. Lee et al., 2003). Virtual community is computer-mediated space that enables integration between content and communication aspect with emphasizing on the content that is generated by its members (F. Lee et al., 2003; Sindhav et al., 1998). Another definition is social unity that occurs from network if there are some people who discuss special topics to form individual network in online space (Hindman, 1996; F. Lee et al., 2003). Virtual community could be divided into several types of community that align with their focuses. Generally, the interaction that occurs in virtual community based on four basic needs such as interest, relationship, imagination, and transaction (F. Lee et al., 2003; Sindhav et al., 1998). The need of interest could be met by grouping several people that share expertise and experience on certain topic. The need of relationship could be met by grouping several people with similar experience to form private and meaningful relationship. The need of imagination could be met by grouping several people to explore the world that is full with imagination and entertainment. The need of transaction could be met by exchanging the information among community members.

D. Environmental Concern

Environmental concern is major determining factor in sustainable environmental consumption (Ajzen, 2012; Chan & Lau, 2000; Kilbourne & Pickett, 2008; Sultan et al., 2021). This factor has emotional attachment towards environment. It could be identified as individual attachment towards environment (Hjalager & Kwiatkowski, 2019; Sultan et al., 2021). Tourist environmental concern emerges from interest of biophysics environment and its problem (Sultan et al., 2021). Emerging individual expression

towards environmental concern shows either individual or group responsiveness and commitment to protect environment. Environmental concern is global phenomenon that are often discussed and relates with pro-environmental behavior (Dolnicar & Grün, 2009; Sultan et al., 2021; Verma et al., 2019). Previous study reports that lacking of environmental concern becomes the root cause of irresponsible behavior towards environment or tourism destination (Abdullah et al., 2019; Sultan et al., 2021; Wang et al., 2018). Hence, environmental concern and its awareness becomes main topic of individual pro-environmental behavior. In the tourism context, the higher environmental concern that individual has, the more optimistic individual attitude towards sustainable practice commitment (Dolnicar & Grün, 2009; Sultan et al., 2021; Yusof et al., 2016).

E. Environmental Attitude

Attitude is positive or negative evaluation of individual towards specific action (Harold R. Hungerford & Volk, 1990; Sultan et al., 2021). In tourism context, environmental attitude refers to individual favored or unfavored approach towards specific environmental aspects (Kollmuss & Agyeman, 2002; Sultan et al., 2021). Attitude is also major changing factor of individual pro-environmental behavior (Chen & Tung, 2014; Follows & Jobber, 2000; Sultan et al., 2021). Environmental attitude is major factor of individual positive evaluation that could influence pro-environmental behavior (Baker et al., 2014; Sultan et al., 2021). Pro-environmental behavior also relates with individual awareness, attitude, and responsibility (Sultan et al., 2021; Varela-Candamio et al., 2018). Hence, environmental attitude has become relevant factor that could predict pro-environmental behavior (Sultan et al., 2021).

F. Culture

Culture always exists in the society. In the global context, there are different cultures for each country or region. Culture is collective mind programming that differentiates between one group with others (Hofstede et al., 2005). Culture is also set of attitude, value, belief, and behavior of people and is communicated from one generation to another generation (Matsumoto, 2000). Culture has four dimensions such as power distance, collectivism vs individualism, femininity vs masculinity, and uncertainty avoidance (Hofstede et al., 2005). First dimension is power distance that emphasizes on how far organization team member who does not have power could accept such things. Second dimension is "collectivism vs individualism" that measures individualism level in society. Third dimension is "masculinity vs femininity" that emphasizes on the emotional role difference between man and woman. Last dimension is uncertainty avoidance that emphasizes on how far organization team member feels threatened because of either ambiguous or unknown situation.

G. Pro-Environmental Behavior

Pro-environmental behavior is a conscious action that minimize negative impacts of individual action toward natural environment (Kollmuss & Agyeman, 2002). This definition has focus on specific action towards environment that means action that provides benefits for environment (Steg et al., 2014). Pro-environmental behavior could be explained through its impact. All human behavior must bring impacts either positive or negative to the environment (Han, 2018; Steg & Vlek, 2009). Currently, classification of pro-environmental behavior focuses on individual level. Several researchers have

classified several pro-environmental behaviors. For example, pro-environmental behavior could be classified as persuasive action, consumers protection, legal action, political action, and environmental management (Han, 2018; H.R Hungerford et al., 1980). Other researchers also classified pro-environmental behavior into six dimensions which are civil action, education, finance, law, physical, and persuasive action (Han, 2018; Smith-Sebasto, 1992). Refer to this definition, other researchers also reclassified pro-environmental behavior into four categories such as discussing with other people about environmental problems, learning to solve environmental problems, and three specific actions like sorting material that could be recycled, joining clean-up community, and saving the usage of water through turning-off tap while cleaning dirty dishes (Han, 2018; Vaske & Kobrin, 2001). To use ecological action, other researchers define pro-environmental behavior as energy conservation, mobility and transportation, action of other people, social action that relates with conservation, waste prevention, and recycling (Han, 2018; Kaiser & Wilson, 2004). In the tourism context, pro-environmental behavior aims to lessen negative impact towards environment, promote environmental conservation efforts, and conserve biosphere and tourism destination ecosystem (Han, 2018; S. (Ally) Lee & Oh, 2014). Tourists' pro-environmental behavior varies from general action to specific action on certain location (Barr & Gilg, 2007; Becken, 2007; Han, 2018).

RESEARCH PROPOSITIONS

A. Relationship between social media UGC and environmental attitude

Social media UGC contains both aspects of cognitive and affective. These aspects influence environmental concern and attitude (Sultan et al., 2021). The usage of social media in luxury hotels also influence guest attitude so that hotels still keep use the social media (Matikiti-Manyevere & Hattingh, 2020; tom Dieck et al., 2017). Pro-environmental UGC also contains persuasive communication that could affect tourist attitude and behavior (Han et al., 2018). Based on these thoughts, the suggested proposition as follows:

Proposition 1: Social media UGC will influence better tourists' environmental attitude

B. Relationship between social media UGC and environmental concern

Environmental concerns are related with tourist emotional attachment towards environment. Social media UGC influence tourists environmental concern (Sultan et al., 2021). Discussion in social media about environmental issue also raises environmental concern (Liu & Li, 2021). Based on these thoughts, the suggested proposition as follows:

Proposition 2: Social media UGC will influence higher tourists' environmental concern

C. Relationship between social media UGC and pro-environmental behavior

Both cognitive and affective aspects of social media affect tourist' pro-environmental behavior (Sultan et al., 2021). Social media is also found to have influence on individuals' pro-environmental behavior through communicative role that social media has (Ai et al., 2021). Through shared information on social media, travel opinion leader also influence tourists' behavior (Javed et al., 2020; Vrana & Zafiropoulos, 2010; Yoo et al., 2011). Based on these thoughts, the suggested proposition as follows:

Proposition 3: Social media UGC will influence better tourists' pro-environmental behavior

D. Relationship between Key Opinion Leader (KOL) and environmental attitude

KOL is an individual who has strong influence in the social media. KOL also could influence others' attitude and behavior (Xiong et al., 2021; Zhao et al., 2018). In social media, KOL also could provide trust to the customers (Nefiratika et al., 2020). KOL increases consumers' confidence level to buy some products that are offered by KOL (C. Nguyen & Nguyen, 2020). Based on these thoughts, the suggested proposition as follows:

Proposition 4: KOL will influence better tourists' environmental attitude

E. Relationship between virtual community and environmental attitude

Virtual communities have become the one of the sources for changes in behavior (N. Chung & Koo, 2015; Sultan et al., 2021). Specifically, online interaction also affects the tourists' attitude (Javed et al., 2020). After the participants have discussed on certain topic through online interaction, it is known that participants' attitude on climate change is changed (Baba et al., 2021). Based on these thoughts, the suggested proposition as follows:

Proposition 5: Virtual communities will influence better tourists' environmental attitude

F. Relationship between environmental concern and environmental attitude

If tourists have high environmental concern, they will have optimistic attitude towards environment (Dolnicar & Grün, 2009; Sultan et al., 2021; Yusof et al., 2016). Environmental concern also influences environmental attitude regarding binning behavior (Esfandiar et al., 2020). People who have higher environmental concern will have better motivation to act responsibly towards environment (Janmaimool & Khajohnmanee, 2019). Based on these thoughts, the suggested proposition as follows:

Proposition 6: Environmental concern will lead better tourists' environmental attitude

G. Relationship between environmental concern and pro-environmental behavior

Environmental concern becomes emerging phenomenon that influences pro-environmental behavior (Dolnicar & Grün, 2009; Sultan et al., 2021; Verma et al., 2019). In addition, understanding the consequences of environmental problem also makes people to behave in pro-environmental way (Esfandiar et al., 2020). Environmental concern could become intrinsic motivation for individual and it correlates positively with responsible environmental behavior (Jekria & Daud, 2016; Liu & Li, 2021). Based on these thoughts, the suggested proposition as follows:

Proposition 7: Environmental concern will lead better tourists' pro-environmental behavior

H. Relationship between environmental attitude and pro-environmental behavior

Attitude is the degree of positive or negative evaluation towards certain behavior (Harold R. Hungerford & Volk, 1990; Sultan et al., 2021). Therefore, attitude is important factor that influence pro-environmental behavior (Chen & Tung, 2014; Follows & Jobber, 2000; Sultan et al., 2021). In the case of binning behavior, it is influenced by several factors such as attitude, perceived behavioral control, and social norm (Esfandiar et al., 2020). Environmental attitude is about people perception on the environment so it also influences pro-environmental behavior (Janmaimool & Khajohnmanee, 2019; Stern, 2000; Stern et al., 1999). Based on these thoughts, the suggested proposition as follows:

Proposition 8: Environmental attitude will lead better tourists' pro-environmental behavior

I. Relationship among culture, environmental attitude, and pro-environmental behavior

National culture can differentiate individual's responsible environmental behavior (Oreg & Katz-Gerro, 2006; Zarei et al., 2021). It means individual pro-environmental behavior depends on the values that are adopted by certain countries. Even cultural values could be considered to predict behavior in the countries that has strong norm (Elster & Gelfand, 2021; Taras et al., 2010). Several culture dimensions also affect individual pro-environmental behavior (Daryanto & Song, 2021; McCarty & Shrum, 2001). Another research also mentions that cultural value could be used as moderating variable to pro-environmental behavior (Chwialkowska et al., 2020). Based on these thoughts, the suggested proposition as follows:

Proposition 9: Culture will be moderating relationship between environmental attitude and pro-environmental behavior

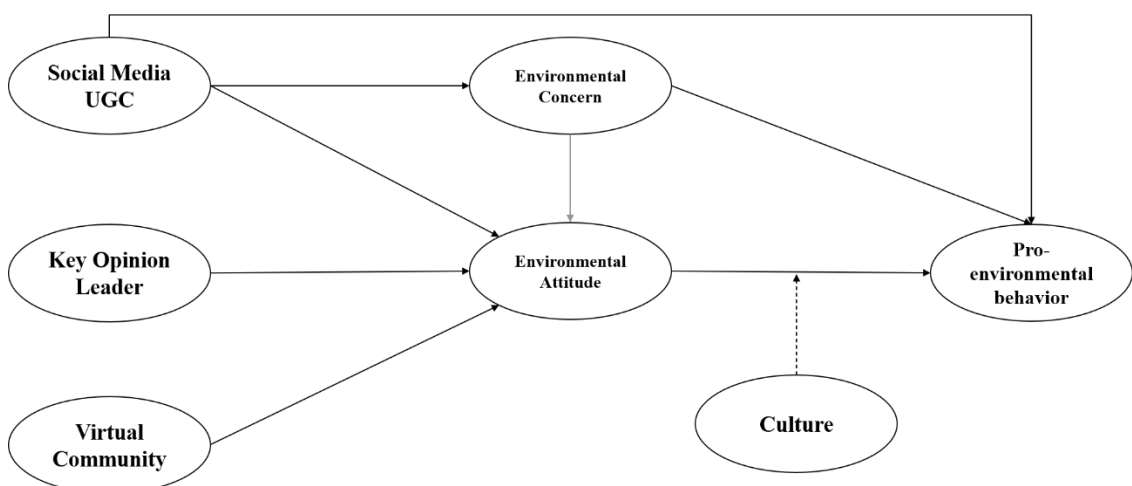Refer to all propositions above, the proposed framework is illustrated in Figure 1 below.

Fig. 1. Proposed Conceptual Framework.

CONCLUSION

This paper aims to provide a new perspective on how pro-environmental behavior is predicted by examining the role of UGC, KOL, virtual community, and culture. In other words, how KOL, its supporting elements (UGC and virtual community), and culture could be utilized altogether to shape tourists' behavior. Hence, tourists could behave responsibly towards environment.

Further research has to be conducted to explore other antecedent variables that may influence other variables in the proposed framework. These antecedent variables are not limited to the scope of social media context. Then, empirical research also has to be conducted. For example, researcher will distribute survey/questionnaire to collect primary data from targeted respondents such as respondents who use social media and love to travel. After getting the data, researcher will test the current model by using Structural Equation Modelling (SEM). The new conceptual framework how UGC, KOL, virtual community, and culture influence tourist pro-environmental behavior also has to be further explored and studied.

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