



Sustainable Living as Seen in Social Media: The Prospect and Limitation for Ecological Literacy Learning

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Abstract. Ecological literacy is one of the alternatives for the more mainstream concept of environment literacy, which makes the goal of Environment Education. Compared to environment literacy, which focus on transforming the learning of the individuals through schools, ecological literacy adopts the idea of relationship between living organisms and ecosystems, and links it with the idea of religiosity or spirituality through various learning mechanism. This research is written as an effort to understand the prospect and the limit of social media use for ecological literacy learning, led by women. Availing from the massive subscription of social media among Indonesians and their significant share of information on sustainable living, the study seeks to probe on whether social media has shifted people's conception on place and experience, which are fundamental to the value formation on human-environment relation in ecological literacy. From a combined online and offline ethnography, the study found that social media, instead of weakening ecological literacy learning, may constitute people-place relations through information and connectivity it facilitates.

Keywords: Ecological literacy · Indonesia · sustainable living · social media · place · experience

1 Introduction

Ecological literacy is one of the many aspects in contemporary literacies (McBride et al., 2013). The term ecological literacy is less used formally than the mainstreaming environmental literacy, which makes the goal of environmental education and is officially adopted in many official documents. Compared to environment literacy, which focus on transforming the learning of the individuals through schools, ecological literacy adopts the idea of relationship between living organisms and ecosystems, then links it with the idea of religiosity or spirituality through various learning mechanism. Whereas environmental literacy believes in the role of reason, ecological literacy highlights the constitutive elements of feelings and physical action in developing a pro-environmentally attitude and behavior (Sauvé et al. 2005).

Lewinson et al. (2015) argued that the framework of environmental literacy, being deprived of emotional attachment and empirical experience, is anthropocentric and subject to manipulation of power. Their entanglement with the standardized idea of schoolings, i.e. to yield citizens competitive and adaptive to global economic demands, is in contradiction to the goals of sustainability since it fails to provide students the ability to criticize the dominant neo-liberal economy and the socio-environmental dimension of globalization (Sauvé et al. 2005).

To mend the situation, some studies have suggested to incorporate a place-based education in order to build a sense of place, based on a belief that individuals who are grounded in their place are more likely to take responsibility in maintaining the cultural and natural history of the place (Sanger, 1997). Some of the methods considered here include experiential exploration, community-service learning, and outdoor education (Smith 2002, Sanger 1997), all of which are based on embodied experience that stands in line with ecological literacy's objective to bring back an understanding of relationship, connectedness, and context in environmental education through soil and place learning (Capra, 2007). Following Ecological literacy thinking, soil is the ground for biodynamic capacities of the earth system as it grants ecosystem in general with material services, while endowing human with cultural experience and spiritual enrichment, thus ensuring "a safe operating space for humanity" (Rockstrom et al., 2009).

While this resonance is relatively strong in some countries, such as China, Australia, and Israel (Woodhouse and Knapp 2000), it is less reverberated in a coherent public policy in Indonesia. In schooling, for instance, although the Ministry of Environment, together with Ministry of Education and Ministry of Religious Affairs, has since 2006 promoted Adiwiyata Program to build awareness through extracurricular activities on environmental protection and conservation (Chi-Kin and Efird 2014), the prescribed compliance upon administration, which is geared toward school's standardized competence, has diverted schools' attention away from empowering their students to creatively innovate solutions for local environmental problems (Prabawa-Sear 2018).

Compared to schooling, social media has nowadays become the main channel where discourse on environmental issues transpires at great lengths (Welle, May 16th, 2019). Not only that people could disseminate issues pertaining to environment, but also discuss ways to alleviate the problems. On the surface, social media enables ramification of environmental issues and activities, which is conducive to make a "ripple effect" in society for social learning and innovations. While circulation of information is part of the service of social media as a channel of communication, the capacity of social media as a medium for value transmission is hardly thought about, albeit actual. From this, debate lingers as to whether the current shift to green lifestyle only reflects market compromise or else, truly a transformation of society.

Nevertheless, correlating the way social media helps facilitate ecological literacy learning is challenging for each is perceived as being unfitted to the other. Social media is normally equated with space due to its deference towards mobility, speed, and connectivity (Brewer and Dourish, 2008), which is in opposition to inter-connectedness and intersubjective meaning within the purview of the soil and place learning in Ecological literacy (Capra, 2007). The paper aims to land on this contradiction by focusing on how sustainable living as seen in social media might (and to what extent) or might not

implicate the basis of ecological literacy learning, which is founded upon experience and place.

2 Literature Review

In media studies, the prevalence of Critical Theories in its analysis towards technology, media industry, and their entanglement have warned the two-face sides of technology. Social media, for instance, has increased connectivity, but also diminished connectedness at the same time. While connectivity enables people to go beyond the limit of bodily presence, it weakens people-to-people confluence in their holistic personalities. Having the characteristics of a game playing at the psychological level through chronic consumption and production, social media encourage individualistic self-presentation, competition, and accumulation of reputation (Allmer, 2015). When social media muddles with primordial issues, it even fosters tribalism and separatism. While social media exercises the stimulation of the senses through imagination and sensation, it alters people's perception about space and connection (Fuchs, 2014). Having said this, social media has been doubted due to the tendency it has in fostering addictive insatiability (Haand and Shuwang, 2020), serving to particular norms for social behavior and cultural production. This unfavorable view of social media makes it difficult to be taken into scholarly account in ecological literacy learning.

Meanwhile, some other scholars also note how social media mediates people-place interaction through affect, cognition, and practice (Olafsson et al., 2021) in ways that facilitates understanding and bonding between people and their ecosystem through self-identities and place identities. Agustina's research (2020), for example, shows how visuals and social media persuasion can move people to experience a green lifestyle through workshops with environmental figures or camps at farmhouses. While this mobility was halted due to the implemented social restrictions following the pandemics, social media has dominated other medium (Hootsuite, 2020) in seeking information related to environmental issues, especially in relation to how ecosystem instability has led to a pandemic, along with the efforts that people can make to mend the situation (cf. Rousseau and Deschacht, 2020). These contrasting frameworks reflect the debate pertaining to the potential capacity of social media to reconstruct the idea of place, natural environment, and their relational values for people's life.

In line with the contradictory account of media technology in media studies is the circumspection of the rise of the non-place (Augè, 2008). Often technologically mediated, a non-place is indicated as being lack of meaningful relations due to the decreasing real activities that eventually leads to the extinction of experience. What is really worrying is, without a place, human lose their identity and their connection with the environment. Place learning is, therefore, in need to revive for it may kindle "a respect for, and a critical reading of, the social institutions, histories, cultures, and environments" that constitutes one's lifeworld (McInerney et al., 2011, p. 12). All factors combined, they make the pocket for one's social ecological memory (Barthel et al., 2010), building one's identity (Relph, 1976), and shaping rooted cosmopolitan subjects (Chapin and Knapp, 2015). While majority of discussion on place education has been focused on community or neighborhood, the scale of observation for place research is in fact more varies. Other

than community or neighborhood, scales of place research may also focus on home, cities, countries, or even continent in place research (Lewicka, 2011).

Juxtaposing place learning is ecological literacy learning. An ecological literacy learning holds that ecosystem provides the ultimate learning exemplar and the soil is the crux where all kinds of relations between all living things emerge. Weighing on the importance of embodied practice and experience, ecological literacy considers that learning in the real world through gardening, farming, or community service works at best because it provides a learning on the intersection of living networks (Capra, 2007). Whereas farming and gardening could provide a rich and multisensory learning of the environment, which is needed to comprehend a complex totality of a life course; a community service reflects the principle understanding of relationship once it is taken into the social context. Since biological diversity is the key to ecosystem health and resilience in the face of environmental shock and stress (Stolton et al. 2008), activities like farming and gardening could teach people that a community is well maintained only by the nourishment of the multiple relationship of its varied members, one that reflects sustainable living. The path toward sustainable living, however, necessitates a transformed sustainable culture, one in which individuals transform their present needs, sensibility, consciousness, values, and behavior. This is the fulcrum where the use of social media to cultivate new norms and culture penchant for sustainability requires a deeper understanding.

3 Methods

The study was part of a research project on sustainable living and environmentalism in everyday life, which was started a year before and after the pandemic hit Indonesia at the end of March 2020. The main study employed life-world analytical ethnography (Honer and Hitzler, 2015) that, weighing more on participation—instead of observation—utilized the experience of immersion as the main instrument for data enablement.

In this paper, resource for discussion was based on the casual conversation during and impression drawn from the immersion, which result was divided between before and after the pandemic. To ensure triangulation, these results were then consulted with the interpretive analysis drawn from the main study and the survey result during April through July 2020. As an online survey method in qualitative study may offer a ‘wide-angled lens’ (Braun et al., 2020), its employment in the main study was meant to gain the gist of the general attitude in society towards environmental issue and sustainable living practice. Analysis was made reflectively (Attia and Edge, 2017) in a description.

4 Results and Discussion

The study found that there is an increasing role that social media play in providing information for people pertaining to environmental problems and how to mend with it. The study also found that orientations that people have in terms of sustainable living have shifted. Prior to the pandemic, sustainable living was merely conceived as a lifestyle that people can choose. These people, mostly urban, educated, middle to upper class,

regard sustainable living as seen in social media as a nifty thing to do, luring them to taste the experience of joining in. They often lead to development of communities of hobbies, such as those focusing on organic farming or organic food consumption. But some others see sustainable living as a cure to the deteriorating vitality of life due to the massive economic intrusion to people's lifeworld. Either to renew their relations with environment and/or to improve their non-economic wellbeing, these latter group engage in various activities, such as composting, vegetable gardening, and selective buying from local farmers. The main consideration for opting sustainable living remains focusing on at the individual who made the option. Practice of selective buying from local farmers, for instance, was more dominated with the issue of personal health than the social justice issue of the farmers themselves.

After the pandemic, however, orientations toward sustainable living practices as seen in social media have developed, no longer directed by a slight interest of tasting the experience through individual events, but more of seeing the possibility of exercising them in everyday life, hoping to contribute to improve the environment through more tangible practice. Compared to the previous trend, these latter developments tend to include the social and environmental aspect of opting for sustainable living practices. This reflects an increasing awareness on the multidimensionality of environmental issue itself and how the audience try to make thorough consideration for a better decision.

But instead of social media, the difference between the two nature of decision occurs because of the pandemic factor itself. The pandemic encourages not only few but many people to rethink the impact of human actions towards the environment. The fact that habits and ways of living that human endures has solely centred around their own comfort and severely degraded the environment has raised question to what extent these may last without jeopardizing for more. The pandemic is therefore questions whether those practices and outlooks will be maintained or changed with other alternatives, which is more considerate to the lives of others.

A participant of the composting class in October 2020 acknowledged that she did not really pay attention of what and how she ate before the pandemic happened, believing that technology was all there to help her at ease with all the daily eating needs. She was a regular user of home delivery service application. The problem started to arise when the pandemic led people to stay at home and the usual garbage collector that came to her house was nowhere to be seen. At first, she was angry seeing the piling of waste disposed given the putrid decomposition of leftover food and the fearing of new diseases to come, thus blaming the absence of the garbage collectors, but then she realized that she was the one who made it all happened.

Indeed, many people need time to reflect on how man-made interference to the quality of the environment has direct links to changes in people's quality of life, too. The pandemic has therefore provided a moment to reflect, to give pause to anyone to look in the mirror and see what has been lost and what can still be achieved by reorienting oneself towards better relationship with one's surroundings and new experience in one's life.

Given the impact it gives to many people at the same instance, the pandemic has enabled more people in the same environs to simultaneously figure out what to do for a proper response. Before the pandemic, this was a difficult state to attain. Of the fourteen

participants joining Workshop on a Less Waste Home (January–February 2020), only three participants believed that ideas to minimize household waste would be directly supported by the other members of the family. But result from online survey ($N = 103$) found that sixty percent of the respondent considers that family members were no longer the factors that impede their decision to practice sustainable living.

A participant of an online class on organic vegetable gardening in July 2020 admitted, being the breadwinner of the family, she used to provide family meals from the ready-made food because it was fast, convenient, and suited her needs. But, after the pandemic, she tried to adjust herself with cooking and gardening so that she could ensure the family health. While issue of health was very much pronounced, another concern leading to the initiation of home gardening as a new habit came from the issue of food shortage, especially in the early weeks of the pandemic.

Until the first two years of the pandemic, social media became a site for discussion and learning about alternative lifestyles. Open discussions on health and environmental issues, followed by inexpensive classes on various topics from farming and food processing to waste management and housekeeping, all offered ways to respond to the situation through thinking and behaving more environmentally friendly. Many parties try to contribute to the discourse and practice of a better life for the future. In social media they met new acquaintances and new aspirations to achieve.

Apart from initial exposure, social media supports the development of one's self-efficacy through connection to likeminded communities of practice (Wenger, 2000) it facilitates. These communities, focusing on practice and problem solving through "thinking together" mechanism (Liberatore et al., 2018) provide feeling good (Foster et al., 2019) that one needs in maintaining one's mood and motivation during the experimentation for building new habit.

One of the mechanisms through which they are formed online is through hashtag (Keir et al., 2021). Pivoting around sustainable living practices, some communities of practice focus their attention on common issues of concerns, such as #plasticwaste, #fastfashion, or #foodwaste. Sharing similar interest, these communities of practice are doted on for their voluntarily equal participation in learning to devise problem solving through #ecobrick, #composting, #foraging, or #foodgardening, to name just a few. These hashtags help create not only field for discussion but also interaction for online community making. Hashtag communities, however, perform well in a less bounded system, such as Instagram.

In a more bounded system (e.g. whatsapp and telegram), other type of communities emerges through group action. Organized better, they developed around particular issues of concern or based on regional boundaries. Sharing mutual gains, these communities are esteemed not only for the explicit and tacit knowledge imparted, but also for their reciprocated motivations, helping to improve a self-regulated performance of those participating. Except for the regional based group action, community participation is relatively fluid and inclusive.

Either in bounded or less bounded system, the internet in general has enabled the transmission of information and practical knowledge, enabling the explosion of discourses to which many individuals could be easily exposed of, enticed to, and participate in (Bakardjieva, 2012).

But even with the loosely exchange of information and knowledge, exposures to these discourses and practices remain feeble and unable to produce any meaningful transformations, had it not been followed with actual practice and experience. Along with observant participation, interviews with informants participating in composting and gardening class during the research reveal this picture well. They describe a change of attitude towards leftover food as well as feelings towards composting process itself.

What is also evident during this change of atmosphere is that despite the significant value of the communities, it is in the home that experience for sustainable living practices can be effectuated. The main study found that sustainable living practices not only impact the individuals who carry it out, but also the people in the family and/or their online peers. Some key informants in the main study reported that they need more time to engage the other members of the family, but some others said that from the very beginning they have already engaged them into the journey of sustainable living practices.

Being the site of experience, a house is not only a location where practices are manifested, but also a ground for meaning. Indeed, it is through experience alone that one can reflect and grasp the meaning profoundly seated under the mundane practice of sustainable living in daily life.

But while it is common sense to conceive a house as a place where people live in togetherness, more and more evidence reveal how it turns placeless, lack of meaningful attachment. Only when a house emplaced as a home that it may restore its function as a primary place where people learn the very basic idea of relationship and experiential learning. A home is, indeed, an important milieu where ecological literacy learning takes place.

5 Conclusion

Social media provides initial access to a diversity of discourses and practice of sustainable living. But as shown from the elaboration above, the functionality of social media stops short as a medium of information and connectivity. By information, social media provides the initial exposure to practices akin to the objective of sustainable living. Social media enables individuals to think up their understanding of the world, including to gauge with immediate and anticipated risk altogether, hoping to make adjustable response to it and to make sense of their presence in a better way. This latter function is further accomplished through connectivity with a multitude of social relations and likeminded communities, from where good feeling reverberates. Hence, instead of debilitating ecological literacy learning, social media was in fact a powerful tool from which people may retain and reflect upon their embodied practices and experiences. Social media fulfil the needs of lay people to learn through discourse and practices of sustainable living from a multitude of sources in a relatively easy and affordable way, hence complementing what one derives from experience and place learning.

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