Identification of cultural capital and sustainable behavior towards sustainable development

Giska Raissa¹, Sandhy Sihotang¹, Filia Christy¹ and Karen Wijaya²

¹Lecturer, Calvin Institute of Technology, Faculty of Science and Engineering, Jl. Industri Blok B14 Kav. 1, Kemayoran, Jakarta Pusat 10610, Indonesia
²Research Assistant, Calvin Institute of Technology, Faculty of Science and Engineering, Jl. Industri Blok B14 Kav. 1, Kemayoran, Jakarta Pusat 10610, Indonesia

E-mail: giska.raissa@calvin.ac.id

Abstract. Cultural capital has been defined as one of the basic aspects and means that enables human society to survive and develop civilizations. At the same time, studies show that the development of human civilization cannot overlook the issue of sustainability. Accordingly, this understanding emphasizes the importance of cultural capital in sustainable development. In academic literature, there is a high level of discussions that address the issue of sustainability in relation to the five capitals, namely natural, human, physical, social, and financial capital. However, the existing research on sustainable development shows that the significance of cultural capital and sustainable behavior is not addressed. This theoretical study aims to investigate the relationship between cultural capital and sustainable behavior in carrying out sustainable development. The result proposes a conceptual framework that shows cultural capital as the basis of understanding in shaping sustainable behavior and managing the five capitals towards sustainable development.

1. Introduction

Based on global consensus, sustainable development is defined as the development of civilization by meeting the needs of today's generation without sacrificing future generations [1]. Following this definition, neglecting the sustainability issue means disrupting human welfare in the present and future. Cultural capital has been defined as one of the basic aspects and means that enables human society to survive and develop civilizations [2]. At the same time, studies show that the development of human civilization cannot overlook the issue of sustainability. Accordingly, this understanding emphasizes the importance of cultural capital in sustainable development. In academic literature, there is a high-level discussion that addresses the issue of sustainability in relation to the five capitals, namely natural, human, physical, social, and financial capital. However, there is limited discussion that identifies the significance of cultural capital and sustainable behavior in its role to support sustainable development. In response to the gap in the literature, this study attempts to answer the following questions: (1) What is the role of cultural capital in supporting sustainable development?; and (2) What is the relationship between cultural capital and sustainable behavior towards sustainable development? Thus, this study contributes to identify cultural capital as an asset that is significant in carrying out sustainable development. Besides, the discussion also seeks to fill the gap in the literature.
by looking at the relationship between sustainable behavior and cultural capital in implementing sustainable development.

1.1. The Five Capitals in relation to Sustainable Development

Over the years, sustainability-related literature has always been linked to natural, human, social, physical, and financial capital, which is known as the five capitals. The five capitals model was developed by an environmental expert, Jonathan Porritt, as a framework in explaining a sustainable society [3]. The framework of thinking used in the five capitals model is to maximize the existence of each capital in generating maximum advantages without disregarding the sustainability. In brief, this section discusses each capital concerning sustainable development. First, natural capital is one of the drivers of many economic activities. In relation to natural capital, sustainable development can be defined as the ability to manage natural resources and ecosystems that eventually supports human life [4]. Secondly, in terms of human capital, sustainable development can be defined as the ability of humans to be productive and creative in achieving human welfare and well-being [3, 5, 6]. This idea can be understood as human beings having high standards of healthy living, actively participating in community activities, and are able to work and learn in order to develop themselves [6]. Third, in relation to sustainable development, social capital is defined as a social bond that supports personal and collective changes that promote sustainable life [7, 8, 9]. Fourth, in terms of physical capital, sustainable development should be achieved by using a minimum amount of natural resources in driving the entire basic infrastructure systems and networks; thus, human skills and creativity should be able to be used maximally in achieving sustainable development [10, 11]. Fifth, financial capital is directly reflected through natural, human, social, and physical capital [6, 12]. Financial capital is used by humans to drive economic activities so as to produce productivity and profits.

1.2. Cultural Capital

Cultural capital is defined as cultural skills and values that are embodied in a society, obtained from previous generations, adapted, and continued by the current community group [13]. Initially, Bourdieu who coined the term cultural capital divides cultural capital into three categories, namely: (1) objectified cultural capital which is in the form of objects or properties; (2) institutionalized cultural capital which is in the form of education and particular knowledge; and (3) embodied cultural capital which is in the form of identity, belief, and skills [14]. Meanwhile, the elements of cultural capital cover tangible objects such as buildings, sites, locations of cultural significance, works of art, artifacts, paintings, literature, music, and sculpture; as well as intangible things such as behaviors, a collection of ideas, practices of beliefs, traditions, and values that form the identity and bind a group of people [13, 15]. This understanding asserts that cultural capital is a fundamental asset in human life. As an asset, cultural capital is related to the cultural well-being that exists in individuals within a group of communities where they can participate in cultural life and express themselves creatively and freely [16]. Cultural life and activities include art; language; film; history; heritage and tradition; sports and recreation; spirituality and the emotional connection; as well as the place where they live [13]. Cultural capital is associated with the expressions of social, ethical, intellectual, science, art, and technology [17]. It enables people to adapt to the environment where they live [13], and to develop human civilization [2]. Its existence forces individuals to give time and effort to acquire it [14]. The process starts when someone is born and lasts throughout his life [14]; it is inherited and transmitted socially [15].

1.3. Sustainable Behavior

Human behavior is a term used to describe human actions and attitudes that are primarily influenced by cultural capital [2]. Human behavior such as excessive consumption of natural resources will cause threats to the environment [18]. Thus, behavior change towards sustainable behavior becomes essential in achieving the goals of sustainable development. Sustainable behavior is defined as ecologically and socially healthy behavior that contributes to environmental conservation [19].
Furthermore, sustainable behavior reflects the values, norms, beliefs, and responsibility for the present and future generation [20]. Examples of such behaviors are for instance conserving the use of energy, reducing water usage, recycling, and involvement in environmental preservation activities [20]. In other words, actions that are friendly to the environment and avoiding irresponsible behaviors that may harm the environment. Eventually, sustainable behavior aims to participate in solving problems related to the environment.

1.4. Major Assumptions in the literature of Sustainable Development
Major studies discuss the relationship between the five capitals and sustainable development [13, 14, 15]. At the same time, the literature shows that cultural capital is a fundamental asset that is the basis of human thought and behavior [2]. Thus, there is a gap in the literature concerning the relationship between cultural capital and the five capitals towards the notion of sustainable development. In addition, studies of sustainable behavior show that it drives sustainable development. However, there is no linkage found between cultural capital and sustainable behavior.

2. Method
This research was conducted using the theoretical approach. The theoretical approach allows the researcher to explore existing beliefs, assumptions, and knowledge [21]. Besides, it provides an opportunity to understand previous studies so that a broader understanding is obtained on the particular topic discussed. In this research, data used were taken from the published article with the main keywords as follows: cultural capital, sustainable behavior, and sustainable development. In analyzing the data, the inductive content analysis approach is used to generate a new perspective in seeing the topic discussed [22]. Thus, a conceptual framework is proposed as a synthesis and integration of previous studies regarding cultural capital, sustainable behavior, and sustainable development.

3. Result
This section shows the result of the synthesis and integration of previous studies related to cultural capital and sustainable behavior towards sustainable development. Synthesis is carried out by integrating: (1) the relationship between cultural capital and the five capitals towards sustainable development; and (2) the relationship between cultural capital and sustainable behavior in achieving sustainable development. The new conceptual framework within the discussion of sustainable development is shown in figure 1 (below). The figure shows that interventions towards cultural capital lead to cultural change. Nevertheless, cultural change arises because the interventions towards cultural capital encourage behavior change that promotes sustainable behavior. Sustainable behavior consequently drives cultural change. In addition, literature shows that cultural capital affects the five capitals. Accordingly, cultural change also affects the five capitals that directly promote sustainable development. Thus, interventions carried out on cultural capital encourage changes towards sustainable behavior and the management of the five capitals.
4. Discussion

4.1. Cultural Capital and The Five Capitals towards Sustainable Development

In the introduction section, the relationship between the five capitals and the notion of sustainable development has already been explored. This section explains how cultural capital relates to the five capitals that are directly related to sustainable development. First, it can be argued that cultural capital influences how natural capital is used and managed. For example, in the world of agriculture, there is traditional knowledge in preserving the genetic diversity of seeds that is environmentally friendly [23]. This activity is a cultural asset that supports natural capital in achieving sustainable development. Second, cultural capital drives financial capital. For instance, in the City of Pekalongan, Indonesia, batik production is one of the cultural activities in producing traditional textiles. This activity becomes a business sector that contributes to creating job opportunities [24]. Third, health is one of the elements of human capital. Health policies and programs should consider traditional treatments that have lower risks to be integrated into the traditional health system where appropriate [25]. Fourth, an example in terms of social capital is the indigenous custom in Indonesia which is gotong royong [26]. Gotong royong is a cultural heritage of the Indonesian people that has become a part of social life. This traditional custom encourages a community to work together to solve problems in one particular neighborhood area. Therefore, it is arguable that cultural capital influences and becomes a driver of social capital. It also underscores the difference between cultural capital and social capital used in this study. Fifth, cultural capital influences physical capital. This example can be seen in Netherlands that has a cycling culture for decades [27]. Previously, it is said that sustainable development in terms of physical capital can be achieved by using a minimum amount of natural resources. Therefore, cycling culture has helped in achieving sustainable development in Netherlands. It can be concluded that cultural capital is the basis of understanding of values related to the environment and awareness towards responsibilities in managing the five capitals. A community or a group of people who have better capacity and quality of cultural capital will have a greater opportunity to transform the other five capitals in creating more sustainable development. In other words, the more developed the cultural capital owned by a particular group of communities, the greater the opportunity they have to develop the five capitals towards sustainable development.

4.2. Cultural Capital and Sustainable Behavior towards The Sustainable Development
Previously, the definition of cultural capital explains that behavior is one of the elements of the cultural asset [13, 15]. Nevertheless, many slogans and campaigns about sustainable behavior do not take into account the context of cultural capital. In fact, cultural capital is the basis of lifestyle and consumption patterns. Interventions towards cultural capital should encourage changes in behavior to a more sustainable lifestyle. In determining the interventions that need to be carried out towards cultural capital, it is necessary to know factors that affect cultural capital, namely education and ICT (Information and Communication Technology) [5, 13, 28]. Education is an important factor because it nurtures, promotes, and ultimately determines culture [5, 28]. Likewise, ICT has changed many aspects of human life including cultural capital [13]. At the same time, it transmits and promotes culture [13]. Thus, attempts that are made towards cultural change, including sustainable behavior campaigns are suggested to consider education and ICT as tools within the process. Besides, the use of education and ICT can help in transmitting and promoting sustainable behavior campaigns for a long period and to large numbers of people. It can be argued that sustainable behaviors will be temporary and insignificant if it does not become habitual actions or everyday behaviors. This means sustainable behavior must be nurtured as part of the culture in a community so that it can run for a long time. In addition, although sustainable behavior can be done by individuals, however, cultural capital involves groups of the community. Accordingly, interventions that are carried out on cultural capital will have an impact on groups of people. Changes in groups of communities will bring greater impacts.

5. Conclusion
This study shows that cultural capital is an asset of thoughts and understanding in managing the five capitals. The more developed the cultural capital owned by a group of people, the greater the opportunity they have to develop all resources in achieving sustainable development. This study also emphasizes the behavioral component as part of cultural capital. If sustainable behaviors are seen separately from cultural capital, the improvement of sustainable behavior will only be temporary. In other words, if cultural capital is intervened, changes will be long term. The slogans and campaigns that encourage people to change their behavior towards sustainable behavior should consider the factors that affect cultural capital namely education and ICT. Thus those behaviors can be practiced and preserved until they become the norms and cultures, otherwise, it will only be temporary. Interventions towards sustainable development that take aspects of cultural capital into account are more effective and efficient because they consider cultural context and diversity. The result is not only sustainable development but also changes that are more sustainable. Future studies should consider how the five capitals affect cultural capital.

References
[1] Basiago A D, 1998 Economic, social, and environmental sustainability in development theory and urban planning practice Environmentalist 19 pp 145-161
[2] Cochrane P, 2006 Exploring cultural capital and its importance in sustainable development. Ecological Economics 57(2) pp 318-330
[3] Dhakal S P, 2011 The five capitals framework for exploring the state of friends' groups in Perth, Western Australia: Implications for urban environmental stewardship International Journal of Environmental, Cultural, Economic and Social Sustainability 7(2) pp 135-147
[4] Moldan B, Janošková S, and Hák T 2012 How to understand and measure environmental sustainability: Indicators and targets Ecological Indicators 17 pp 4-13
[5] Brereton D, and Pattenden C 2007 Measuring what matters: Monitoring the contribution of a new mining project to community sustainability In 3rd International Conference on Sustainable Development Indicators in the Minerals Industry Milos Island, Greece
[6] Šlaus I and Jacobs G 2011 Human capital and sustainability. Sustainability MDPI 3(1) pp 97-154
[7] Syamni G 2010 Profil Social Capital Suatu Kajian Literatur Jurnal Bisnis dan Ekonomi 17(2) pp 174-182
[8] Anheier H K., Gerhards J, and Romo F P 1995 Forms of capital and social structure in cultural fields: Examining Bourdieu's social topography American journal of sociology 100(4) pp 859-903

[9] Falk I and Kilpatrick S 2000 What is social capital? A study of interaction in a rural community. Sociologia ruralis 40(1) pp 87-110

[10] Dissou Y and Didic S 2013 Infrastructure and growth. In Infrastructure and Economic Growth in Asia Springer Cham pp 5-45

[11] Goodwin N R 2003 Five kinds of capital: Useful concepts for sustainable development G-DAE Working Paper No.03-07

[12] Brunner K and Meltzer A H 1972 Money, debt, and economic activity Journal of political Economy 80(5) pp 951-977

[13] Dalziel P, Saunders C, Fyfe R and Newton B 2009 Sustainable development and cultural capital (Official Statistics Research Series Vol. 5)

[14] Bourdieu P 2011 The forms of capital 1986 Cultural theory: An anthology 1 pp 81-93

[15] Throsby D 1999 Cultural capital Journal of cultural economics 23(1-2) pp 3-12

[16] Kim S and Kim H 2009 Does cultural capital matter?: Cultural divide and quality of life Social Indicators Research 93(2) pp 295-313

[17] Robbins D 2005 The origins, early development and status of Bourdieu's concept of ‘cultural capital’ The British journal of sociology 56(1) pp 13-30

[18] Lehman P K and Geller E S 2004 Behavior analysis and environmental protection: Accomplishments and potential for more Behavior and social issues 13(1) pp 13-33

[19] Khansari N, Mostashari A, and Mansouri M 2013 Impacting sustainable behavior and planning in smart city International journal of sustainable land Use and Urban planning 1(2) pp 46-61

[20] Ibtlissem M H 2010 Application of value beliefs norms theory to the energy conservation behaviour Journal of Sustainable Development 3(2) pp 129-139

[21] Thomas G 2011 A typology for the case study in social science following a review of definition, discourse, and structure Qualitative inquiry 17(6) pp 511-521

[22] Thomas D R 2006 A general inductive approach for analyzing qualitative evaluation data American journal of evaluation 27(2) pp 237-246

[23] Esquinas-Alcázar J 2005 Protecting crop genetic diversity for food security: political, ethical and technical challenges Nature Reviews Genetics 6(12) pp 946-953

[24] Steelyana W 2012 Batik, a beautiful cultural heritage that preserve culture and support economic development in Indonesia Binus Business Review 3(1) pp 116-130

[25] Bodeker G and Kronenberg F 2002 A public health agenda for traditional, complementary and alternative medicine American journal of public health 92(10) pp 1582-1591

[26] Slikkerveer L J 2019 Gotong Royong: An Indigenous Institution of Communality and Mutual Assistance in Indonesia In Integrated Community-Managed Development Springer Cham pp 307-320

[27] Stoffers M 2012 Cycling as heritage: representing the history of cycling in the Netherlands The journal of transport history 33(1) pp 92-114

[28] Tilbury D 1995 Environmental education for sustainability: Defining the new focus of environmental education in the 1990s Environmental education research 1(2) pp 195-212