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ROLE OF GREEN ENTREPRENEURSHIP IN RAISING THE EFFECT OF GREEN VALUE TOWARD SUSTAINABLE DEVELOPMENT

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ABSTRACT

In line with circular economic, the role of green entrepreneurship (GE) should be useful in preserving environmental sustainability. However, so many people are less aware of the importance of sustainability and green behavior in business activities. Therefore, the goal of the study is to explore a linkage of green value, GE, and sustainable development that is perceived by entrepreneurship students in Jakarta, Indonesia. 180 students were involved as respondents resulting in significant impacts. By using Smart-PLS proves significant relationships and finds a mediating effect of GE which links green value to sustainable development at the level of 5 percent. It forms a green triangle approach in promoting sustainability education for university students so that this linkage signs a good perception of students in expressing green value toward GE and sustainability issues. It is an early stage in promoting the triple bottom line so that the learning system could collaborate with stakeholders for enhancing the sustainability system in entrepreneurial education.

Keywords: Green value, green entrepreneurship, sustainable development.

INTRODUCTION

Today's global community is confronting environmental problems that can disrupt the welfare of future generations. In pursuit of sustainable development is needed an economic development model which commits to environmental sustainability. Thus, the development is expected to grow simultaneously between economic and environmental goals. It is in line with the circular economy model where the companies ought to own the higher responsibility to uphold the values of environmental and social sustainability and always to respond with stakeholders (Lahti, Wincent and Parida, 2018). The model turns the economic orientation into the cycle of care for societies and ecosystems (Pla-Julián and Guevara, 2019). Even, this issue has led to a notable increase in research works during the last few years (Ruiz-Real et al., 2018). As a mode of economic development, the purpose of the circular economy prevents pollution and recycles the material or waste. It is relevant to the green economy that previously has emphasized tradeoff between the benefit of natural capital and reducing environmental risks. Based on these reasons, the business model must be in line with the socio-ecological system so the business activities can mitigate the natural destruction and save the resources in order to keep on the sustainability for the future.

One of the adoption of the circular economy in the entrepreneurial development area is practiced through the green entrepreneurship (GE). By the model, an entrepreneur ought to own a vision to move a green innovation and maintain the ability to bring innovation to the green market. Hence, in order to realize the goals must respect the ecological values. It is agreeing with Kotchen, (2009) who highlighted the starting of new business by creating the products that appreciate to the ecological benefits. Through this system, entrepreneurs can contribute to

defend sustainability in the future. It is in line with the Brundtland Commission has been as pioneer the agreement of our common future since 1987. It has a target to improve human well-being and social equity by harmonizing programs, thus meets the welfare for current and future generations. The facts Indonesia is as one of the biggest biodiversity and rainforests which must be kept safe for sustainability in the future. At the same time, the country faces diseases, and natural disaster such as floods, landslides, forest fires, or drought is an indicator of the environmental damages (Sudyasjayanti, 2018). Moreover, the heatwave phenomenon direct impacts on agriculture, economic, and human health (Suparta and Yatim, 2019). Thus, the maintaining of natural resources and anticipating disasters ought to be a trigger for entrepreneurs. All parties must concentrate on environmental sustainability (Dong and Hauschild, 2017), including the business practices that must align with the sustainability values without ignoring the social welfares and the quality of the natural resources.

Furthermore, in line with growing rapidly in the entrepreneurship sector, entrepreneurs have to innovate continuously and promote the changing of the business framework. Moreover, a new wave of destruction is coming to challenge the millennial entrepreneurs to be green innovators. Digital technology grows up so vastly so young entrepreneurs must take the opportunity for supporting the sustainability's thinking. GE has a role as media for connecting the goals of sustainable development or SDGs with circular economy. Thereby, a green entrepreneur must be conscious of pro-environmental and pro-prosperity behavior for nowadays and the future. One of the entrepreneur decisions can be seen in the relationship between environmental awareness and behavior (Mei, Wai and Ahamad, 2016; Amartha, Hamzah and Herdiansyah, 2019) or detected by the environmental attitude (Atav, Altunoğlu and Sönmez, 2015). This indicates that the aspects of psychology hold a role in shaping one's mindset towards eco-friendly business and sustainability for society.

For these reasons, the study emphasizes the role of GE in mediating the green value to sustainable development. The term "green" aligns with the green economy as used by Uslu, Hancıoğlu and Demir, (2015); Lotfi, Yousefi and Jafari, (2018); Romanowski and Gnusowski, (2019). Other prior studies use the mention of the "eco" such as Kainrath, (2009); Kotchen, (2009); Kirkwood and Walton, (2010); McEwen, (2013); Abina, Oyeniran and Onikosi-Alliyu, (2015); Nuringsih and Puspitowati, (2017). Both are used interchangeably in defining this model. Basically, it turns the managing of conventional to the green business with respect to environmental issues, for instance in saving natural resources, conserving the environment, and mitigating degradation. Therefore, a positive perception will be formed towards sustainable development.

According to Kirkwood and Walton, (2010) stated a green value or green ethic is one of the important decisions that encourage an eco-entrepreneur. From the psychological perspective, value impacts the perception of people, then forms a desire or intention in green entrepreneurship. Value is the basic conviction of the specific model, thus an entrepreneur has a conscientiousness to apply the ecological values which benefit people and the planet simultaneously. It forms a direct linkage to sustainable development and to the GE. Hence, the research explores the perception of millennials students in understanding GE and sustainability through the shaping of the green value. The segment is considered to own greater environmental awareness. It could be possibly related to the education approach which is adopted by their education institution. Therefore, the role of constructs in these relationships will be investigated through this research.

In understanding the framework, this study involves university students in Jakarta, Indonesia. This institution has executed the entrepreneurship program for over one decade, so it is sufficient enough to be involved in environmental issues. Along for conserving biodiversity, the

nascent of entrepreneurs have to be careful with the green business. In the millennial era, students master fluently to information technology, thereby they are highly cultured digitally about pro-environmental behavior and green lifestyles. Even, as urban communities ought to more appreciate the environmental issues and make sure the way in overcoming the sustainability issues. For these reasons, an educational institution could arrange a learning system that accommodates the current environmental issues, thus it creates a visible outcome and promotes the student potential (Othman and Othman, 2019). Through synergizing between self-knowledge and education system are able to encourage the green value among students, thus enhancing the perceived of GE and driving the mindset of sustainability in the business. This frame thinking is useful to foster the students through the entrepreneurial education approach.

The goal of the study explores a linkage of green value, GE, and sustainable development where the GE is placed as mediating to the link green value toward sustainable development. Thereby, the goal of the research is to identify the relationship among three constructs in order to expose the education of green entrepreneurship. Related to the behavior study, the analysis involves the theory of planned behavior (TPB) for identifying human perception. It could design a mechanism for encouraging of environmental mindset for millennial society, thus they will be more motivated to seize the opportunity for sustaining a green economy in the entrepreneurship sector. These results serve as information for the institution to perfect curriculum and prepare learning method for students within a sustainability ecosystem.

LITERATURE REVIEW

Sustainable Development, Green Economy, and Circular Economy

The term sustainable development is a theme of meeting that was organized by the United Nations by defining as “a development that meets the need of the present without compromising the ability of future generations to meet their own needs”. The further explanation contained two main ideas: “(1) the concept of need, in particular, the essential needs of the world’s poor to which overriding priority should be given, (2) the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs” (WCED, 1987). In a highlight, the program aims to improve social welfare without ignoring cultural preservation and ecological conservation. It appreciates opportunities for future generations and prepares the ability to satisfy their needs related to the triple bottom line. Thereby, it requires simultaneous implementation in order to achieve the sustainability of the development.

In supporting sustainable development, the economic development practice is created conceptually through the green economy. The United Nations Environment Programs (UNEP, 2011) noted that the green economy is an economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In detail is interpreted that “a green economy can be thought of as one which is a low carbon, resource-efficient, and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services”. The concept of "green economy" as a development model to realize sustainable development. Further, UNEP stated that the "chocolate economy" has not substantially overcome social marginalization and resource depletion so that the green economy as a model to makes sure in achieving SDGs.

In clinging with this moment, the circular economy comes to perfect the economic growth in the green business era by placing the environmental program as a good program to overcome the ecological issues. It harmonizes the socio-ecological issues equally with economic goals. The circular economy emphasizes the responsibility to enhance environmental values, social

sustainability, and respond quickly with stakeholders. Moreover, it is an alternative approach to blend the system of production and consumption in line with the ecosystem (Pla-Julián and Guevara, 2019), such as recycling projects, energy/resource-saving, the longevity of product duration, reducing pollution or zero waste, and empowering people or customer in the green activity programs. The shifting will reduce environmental risks and ecological scarcities thus can make sure the capability of future societies to satisfy their needs. Therefore, this renewal model aligns with the green economy in order to control the achievement of SDGs.

Green Entrepreneurship

The scholarly articles about green entrepreneurship began easily to be discovered after the 2000s. These were in line with the declaration of Millennium Development Goals (MDGs) by the United Nations in 2000. There are a number of goals of millennial society, including environmental issues. In addition, there are many targets related to poverty alleviation, gender equality, human health, global partnership, and the HIV/AIDS pandemic. The MDGs ended in 2015, continued with a new declaration of SDGs for 2016-2030 that holds the 17 targets, including highlighting environmental issues, namely climate action, and take care of the life below water and on land. However, social and economic aspects are targets that cannot be separated from environmental aspects, so that the overall goals of the global community are mapped into three pillars on the triple bottom line. Supporting entrepreneurs or business owners is needed to enforce the triple bottom lines as values in the business sector.

Understanding entrepreneurship uses interchangeable terms of green entrepreneurship (GE) and eco-entrepreneurship (EE). Dean and McMullen, (2007) defined GE as a process for defining and exploiting existing economic opportunities that are environmentally compatible with market failures. Mathur and Tandon, (2016), GE is a worldwide phenomenon to realize the knowledge and measures as a solution to environmental issues, global warming, and the crisis of resources. This model provides new standards in enhancing the capacity for innovation, technology support, and human resources to overcome the socio-environmental problems. Contrarily, Kotchen, (2009) stated the basic definitions as follows:

"(1) EE is the practice of starting new businesses in response to an identified opportunity to earn a profit and provide (minimize) a positive (negative) environmental externality. (2) EE is the practice of starting new businesses that are profitable and based on goods and services that are impure public goods with environmental benefits".

Basically, the statements stipulate the main goal is to earn money by solving environmental problems (Schaltegger and Wagner, 2011). Furthermore, adopting to Rosca et al., (2020) stated "a general definition of the GE program is a community intervention that creates solutions based on market mechanisms, so as to improve access to opportunities in remote communities, while at the same time intelligently harnessing their natural and cultural heritage". The model was developed to overcome the social-economic gaps in rural communities in Rumanian. It appreciates local wisdom and natural resource in order to capture the green market opportunities. According to Romanowski and Gnusowski, (2019), GE accommodates the quintuple helix model with a supportive role of sustainability-oriented innovation intermediaries. For these reasons, GE involves collaboration to stakeholders.

Based on these statements, GE is shifting from conventional entrepreneurship become modern business activities that own goals to achieve profitability and simultaneously respect to environment dimension e.g., save natural resources, conserve environmental, or mitigate degradation. At the same time, the entrepreneur must be careful with social problems e.g., preserving local heritage, empowering the social community, or opening access for local market. Hence, in ensuring sustainability, a green entrepreneur promotes greening by innovation,

commitment, and opportunity (Kainrath, 2009). At the moment, GE provides new guidance to move the growing economy, thus it give a positive effect on triple bottom line sustainability.

Green Value

From a psychology perspective, value designates to the attitude which then can impact one's motivation, perception, and behavior. Referring to (Robbins and Judge, 2006), stated that "value is the basic conviction of specific mode" so green entrepreneurs need consciously to apply environmental value to benefit people and the planet. It shows strongly internal motivation relate to environmental problems. Previously, Kirkwood and Walton, (2010), stated that eco-entrepreneurs are those entrepreneurs who start for-profit businesses with strong underlying green values and who sell green products or services. Further, Nuringsih and Puspitowati, (2017) proved a positive impact of green value to the eco-entrepreneurial intention. Other research by Abina, Oyeniran and Onikosi-Alliyu, (2015) concluded that environmental concern impacts eco-entrepreneurial intention. For these reasons, green value impacts attitude and motivation so that it forms a good perception of green entrepreneurship among entrepreneurs.

Related to the Theory of Planned Behavior

This research is not directly related to TPB but the mechanism is in harmony with this theory. TPB states that intention is determined by attitude toward the behavior, subjective norm, and perceived behavior control (Ajzen, 1991) and by assuming "human beings usually behave in a sensible manner" thus they tend to calculate existing information and implicitly or explicitly consider the implications of their actions (Nishimura and Tristán, 2011). Basically, the goal of the research is to identify how much students perceive their green valuation towards GE and sustainable development, so that the results will be used to examine students' interest in GE. Previously, it was stated that green value as part of psychological aspects has a role in forming attitudes so that in the future it will affect students' interest and behavior in GE. Moreover, it is as internal encouragement to force mentally thinking about eco-entrepreneurial activities. By having this concept, students will behave reasonably using information as a basis for building interest in GE. If supported by social norms and perceived behavioral control it will strengthen student intentions on GE.

Development of Hypothesis

The adoption of a green economy in the entrepreneurial sector is developed through green entrepreneurship. Related to the triple bottom lines, it is one of the three most important components of sustainable development that have an intersection of economic and ecological goals. Adopting to Rumanian-American Foundation, there are four pillars of the GE model which consist of a market mechanism, leadership and awareness, business opportunity, and sustainability. There is a positive relationship between GE and sustainable development. Hence, green entrepreneurs are intrinsically motivated to ensure a greener business practice (Farinelli et al., 2011). Conceptually, GE provides new opportunities for young entrepreneurs and becomes a powerful force to mainstream a new paradigm of business responsibility. Thus, millennial students are expected to be aware of emerging opportunities in the environment industry and apply the knowledge in driving green venture. The implementation of GE has a positive impact on sustainable development which was proven by the study of (Lotfi, Yousefi and Jafari, 2018). Eventually, in capturing millennials students to respect with GE and sustainable development, the first hypothesis:

H1: Green entrepreneurship relates to sustainable development.

According to Kirkwood and Walton, (2010), business activities are encouraged by ethics or green values. In accordance with this opinion, entrepreneurship students who own a good perception toward environmental issues, thus they are more interested in aligning with SDGs.

Thus, eco-friendly values have an impact on these aspects. For these reasons, green value affects the motivation among eco-entrepreneurs, thus it forms the positive valuation toward sustainable issues, social pressure on the sustainable norms, and maintaining behavior to adjust the domains of sustainability (triple bottom line) in business practices. It is also relevant to the study of Sargani et al., (2020), the mechanism forms a good perception of sustainable development. Thus, the next hypothesizes are as follows:

H2: Green value relates to sustainable development.

H3: Green entrepreneurship as a mediating variable to links green value to sustainable development.

METHODS

Fig. 1 depicts the stages of research activities. First, data collection involves the population from entrepreneurship students in the Faculty of Economics & Business at Tarumanagara University, West Jakarta. The study uses the random sampling method to select 180 students that passed in the business implementation project. Respondents are considered to own sufficient enough about sustainability knowledge in the business model development. The participants are assumed to have a better mindset of the current lifestyle such as green value, green entrepreneurship, and sustainable development than others. Thus, the students are selected as representative for millennials in perceiving the green business, by the term "millennials entrepreneurial students" or abbreviated to MES.

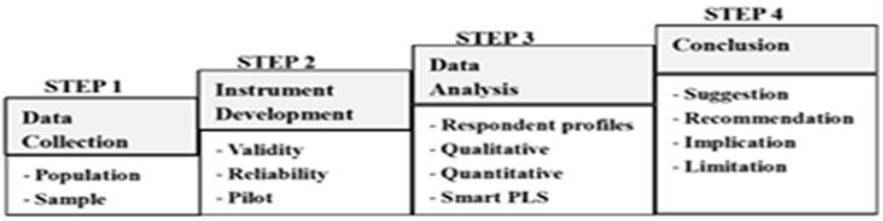

Figure 1. The Research Stages

Second, the instrument is designed by using some previous studies. Inspiring by Kirkwood and Walton, (2010), the construct of green value is broken down into three statements which were elaborated previously in Nuringsih and Puspitowati, (2017) and Nuringsih et al., (2019). One of the studies found the score of Cronbach's Alpha was 0.774 while composite reliability of 0.869. The result proved the indicators are reliable to measure green value. Meanwhile, the constructs of green entrepreneurship and sustainable development each consist of five indicators which are taken from Lotfi, Yousefi and Jafari, (2018). It resulted in the score of Cronbach's Alpha as many as 0.82 for green entrepreneurship's reliability while 0.70 for sustainable development. Totally, 13 items are involved as instruments. The entire indicator is arranged as the statement in the questionnaire with the scaling of 1 to 5. Based on these scales, the grade of 1 means strongly disagrees, on the contrary, means strongly agree. It is to make it easier for respondents to self-administrate their options. Questionnaires were distributed in June 2019 and filled out by the respondents themselves.

However, to ensure the accuracy of the conceptual measurement scale uses information from composite reliability. In line with Henseler, Ringle and Sarstedt, (2012), noted that the value of composite reliability is set as many as 0.70 as minimum criteria in the confirmatory while 0.60 for exploratory research. Based on the range, the instrument is considered as reliable in measuring a contract. The validity was verified through bootstrapping processes. The score of loading factor is higher than 0.60 while the

discriminant validity based on the value of cross-loadings on the intended construct must be greater than the value of the other constructs.

Third, primary data is analyzed quantitatively to capture the significant relationship among green value, GE, and sustainable development. Three hypotheses are improved to be investigated the significant relationship among constructs. The program of Smart-PLS is utilized to analyze the link among constructs and to test the feasibility of the instrument. A quantitative approach is used to improve the analysis of the information whereas a one-tailed t-test is used to ensure the significance of the value of the path coefficient on this model. Meanwhile the qualitative is used to complete the analysis. Fourth, the conclusion of the result consisting of suggestions, recommendations for institutions, implications for the next research, and limitations of the research.

RESULT

Fig. 2 shows the respondents consist of 0.52 of female students and 0.48 of male students with ranging ages of 23-25 years old. Students come from Greater Jakarta (0.42) while 0.58 are dispersed from other cities in Indonesia, for instance: West Java, East Java, Lampung, North Sumatra, Riau, Bali, West Kalimantan, Papua, and others. Respondents passed in the subject of business implementation project which is exhibited in the mall around Jakarta. This business project consists of goods and services considering the environmental value such as original food and beverage, cultural fashion, traditional culinary, and handicraft. Further information includes as many as 45 percent of students own business while 55 percent of respondents are preparing of the business. Related to the sustainability issues, the majority of students tend to own awareness and follow the news from social media or the internet. By these reasons, the institution could manage the benefits of this students' perception of enhancing education or learning system related to the sustainability ecosystem. It will be more visible and impact in developing the potentials of students in the next projects.

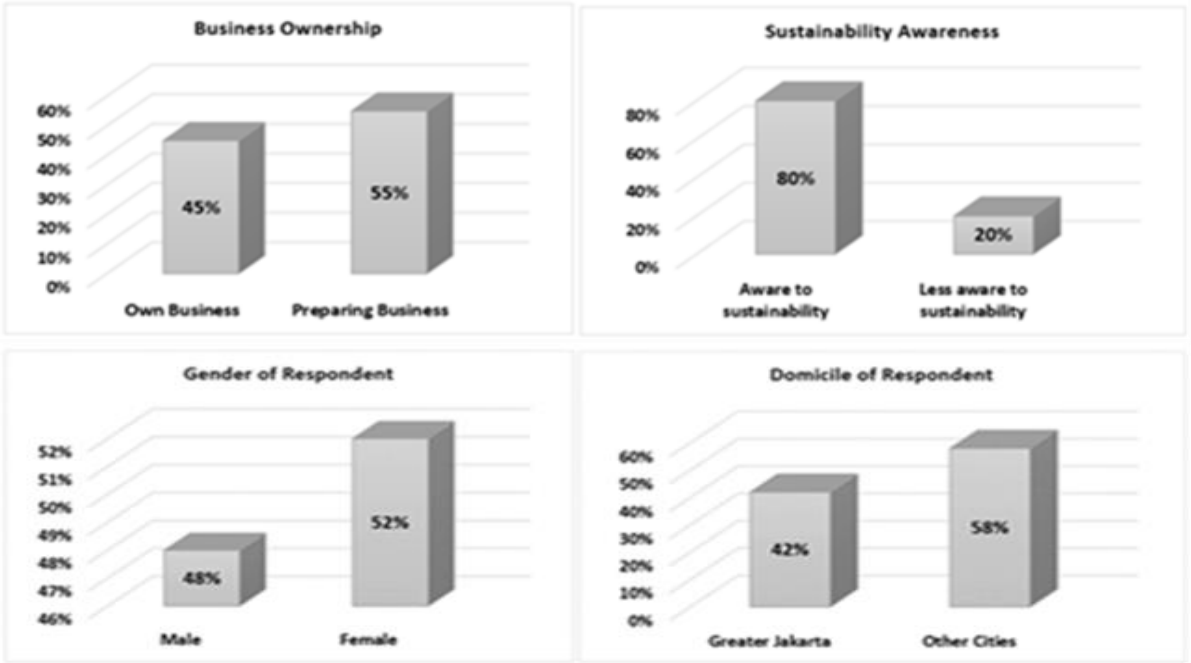

Figure 2. Respondent Profiles

Furthermore, the empirical result indicates the score of Cronbach's Alpha and composite reliability is over 0.70 so the indicators are reliable to measure the constructs. Nevertheless, the scores of composite reliability can be more appropriate to test internal consistency or construct reliability than Cronbach's Alpha. The value of Cronbach's Alpha has a tendency to be higher or

lower than the estimate. For instance, the score of green value differs between 0.798 (Cronbach's Alpha) and 0.881 (composite reliability).

Table 1. Reliability of the Constructs

Constructs		Cronbach's Alpha	Composite Reliability
Green value	GV	0,798	0,881
Green entrepreneurship	GE	0,831	0,881
Sustainable development	SD	0,835	0,884

Table 1 depicts the biggest score composite reliability is 0.884 at the sustainable development, then the second score of GE is 0.881. Actually, compared with the score of Cronbach's Alpha, this study results in the score over than prior study of Lotfi, Yousefi, and Jafari (2018). Finally, both reliability scores of green value result in the higher than a prior study of Nuringsih et al., (2019) and Nuringsih and Puspitowati, (2017).

Table 2. Score of loading factor on Green Value

No	Indicators	Loading	T Statistic
1	GV1: Continuously, I look for a better manner to create a business activity that gives prosperity for the people and the environment.	0,834	17,280
2	GV2: I am ready to share the eco-friendly values for a society that requires these pieces of information.	0,865	24,780
3	GV3: I am ready to guide society in order to preserve the environment.	0,832	17,900

Table 3. Score of loading factor on GE and SD

No	Indicators	Loading	T Statistic
1	GE_1	0,735	7,875
2	GE_2	0,817	19,219
3	GE_3	0,797	13,729
4	GE_4	0,802	17,258
5	GE_5	0,711	7,847
6	SD_1	0,790	14,781
7	SD_2	0,786	10,539
8	SD_3	0,715	12,959
9	SD_4	0,845	17,709
10	SD_5	0,743	9,320

Both tables illustrate the loading scores are greater than 0.60. **Table 2** shows the highest score of the green value indicator is GV2 with a score of 0.865 while the minimum score is 0.832 on GV3. Further information, in **Table 3** depicts the most valid of the GEs' indicator is GE2 with a value of 0.817 whereas the lowest validity is GE5 with value in 0.711. The strongest indicator validity of sustainable development is SD4 with the point of 0.845. Contrarily, the lowest is 0.715 in SD3. The overall value is also illustrated in **Fig. 3.** Compared with prior studies, the score of loading factors are relatively similar, evenly are better than studies of Lotfi, Yousefi and Jafari, (2018) and Nuringsih *et al.*, (2019). Further, the score of the Fornell-Larcker Criterion is over 0.70 while the model fit of Chi-square is 264.970 and the NFI is 0.760 thus have the meaning that data is a fit with the real population. Based on the results, at least finds four indicators must be improved for students. The education program has to give attention to knowledge and how to practice on some items, e.g., eradicate environment degradation (GE1), drive the new economic growth (GE5), anticipate the decreasing of quality of life (SD3), and proceed toward jobs by synergizing the triple bottom line factors (SD5). The topics are urgent in understanding GE and sustainability so that entrepreneurial education ought to improve the self-efficacy of students and map their thinking related to the green business.

Table 4. Coefficient Correlation of the Constructs

Constructs	Green value	Green entrepreneurship	Sustainable development
Green value	1.000	-	-
Green entrepreneurship	0.744	1.000	-
Sustainable development	0.740	0.741	1.000
R^2 of GE = 0.5533	Adj. R^2 = 0.5250		
R^2 of SD = 0.6288	Adj. R^2 = 0.6050		

Based on the correlation score (**Table 4**) and the coefficient of the outer model are estimated the effect of each construct (**Fig. 3**) thus, the calculation of path coefficient as follows: Firstly, the path coefficient of GV->GE is 0.744 while the score of correlation is 0.744. Hence, the impact of green value on green entrepreneurship is 0.553 or calculated (0.744 x 0.744). It indicates, if the perceived green value increases 1 percent, it will raise the mindset of green entrepreneurship of 55.33 percent. Particularly, it is equal to the R^2 of GE. Secondly, the path coefficient of GE->SD is 0.425 while the score of correlation is 0.741. Therefore, the impact of green entrepreneurship to sustainable development is 0.315 or calculated (0.425 x 0.741). It shows, if the perceived of green entrepreneurship increases 1 percent so it will impact positively to the perceived of sustainable development as many as 31.50 percent.

Thirdly, the path coefficient of GV-> SD is 0.424 while the score of the correlation value is 0.740. Thereby, the impact of green value to sustainable development is 0.3138 by calculating (0.424 x 0.740). It illustrates, if the perceived green value increases 1 percent so it will foster the perceived sustainable development as many as 31.38 percent. Totally, the impact of green value and green entrepreneurship toward sustainable development is 62.88 percent (31.50 plus 31.38). It is equal with R^2 of SD. Overall, the value of adj. R^2 of GE is 52.50 percent whereas SD is 60.50 percent. There shows as many as 47.50 percent of green entrepreneurship and 39.50 percent of sustainable development are determined by other factors, for instance: stakeholder and government supporting, social-culture effect, or environmental attitude.

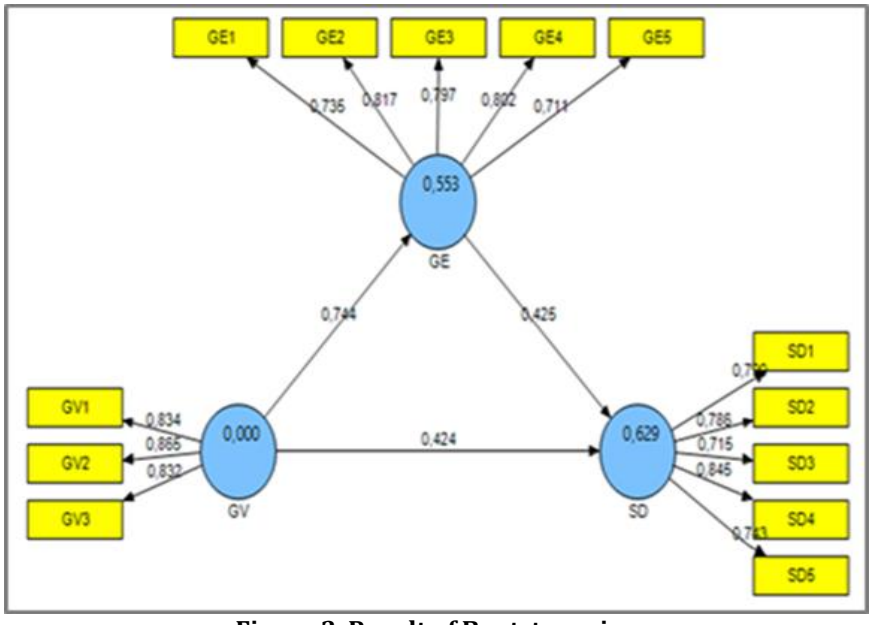

Figure 3. Result of Bootstrapping

Furthermore, **Fig. 4** depicts the result of regression analysis. First, the path coefficient between green entrepreneurship and sustainable development results at the t-value of statistics

of 3.866 so significant effects at 5 percent. It proves the first hypothesis (**H1**) is not rejected. Second, the path coefficient between green value and sustainable development shows a statistical value of 3.868 so it significantly affects 5 percent. It concludes the second hypothesis (**H2**) could be accepted. Third, the path coefficient between green value and green entrepreneurship produces a statistical t value of 10.008. The result shows a greater score than 1.96, thus significantly predicts the green entrepreneurship. It proves the third hypothesis (**H3**) is accepted. At the same time, the result of the original sample and mean samples are in the highest value than others, otherwise producing the lowest standard deviation. These prove green value as a predictor of green entrepreneurship and linkage frames hypothesis which significant to predict the perceived sustainability. These mechanism shows a mediating impact of green entrepreneurship which links the green value to sustainable development in the students' perception scope.

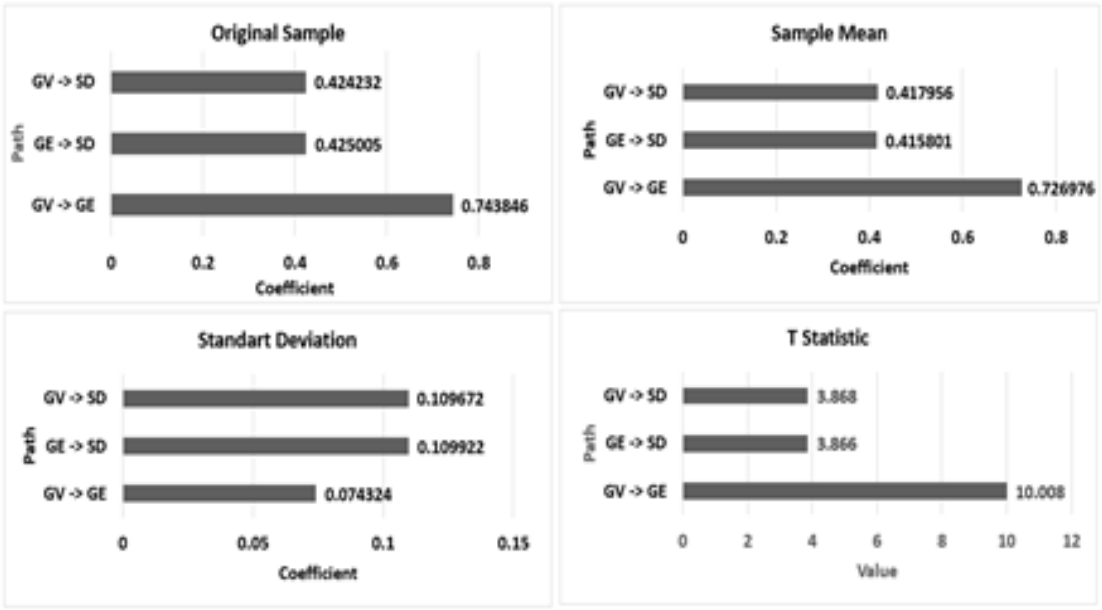

Figure 4. Coefficient Regression

DISCUSSION

The linkage of green value, GE, and sustainable development creates an education mechanism for the MES. This model is able to capture the good perception of GE and sustainable development by involving the green value among students. Moreover, it could encourage the aspirant of entrepreneurs to overcome environmental issues and actualize the meaning of meeting the welfare for current and future generations. Conceptually, green value directly relates to green entrepreneurship, therefore the construct could form the mindset to be a green entrepreneur. As millennial societies, youth people own awareness to get over environmental problems. The majority of students know the advantage of eco-friendly values in people's lives and the maintenance of the planet as a decent place for life. These are proved by their perception of (1) continuously seeking a better way to make business activity, (2) readiness to share the conviction of environmental-friendly, and (3) willingly educate society. This is in line with the previous opinion of Kirkwood and Walton, (2010). This relationship depicts the basic value that concerns with sustainability. It also encourage the seed of environmental attitudes among university students so that they will be more careful with social-ecological issues in the future.

Referring to Tung *et al.*, (2020), TPB has focused on behavioral awareness by addressing levels of personal awareness regarding control and limitations connected to the performance of a specific behavior. By understanding the planned behavior theory, it seems a perception of environmental values potentially forms a green habit, then impacts to the propensity for green

entrepreneurship. This mechanism drives the social pressure on sustainability issues that eventually will create a sense of self-confidence among students so that they want to the start-up of a green enterprise in the next times. It is equal to the prior studies Abina, Oyeniran and Onikosi-Alliyu, (2015); Nuringsih and Puspitowati, (2017); Nuringsih *et al.*, (2019). At the same time, the moment aligns with the customer consciousness on green consumption. For instance, human value affects the purchasing intention in sustainable dairy products (Vermeir and Verbeke, 2008) or green value improves the green purchase intention (Rahardjo, 2015). Therefore, through the TPB approach, the environmental concern impacts the purchasing intention (Chaudhary and Bisai, 2018). Basically, students have found the insight, however they need a coaching program to enhance self-efficacy in order to embody the eco-friendly business model.

The relationship in the research model forms a green triangle model for encouraging young people to understand the urgency of GE by bringing the green value. This relationship fosters the educated MES to respect SDGs so that as a signal the growth of consciousness of millennials towards sustainability problems and proves the GE as a new concept to links with sustainable development. Generally, this result has concern for the triple bottom line which is also as the insight at the study of Sargani *et al.*, (2020). In aligning with Lotfi, Yousefi and Jafari, (2018), suggested that entrepreneurs seize these opportunities through creating green products in order to promote the emerging green market. The result was proven that manager's perception of green entrepreneurship is significant to improve sustainable development. It is also relevant to Kainrath, (2009) in surviving business, entrepreneurs drive the green innovation, involve the green commitment, and grab the green opportunities. Aligning with this study, the education system should emphasize the implementation of green business in the education practices. Entrepreneurship brings economic innovation, thus the innovation for business incubators must be operationally integrated into environmental sustainability programs. However, to realize the innovation is costly and found disadvantages for the green entrepreneurs (Uslu, Hancıoğlu and Demir, 2015). The ideas could be prototyped to the students' project or could be proposed as creation values. For realizing the moment, it could be done through collaboration between internal faculty and intermediary institution to create a green ecosystem on entrepreneurial education practices.

Learning from the study of Romanowski and Gnusowski, (2019) improved a Quintuple Helix Model in the development of GE. One of the functions of the model involves the education system as a part of the domains in sustaining sustainable development. Under the model, continuous innovations have resulted from the five functions including economic, education, political, media-based & culture-based public, and natural environmental systems. The entire subsystems support the knowledge creation system which integrates to supply some capitals e.g., economic, human, political & legal, information & social, and natural capital. A prior study Racelis, (2014) suggested the equal model of Quintuple Bottom Line. In fact, the model places five domains in the scope of economic function with harmonizing among social, ecological, cultural, and ethical for surviving sustainable development. Both are a heuristic approach that needs collaboration among stakeholders such as researchers, business practitioners, education institutions, corporate responsibility, and government. The approaches point to the role of the education system to support the creating of human capital as long as for surviving sustainable development. Hence, this is the time for educational institutions to involve triple bottom line based education as knowledge for students in dealing with problems in their own business development, or in modeling of strategic management (Nadiia, Anatoliy and Kateryna, 2019).

In the future, the propensity to be green entrepreneurs will ensure to grab the opportunities. Therefore, the output of research could be directed to improve the knowledge and perfect the learning system by implementing the double until the quintuple pillars of

sustainability on some field of businesses. Millennials are aware of the emerging opportunities and commit to the economic development in the most sustainable manner with environmental, social, and ethical values imbibed in the green ventures. Moreover, the growth of digital technology is as trigger and benefits the moments in supporting sustainability's thinking. The institution's vision is required to accompany students in preparing entrepreneurial activities.

Some opportunities in aligning with the green business. The founders could be aware of the projects and inspire students to offer for people and earth-friendly. Student's projects could be directed to be in line with environmental issues. For instance in the environmental areas are focused on conserving local heritage, appreciating local community, recycling, reducing, and reusing (3R) material, preserving traditional species and varieties, and others. Moreover, the social field is done by changing the mentality of the community, partnership with local stakeholders, and community consolidation. By empowering society, the students are able to direct for improving the value-added of local resources, reducing poverty, and providing website services for educating or campaigning for the community. Eventually, the economic benefit is gained by creating jobs and income for the community, opening access to a market for local entrepreneurs, improving the attraction of local resources, and collaborating with local supplier. There are as a part of implementation the triple bottom line in entrepreneurship sector.

This approach shifts an education strategy to pursue green competitiveness in the green economy's era. In fact, it is relevant to a circular economy (Lahti, Wincent and Parida, 2018; Ruiz-Real *et al.*, 2018; Pla-Julián and Guevara, 2019) which harmonizing the economic growth with the progress of socio-ecological. Thus, the educational institution has to be aptly in providing an adequate entrepreneurial ecosystem, thereby students are highly motivated to be entrepreneurs who are aware of the environmental issues. The entrepreneur must understand how to extend the duration of the use of a product in order to save resources and reduce the waste of material that is not useful. Therefore, there is the relevance between the circular economy and green entrepreneurship so that both will support the realization of sustainable development.

A glance, there are seemingly so simple, however, needs continuous innovation and collaboration with internal resources and external intermediaries. This result just captures the general impact in shaping perception toward sustainable development. Therefore, it is a limitation. This study does not involve the entrepreneurial supporting factor and innovation ability that directly impact to shape the propensity for green entrepreneurship. Nevertheless, this research finds basic thinking about sustainability. Further, in order to anticipate the environmental risk such as explained by McEwen, (2013); Sudyasjayanti, (2018); Suparta and Yatim, (2019) a green entrepreneurial program should encourage awareness among millennials in coping with environmental damages and natural disasters. The environmental challenge could be seen as odds or not as obstacles. Therefore, green entrepreneurship is a solution for the future.

However, at the end of the research activity was in the midst of the global pandemic which disrupts the economic performance. Awareness of health and ecosystem sustainability is most important and necessary in order to maintain the quality of life of the community. It shows the entrepreneur's orientation is not only to pursue profitability but must be harmonized with social health and welfare, local cultural wisdom, and prudence in addressing ecological issues. This mindset is in tune with the effort to embody the future of the earth as a decent place for humans, animals, and plants. Finally, the triangle green model constructs an illustration of the importance of the ecosystem's wisdom to secure the sustainability of development activities.

CONCLUSION

The study captures the significant relationship among green value, green entrepreneurship, and sustainable development in the knowledge-based students. A triangle

linkage model captures a mindset of millennials in understanding the new model of entrepreneurship development and its relatedness to sustainability. These relationships foster the educated of MES to respect to environmental sustainability. Further, if it is pushed through an educational process that is in line with SDGs, it will encourage the entrepreneurship sector as a pioneer in the implementation of green economy and circular economy. Therefore, this result is as information for institutions to perfect curriculum and prepare learning methods in the clinging sustainability ecosystem. The collaboration can create an atmosphere of green on entrepreneurial education practices and as a good reputation for the institution. Understanding student's perceptions is a notable step to prepare a system of green business in the higher education level.

For the next implication, educational institution can consider the result for improving the learning method which is in line with the sustainable development program. Students are expected to get adequate knowledge about green business from various learning sources such as practitioners or non-governance organizations (NGOs). In addition, students are reminded about achieving SDGs in order to target their business activities. The collaboration will be easier for students to learn and practice the green business appropriate with their passion. However, there are some limitations. For instance, it does not consider the entrepreneurial support model so the next studies can involve this construct to explore how many stakeholders appreciate environmental education. Moreover, Indonesian societies are multicultural, thus the avenue for the next study includes the supporting aspects, especially at specific cultural regions such as Bali, Yogyakarta, or West Sumatra.

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