

Green Entrepreneurship: A New Paradigm for Millennials in Indonesia

Genoveva Genoveva*, Jason Tanardi

School of Business, President University, Cikarang 17550, Indonesia

Corresponding Author Email: genoveva@president.ac.id



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ABSTRACT

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The number of young entrepreneurs in Indonesia is very low when compared to global data. Meanwhile, environmental issues in Indonesia are in a state of emergency. We are interested in conducting research on millennials as a productive generation and, according to several studies, a generation with high environmental awareness. The purpose of this study is to assess their desire to become environmentally conscious entrepreneurs. The variables used in this study are Green Awareness and Green Knowledge, which will be reflected in their Green Entrepreneurial Behavior via the mediation of Green Entrepreneurial Intention. This study differs from previous studies in that it investigates the millennial generation, not only their desire to become environmentally friendly entrepreneurs, but also their future behavior once they become entrepreneurs. Data was gathered through the use of an online questionnaire, specifically a Google form. Purposive sampling was used, yielding 217 responses from millennials living in and around Jakarta, a metropolitan city known for producing the most young entrepreneurs. The data was processed using PLS-SEM (Partial Least Square Structural Equation Modelling) with SmartPLS 3.2.8. According to the study's findings, improving Green Awareness and Green Knowledge could lead to an increase in environmentally conscious entrepreneurs. The government, educational institutions, and the companies can work together to carry out environmental awareness campaigns and provide environmental knowledge so that future entrepreneurs can become environmentally oriented entrepreneurs.

1. INTRODUCTION

Currently, Indonesia is facing economic issues such as low on human development, poor infrastructures and environmental challenges. One of the major environmental issues is plastic waste because the plastics cannot be recycled and cannot be biodegradable. To improve environmental issues, the government is targeting the growth of environmentally friendly industries by 6% annually until 2045. The government also encourages the millennial generation to become entrepreneurs as a form of job creation, while supporting environmental issues [1, 2]. The millennial generation as the productive generation currently amounts to 25.87% of Indonesia's total population of 270 million people [3], they have an important role in the business movement in Indonesia. Millennials are the driving force for digital SMEs which are the source of economic growth in Indonesia today [2].

Generally, generation Y or the millennials have university degrees and work cross-generation with generation Z and generation X to create impact. The millennials, also known as the Y generation, live in a professional era because they tend to work while they are still in their productive years [4]. With its three main characteristics of connectedness, confidence, and innovation, generation Y has the highest likelihood of becoming an entrepreneur [4]. Furthermore, whereas 69% of Indonesia's generation Y population has the capacity to become entrepreneurs, just 3.1% of the productive age population has done so as of today [3]. Indonesia will also face

a bonus demography in 2020-2040, with an increase of 70% from 33.75% now, making 2/3 of the total population capable of becoming entrepreneurs in the coming year [3].

Besides, related to the environmental issue, generation millennials also become the key to solve the problem as they are more concerned about the environmental issue compared with the baby boomers and X generation [1]. Generation millennials will become the trigger for the Indonesian economy in the future as they accommodate a creative and sustainable mindset and become green entrepreneurs. Previous studies show that the millennial generation has a positive and significant influence on environmental issues, including a preference for environmentally friendly products [1, 5-7].

Facing entrepreneurial and environmental problems that occur in Indonesia, prospective business actors must be adapted to become green entrepreneurs [8]. In addition, green entrepreneurship is highly rated as a way to solve entrepreneurial and environmental problems and have a positive impact on the country. Green entrepreneurs will make changes to a better world in the future by stabilizing the economic and environmental aspects with several innovative models [9]. While entrepreneurs focus on looking for profit, green entrepreneurs are not only looking for profit but also have a positive impact on the environment [10].

The green entrepreneurship behavior took the concept of making innovations where the products or services developed not only to fulfill the demand of the consumers but also to take part in the long-run development [11]. Besides, the green entrepreneurs added value to the economic activities [12].

Millennials will have the intention to become green entrepreneurs if they have green awareness [1, 12].

As stated by some authors, knowledge will also determine the intention to start the business and the success indicator from the running business. Green knowledge of environmental sustainability education is needed to turn the action of the current business [13]. Furthermore, the intention of being entrepreneurs will positively impact the action of being an entrepreneur [14].

The millennials are now having aware of environmental awareness and the knowledge in the term of buying green products or consuming instead of producing [15]. These young people are aware of the environment and believe waste as the main problem, but do not understand the reasons on the environmental issue and how to protect it through actions and innovation. Also, Indonesia, as stated in Inside Indonesia is urgent in need of environmental education or knowledge. In this research, we assume that millennials who have awareness and knowledge of the environment have the intention to become environmentally conscious entrepreneurs and finally implement them in the form of behavior. Our samples are exclusively millennials born in 1981 until 2000 [16]. To test our knowledge, this is the first research related to millennial intention as a green entrepreneur.

The first section of this study is the introduction that highlights the rationale for selecting the topic and the challenges facing green entrepreneurs in Indonesia. The second section is a literature review, in which we discuss the theories that underpin this study. The third section is the research methodology, in which we elaborate the steps we took to collect and analyse the data. The fourth section is the result and discussion, where we present and discuss the statistical results. Finally, we summarize our study's findings in the conclusion section.

2. LITERATURE REVIEW

Schumpeter [7] stated that entrepreneurs are the individuals who see and use the opportunities in the market and make it an innovation. Entrepreneurs also refer to someone who intended on starting an entrepreneurial venture and creates a business [17]. Furthermore, entrepreneurs are business players who create innovation based on opportunity and responsible for its risks and failures [18]. Moreover, an entrepreneur is someone who takes responsibility for the decision that affects the form, use of resources, location to create a better impact in the society economically and environmentally [19]. According to Katia and Freyman [20], there are 3 types of entrepreneurs: 1) Conventional Economic Entrepreneur, 2) Ecological Environmental / Green Entrepreneur and 3) Social / Cultural Entrepreneur.

Green entrepreneurs have the same meaning as ecopreneurs, enviro-preneurs, environmental entrepreneurs, and ecological entrepreneurs. Green entrepreneurs are one of the major potentials to help the transition towards a greener business paradigm. Green entrepreneurs combined the economy, and the environment of sustainable business in a whole perspective to have a better logic practice from traditional entrepreneurs. Furthermore, green entrepreneurs build businesses that focused on sustainable development on its enterprise design not just focused on economic factors but also on the environment. Green entrepreneurship is made not only for-profit businesses, but these businesses are also built with

strong green and social values [9, 10, 21].

The recent study defined green entrepreneurs as the force of the economy that ensuring the growth of the economy with technology and innovation products or services [22]. Another finding by Lotfi, Yousefi, and Jafari [23], that green entrepreneurs are the ones who introduce green technologies and green products to the market as they transform patterns and prototypes into business products. Furthermore, green entrepreneurs are now shifting from "how to produce products efficiently?" to "how to build products that eco-friendly and reduces all of the negative effects to the environment on the production?" [24].

Green awareness mentioned to be GA in this research is the same term with environmental awareness or environmental concern. Green awareness could be defined as a way to put attention towards the environment and has the personal side to solve the environmental problems [25]. Chairy et al. [26] also stated that green awareness is a consciousness by individuals that produce or consume green products to contribute to environmental values. In this research, the researcher focuses on green awareness on the business perspective and may conclude that green awareness is an individual's or organization's consciousness to see the environmental issues happening in the society to get a better understanding of the green concepts. In this research, based on the previous research, green awareness or the environmental concern did not directly affect the green entrepreneurial behavior leads the researcher to propose green entrepreneurial intention as the mediating variable [27]. There are several indicators related to green awareness [27] such as (1) Environmental Quality, (2) Environmental Issues, (3) Environmental Protection, and (4) Environmental Practices.

Knowledge refers to the further result of an idea and its gains from sensing of an object through sight, hearing, taste, etc. There are three dimensions of green knowledge stated by Lieflander et al. [28]; system knowledge, action-related knowledge, and effectiveness Knowledge. Furthermore, knowledge will be defined if there are beliefs, true, and justified. Green knowledge or mentioned to be GK on this research can be defined as the environmental education to an understanding in the eco-friendly business process start with the preservation, 3R, and renewable energy sources. Green knowledge refers to support education with the triple bottom line (People, Profit, and Planet) as the core of the business [29].

To continue, green knowledge also talks about the knowledge of harmful substances such as chemical resources, green-house effects, and many more [13]. The green knowledge works along with green awareness as the ability of business players and prospect customers to know about the ecological symbols [24]. Green knowledge did not directly influence green behavior, the researchers proposed the green entrepreneurial intention to see its indirect effect [10].

Entrepreneurial Intention refers to the personal willingness to create business supported by the factors on the surrounding environment [30]. Entrepreneurial intention is also defined as the conscious way of thinking to build new business and run the business. Another definition of entrepreneurial intention is the willingness and readiness to perform a business [14]. Related with the term of green, as stated by Kotchen [14], green entrepreneurial intention later to be mentioned as GEI or eco entrepreneurial intention on this research defined as the motivation to start a new business in response to the opportunity and earning profit while reducing the negative impact on the surrounding environment. The green

entrepreneurial intention has a commitment underlying the decision on starting the firm which also protecting the environment [20].

Based on one of the definitions by Green Mechanical Council it is stated that green awareness becomes the key factor for millennials to be aware of the environmental issues and build environmentally safe concepts for the business. In this research, the green awareness answers how aware the millennials population in Indonesia to the surrounding environmental issues [1]. One of the researches states that millennials are having a high environmental concern or awareness [10]. It is stated by the previous research by Remeikiene and Startiene [13] which state that the environmental concern of individuals is one of the motivational factors to become green entrepreneurs. Therefore, our first hypothesis is as follow:

H₁: There is a direct effect of green awareness on millennials green-entrepreneurial intention

Green knowledge refers to specific knowledge on the environmentally-save sources, actions, and symbols through green education [28]. In this research, the green knowledge takes the understanding of millennials with the "green" term on the process and products along with the previous research found that environmental/green knowledge as one of the factors that significantly influence to the entrepreneurial intention [16, 23]. Therefore, we can conclude that, the second hypothesis is:

H₂: There is a direct effect of green knowledge on millennials green-entrepreneurial intention

Entrepreneurial behavior according to Lee and Wong [31] is the result of entrepreneurial intention as the step to the creation of a business. Moreover, entrepreneurial behavior is a result of knowledge, experience which made into a specific behavior and effect innovative way of thinking. Furthermore, Fayolle and Gally [32] stated that entrepreneurial behavior is the next step of an individual's entrepreneurial intention.

Green entrepreneurial behavior or the GEB which is used as the term this research is intentional behavior that takes initiative, proactive, and consistency, even commitment to act and think green [33]. Green entrepreneurial behavior related to entrepreneurial behavior and the differences are just the green term is applied. Related the definition, green entrepreneurial behavior will refer to the business plan that saves for the environment, product planning without any harmful resources to the environment, and so on. Besides, green entrepreneurial behavior also defined as a transitional economy that contributes to green management to solve environmental issues [33, 34].

As stated by Anisah and Wandari [35], there are 14 indicators related with green entrepreneurial behavior and later to be modified in this research; green energy and drive, green self-confidence, green initiative, green internal locus of control, green tolerance of ambiguity, low fear of failure, green moderate risk-taking, green long-term involvement, money as a measure, green use of feedback, green continuous pragmatic problem, green use of resources, and green self-imposed standards.

Green entrepreneurial intention can be defined as the willingness and readiness of an individual to perform a business [5]. In this research, the green entrepreneurial intention leads the millennials to be green entrepreneurs and perform green entrepreneurial behavior. This is in line with the

research conducted by the previous researchers where the entrepreneurial intention positively influences the pre-startup behavior [36, 37]. Based on all of the construct structured, the researchers come up third hypotheses:

H₃: The green-entrepreneurial intention will positively drive to create entrepreneurial behavior

Green awareness refers to the environmental awareness of the millennials with their surroundings by putting attention and actions to solve the environmental issues [10]. Green awareness or environmental concern as stated on Tam and Chan [38], is not directly impacting green entrepreneurial behavior. The researchers proposed the mediating variable of green entrepreneurial intention as the previous research by [12] found that the awareness of green can lead to green entrepreneurial intention and results in green-entrepreneurial behavior. Therefore, the fourth hypothesis in this research is:

H₄: There is a significant indirect impact of green awareness on green entrepreneurial behavior mediated by green-entrepreneurial intention

Green knowledge defined to be the knowledge of environmentally safe products, resources, and actions that gain through education [28]. The previous researchers found that ecopreneur education did not influence ecopreneur intention [39]. On the other hand, Weiss [16] found that the green knowledge or education will be affecting the intention to have green entrepreneurial behavior. The green knowledge considered not affecting directly pro-environmental behavior. In this research, the researchers proposed the mediating variable of green entrepreneurial intention to bring green knowledge to green entrepreneurial behavior. Therefore, the fifth hypothesis as the follow:

H₅: There is a significant indirect impact of green knowledge on green entrepreneurial behavior mediated by green-entrepreneurial intention

3. RESEARCH METHOD

This study employs a quantitative model to investigate the effects of Green Awareness and Green Knowledge on the intention to become and to act as an environmentally conscious entrepreneur in the future. This study is descriptive in nature because it investigates the factors that encourage the millennial generation to pursue careers as environmentally conscious entrepreneurs. Furthermore, this desire is linked to their proclivity to act as environmentally conscious entrepreneurs. The findings of this study cannot be generalized to a larger population, but they do provide a better understanding of the sample used [40] The proposed model is as shown below on Figure 1.

In this research, the population is all people who were born between the years 1981 – 2000 known as the millennials generation and live in greater Jakarta (Jakarta, Bogor, Depok, Tangerang, Bekasi) as the highest possibility center area for the potential business players to build business [41]. As this research classified as the unknown population, the researchers use purposive sampling with the total sample collected 217 respondents.

The researchers use a survey method where the data collected by using Google Form with an e-questionnaire as the instrument. The questionnaire is one of the primary sources of data where the respondent rated several statements constructed

by the researchers related to green awareness, green knowledge, green-entrepreneurial intention, and green-entrepreneurial behaviour. Researchers used a screening question at the beginning of the questionnaire to ensure that the target respondents met the desired criteria, namely those born between 1981 and 2000 and living in greater Jakarta. If they did not meet the criteria, the system in the Google form would prevent them from continuing to fill out the questionnaire. The total question on the questionnaire is 28 questions. The questionnaire data were processed using Smart PLS to analyze the complexity of this study.

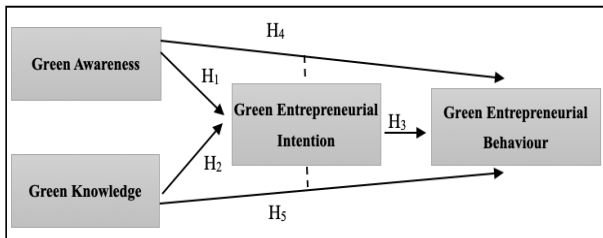


Figure 1. Research framework

The data is analysed using the Statistical Product and Service Solution (SPSS) Statistic 22 and Partial Least Square-Structural Equation Model (PLS-SEM) method, as well as SmartPLS 3.2.8 software. SPSS Statistics is used to analyze and calculate the Mahalanobis Distance as well as identify outlier data. SEM-PLS is the best method for data analysis because of its technique to confirm rather than explain. The researcher employs SmartPLS 3.2.8 software to test the five hypotheses proposed in the study.

4. RESULT AND DISCUSSION

4.1 Respondent profile

Researchers collected 217 respondents in total, there are 26 invalid respondents and 14 outliers with 0.1% significance on Mahalanobis Distance testing 0.1%. As the result, there are 217 respondents analysed on this research. Furthermore, Table 1 shows the respondent profile. With a total of 217 respondents, the researchers can conclude that most of the respondents are female as there are 126 respondents or dominate 58.06% of the total respondent. Besides, there are only 91 male respondents with 41.94% of the total respondents. Most of the respondents are bachelor with the total of 121 respondents (55.77%), followed with Senior High School with 81 respondents (37.32%), and others with 15 respondents (6.91%).

Table 1. Respondent profile

Demographic	Frequency	Percentage	
Gender	Male	91	41.94%
	Female	126	58.06%
Education	Senior High school	81	37.32%
	Bachelor Degree	121	55.77%
	Others	16	6.91%

4.2 Descriptive analysis

As shown in Table 2, all of the answers are diverse as from

each of the variable the minimum score is 1 and the maximum score is 5. Furthermore, green awareness has the highest mean among all of the variables with 4.305 and assumed that all of the respondents were answering strongly agree on the green awareness questions. The Green Knowledge, Green Entrepreneurial Intention, and Green Entrepreneurial Behaviour variables also showing a high mean with 4.081, 4.163 and 4.113 categorized as agree.

Table 2. Descriptive analysis

Variable	Mean	Standard Deviation
Green Awareness (GA)	4.305	0.942
Green Knowledge (GK)	4.081	0.892
Green Entrepreneurial Intention (GEI)	4.163	0.811
Green Entrepreneurial Behaviour (GEB)	4.133	0.789

4.3 Outer model (validity and reliability test)

Researchers at first conducted the pre-test with 50 respondents and find out 2 of the indicators from Green Awareness (GA1 and GA3) are invalid and were not included in the full data descriptive analysis. On the convergent validity, there are 2 ways to measure the convergent validity which are the Outer Loading Factor and the Average Variance Extracted [39]. Furthermore, on the discriminant validity, the measurement used HTMT ratio [42]. In addition, the Cronbach Alpha and Composite Reliability also use to measure the reliability test. On the outer loading factor, there are 4 indicators (GA2, GK2, GK6 and GK7) that are invalid for the full data measurement as it is below the threshold of 0.60. The modified full data outer model shown on Figure 2.

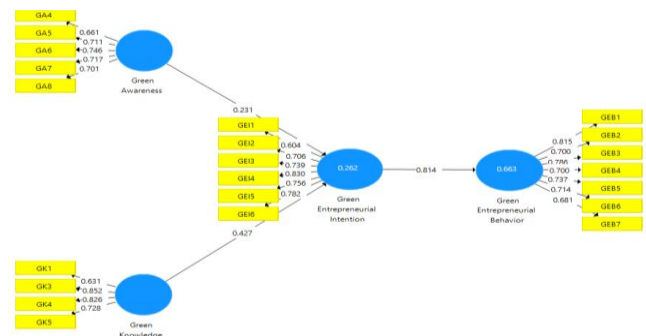


Figure 2. Modified full-data outer model

Table 3. Outer model result

Variable	AVE	Cronbach's Alpha	CR
Green Awareness	0.501	0.754	0.834
Green Knowledge	0.540	0.760	0.847
Green Entrepreneurial Intention	0.547	0.832	0.878
Green Entrepreneurial Behaviour	0.570	0.857	0.891

As seen from Figure 2, the outer loading factor are all above the threshold of 0.60. For the Average Variance Extracted (AVE), the threshold for each of the variable is above 0.50. As shown on the Table 3, the result of the processed data showed

that the measurement is valid and reliable and can be used for the research.

For the discriminant validity, the researchers used HTMT Ratio to make sure that there is a discriminant and each of the construct are unique and measuring the same thing. The HTMT ratio should lower than 1 [42]. In Table 4 researchers concluded that all of the data < 1.

Table 4. HTMT ratio result

	GA	GEB	GEI	GK
GA	-	-	-	-
GEB	0.365	-	-	-
GEI	0.357	0.952	-	-
GK	0.221	0.617	0.567	-

4.4 Inner model analysis

The inner model or known as the structural model measurement to see the connection and correlation on the inner construct. The inner model analysis can be measured through Path Coefficient and coefficient of determinants (R²) to see how strong the relationship between variables.

The R² of the research shows that the variable of green awareness (X¹) and green knowledge (X²) have an impact of 25.5% towards the variable Y (Green Entrepreneurial Intention) and considered weak to moderate impact (Table 5). The rest 74.5% of what impacting the green entrepreneurial intention caused by the variables are not discussed by the researchers in this research. The low value of R² caused by the independent variable coefficient related to the dependent variable coefficient.

The variable Y (Green Entrepreneurial Intention) has significantly drive to the variable Z (Green Entrepreneurial Behaviour) with 66.1% consider as a weak to substantial relation while the rest 33.9% of Green Entrepreneurial Behaviour cause by others variable are not discussed in this research (Table 5). Looking at the coefficient of the determinant of the model proposed, the researchers found the model is fitted with the relation of R² moderate and considered accepted.

Table 5. Coefficient of determinants (R²)

Variable	R ² Value	Result
Green Entrepreneurial Intention	0.225	Weak to moderate
Green Entrepreneurial Behaviour	0.661	Moderate to substantial

4.5 Path coefficient

Our study proves that Green Awareness defined on how aware the millennials towards the surrounding environments and try to protect the environment has a direct effect on the millennials Green Entrepreneurial Intention with a T-value of 4.742. Furthermore, the H₁ is significant (Table 6). Indicator GA4, GA5, GA6, GA7, and GA8 have contributed to the Green Entrepreneurial Intention, the millennials in the greater Jakarta answer strongly agree. The millennials also concern with the environmental condition as stated on GA6. With the increase of awareness, it is interpreted the intention to be the green entrepreneur among millennials also increased.

Besides, the millennials in the greater Jakarta are now aware

of the environmental awareness against the assumption as the base problems as the world is changing day by day and start shifting the mindset from consuming to producing. With the data from the Asia Pacific Foundation of Canada which shows 69% of the millennials willing to incorporate to environmental sustainability, the possibility of green entrepreneurs also increased. On the other hand, this result is in line with the previous research from [12].

Table 6. Direct effect of path coefficient

Effect	T-Value	T-Statistic	P-Value	Result
GA → GEI	1.96	4.742	0.000	Significant
GK → GEI	1.96	7.762	0.000	Significant
GEI → GEB	1.96	39.144	0.000	Significant

The second hypothesis (H₂) shows that t-statistic as 7.762 is greater than the t-value of 1.96 it means that Green Knowledge has a positive impact on the Green Entrepreneurial Intention. There are several driver factors on green knowledge, GK1, GK3, GK4, and GK5. The GK1 has the mean 4.45 as the highest score indicates that most of the respondents answer strongly agree on understanding the term of 3R (Reduce, Reuse, and Recycle). The GK3, GK4, and GK5 has the mean of 3.85, 3.81, and 3.59 showing that almost all of the respondent answer agrees on updating the environmental issue (GK3), actively finding the reason on why the issues happen in the society (GK4), and these millennials have the knowledge and can easily indicate the environmentally-save resources (GK5).

The result found by the researchers is against the research from Babatunde et al. [39] that stated green entrepreneurship education as a way to gain green knowledge does not significantly influence green entrepreneurial intention. Education support to gain green knowledge does not significantly influence green entrepreneurial intention. On the other hand, there are also some of the previous researches support the result as the research in Malaysia found the result that sustainable education to gain green knowledge does significantly influence the GEI it is in line with what the researchers found [43].

The third hypothesis (H₃) t-statistic result showing 39.144 as it is greater than the t-value of 1.96 indicates the construct of variable Y will positively drive to green entrepreneurial behaviour. On the Green Entrepreneurial Intention, the indicators did the effect on Green Entrepreneurial Behaviour. The green entrepreneurial intention is driven by several indicators in this research as GEI3 has the highest mean by 4.35 indicates most of all respondents answer strongly agree and can be interpreted that most of the millennials in greater Jakarta willing to be a green entrepreneur if they have the opportunity. As they willing to act, then green entrepreneurial behaviour can be achieved.

The rest indicators such as GEI1, GEI2, GEI4, GEI5, and GEI6 are calculated by having 4.15 mean indicates that most of the respondent answer agree which already show a good result. It shows that the millennials with the characteristic of collaboration, innovation, and freedom once have the intention to become the green entrepreneur, Green Entrepreneurial Behaviour could be achieved and led the millennials to become a green entrepreneur in the future. The Green Entrepreneurial Intention will direct or as the mediating variable for the millennials to build green enterprises. This result is in line with the previous research by Himel et al. [19]

results in green entrepreneurial intention positively led to green entrepreneurial behaviour. The research uses the indicator of entrepreneurial intention towards pre-start-up behaviour by Himel et al. modified to the green term showing that entrepreneurial intention leads to behaviour [19].

Table 7. Indirect effect of path coefficient

Effect	T-Value	T-Statistic	P-Value	Result
GA → GEI → GEB	1.96	4.669	0.000	Significant
GK → GEI → GEB	1.96	7.159	0.000	Significant

Our study proves that the Green Awareness has positive impact on Green Entrepreneurial Intention, mediating by Green Entrepreneurial Intention (H₄) with t-statistic 4.669 greater than the t-value of 1.96 and the p-value below 0.05 (Table 7). This result is in line with the research by Kollmus and Agyeman [44] where awareness towards the environment leads to green intention and ended in green entrepreneurial behaviour. As stated that green awareness considered not directly impact Green Entrepreneurial Behaviour because in the previous research by Xue et al. [45]. Green Awareness needs to be mediated by other variables then it can directly impact. Based on the indicator, means once the millennials aware of the surroundings, it might lead to Green Entrepreneurial Intention and decided to perform Green Entrepreneurial Behaviour to be the green entrepreneur.

In Table 7, our study also proves a significant indirect effect from Green Knowledge towards Green Entrepreneurial Behaviour with Green Entrepreneurial Intention as the mediating variable with t-statistic 7.159 greater than the t-value of 1.96 (H₅). This result is in line with the research by Kollmus and Agyeman [44] that stated that green awareness needs to be mediated to act then it will lead to behaviour. Green Knowledge considered does not directly affect the green entrepreneurial behaviour based on the previous research that stated that green knowledge needs to be mediated by other variables to reach entrepreneurial behaviour because of its gap between one another [45]. It can be interpreted that how deep the understanding of millennials in Indonesia with the term “green” and knowledge about it, can give a positive direction to the intention of being green entrepreneurs and lead to green entrepreneurial behaviour. It shows that green entrepreneurial intention affecting the green entrepreneurial directly and indirectly works as the independent variable nor mediating variable.

5. CONCLUSION

This study focuses on the problem of young entrepreneurs in Indonesia today, as millennials lack green awareness as well as green knowledge. According to Howe and Strauss [6], the respondents of this study are millennials, or those born between 1981 and 2000. They also live in the greater Jakarta area. We received 257 responses at first, however subsequent screening revealed that up to 40 of them were invalid, therefore only 217 responses were used for thorough data analysis.

We employed both SPSS v22 and SmartPLS 3.2.8 The SPSS v22 was only used to check for outliers, while the SmartPLS 3.2.8 was used to calculate the outer and inner models. The model is fitted with the R-squared of green

entrepreneurial intention. The variable green awareness and green knowledge account for 25.5% of the variance in green entrepreneurial intention, with the remaining 74.5% influenced by other variables not discussed in this study. The value of R-squared for green entrepreneurial behaviour suggests that green entrepreneurial intention accounts for 66.1% of its variance, which is considered as a good fit model.

Looking at all of the results from the data analysis, the researchers concluded that all of the analysis shown a positive result in a direct and indirect effect. It is no difference between the male and female intention toward green entrepreneurial behaviour, and the status is not considered as a problem. The green awareness and green knowledge are essential and can work individually towards green entrepreneurial intention. While how aware and how sure the millennials to have the intention of building green entrepreneurship also determine the green entrepreneurial behaviour, the bigger opportunity for them to be green entrepreneurs [46].

The green entrepreneurial intention also plays a crucial role in mediating green awareness and green knowledge toward green entrepreneurial behaviour. With the increase of green awareness and green knowledge as the external factors, the millennials' paradigm could be changed to the paradigm of building business specifically to become the green entrepreneurs. Once the millennials have the awareness and knowledge, the intention takes a role to boost the millennials creating green enterprises. Besides, to solve the entrepreneurship and environmental issues happening in Indonesia, the millennials found to be the key to solve by having the innovation, creative mindset and building a business that does not only focus on economic growth but also on the positive impact towards the environment.

Managerial implication to the government became one of the key players to increase green awareness. The society needs to be introduced with lifecycle-based thinking to encourage the creation of the green business. Even most of the millennials are currently aware of the environment, but the actions on making green entrepreneurs still need to increase and change the mindset from consuming to producing. The government will take a role in making the groups of activists related to the awareness of green, create business incubators and build more green businesses such as the European Environment Bureau for countries in Europe, Environmental Agency in United Kingdom, or even allowing the non-governmental organization to do campaign-related with environment issue happening such as the Green Peace, World Wide Fund for Natural, Global Environmental Facility, etc. The government could also be the source of funds, as many of the potential entrepreneurs are also struggling in the fund. The government could be investors for potential green entrepreneurs. The internal factor of an individual such as motivation, experience, the fund is important to have the intention to build businesses despite the green awareness and green knowledge.

The educational parties such as schools, universities should emphasize the importance of having green entrepreneurs' mindset with the hope of having the intention to become green entrepreneurs and proof effective by Dianne, Tantular, Nemati [47]. The educational parties should be the ones who introduce the green mindset not just the knowledge on issues, but also regarding resources, symbols, etc. The educational party becomes one of the key players in changing the paradigm of the millennials. As the educational party will be the place that the millennials can learn and understand with the term and green actions [48, 49].

Companies can also play a role in the millennials' paradigm shift. One method is to hold a competition among millennial students to act, think, and innovate in ways related to the term "green" by using environmentally friendly products. Until now, only a few companies have focused on and created competition for students involved in environmental campaigns. Companies can contribute to the growth of green awareness and knowledge by participating in green-themed competitions.

Millennial entrepreneurs, particularly those in the food industry, may help to reduce food waste. To clear away food products that are about to expire, they might be sold at lower prices or at steep discounts using the online platform. This business strategy has the potential to reduce food waste in Indonesia while also contributing to environmental sustainability [50].

As the front line in educating the younger generation, particularly the millennial generation, the government, educational parties, and businesses can use social media and other digital information as a means of modern education in increasing environmental awareness and knowledge. Because it does not use hard copy material, the use of social media and digital information is also part of implementing an environmentally friendly learning process. Furthermore, the dissemination of information about environmental education is facilitated by social media and other digital means, so that future generations under the millennial generation, namely Generation Z, are also prepared to be environmentally-oriented entrepreneurs.

Our study's limitations include the small number of respondents, which cannot be generalized to all Indonesian millennials. Using a qualitative approach, future research could look into new factors influencing green entrepreneurial behaviour.

REFERENCES

- [1] Genoveva, G., Syahrivar, J. (2020). Green lifestyle among Indonesian millennials: A comparative study between Asia and Europe. *Journal of Accounting and Management*, 8(4): 397-413. <http://dx.doi.org/10.5890/JEAM.2020.12.007>
- [2] Salim, Z. (2014). Indonesia's ways to sustainable economic growth and development. *Handbook of Emerging Economies*, Bandung, Routledge, 1-28.
- [3] BPS. (2020). Hasil Sensus Penduduk Indonesia (Indonesia Population Census). BPS, Jakarta.
- [4] Haryanto, B., Budiman, S. (2014). The role of environmental knowledge in moderating the consumer behavioral processes toward the green products. *Review of Integrative Business and Economics*, 4(1): 203-216.
- [5] Porcar, A.T., Soriano, D.R. (2018). *Inside The Mind of Entrepreneur: Cognition, Personal Trait, Intention and Gender and Gender Behavior*. Italy: Springer International Publishing.
- [6] Howe, N., Strauss, W. (2000). *Millennials Rising: The Next Generation 13th Gen*. United States: Vintage Books.
- [7] Schumpeter, J. (1934). *The Theory of Economic Development*. Cambridge: Harvard University Press.
- [8] Kao, R.W. (1993). *Defining Entrepreneurship, Past, Present and?* Singapore: James Cook Press. <http://doi.org/10.1111/j.1467-8691.1993.tb00073.x>
- [9] Eroglu, O., Picak, M. (2011). Entrepreneurship, national culture and Turkey. *International Journal of Business and Social Science*, 2(16): 146-151.
- [10] Boiyo, K.V. (2010). Environmental awareness, attitude, and participating among secondary school students: A comparative study of Kasarani and Kibera division (master thesis). Kenyatta University Press, Nairobi, 2010.
- [11] Ham, M., Horvat, M., Mrcela, D. (2016). Insight for measuring environmental awareness. *Ekonomski Vjesnik*, 29(1): 159-176.
- [12] Bennet, S.J. (1991). *Ecopreneuring: The Complete Guide to Small Business Opportunities from the Environmental Revolution*. New York: John Wiley.
- [13] Remeikiene, R., Startiene, G. (2013). Explaining entrepreneurial intention of university students: The role of entrepreneurial education. *International Proceedings of the Management, Knowledge and Learning Conference 2013*.
- [14] Kotchen, M.J. (2009). *Advances in the Study of Entrepreneurship Innovation and Economic Growth*. United Kingdom: Emerald Group Publishing.
- [15] Bhatnagar, A., Vidyapeeth, D.Y.P., Bharwaj, B.R., Gandhi, S. (2013). Women ecopreneurship: A case study from emerging country. *Greener Journal of Business and Management Studies*, 12(2): 91-98.
- [16] Weiss, P. (2015). *Entrepreneurial Intention Among Dutch and Indonesian University Student*. Tilburg University Press, Tilburg.
- [17] Audretsch, D.B., Link, A.N. (2019). *Source of Knowledge and Entrepreneurial Behavior*. Toronto: University of Toronto Press. <http://doi.org/10.3138/9781487512538>
- [18] Tsai, S.B., Liu, B., Li, Y. (1973). *Green Production Strategies for Sustainability*. Nankai: IGI Global Book Series.
- [19] Himel, T.H., Rahman, A.A., Muliandi, S.L. (2016). The relationship between self-efficacy, feasibility, and awareness towards green entrepreneurial intention. *Sci.Int.*, 28(2): 2095-2102.
- [20] Katia, R.H., Freyman, J.D. (2011). What sustainable entrepreneurship looks like: An exploratory study from a student perspective. 56th Annual International Council for Small Business (ICSB) World Conference, Stockholm. http://dx.doi.org/10.1007/978-3-319-01396-1_7
- [21] Mathur, S., Tandon, N. (2016). Green entrepreneurship: the emerging paradigm for sustainable growth, and development in India: A study of the millennials. *Indian Journal of Science and Technology*, 9(45): 1-11. <http://dx.doi.org/10.17485/ijst/2015/v8i1/106753>
- [22] Allen, J.C., Malin, S. (2008). Green entrepreneurship: a method for managing natural resources? *Society and Natural Resources*, 21(9): 822-840. <http://dx.doi.org/10.1080/08941920701612917>
- [23] Lotfi, M., Yousefi, A., Jafari, S. (2018). The effect of emerging green market on green entrepreneurship and sustainable development in knowledge-based companies. *Sustainability*, 10(7): 2308. <https://doi.org/10.3390/su10072308>
- [24] Genoveva, G., Rahdino, R.A. (2020). Green purchase decision on mineral waters' environmental packaging: Millennials perspectives. *Jurnal Manajemen dan Bisnis Sriwijaya*, 18(1): 15-32. <http://dx.doi.org/10.29259/jmb.v18i1.11798>
- [25] Genoveva, G., Levina, L. (2019). The green marketing

- mix: A review of customers' body shop purchase intention. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 3(2): 400-409. <http://dx.doi.org/10.24912/jmie.v3i2.7386>
- [26] Chairy, C., Syahrivar, J., Ida, Sisnuhadi (2019). Does the green image enhance student satisfaction (evidence from Indonesia). *New Educational Review*, 57(3): 52-62. <http://doi.org/10.15804/ner.2019.57.3.04>, 2019.
- [27] Djatmika, E.T. (2014). Preparing green entrepreneurs for sustainable development. *Journal Entrepreneur and Entrepreneurship*, 3(2): 49-64. <https://doi.org/10.1201/10.1201/9780429295348>
- [28] Lieflander, A.K., Bogner, F.X., Kibbe, A., Kaiser, F.G. (2015). Evaluating environmental knowledge dimension convergence to assess educational programme effectiveness. *The International Journal of Science Education*, 3(4): 50-71. <https://doi.org/10.1080/09500693.2015.1010628>
- [29] Parker, L., Sear, K.P., Kustiningsih, W. (2018). How Young people in Indonesia see themselves as Environmentalist. *Indonesia and the Malay World*, 12: 263-282. <http://dx.doi.org/10.1080/13639811.2018.1496630>
- [30] Pradeep, M.D., Akhilesh, A. (2017). Going green in business - a study on the eco-friendly initiatives towards sustainable development in India. *International Journal of Applied Engineering and Management*, 1(2): 40-50. <https://doi.org/10.5281/zenodo.1017596>
- [31] Lee, S., Wong, P.K. (2004). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, 19: 7-28. [http://dx.doi.org/10.1016/S0883-9026\(02\)00112-X](http://dx.doi.org/10.1016/S0883-9026(02)00112-X)
- [32] Fayolle, A., Gaily, B. (2013). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business and Management*, 5(1): 75-93. <http://dx.doi.org/10.1111/jsbm.12065>
- [33] Ma, Y., Hou, G., Yin, Q., Xin, B., Pan, Y. (2018). The sources of green management innovation: Does internal efficiency demand pull or external knowledge supply push. *Journal of Cleaner Production*, 202(2): 582-590. <https://doi.org/10.1016/j.jclepro.2018.08.173>
- [34] Quoquab, F., Mohammad, J. (2019). *Green Behavior and Corporate Social Responsibility in Asia*. Emerald Publishing Limited. <http://dx.doi.org/10.1108/9781787566835>
- [35] Anisah, H.U., Wandari, W. (2015). Shaping entrepreneurship's human resource by green entrepreneurial behaviour approach: Instrument preparation's preliminary study. *Mediterranean Journal of Social Science*, 6(5): 109-117. <http://dx.doi.org/10.5901/mjss.2015.v6n5s5p109>
- [36] Kirkwood, J., Walton, S. (2010). What motivates ecopreneurs to start businesses. *International Journal of Entrepreneurial Behavior and Research*, 16(3): 204-228. <https://doi.org/10.1108/13552551011042799>
- [37] Gibbs, D. (2009). Sustainability entrepreneurs, ecopreneurs and the development of a sustainable economy. *Greener Management International*, 55(2): 63-78. <https://doi.org/10.9774/GLEAF.3062.2006.AU.00007>
- [38] Tam, K.P., Chan, H.W. (2018). Generalize trust narrows the gap between environmental concern and the pro-environmental behavior: Multilevel evidence. *Global Environment Chang*, 48: 182-194. <http://doi.org/10.1016/J.GLOENVCHA.2017.12.001>
- [39] Babatunde, A.M., Ishola, O.W., Alliyu, S.O. (2015). Determinants of eco entrepreneurial intention among students: A case study of university students in Ilorin and Malete. *Ethiopian Journal of Environmental Studies & Management*, 8(1): 107-112. <https://doi.org/10.4314/ejesm.v8i1.10>
- [40] Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. (2019). When to use and how to report of PLS-SEM? *European Business Review*, 31(1): 2-24. <http://doi.org/10.1108/EBR-11-2018-0203>
- [41] Handayani, R., Suleman, E., Priadi, C., Darmajanti, L. (2017). Water recycling opportunity in the business sectors of greater Jakarta, Indonesia. *International Journal of Technology*, 8(6): 1031-1039. <http://dx.doi.org/10.14716/ijtech.v8i6.743>
- [42] Garson, G.D. (2016). *Partial Least Square: Regression and Structural Equation Models*. North Carolina: Statistical Associates.
- [43] Noor Hazlina Ahmad, N., Halim, H.A., Ramayah, T., Rahman, S.A. (2015). Green entrepreneurship inclination among Generation Y: the road towards a green economy. *Problems and Perspectives in Management*, 13(2-1): 211-218.
- [44] Kollmus, A.J., Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education*, 8(3): 239-260. <http://doi.org/10.1080/13504620220145401>
- [45] Xue, M.K., Deng, T., Mao, K.R. (2018). Influencing factors on the ecological protection behaviors of entrepreneurial farmers in Chinese forest zones. *Sustainability*, 10(6): 201-239. <https://doi.org/10.3390/su10061827>
- [46] Mrkajic, B., Murtinu, S., Scalera, V.G. (2019). Is green the new gold? Venture capital and green entrepreneurship. *Small Business Economics*, 52: 929-950. <http://dx.doi.org/10.1007/s11187-017-9943-x>
- [47] Dianne, H., Tantular, W.L., Nemati, H. (2016). Entrepreneurship education: Process, method, or both? *Journal of Innovation and Knowledge*, 1(3): 125-132. <https://doi.org/10.1016/j.jik.2016.01.005>
- [48] Westhead, S.M., Solesvik, M.Z. (2018). Entrepreneurship education and entrepreneurial intention: Do female students benefit? *International Small Business*, 34(8): 979-1003. <https://doi.org/10.1177/0266242615612534>
- [49] Chairy, C., Raharja, C., Syahrivar, J., Ekananda, M. (2020). Waste not: Selling near-expired bread in Indonesia. *International Review on Public and Nonprofit Marketing*, 17(4): 391-407. <https://doi.org/10.1007/s12208-020-00253-4>
- [50] Gevrenova, T. (2015). Nature and characteristic of green entrepreneurship. *Trakia Journal of Sciences*, 13(2): 321-323. <https://doi.org/10.15547/tjs.2015.s.02.068>